JENOPTIK

MORE LIGHT

Annual Report 2022

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Jenoptik at a glance

	Jan. – Dec. 2022	Jan. – Dec. 2021	Change in %
Order intake (in million euros)	**1,185.4**	**936.7**	**26.6**
Advanced Photonic Solutions	891.8	674.9	32.1
Smart Mobility Solutions	125.8	116.5	7.9
Non-Photonic Portfolio Companies	163.4	141.6	15.4
Other[1]	4.5	3.7	21.0
Revenue (in million euros)	**980.7**	**750.7**	**30.6**
Advanced Photonic Solutions	729.6	495.6	47.2
Smart Mobility Solutions	114.3	110.1	3.8
Non-Photonic Portfolio Companies	132.3	141.3	−6.4
Other[1]	4.5	3.7	21.0
EBITDA (in million euros)	**184.1**	**155.7 / 125.2[4]**	**18.2**
Advanced Photonic Solutions	170.0	143.4 / 112.9[4]	18.6
Smart Mobility Solutions	19.3	19.2	0.8
Non-Photonic Portfolio Companies	2.7	5.4	−49.8
Other[1]	−8.0	−12.2	34.5
EBITDA margin	**18.8**	**20.7 / 16.7[4]**	
Advanced Photonic Solutions[2]	23.3	28.6 / 22.8[4]	
Smart Mobility Solutions[2]	16.9	17.4	
Non-Photonic Portfolio Companies[2]	2.0	3.8	
EBIT (in million euros)	**101.9**	**108.1**	**−5.8**
EBIT margin	**10.4**	**14.4**	
Earnings after tax (in million euros)	**63.9**	**92.9**	**−31.2**
Earnings per share – Group (in euros)[3]	**0,96**	**1.43**	**−32.8**
Dividend (in euros)	**0.30**	**0.25**	**20.0**
Free cash flow (in million euros)	**82.7**	**43.2**	**91.4**
Cash conversion rate (in %)	**44.9**	**27.7**	
Net debt (in million euros)	**479.0**	**541.4**	**−11.5**
Equity ratio (in %)	**50.4**	**44.4**	

	31/12/2022	31/12/2021	Change in %
Order backlog (in million euros)	**733.7**	**543.5**	**35.0**
Advanced Photonic Solutions	581.4	430.2	35.1
Smart Mobility Solutions	65.7	54.3	21.0
Non-Photonic Portfolio Companies	86.6	58.9	46.9
Employees (in head count and incl. trainees)	**4,435**	**4,205**	**5.5**
Advanced Photonic Solutions	2,995	2,721	10.1
Smart Mobility Solutions	485	491	−1.2
Non-Photonic Portfolio Companies	657	692	−5.1
Other[1]	298	301	−1.0

[1] The item Other includes Corporate Center (Holding, Shared Services, Real Estate) and Consolidation
[2] Based on the total of external and internal revenue
[3] Group includes the continuing operations plus VINCORION as a discontinued operation
[4] Excluding one-off effect in prior year

The prior year's information by segment was adjusted to the new structure of the Jenoptik Group. Unless explicitly stated, the values in the table include the continuing operations. It is pointed out that rounding differences to the mathematically exact values (monetary units, percentages, etc.) may occur.

More Value

This is the motto of our Strategy 2025. With the “More Value” growth agenda, we want to accelerate the transformation of Jenoptik into a pure, globally leading photonics group.

Focussing on the three high-growth markets of the future – semiconductor & electronics, life science & medical technology and smart mobility – is the core of the “More Value” agenda.

We expect this to generate substantial organic revenue growth which will be supplemented by further acquisitions, but does also not exclude possible divestments.

By 2025, we plan to increase revenue to around 1.2 billion euros and the EBITDA margin to around 20 percent.

With this positive development, we want to create “more value” for all our stakeholders.

The online report is available at:
www.jenoptik.com/annual-report

About Jenoptik

Optical technologies are the basis of our business. Our key markets primarily include the semiconductor equipment and electronics industry, life science and medical technology as well as smart mobility.

The Jenoptik Group is headquartered in Jena (Thuringia). In addition to several major sites in Germany, Jenoptik is represented worldwide, for example with production and assembly sites in the US, France, the United Kingdom, China, and Switzerland.

As a globally operating technology group Jenoptik is active in the two photonics-based divisions Advanced Photonic Solutions and Smart Mobility Solutions. The non-photonic business activities, which are focused in particular on the automotive market, are managed within the Jenoptik Group's Non-Photonic Portfolio Companies.

Management

Interview with the Executive Board

Despite major external challenges, 2022 was another very successful year for Jenoptik. With revenue growth of more than 30 percent to 980.7 million euros and an EBITDA margin of 18.8 percent, the very positive development from the prior year was continued. The strategic focus on the growth markets semiconductor & electronics, life science & medical technology as well as smart mobility is paying off. Accordingly, Jenoptik has set itself the goal of further improving its key financial figures in 2023. The company is on the right path to achieving its medium-term goals defined in the "More Value" strategic agenda by 2025, which envisage revenue of around 1.2 billion euros and an improvement in profitability to an EBITDA margin of around 20 percent. Jenoptik is also financially well prepared for future growth. Jenoptik Executive Board members Dr. Stefan Traeger and Hans-Dieter Schumacher explain in this interview how the goals will be achieved, what growth potential still exists organically and possibly also externally, and how Jenoptik is positioned in terms of sustainability.

The organic **growth** in fiscal year **2022** was approximately **11 percent**

Despite difficult underlying conditions, 2022 was a very successful year for Jenoptik. How did you achieve this?

Stefan Traeger: The very positive development in revenue and EBITDA margin is an indication that our focus on specific growth areas in the photonics market is not only strategically but also economically correct. Thanks to well-established relationships with our customers and suppliers, but also due to our focus on demanding photonic applications, we have developed a certain resilience. Yet 2022 was challenging, with high inflation rates, rising interest rates, intermittent supply bottlenecks, and uncertainties associated with the war in Ukraine and the Covid-19 pandemic. Our investment in innovation forms the basis for the company's success. In addition, we will continue to implement our goal of becoming a world leading, pure photonics group using appropriate portfolio measures. We remain focused on the goals of our "More Value" growth agenda and expect continued profitable growth in 2023. We can be satisfied with what has been achieved over the past fiscal year and I would like to take this opportunity to thank our more than 4,400 employees for their outstanding commitment!

Mr. Schumacher, you will be leaving Jenoptik on April 1, 2023 after very successful years; how do you classify 2022?

Hans-Dieter Schumacher: In many respects, 2022 was a highlight of my eight-year term as Chief Financial Officer. We exceeded our own targets, in some cases significantly, and achieved new records in terms of both order intake and revenue. A revenue increase of more than 30 percent – around 11 percent of which was organic – is definitely something

"We see good opportunities to further improve our profitability."

Hans-Dieter Schumacher

to be proud of. And we significantly improved our EBITDA margin on a comparable basis. This is particularly remarkable when considering the challenges we had to face. As Chief Financial Officer, my focus has always been on Jenoptik's financial and balance sheet health. And here we are in an excellent position with an equity ratio of 50.4 percent, a significant reduction in net debt in 2022 and a debt-to-equity ratio of 2.6, which is clearly below our target of 3.0. Consequently, Jenoptik is very well positioned for the future.

You have focused your portfolio on three strategic growth areas. Do you think Jenoptik is already perfectly positioned here?
Stefan Traeger: Our "More Value" growth agenda focuses on the semiconductor & electronics, life science & medical technology, and smart mobility markets. These markets offer above-average growth potential, require sophisticated photonic solutions, and are only partially affected by economic fluctuations. In recent years, we have strengthened ourselves very well in these markets through the

acquisition of TRIOPTICS, BG Medical, and SwissOptic. This has brought us a good deal closer to our goal of generating around 50 percent of the 1.2 billion euros in revenue targeted for 2025 from semiconductor & electronics and around 25 percent respectively from life science & medical technology and smart mobility. In 2022, we already generated around 85 percent of our revenue in these markets. We also always look for suitable additions to our portfolio, but this is done with prudence.

What potential do you see for the next few years in your core markets? How long will the current boom in the semiconductor business last?

Stefan Traeger: Our Advanced Photonics Solutions division, where we bundle our activities in the areas of semiconductor & electronics and life science & medical technology, among others, continued to show fantastic development in 2022 with revenue growth of around 47 percent, 17 percent of which was organic. Growth was driven by almost all application areas, but above all by the semiconductor equipment segment. Against the backdrop of strong long-term drivers of growth such as ever-increasing digitization, we see significant potential here. We are also benefiting from the trend towards becoming less dependent on Southeast Asia for semiconductor production and establishing production in the US and Europe. As a result, we are investing heavily, for example more than 70 million euros in a new high-tech factory in Dresden, which is scheduled to start operation in 2025.

And how does the situation look for the other activities?

Hans-Dieter Schumacher: We also see very good growth opportunities in life science and medical technology. Here we are well positioned as a supplier in the areas of ophthalmology, dermatology, dentistry and laboratory diagnostics. Smart mobility is benefiting from increased safety awareness in the mobility segment and among the general public, resulting in steadily rising demand. As an integrated service provider for speed monitoring, for example, we offer everything from speed measurement to fine notices from a single source. So, all in all, we are very confident about the future.

Currently an 18.8 percent margin and you still see room for improvement, where do you see this coming from?

Hans-Dieter Schumacher: Actually, we had very good development in our operating profitability. On the one hand, we expect to grow particularly strongly in products with above-average margins and to benefit accordingly from an improved product mix. On the other hand, we are constantly working on our efficiency, so we see this as having a further positive effect on profit. We expect these two aspects to provide further positive effects in the future. However, key, above all, is our ability to further expand our business with our customers through new applications, among other things, and to win new customers.
Last year, we spent around 87 million euros on research and development, some of which we develop jointly with our customers; this represents 8.9 percent of our revenue.

You see yourself as an enabler, helping to make the world more sustainable with your products. What do you base this on?
Stefan Traeger: According to the industry association SPECTARIS, photonics applications will facilitate at least 11 percent of global CO_2 savings in 2030. As one of the leading technology companies, Jenoptik intends to contribute here in the areas of infrastructure, communication, mobility and health. In addition, we have made a clear commitment as to how we will also make Jenoptik ever more sustainable. This includes, for example, the goal of reducing CO_2 emissions by 30 percent by 2025 compared to the base year 2019 and increasing the share of green energy in the Group to 75 percent. Our ambitions are recognized, both by awards from customers, and by positive ESG ratings. For example, MSCI, a global leader in sustainability analysis

"In 2023, we aim to achieve further growth in revenue and earnings."

Dr. Stefan Traeger

and ratings, has certified us with an AA rating, indicating that we are among the top 15 percent of the world's best-rated companies in the electronic components sector and thus, according to MSCI, part of the group of leaders in sustainability.

Let's look ahead, what are your plans for 2023?

Stefan Traeger: Assuming that the geopolitical risks do not worsen and the imminent easing of inflation and materials procurement continues, we aim to achieve further growth in revenue and earnings in 2023 on the basis of the excellent order situation. Accordingly, revenue should be between 1,050 million euros and 1,100 million euros. In terms of profitability, we forecast a further step towards our goal for 2025, aiming to achieve an EBITDA margin of 19.0 to 19.5 percent. Accordingly, we believe there will once again be good opportunities for us to once again achieve strong free cash flow and a further significant reduction in net debt, despite continued high investment in our organic growth. Possible changes to our portfolio are not taken into account here.

And what do your shareholders gain from this positive development?

Hans-Dieter Schumacher: We continue to pursue the goal of allowing our shareholders to participate appropriately in the success of the company, taking into account necessary investment in growth. Accordingly, we want our shareholders to participate in the company's success through a 20-percent higher dividend of 0.30 euros per share. On the other hand, our investment in growth should lead to a sustainable increase in the value of our company.

Dr. Traeger, Mr. Schumacher, thank you for talking to us!

Supervisory Board Report

Honored Shareholders,

2022 was another challenging fiscal year, dominated in particular by the war in Ukraine and its economic and geopolitical consequences. Despite these challenging circumstances, Jenoptik demonstrated its resilience and ability to grow in the past fiscal year: Group revenue grew 30.6 percent and, on a comparable basis, i.e without the one-off effect in fiscal year 2021, the EBITDA margin improved to 18.8 percent. The acquisitions made in recent years of TRIOPTICS, the SwissOptic Group, and BG Medical Applications GmbH also contributed to this significant growth. A considerable increase of 26.6 percent was also achieved in order intake. With the sale of VINCORION, completed on June 30, 2022, Jenoptik reached a further important milestone on its path to becoming a streamlined, globally leading photonics group. As a result, Jenoptik remains on course to build on its successful and profitable growth in the coming year.

Cooperation on the Executive and Supervisory Boards

In the past fiscal year, the Supervisory Board diligently performed the duties stipulated by law, by the Articles of Association, and by the rules of procedure, regularly provided advice to the Executive Board on the management of the company, and continuously monitored its work. The Executive Board directly involved the Supervisory Board in all decisions of fundamental importance to Jenoptik and notified it regularly, in good time and in full, both verbally and in writing, of the business development, the course of business and the economic situation, the risk position, risk management, sustainability issues, and issues relating to compliance, strategy, and corporate planning. In the event that actual business development deviated from the defined plans and targets, the Executive Board notified the Supervisory Board, explaining the reasons in detail. The members of the Supervisory Board fully discussed in detail the reports submitted by the Executive Board and reviewed them for plausibility at committee and Supervisory Board meetings. It further maintained full compliance with the professional duties set out in § 90 of the Stock Corporation Act (AktG) and the German Corporate Governance Code ("Code"). The Supervisory Board approved business transactions requiring approval following due deliberation and discussion. Meetings of the Supervisory Board were in part prepared separately by shareholder representatives and employee representatives.

Attendance at Meetings of the Supervisory Board and its Committees

Over the course of the fiscal year 2022, the Supervisory Board met for five regular meetings and one constituent meeting following the Annual General Meeting on June 15, 2022. All meetings were held in person, with individual members joining virtually via video in several meetings when they were unable to be physically present. In addition, resolutions were adopted through two written circular resolutions. Over the past fiscal year, the Supervisory Board saw a consistently high participation rate: All members of the Supervisory Board attended at least half of the meetings. Overall, participation in Supervisory Board meetings averaged 97 percent.

There were also five meetings of the Audit Committee, six meetings of the Personnel Committee, four meetings of the Investment Committee, and one meeting of the Nomination Committee. The Nomination Committee meeting and four Audit Committee meetings were held in person. Of the six meetings of the Personnel Committee, two were held in person and four virtually. All meetings of the Investment Committee were held virtually. At some of the committee meetings that were held in person, individual members could attend virtually. Attendance at Audit Committee meetings was 100 percent, at Investment Committee meetings 96 percent, and at Personnel Committee meetings 97 percent. Only one Nomination Committee meeting had a low attendance of 67 percent, as Mr. Dudok had to excuse himself at short notice due to illness. Accordingly, he also attended less than half of the meetings of the Nomination Committee. Detailed information on individual attendance at meetings can be found in tabular summary T01.

The members of the Executive Board attended the meetings of the Supervisory Board and its committees. In line with the new recommendations of the Code, the Supervisory Board, the Audit Committee, and in particular the Personnel Committee also regularly discussed individual agenda items without the Executive Board, for example in connection with the appointment of new Executive Board members or with regard to adjustments to the Executive Board remuneration system.

The Executive Board and the Supervisory Board worked together in an open atmosphere of mutual trust and understanding at all times. The Chairman of the Supervisory Board and the chairmen of the committees maintained ongoing contact with the Executive Board between the meetings of the Supervisory Board and the committees. The Chairman of the Supervisory Board consulted with the Executive Board on current business performance, in particular, but also on planning, the risk situation, risk management, and compliance within the company. In addition, the Executive Board promptly informed him, either verbally or in writing, about important issues of key relevance to assessing the situation, development, and management of Jenoptik. He informed the Supervisory Board of these issues without delay, and at the next meeting by the very latest.

Particular Subjects discussed by the Supervisory Board

At all its regular meetings, the Supervisory Board dealt with the Executive Board’s detailed reports on the course of business, in particular the Group’s current revenue and earnings performance and its financial and asset position. This included a comprehensive examination and discussion of the monthly reports and quarterly statements. A recurring issue at several meetings also included detailed explanations and discussions on the sale of VINCORION, completed on June 30, 2022, and other acquisition and divestment projects.

Through a written **circular resolution in January 2022**, the Supervisory Board approved the candidacy of Dr. Traeger for a Supervisory Board mandate at Aixtron SE. In a further written **circular resolution in February 2022**, the members of the Supervisory Board adopted their report for the 2022 Annual General Meeting and, together with the Executive Board, the Remuneration Report for the fiscal year 2021, and approved the Corporate Governance Statement, including the Corporate Governance Report. In addition, the CVs of Supervisory Board members were compared against the competency profile adopted by the Supervisory Board and updated on the Jenoptik website.

At its **balance sheet meeting on March 25, 2022**, the Supervisory Board discussed the audit of JENOPTIK AG's Annual Financial Statements, the Consolidated Financial Statements, the Combined Management Report, the Consolidated Non-Financial Report, the Remuneration Report, and the appropriation of accumulated profits at length in presence of the auditor. After extensive discussion, the Supervisory Board approved the Annual Financial Statements of JENOPTIK AG and the Consolidated Financial Statements for the fiscal year 2021. The Annual Financial Statements were thus adopted. The members of the Supervisory Board also resolved to approve the Executive Board's proposal for the appropriation of profits, with, as in the prior year, an unchanged dividend payment of 0.25 euros per dividend-bearing no-par value share. The Supervisory Board also discussed the possible effects of the war in Ukraine on Jenoptik. Other matters discussed at the meeting were the settlement of the target agreements for Executive Board members in the fiscal year 2021, including determination of the multiplier, and the conclusion of new target agreements for both Executive Board members for 2022. The Supervisory Board adopted the agenda for the Annual General Meeting on June 15, 2022, dealing in particular with a candidate proposal to succeed Mr. Heinrich Reimitz as a shareholder representative on the Supervisory Board. The Supervisory Board also elected a successor to the employee representative Mr. Dieter Kröhn on the Investment Committee, who left the Supervisory Board on March 31, 2022.

The **meeting on June 14, 2022** focused on the company's current business outlook and financial situation following the end of the first quarter and on the figures as of April 30, 2022. The Supervisory Board dealt with issues relating to the Annual General Meeting to be held on the following day and obtained detailed information on the progress of the integration and business activities of the companies acquired in recent years and on current acquisition and divestment projects. The Supervisory Board also discussed the further development of the Executive Board and resolved to contract an external personnel consultant to search for a successor to Mr. Hans-Dieter Schumacher, who will leave on March 31, 2023.

At the **constituent meeting** directly following the Annual General Meeting **on June 15, 2022**, I, Matthias Wierlacher, was re-elected Chairman of the Supervisory Board, and Mr. Stefan Schaumburg was re-elected as my deputy. There were also changes on the committees: Mr. Thomas Spitzenpfeil

T01 Participation of the individual Supervisory Board members in meetings

	Matthias Wierlacher	Stefan Schaumburg	Evert Dudok	Elke Eckstein	André Hillner (since 15.06.2022)	Prof. Ursula Keller (since 22.01.2022)	Dörthe Knips	Alexander Münkwitz (since 01.04.2022)
6 Supervisory Board Meetings	●●●●●●	●●●●●●	●●●●●●	●●●●● ○	●●●●	●●●●●●	●●●●●●	●●●●●
5 meetings of the Audit Committee	–	–	–	–	–	–	●●	●●
6 meetings of the Personnel Committee	●●●●●●	●●●●●●	●●●●●●	●●●●	–	–	●●●●	–
4 meetings of the Investment Committee	●●●●	●●● ○	–	●●●●	●●	–	●●	●
1 meetings of the Nomination Committee	●	–	○	–	–	–	–	–

● Participation ○ No participation

was elected Chairman of the Audit Committee, Ms. Doreen Nowotne his deputy. As provided for in the Rules of Procedure of the Supervisory Board, I chair the Personnel, Mediation, Investment, and Nomination Committees.

At the **meeting on September 14, 2022**, which was held in Switzerland at the site of SwissOptic AG, acquired in 2021, following a tour of the manufacturing areas, the Executive Board, reported on the current business and financial situation of the Group at the end of the second quarter and as of July 31, 2022, the non-financial reporting as of July 31, 2022, and the performance of the Jenoptik share in the current fiscal year. The Supervisory Board examined the planning assumptions for the 2023 fiscal year, a range of acquisition and divestment projects, and the Group's Risk and Opportunity Report as of June 30, 2022. The Supervisory Board also resolved to contract an independent external expert to review and further develop the Executive Board remuneration system in order to introduce ESG targets as part of the multi-year variable remuneration and share ownership guidelines, as announced in last year's Remuneration Report. The Supervisory Board was also updated on the status of the search for a successor to Mr. Hans-Dieter Schumacher.

During the **two-day strategy meeting in November**, the Supervisory Board, together with the Executive Board and other members of the Executive Management Committee, discussed in detail the progress made with the Group's "More Value" strategy at divisional level and also dealt with the Group's sustainability and HR strategy. The Supervisory Board adopted adjustments to the remuneration system for the Executive Board members, which is to be submitted to the Annual General Meeting on June 7, 2023 for approval. Subject to approval by the Annual General Meeting, the adjusted remuneration system is to take effect retroactively from January 1, 2023. The Supervisory Board also resolved to expand the Executive Board to three persons and, following the recommendation of the Personnel Committee, appointed Dr. Ralf Kuschnereit to the Executive Board with effect from January 1, 2023, and Dr. Prisca Havranek-Kosicek from March 1, 2023. It considered the overview of the customary nature of Executive Board remuneration compared with other companies and with other employee groups in the company, which had been prepared with the assistance of an

Doreen Nowotne	Thomas Spitzenpfeil (since 15.06.2022)	Christina Süßenbach (since 15.06.2022)	Franziska Wolf (since 15.06.2022)	Thomas Klippstein (until 15.06.2022)	Dieter Kröhn (until 31.03.2022)	Astrid Biesterfeldt (until 15.06.2022)	Heinrich Reimitz (until 15.06.2022)	Frank Steininger (until 15.06.2022)	Total attendence in percent
●●●●● ○	●●●●	●●●●	●●●●	●●	●	●●	●●	●●	97 %
●●●●●	●●	–	–	●●●	–	●●●	●●●	–	100 %
–	–	–	●●● ○	●●	–	–	●●	●●	97 %
●●●●	–	●●	–	–	●	–	–	–	96 %
–	–	–	–	–	–	–	●	–	67 %

external independent remuneration consultant, and concluded that the remuneration agreed with the members of the Executive Board is customary in a horizontal and vertical comparison in accordance with the requirements of the Code. Finally and on the recommendation of the Personnel Committee, the conclusion of the service contracts with the new Executive Board members was approved.

At its last meeting of the year on **December 14, 2022**, the Supervisory Board dealt in detail with the business performance of JENOPTIK AG and the Group following the end of the third quarter and as of October 31, 2022, including the sustainability indicators. The Supervisory Board was provided with information on the medium-term planning and approved the corporate planning for the fiscal year 2023. After reviewing a corporate governance checklist, the Declaration of Conformity in accordance with § 161(1) AktG for the fiscal year 2022 was approved. The Supervisory Board also dealt determined the ESG indicators for the multi-year variable remuneration of the Executive Board members and adopted a new schedule of responsibilities for the extended Executive Board. The Executive Board provided information on adjustments to the D&O liability insurance policy as part of the annual renewal. The Supervisory Board also discussed how effectively the Supervisory Board as a whole and its committees perform their duties (efficiency review).

Work in the Committees

The Supervisory Board has established five committees to perform its tasks with greater efficiency. To the extent permissible by law, these committees make one-off decisions in place of the Supervisory Board and prepare topics that are then addressed by the Supervisory Board. The chairmen on the committees provide in-depth information on the content and outcomes of each committee meeting at the following meeting of the Supervisory Board. With the exception of the Audit Committee, the committees are led by myself as the Chairman of the Supervisory Board. Information on the individual members of each committee can be found in the Corporate Governance Statement.

The Audit Committee, chaired until June 15, 2022 by Mr. Heinrich Reimitz and since then by Mr. Thomas Spitzenpfeil, held four meetings and one conference call in the reporting period. Both members of the Executive Board, the Head of Corporate Controlling & Accounting, and the Head of Group Accounting were present at all meetings; the heads of relevant departments attended as required for individual topics. In addition to the monthly reports, the Quarterly Statements as well as the Half-Year Financial Statements, and the Annual and Consolidated Financial Statements, the Audit Committee paid particular attention to the effectiveness, appropriateness, and ongoing development of the risk management, internal control, and compliance management systems. The Chairman of the Audit Committee also maintained regular contact with the auditor outside the meetings, and subsequently reported to the committee on this. In its new composition since June 2022, the Audit Committee also discusses individual matters at each meeting without the Executive Board.

During a **conference call on February 8, 2022** prior to publication of the preliminary figures, the Audit Committee together with the Executive Board discussed the key indicators in the fiscal year 2021 as well as the current status of the preparation of the Annual and Consolidated Financial Statements.

The **balance sheet meeting on March 10, 2022** focused on the audit of the Combined Management Report, JENOPTIK AG's Annual Financial Statements and Consolidated Financial Statements following application of ESEF regulations, and the Executive Board's proposal for the appropriation of profits. This meeting was also attended by Mr. Steffen Maurer and Mr. Uwe Pester, acting as representatives of our auditor. The Consolidated Non-Financial Report and the results of the limited assurance audit were discussed with representatives from auditing firm PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft ("PWC"). The Audit Committee considered the quality of the audit carried out by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart ("EY"), and rated it as convincing. The Director of Risk & Compliance then presented the current Group Risk and Opportunity Report as of December 31, 2021. Another issue at the meeting was the recommendation by the Audit Committee to the Supervisory Board that EY again be proposed to the Annual General Meeting as the auditor for the fiscal year 2022. EY confirmed that there are no circumstances compromising its independence as auditor.

At the **meeting on May 10, 2022**, the Audit Committee dealt in detail with the Statement for the first quarter of 2022. The Committee obtained information on current interest rate developments and their impact on group financing, audits carried out, and Internal Audit's audit planning, and was given an overview of a project to optimize the internal control system.

In addition to the Half-Year Financial Statements, the topics of discussion on **August 9, 2022** included the determination of the main points of the audit and the review of EY's fee agreement for the upcoming audit. The committee also addressed the issue of monitoring the independence of the auditor. To this end, it reviewed the services provided in the past year in addition to the audit and updated its approved catalog of permissible non-audit services. On the basis of the resolution of the Annual General Meeting on June 15, 2022, the Audit Committee subsequently appointed EY as auditors for the fiscal year 2022. The Committee was also informed about the current Group Risk and Opportunity Report as of June 30, 2022.

At its last meeting of the year on **November 9, 2022**, the Audit Committee examined the Financial Statements for the third quarter and the current forecast as of December 31, 2022. Representatives from EY presented the audit strategy and audit plan for the upcoming audit to the Audit Committee. This plan covered the defined main points of the audit, the scope of the audit at the individual group companies, and the provisional key audit matters. The Head of Group Internal Audit reported on the audits carried out in the second half of the year and the main findings, the status of the internal control system optimization project, and the Internal Audit department's audit planning for the following year.

The Personnel Committee met six times in the past fiscal year. Its meetings focused on the settlement of the Executive Board's target agreements for 2021, including determination of the multiplier for the one-year variable remuneration, and the agreement of new targets for the fiscal year 2022. After Mr. Hans-Dieter Schumacher declared that he did not wish to extend his Executive Board service contract, which expires on March 31, 2023, the Personnel Committee dealt intensively with succession planning and proposals to expand the Executive Board to three persons in the further course of the year. It was supported in this by an external personnel service provider. It also submitted the proposals for an adjusted Executive Board remuneration system drawn up with the assistance of an external remuneration consultant to the Supervisory Board, including the introduction of ESG criteria in the multi-year variable remuneration and of share ownership guidelines. With the support of the remuneration consultant, the customary nature of Executive Board remuneration was considered in comparison with other companies and with other employee groups in the company, and taken into account in the proposal for the level of remuneration of the new Executive Board members.

The Investment Committee met four times in 2022, and dealt with current acquisition and divestment projects, in particular the completion of the sale of VINCORION, which was successfully concluded on June 30, 2022, and information on the development of the companies acquired in the last four years. Following relevant suggestions made in the course of the self-evaluation, the committee also discussed its allocation of tasks and the structure of its working methods.

The Nomination Committee met once in the past fiscal year to prepare for the upcoming election of shareholder representatives to the Supervisory Board by the 2022 Annual General Meeting. Taking into account the requirements profile updated by the Supervisory Board at the end of 2021, it discussed the suitability and independence of various candidates to succeed Mr. Heinrich Reimitz, who was not available for a further term of office. It ultimately recommended Mr. Thomas Spitzenpfeil as the candidate for election to the Supervisory Board by the Annual General Meeting. Mr. Spitzenpfeil introduced himself personally both to the Nomination Committee and subsequently to the Supervisory Board.

The Mediation Committee established on the basis of § 27(3) of the Codetermination Act (MitbestG) did not meet in the year covered by the report as there was no reason for it to do so.

Corporate Governance

Over the past fiscal year, the Supervisory Board engaged with corporate governance issues, and in December, following examination of a corporate governance checklist and in conjunction with the Executive Board, adopted the Declaration of Conformity in accordance with § 161(1) AktG. It is part of the Corporate Governance Statement.

Following the most recent efficiency review carried out with the assistance of an external expert in 2020 and an internal audit in 2021, the Supervisory Board once again made an internal self-assessment in the past fiscal year. Based on suggestions from the internal evaluation in 2021, the Investment Committee reviewed its task profile and working methods in 2022, among other things. The internal self-assessment of the Supervisory Board, which has been largely reconstituted since the Annual General Meeting in June 2022, again gave a positive picture of the activities of the Supervisory Board and its committees in December 2022. No efficiency shortcomings were identified. The next external efficiency review is scheduled to take place in 2023.

Within the Supervisory Board, there were no conflicts of interest subject to reporting requirements in the past fiscal year. Based on the recommendations of the Code, members of the Executive Board may only exercise external supervisory board mandates with the approval of the Supervisory Board. In the past fiscal year, the Supervisory Board approved the exercise of a supervisory board mandate by Dr. Traeger at Aixtron SE. One member of the Supervisory Board of JENOPTIK AG exercises an executive role at a company with which Jenoptik has a business relationship. Jenoptik does not, however, consider these business transactions to be of significance, especially as they are conducted under the same conditions as would have been maintained with third-party companies. Furthermore, the Executive Board and Supervisory Board did not undertake any transactions that would have been subject to approval or publication as related party transactions. More information on business transactions by the Executive Board or Supervisory Board with related parties can be found in chapter 8.5 of the Notes.

Members of the Supervisory Board are responsible for undergoing the training and professional development measures necessary for their tasks. To the extent permitted by law, they are given targeted support by the company, for example in the form of invitations to selected events. All members are regularly informed about new regulatory requirements or other legal developments affecting them.

New members also are supported by the company during their inductions (“onboarding”). Immediately after assuming the chairmanship of the Audit Committee, Mr. Thomas Spitzenpfeil met the CFO and managers with specialist responsibility on several occasions to exchange views on fundamental and current issues, thus gaining an overview of the relevant Audit Committee topics at Jenoptik.

Detailed information on corporate governance at Jenoptik can be found in the Corporate Governance Statement.

Annual Financial Statements and Consolidated Financial Statements

In line with the resolution of the Annual General Meeting on June 15, 2022, EY was appointed to audit the Combined Management Report, the Annual Financial Statements of JENOPTIK AG, the Consolidated Financial Statements, and to carry out a formal audit of the Remuneration Report. EY has been the JENOPTIK AG and Group auditor since the fiscal year 2016. The lead audit partner is currently Mr. Steffen Maurer. EY audited the Annual Financial Statements prepared by the Executive Board according to the provisions of the German Commercial Code (HGB), the Combined Management Report as well as the Consolidated Financial Statements, and each provided with an unqualified audit opinion. The Consolidated Financial Statements were prepared according to § 315e HGB and on the basis of International Financial Reporting Standards (IFRS) as applicable in the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB. The Remuneration Report was subjected to a formal audit by EY in accordance with § 162 (3) AktG and issued an unqualified opinion. The limited assurance audit of the Consolidated Non-Financial Report was also given an unqualified opinion by PWC.

Within the scope of its audit duties, EY also checked whether the Executive Board had adopted suitable measures to ensure that developments that may endanger the continued existence of the company are identified in good time. The EY audit was conducted according to § 317 HGB and the EU Audit Regulation, giving consideration to the generally accepted German audit principles defined by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer [IDW]).

On completion, the audit reports, the Annual Financial Statements, the Consolidated Financial Statements, the Executive Board’s proposal for the appropriation of profits, the Combined Management Report, including the Combined Non-Financial Report were dispatched to all members without delay and, together with the documents submitted by the Executive Board, discussed in detail by the Audit Committee and the Supervisory Board at their March meetings. Both also dealt with the key audit matters. In the presence of the Executive Board, representatives from EY and PWC reported personally on the scope, main focus, and key findings of their audit at the meetings, and were also available to respond to any further queries. The Supervisory Board is of the opinion that the participation of the Executive Board is a valuable addition to Supervisory Board discussions and completion of auditing of the Annual and Consolidated Financial Statements, at which auditor EY is in attendance, and therefore endorses the Executive Board's continued participation in the future. If a member wishes to have a discussion with the auditor without the participation of the Executive Board, the Chairman of the Supervisory Board or the Committee will agree to this.

EY also provided information on services rendered in addition to the audit services. Detailed information can be found in the Notes in chapter 10.3. According to the auditor, there were no circumstances that gave rise to a concern of partiality. No major weaknesses in the risk management system or the internal control system were reported. The Chairman of the Audit Committee also reported in detail on the audits of the Annual Financial Statements and the Consolidated Financial Statements prepared by the Audit Committee.

Following the final outcomes of the preliminary audit by the Audit Committee and its own review and discussion, the Supervisory Board raised no objections to the outcomes of the audit at its meeting on March 27, 2023 and approved the Annual Financial Statements and Consolidated Financial Statements prepared by the Executive Board. The Annual Financial Statements for 2022 are thus adopted according to § 172 (1) AktG. The Supervisory Board discussed in detail the Executive Board's resolution on the appropriation of profits, which provides for a dividend payment increased by 5 cents to 0.30 euros per dividend-bearing no-par value share, and approved it following an internal review.

Changes on the Supervisory Board and Executive Board

There were several changes on the Supervisory Board in the past fiscal year. Prof. Ursula Keller was appointed to the Supervisory Board by court order, with effect from January 22, 2022, to succeed Prof. Tünnermann, who left the Board on December 31, 2021, and was confirmed in office by the Annual General Meeting in June 2022. As of April 1, 2022, Mr. Alexander Münkwitz was also appointed to the Supervisory Board by court order as employee representative to succeed Mr. Dieter Kröhn, who left the Board on March 31, 2022, and was subsequently elected for a five-year term in the employee representative election. Mr. Heinrich Reimitz, Mr. Frank-Dirk Steininger, Mr. Thomas Klippstein, and Ms. Astrid Biesterfeldt left the Supervisory Board of JENOPTIK AG at the end of the Annual General Meeting on June 15, 2022. We thank all departed members for their valuable assistance and, in some cases, many years of service on the Supervisory Board. At the Annual General Meeting on June 15, 2022, Mr. Thomas Spitzenpfeil and, in the employee representative election, Ms. Christina Süßenbach, Ms. Franziska Wolf, and Mr. André Hillner were elected as new Supervisory Board members with effect from the end of the Annual General Meeting.

After our Executive Board member Mr. Hans-Dieter Schumacher announced that he would not be available again for an extension of his contract, which expires on March 31, 2023, the Supervisory Board decided in November 2022 to expand the Executive Board to three persons. As of January 1, 2023, Dr. Ralf Kuschnereit and as of March 1, 2023, Dr. Prisca Havranek-Kosicek were appointed additional members of the Executive Board. Dr. Havranek-Kosicek will succeed Mr. Hans-Dieter Schumacher on April 1, 2023. Mr. Schumacher has been Chief Financial Officer of JENOPTIK AG for a total of eight years, starting April 1, 2015, and has played a key role in shaping the company's very successful development since then. In doing so, he has ensured the necessary financial room for maneuver for investments and acquisitions and thus created an essential basis for Jenoptik's transformation into a global photonics company. We would like to thank Hans-Dieter Schumacher for the services he has provided to the company.

On behalf of the Supervisory Board, I would like to express my particular thanks to all employees, the employee representatives, and the members of the Executive Board for their extraordinary dedication and great personal commitment over the past year. I would also like to thank our shareholders, who have continued to place their trust in us throughout this time.

Jena, March 2023
On behalf of the Supervisory Board

Matthias Wierlacher
Chairman of the Supervisory Board

Highlights 2022

Awards for innovation

Jenoptik was presented with the Green Globe Award at the Intertraffic trade fair in March for the TraffiPole housing system, an environmentally friendly solution for greater sustainability and emissions reduction in traffic monitoring. The opto-electronic UFO Probe® Card for efficient PIC wafer testing was awarded the Thuringia Innovation Prize in the "Industry & Material" category in November.

Sustainability improvements

Sustainability is an integral part of our corporate strategy. With "LEED Gold Certification" in the construction industry, our newly constructed buildings, such as the employee restaurant opened in 2022, go well beyond legal requirements for sustainability. Our sustainability competition was also run successfully for the third time last year, with a large number of projects dedicated to protecting the environment and conserving resources.

Investments in growth markets

With a focus on the growth market of semiconductor & electronics, we are investing in a new high-tech factory in Dresden, where micro-optics and sensors for semiconductor equipment manufacturers will be produced from 2025 on. A major milestone was the groundbreaking ceremony at the site in September 2022.

Progress with the strategic Agenda 2025

With our Agenda 2025 "More Value," we are continuing our transformation into a globally leading, streamlined photonics group with sustainable profitable growth in the core photonics markets of semiconductor & electronics, life science & medical technology, and smart mobility. In this context, we adjusted our divisional structure in spring 2022 and completed the sale of VINCORION in June.

Changes in management

In late 2022, the Jenoptik Supervisory Board appointed two new Executive Board members for 2023. Since January 1, the Head of the Advanced Photonic Solutions division, Dr. Ralf Kuschnereit, has been the third member of the Executive Board. Dr. Prisca Havranek-Kosicek will join the Executive Board on March 1 and succeed Hans-Dieter Schumacher in the role of Chief Financial Officer from April 1.

Jenoptik celebrated 30+1

On July 1, 2022, we were finally able to join in the postponed celebration of our 30th anniversary with many employees, the city of Jena, and the general public. Our vision of "More Light" was also part of the anniversary: Entitled "We shine together," a diverse program for young and old was put on stage at Ernst-Abbe-Platz in Jena.

The Jenoptik Share

Stock Markets

The 2022 trading year was dominated by the energy crisis and the Ukraine war, high inflation, rising interest rates, and supply chain issues.

At the end of the year, Germany's benchmark index, the Dax, was at 13,923.59 points, 12.4 percent lower than at the end of 2021. The TecDax, Germany's technology index, was at 2,921.12 points at the end of December, up 25.5 percent for the year. On the last day of trading in 2022, the SDax was down 27.4 percent, at 11,925.70 points.

The latest information on the Jenoptik share and the development of the Jenoptik Group can be found at www.jenoptik.com/investors

Jenoptik Share Price Trends

The Jenoptik share also fell sharply in value over the reporting period. Starting the first day of trading in 2022 with a closing price of 37.26 euros, the highest price in the course of the year, the share price declined despite the announcement of revenue and earnings growth. The share reached its lowest level on September 29, closing at 19.54 euros. Specification of the forecast in November 2022 and a somewhat more positive mood on the German stock market again helped to buoy the Jenoptik share price in the further course of the year. The share ended trading on December 30 at 25.56 euros, a year-to-date fall of 31.2 percent.

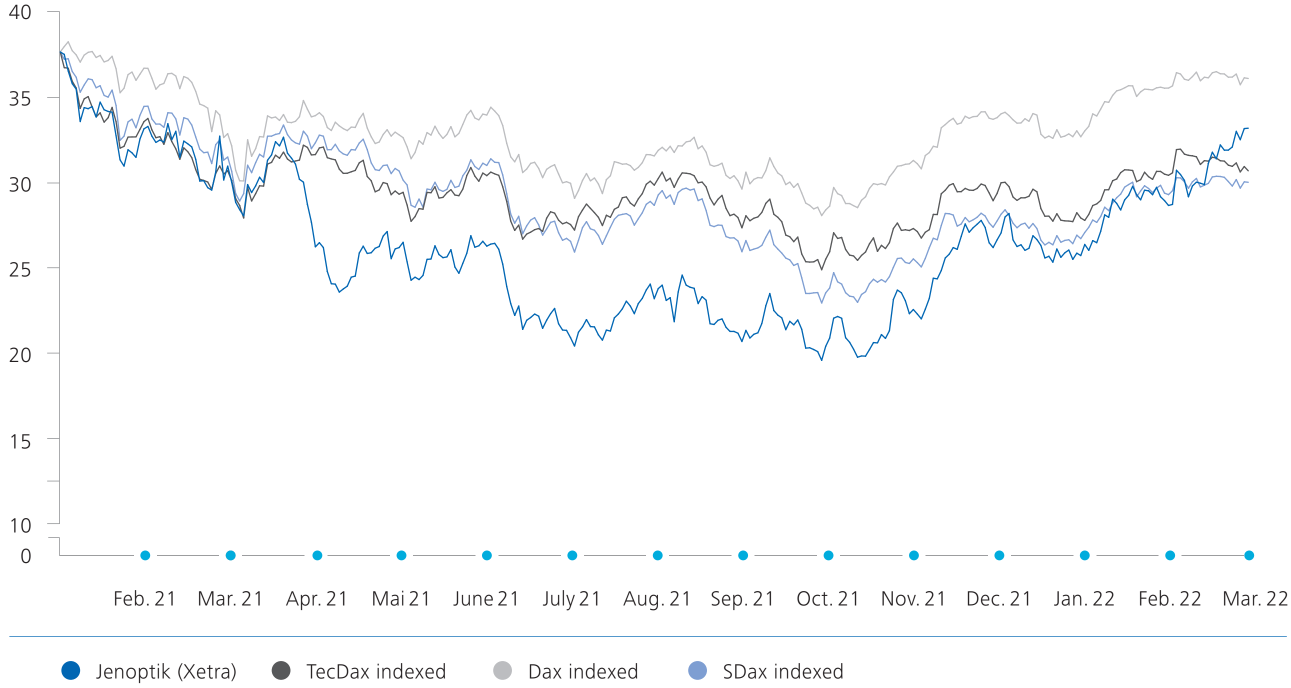
Jenoptik's total shareholder return, i.e., share price performance (last closing price in 2021 through last closing price in 2022) accounting for dividends paid in the fiscal year, came to minus 44.3 percent in 2022 (prior year: 48.8 percent). Based on 57,238,115 shares issued, market capitalization amounted to 1,463.0 million euros at the end of the year (prior year: 2,125.8 million euros).

In the first two months of 2023, the Dax, but also the TecDax and SDax, moved slightly upwards. The Jenoptik share performed much better, particularly after the announcement of the preliminary results for 2022 and the forecast for 2023. The closing price of the share in Xetra trading on February 28, was 32.88 euros. This corresponded to a market capitalization of 1,882.0 million euros.

Compared to the prior year, investor trading saw a downturn. The average number of Jenoptik shares traded per day on the Xetra, in floor trading, and on Tradegate in 2022 was 127,179, 29.1 percent less than in the prior year (prior year: average 179,374 shares).

In the TecDax ranking compiled by Deutsche Börse Group, the Jenoptik share improved to 18th place in terms of free float market capitalization in December 2022, up from 20th in the prior year. Of the 70 stocks on the SDax, JENOPTIK AG remained in 3rd place in free float market capitalization (prior year: 3rd) at the end of the year.

G01 Share performance January 3, 2022 through February 28, 2023 (indexed in euros)



G02 Share performance 2018 through 2022 (indexed in euros)

Shareholder Structure

At the end of the fiscal year, JENOPTIK AG's free float was unchanged at 89 percent.

Throughout 2022, we received several voting right notifications from institutional investors on the purchase or sale larger stock positions; these were published by the company. For more information on this, see the individual JENOPTIK AG financial statements and the Investors/Share/Voting rights announcements section on www.jenoptik.com.

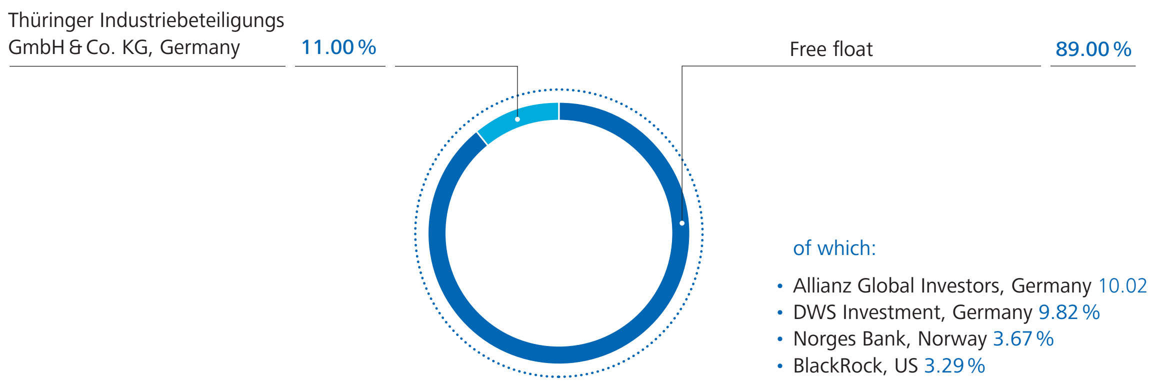
At the end of 2022, a total of 50,612 shareholders (prior year: 49,995) were entered in the share register, of which 556 were institutional investors (prior year: 588) and 50,056 private investors (prior year: 49,407). Institutional investors held 77.31 percent of the company's share capital (prior year: 78.23 percent), private investors 22.69 percent (prior year: 21.77 percent).

Dividend

The Jenoptik management aims to pursue a policy of dividend reliability and continuity in which shareholders receive a dividend in line with the company's success. At the same time, sufficient financial resources are required to finance Jenoptik's operating business and strategic investment to drive its transformation into a globally leading, streamlined photonics group. This, together with the use of further acquisition opportunities, is key to the sustainable and successful growth of the company, and thus also in the interests of shareholders. The Executive and Supervisory Boards of JENOPTIK AG therefore review their dividend recommendation with considerable prudence every year. In the past fiscal year, Jenoptik paid a dividend of 0.25 euros per share (prior year: 0.25 euros) to its shareholders for 2021.

Based on the very good result in fiscal year 2022 the Executive Board and the Supervisory Board will propose to the Annual General Meeting 2023 to pay a dividend of 0.30 euros per share for fiscal year 2022. The management is thus pursuing the goal of allowing shareholders to participate appropriately in the company's success while at the same time enabling further investments in growth in a highly volatile market environment. With earnings per share of 0.96 euros (previous year: 1.43 euros), the payout ratio is 31.2 percent (prior year: 17.5 percent), subject to the approval of the Annual General Meeting, and thus significantly exceeds the prior year's figure.

G03 Shareholder structure (as of February 28, 2023)*



* Based on received voting right notifications

3 Management 26

Capital Market Communications

We are committed to making sure our communication with shareholders, analysts, and institutional investors is open and reliable. In doing so, we follow the principle of providing the participants in the capital market as well as the general public with continuous, up-to-date information on an equal basis in order to guarantee as much transparency as possible and boost confidence in Jenoptik.

We use our financial reports and releases to provide extensive information about the Group's earnings, assets, and finances four times a year. In addition, important events and current developments are reported in press releases. These documents, as well as presentations, the financial calendar, the Articles of Association, and further information are also available in German and English on the Jenoptik website at www.jenoptik.com.

T02 Key figures of the Jenoptik share

	2022	2021	2020	2019	2018
Closing price (Xetra end-year) in euros	25.56	37.14	25.12	25.48	22.78
Highest/lowest price (Xetra) in euros	37.26/19.54	37.60/22.36	27.44/13.82	36.45/21.00	39.48/22.78
Absolute performance in euros/relative in percent	−11.58/−31.2	12.02/47.9	−0.36/−1.4	2.70/11.9	−4.77/−17.3
Issued no-par value shares (31/12) in millions	57.24	57.24	57.24	57.24	57.24
Market capitalization (Xetra end-year) in million euros	1,463.0	2,125.8	1,437.8	1,458.4	1,303.9
Average daily trading volume [1] (shares)	127,179	179,374	190,855	152,355	167,748
P/E ratio (basis highest price)/P/E ratio (basis lowest price)	38.81/20.35	26.3/15.6	37.6/18.9	30.9/17.8	25.8/14.9
Free cash flow per share in euros	1.40	1.10	1.09	1.35	1.89
Group earnings per share in euros	0.96	1.43	0.73	1.18	1.53

[1] Source: Deutsche Börse; includes trading on the Xetra, in Frankfurt, Munich, Berlin, Düsseldorf, Hamburg, Hannover as well as Stuttgart and on Tradegate

T03 Dividend key figures

	2022	2021	2020	2019	2018
Dividend per share in euros	0.30	0.25	0.25	0.13	0.35
Payout amount in million euros	17.2	14.3	14.3	7.4	20.0
Dividend yield [1] in %	1.2	0.7	1.0	0.5	1.5
Payout ratio [2] in %	31.2	17.5	34.2	11.0	22.9
Total shareholder return in %	44.3	48.8	−0.4	12.4	−16.0

[1] based on year-end closing price
[2] based on earnings attributable to shareholders

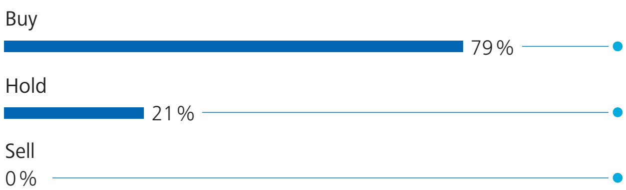
In accordance with the statutory requirements of the Regulation on Market Abuse, inside information is published immediately and simultaneously worldwide in German and English, insofar as JENOPTIK AG is not, in individual cases, exempt from this publication.

In the fiscal year 2022, Jenoptik was once again represented at numerous investor conferences, roadshows, and sales briefings. During conference calls on the publication of the financial statements and quarterly statements and reports, and in numerous individual conversations, the Executive Board and the investor relations team explained the development of business, key figures, and strategy to institutional investors, analysts, and journalists.

The 24th Annual General Meeting of JENOPTIK AG was for the third time held in purely virtual form due to the coronavirus pandemic on June 15, 2022. At around 63 percent, the proportion of capital represented was slightly below the prior-year figure of 65 percent. By a large majority, the shareholders formally approved the actions of the Executive Board and Supervisory Board, and agreed to payment of the proposed dividend. In addition, shareholder representatives were elected to the Supervisory Board. Shareholders also approved all other items on the agenda by a clear majority.

Over the course of 2022, 14 (prior year: 12) analysts published recommendations on the Jenoptik share: Baader Helvea, Bankhaus Metzler, Berenberg, Deutsche Bank, DZ Bank, Hauck & Aufhäuser, HSBC, Kepler Cheuvreux, LBBW, STIFEL, and Warburg Research. New analysts in 2022 were ODDO BHF, BNP Paribas, and Jefferies; Independent Research did not publish recommendations anymore. On December 31, 2022, the average target price of the Jenoptik share as assessed by our analysts was 31.08 euros (prior year: 38.32 euros). G04

G04 Analyst recommendations (as of December 31, 2022)



Combined Management Report

General Group Information

Group Structure

Legal and organizational structure

As the corporate center and strategic holding company of the Group, JENOPTIK AG, based in Jena, has top-level functions including strategic corporate development, key tasks in controlling, corporate development (strategy, mergers and acquisitions, innovation), corporate real estate management, finance, internal audit, investor relations and communications, human resources, accounting, legal and IP, compliance and risk management, taxes, and treasury. It further pools the central functions of IT and data security, purchasing, safety, occupational health and safety, and environmental protection.

The Group's operating business is the responsibility of the divisions and largely focused on the photonic growth market.

As part of its 2022 reorganization, the Jenoptik Group has consolidated its core photonics business in two new divisions, Advanced Photonic Solutions (industrial customer business, B2B) and Smart Mobility Solutions (business with public sector contractors, B2G). In the first quarter of 2022, the former Light & Optics and parts of the former Light & Production divisions were merged into the new Advanced Photonic Solutions division. Non-photonic activities, particularly for the automotive market, are operated as independent brands (incl. HOMMEL ETAMIC, Prodomax and INTEROB) within the Jenoptik Group's Non-Photonic Portfolio Companies. The former Light & Safety division became the Smart Mobility Solutions division.

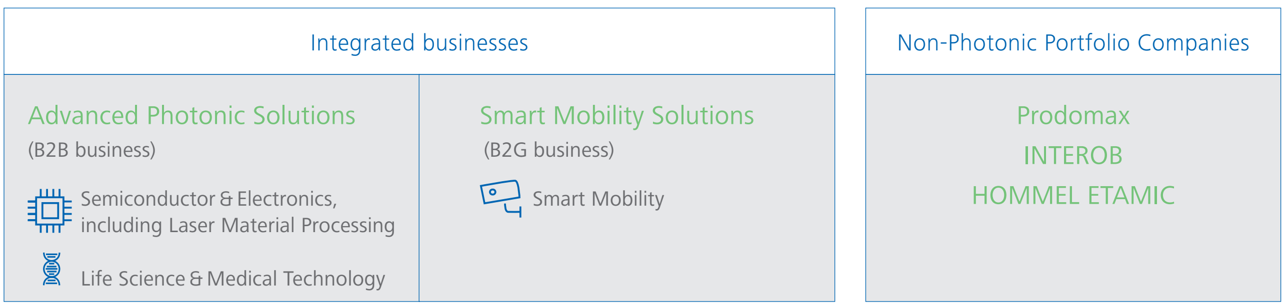
Since the first quarter of 2022, the two photonics divisions and the Non-Photonic Portfolio Companies represent the segments as defined in IFRS 8.

Jenoptik successfully completed the sale of VINCORION on June 30, 2022. Approval was granted by the competent authorities and the necessary conditions of closing were met. The acquirer of VINCORION is a fund managed by the private equity firm STAR Capital Partnership LLP ("STAR"). VINCORION develops, produces, and sells mechatronic products, in particular for the security and defense technology, aviation, and the rail and transport industries. VINCORION's activities are shown as discontinued operation in the IFRS financial statements.

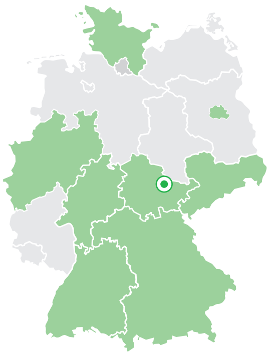
As of August 31, 2022, JENOPTIK Medical GmbH (formerly BG Medical Applications GmbH) was merged into JENOPTIK Optical Systems GmbH with retrospective effect from January 1, 2022.

In recent years, Jenoptik has continued to expand its international business and the structures associated with it. The US holding company at the Jupiter location in Florida is responsible for steering the overall strategy and coordinating financial activities for the American market. The Asia / Pacific region is managed from Shanghai, China. The operating business in Europe is coordinated at the main locations in Germany and Great Britain.

G05 Organizational structure of the Jenoptik Group in the fiscal year 2022



G06 Selected locations of the Jenoptik Group



Germany

Berlin
Dresden
Jena
Monheim am Rhein
Triptis
Villingen-Schwenningen
Wedel
Wetzlar

Europe

France
Bayeux
Villeurbanne

Great Britain
Camberley

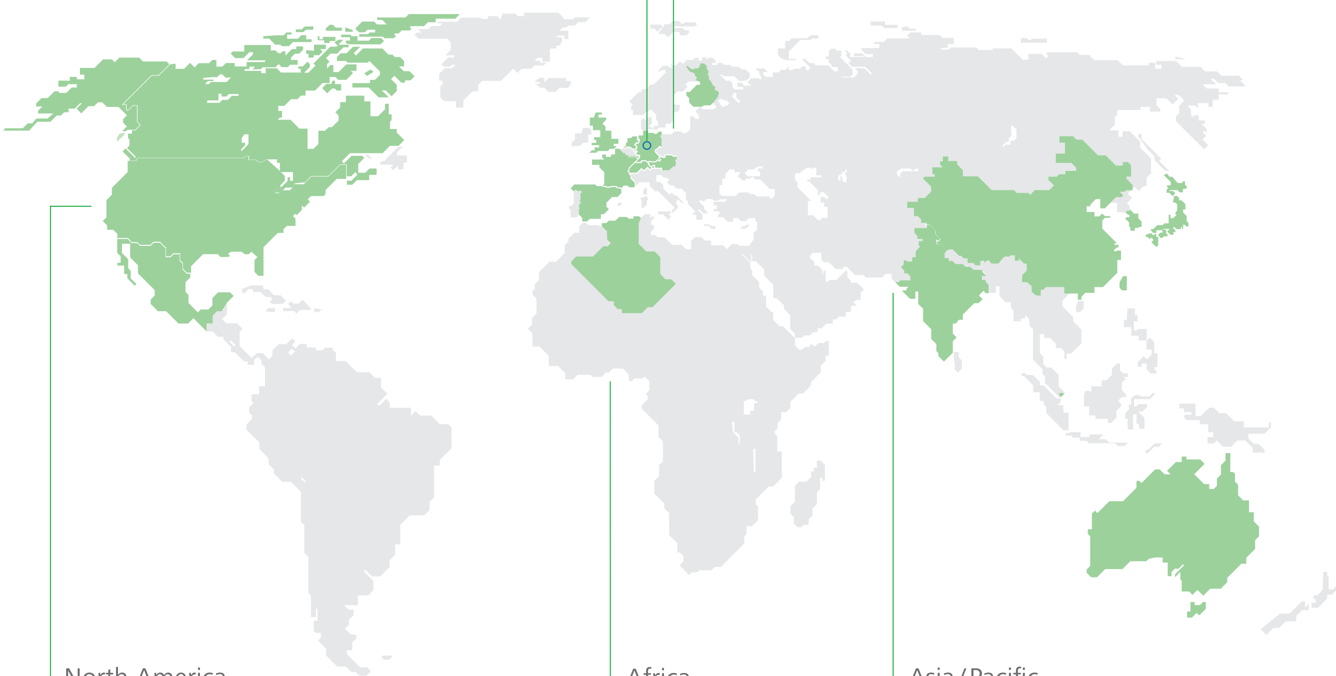
Netherlands
Drunen

Austria
Vienna

Switzerland
Heerbrugg
Uster

Finland
Tampere

Spain
Valladolid



North America

USA
Fremont (CA)
Huntsville (AL)
Jupiter (FL)
Rancho Cucamonga (CA)
Rochester Hills (MI)

Mexico
Saltillo

Canada
Barrie
Mississauga
Toronto

Africa

Algeria
Algiers

Asia / Pacific

Australia
Sydney

China
Shanghai
Wuhan
Peking

Hong Kong
Hong Kong

India
Bangalore

Taiwan
Taoyan

Japan
Yokohama
Shizuoka City

Singapore
Singapore

South Korea
Pyeongtaek
Suwon-si

Last updated: December 2022

Key locations

Jenoptik is represented in over 80 countries worldwide, with a direct presence in 20 of them, e.g., through its own companies, investments, or asociates. The majority of the Group's products are manufactured in Germany, followed by the US and China. The Group's Jena headquarters is primarily home to the Advanced Photonic Solutions division. Other major German sites are at Wedel near Hamburg (Advanced Photonic Solutions), Monheim near Düsseldorf (Smart Mobility Solutions), Villingen-Schwenningen (Non-Photonic Portfolio companies), Berlin, Dresden, and Triptis (Advanced Photonic Solutions).

Outside Germany, Jenoptik has sites or is represented by subsidiaries or associates in the following countries: Algeria, Australia, Austria, Canada, China, the Czech Republic, France, Great Britain, India, Japan, Korea, Mexico, the Netherlands, Switzerland, Singapore, Spain, Taiwan, and the US. G06

For shareholdings of the Jenoptik Group, Notes, chapter 11

Business Model and Markets

Jenoptik is a globally operating photonics group that provides the majority of its products and services to the photonics market. Photonics covers the basics and areas of application of optical methods and technologies that address the generation, transmission, shaping, and measurement of light. Controllable light sources such as LEDs and lasers, together with suitable optical devices and sensors, make it possible to transmit data, analyze materials, create micro-optical components, and perform non-contact precision measurements. Autonomous cars are practically inconceivable without LiDAR (light detection and ranging) technology. Photonics is also critical to efficient data exchange. In the process, it uses the special physical properties of light quanta (photons) in place of electrons or also combines optics and electronics. Light-based solutions also enable resource-saving production processes, material savings, and reduced energy consumption, thus contributing to the global reduction of greenhouse gas emissions.

As a supplier of innovative capital goods for these markets, Jenoptik is primarily a technology partner to industrial companies. Its range of products comprises OEM or standard components, modules and subsystems, through to complex systems and production lines for numerous sectors. The range also includes total solutions and full-service operator models. Alongside industry, customers in the Smart Mobility Solutions division include public sector contractors.

With its product portfolio Jenoptik competes with a wide range of internationally operating companies predominantly specializing in only one or a few of the product areas and markets addressed by Jenoptik. Differing service ranges are only comparable to a limited extent and thus make it difficult to provide definite market share estimates.

Research and development occupy a key position in Jenoptik's work, with the customer at the center of everything we do. Technology-intensive products and systems are often created in close collaboration with customers. Lasting and successful cooperations with key customers are therefore an important factor of Jenoptik's success. This demands a spirit of mutual trust together with knowledge of our partners' requirements, and is reflected, for example, in the costs for developments on behalf of customers in the fiscal year 2022.

Examples of innovative products can be found in the "Research and Development" chapter

The Jenoptik Divisions

Advanced Photonic Solutions

The Advanced Photonic Solutions division is a global supplier of solutions and systems based on photonic technologies. Jenoptik has a wide range of such technologies here, especially in the fields of optics, micro-optics, laser technology, digital imaging, optoelectronics, sensor technology, and optical test and measurement systems. The core markets in which Jenoptik supplies specific market segments are the semiconductor equipment, medical technology / life science, information and communication technology, metrology, automotive, virtual and augmented reality, industrial automation, and the security technology industries.

As a development and production partner, the division uses its expertise in key technologies to fulfill customers' demanding requirements. Its systems, modules, and components help customers meet their challenges with the help of photonic technologies. Key sales regions in the Advanced Photonic Solutions division are in Europe and North America, as well as in Asia / Pacific.

The division's competitive environment is in part heavily fragmented, with a limited number of larger suppliers. For some products, the division is the sole supplier. Competitors include MKS / Newport, Excelitas / Qioptiq, IDEX, II-VI / Coherent, Lumentum, Novanta, OptoAlignment Technologies, Optikos, Gooch & Housego, Trumpf, and Prima Industrie.

In the Semiconductor & Advanced Manufacturing area, Advanced Photonic Solutions develops and produces optical and micro-optical systems as well as precision components to the highest quality standards. This includes complete systems and modules, as well as special optical components and custom solutions for wavelengths from the far infrared (FIR) to the extreme ultraviolet (EUV) range. These products are particularly used in both lithography and inspections within the semiconductor equipment industry. The division works with leading international manufacturers, e.g., ASML, in this field. The semiconductor business of the SwissOptic Group, acquired in late 2021, further rounds off the division's product portfolio with a complementary range, enabling it to offer existing and new customers an even broader product spectrum.

With its innovative, in part software-assisted optical and micro-optical solutions, Jenoptik is also able to exploit further potential for growth in the field of digitization, for example in the market for information and communication technology, and increasingly also in the laser material processing market. For information and communication technology, the company in particular supplies components and modules for use in optoelectronic transceiver modules and in systems for free-space optical data transmission. The product range also features optoelectronic probe cards for industrial testing of photonic integrated circuits at wafer level. In the laser material processing market, customers including system integrators and manufacturers of laser production equipment are supplied with components and modules, e.g., F-Theta lenses, beam expander modules or gratings, and smart system solutions.

See Segment Report for detailed information on the course of business in the divisions and the Forecast Report for information on the development of the divisions

In the field of biophotonics, the division offers applications for bio-imaging and laser-based therapy. Based on its core expertise in laser and LED-based beam sources, optical components and modules, sensors, digital imaging, and system integration, Jenoptik develops solutions and products for the medical technology / life science industry. OEM laser solutions are based on diode and disk laser technologies and are used in ophthalmology, dermatology / aesthetics, and in surgery. The division also develops and produces optical and optoelectronic modules and subsystems for digital imaging and microscope cameras for applications in the medical field. Jenoptik acquired a complementary product portfolio in the areas of dentistry (e.g., intraoral scanners) and robot-assisted surgery (e.g., components for minimally invasive surgical devices) in 2021 through the acquisition of BG Medical. Through the products and services of the SwissOptic Group, the Group is strengthening its own business in the areas of ophthalmology and life science.

Information on our extensive product range can be found at www.jenoptik.com/products

Biophotonics customers include national and international medical technology companies, in particular OEMs in ophthalmology, dentistry, diagnostics suppliers, and companies involved in DNA sequencing.

In the field of Optical Test & Measurement, the division supplies an extensive range of optical measurement, testing, and production technology for development, quality assurance, and production worldwide through TRIOPTICS. Its expertise ranges from testing individual optical components to the assembly and testing of complex camera systems. These systems help to accelerate and improve the development, quality control, and

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production of lenses, objectives, and camera modules. Customers include smartphone and camera manufacturers, and their suppliers. We are also targeting other markets, such as those for new virtual and augmented reality applications in the industrial and consumer segments, the optical industry, and the automotive industry. Products and services are marketed worldwide through a network of subsidiaries and sales partners, with local service centers in key markets.

The Optical Test & Measurement unit also has optical testing systems for product inspection and process optimization, optical shaft metrology, and complex imaging systems for applications in the field of parts measurement, surface testing, and position detection. Customers come primarily from the automotive, stamping, and glass industries, as well as from the machine and equipment manufacturing sector.

For the field of industrial solutions, Advanced Photonic Solutions supplies high-power optoelectronic components and modules as well as integrated solutions that combine optics, laser technology, sensors, and digital imaging as required. In addition to complex components for head-up displays and lenses for driver assistance systems, the division also produces polymer optics for machine vision applications. Sensor products cover such things as infrared and thermographic camera systems, polymer and infrared optics, and laser rangefinders. The division focuses on applications in the fields of industrial automation, mobility, security/defense, and industrial applications.

The product portfolio in the Advanced Photonic Solutions division also includes laser machines (e.g., for laser airbag weakening) that are integrated into customers' production lines, e.g., in the automotive industry, as part of process optimization and automation upgrades. They are used to machine plastics and leather at high speed and with accurate contours, and are thus both efficient and precise.

Smart Mobility Solutions

The Smart Mobility Solutions division is primarily active in the areas of traffic law enforcement/road safety, civil security, road user charging, emission control, and traffic management. Jenoptik develops, produces, and sells photonics-based components, systems, and services for customers in the public sector (local and central government, police and regulatory authorities, and both public and private organizations), which are used to monitor compliance with applicable road traffic regulations and thus make roads and cities safer worldwide.

With its range of sensor-based traffic cameras and automatic license plate recognition (ANPR/ALPR), the division focuses on technologies for traffic monitoring. The solutions offered cover a wide range of stationary and mobile applications, which also make use of video analytics and artificial intelligence. Examples include vehicle monitoring and classification, speed and red light monitoring, illegal turning maneuvers, average speed determination, civil security, road user charging, and emission control.

Depending on the region and its local requirements, the division offers different business models, ranging from the provision of systems and enabling services to managed services and traffic service provision, a combination of equipment business and services. Here, Jenoptik covers the entire supporting process chain – from system development, construction, installation, and maintenance of the monitoring structure, to capturing images of traffic violations and their automated back-office processing. Smart Mobility Solutions is also increasingly offering its customers software-as-a-service (SaaS) business models, e.g., in the UK or Australia, in response to demands for greater flexibility and less upfront investment by customers.

The sales activities in the division are subdivided into five regional units: the Americas, Middle East/Africa, Great Britain, Europe, APAC/Australia. Its regional areas of focus are primarily determined by customers. Smart Mobility Solutions thus has a strong local presence in Germany, Great Britain, the Netherlands, Switzerland, Austria, North America, and Australia, and continues to expand its sales activities on the basis of the above structure.

In addition to international companies such as Verra Mobilty/ Redflex, Sensys Gatso Group, Idemia, and Vitronic, Smart Mobility Solutions also competes with a large number of locally operating companies, e.g., in the Asian region.

Traffic safety systems in Germany are tested and certified by the Physikalisch-Technische Bundesanstalt (PTB) in Braunschweig, thereby obtaining proof of their measuring accuracy. Foreign installations are subject to controls by national institutes, although various countries also partially or fully recognize the German PTB test certificate or licenses from other leading European licensing authorities.

Non-Photonic Portfolio Companies

With many years of experience and expertise in industrial metrology and optical inspection, as well as highly flexible robot-based automation, the Non-Photonic Portfolio Companies develop manufacturing solutions for customers in the automotive, aerospace, and other manufacturing industries. With its products, automation solutions, and services for industrial customers, Jenoptik is thus primarily addressing the trend toward greater flexibility and efficiency in production processes, particularly in the automotive industry.

In Automation & Integration, the companies, Prodomax and INTEROB, plan and create automated production lines and integrate them into customers' manufacturing environments. Solutions, products, and services related to process engineering and implementation include plant layouts, simulation, machine control and software design, robot handling systems, and transport devices.

The HOMMEL ETAMIC metrology portfolio includes high-precision contact and non-contact production metrology with a resolution in the nanometer range for tactile, pneumatic, and optical inspection of roughness, contour, shape, and the determination of dimensions at every stage of the production process and in the inspection room. A wide range of services such as advice, training, service, and long-term maintenance agreements are also all provided.

The Non-Photonic Portfolio Companies are active in the centers of the global automotive and automotive supplier industry in Europe, North America, and Asia and, in addition to Germany, also have development and production facilities in the US, Canada, France, and Spain. There are also numerous sales and service offices located on three continents. Companies such as Marposs, Mahr, ViciVision, Tokyo Seimitsu, Faro Technologies, and Renishaw compete with Jenoptik's metrology business and companies such as Centerline Automation, Serra, and Kuka with its automation business.

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Further information on the development of the industries and markets can be found in the "Macro-Economic and Sectoral Developments" chapter

Targets and Strategies

Strategic orientation of the Group

As already noted in the chapter "Business model and markets," Jenoptik's range of services is predominantly based on optical methods and technologies. High-precision, flexible photonics methods and processes will continue to enjoy an increasing share in industrial value creation as so-called "enabler" technologies and contribute to greater sustainability.

With a greater focus on photonics growth markets, we are on our way to becoming a streamlined and globally positioned photonics company.

Further information on the development of the photonics market can be found in the "Macroeconomic and Sectoral Developments" chapter

According to studies by Verified Market Research and Triton Market Research, for example, the photonics market is expected to experience annual average growth of between 6 and 8 percent from 2021 to 2028.

With the Strategy 2022 announced in 2018, Jenoptik focused on its core areas of expertise in optical and photonic technologies. The goal of addressing primarily those markets in which Jenoptik's technological expertise justifies a price premium is being consistently pursued by means of our strategic Agenda 2025 "More Value".

Information on the Group structure can be found in the "Business Model and Markets" chapter

Agenda 2025 "More Value"

Jenoptik is using its strategic Agenda 2025 "More Value" to focus on sustainable profitable growth in the photonics market segments. The transformation into a globally leading, pure photonics group is to be continued. We are focusing on three attractive core markets: semiconductor & electronics, life science & medical technology, and smart mobility.

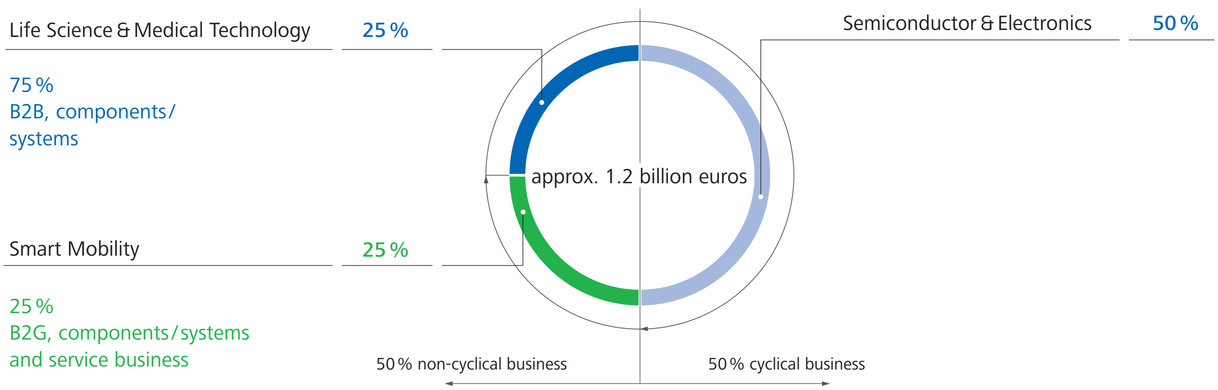
In order to create more value for all our stakeholders with the Agenda 2025, we also want to:

- drive organic and non-organic growth, and increase profitability,
- secure financial flexibility for further acquisitions and investments, and
- act in a socially and environmentally responsible manner.

Transformation into a pure photonics group

In recent years, Jenoptik has already aligned its product portfolio with the core photonics markets. The acquisition of TRIOPTICS, BG Medical, and the SwissOptic Group has contributed to this, along with the divestment of non-core activities (non-optical metrology for grinding machines and crystal growing). The sale of VINCORION at the end of June 2022 is a further significant milestone in the transformation towards a pure, globally leading photonics group.

G07 2025 – Jenoptik focuses on three core markts



Focusing on three core markets

For us, the three core markets of semiconductor & electronics, life science & medical technology, and smart mobility are markets that are not only growing at an above-average rate, but in which Jenoptik is also characterized by technological differentiation potential in the field of optics and photonics. With our range of services, we help our customers to solve complex photonic challenges and thus have a decisive influence on the performance of their products. This enables us to achieve higher prices. For 2025, we are striving to generate around 50 percent of group revenue in the semiconductor and electronics market, with around 25 percent in each of the life science & medical technology and smart mobility markets, as announced in November 2021.

At the same time, we want to position ourselves in such a way that our business remains resilient to market fluctuations. By 2025, we want to generate around 50 percent of our group revenue in markets that are less cyclical – this relates to our business in the life science & medical technology and smart mobility markets. The remaining portion of revenue is expected to be generated in market segments that are more cyclical, such as the semiconductor equipment industry.

Jenoptik profits in particular from the global trends in digitization, health, mobility as well as sustainability, and is increasingly establishing itself as a strategic systems partner for international customers, with whom it works to design forward-looking solutions.

The planned profitable growth will be further supported by efficiency measures, the realization of economies of scale, and increasingly also by the further expansion of the service business, especially in the Smart Mobility Solutions division.

2025 targets

We plan to increase revenue to around 1.2 billion euros, with an EBITDA margin of around 20 percent, by fiscal year 2025, as announced in November 2021. The revenue growth averaging around 8 percent per annum is expected to be achieved mainly organically, but also includes further portfolio changes. In 2025, we want to generate three quarters of our revenue in the photonics business in our Advanced Photonic Solutions division, and the remaining 25 percent in the Smart Mobility Solutions division.

The targeted improvement in the EBITDA margin is to be achieved primarily through an improved product mix, i.e. a successively increasing share of higher-margin products as well as economies of scale.

As part of the "More Value" Agenda 2025, we want to ensure sufficient financial flexibility for the scheduled profitable growth. In addition, we will focus more on the return on capital employed (ROCE), i.e. the yield on our employed capital, in the future. ROCE (excluding goodwill) is expected to increase to more than 20 percent by 2025.

Innovation

As an innovative high-tech company, it will remain crucial for Jenoptik to identify customer needs and trends at an early stage and to align strategic measures and business activities with them accordingly. Therefore, we still will be focusing on research and development – both in our own innovative products and for joint developments with our customers. This enables us to achieve competitive advantages which determine our performance and thus our economic success.

As a system partner, Jenoptik is constantly looking for new solutions in conjunction with customers. We are often already involved by our customers in the very early stages of the development processes. This enables us to strengthen our relationships and steadily boost value creation. At the same time, we also want to drive our own innovation forward independently of customer-related orders.

We will continue to invest in future applications, such as those in the areas of augmented and virtual reality. We also want to further expand our software expertise and our knowledge in the field of artificial intelligence.

In a medium to long-term time frame, we will be dealing with market segments that are currently still relatively small, but in which we see (1) enormous potential for market growth as well as (2) considerable influence of high-performance optical technologies. Among other things, this relates to the topic of quantum technology.

Further information can be found in the "Research and Development" chapter

Organic growth

In order to achieve our goals for 2025, we are planning significant organic growth. To achieve this, we want to

- further expand revenue from existing customers by making even better use of both the expanded technology base resulting from the acquisitions and the joint production capacities,
- win new customers, e.g. through the expanded joint expertise; and
- make significant investment in production capacities, including for example the construction of a new state-of-the-art production building for micro-optics and sensors in Dresden.

Active portfolio management to support the group strategy

In implementing Agenda 2025, we will focus on further acquisitions to optimize our portfolio. We want to use targeted acquisitions to further expand our market and customer access. We intend to round off our portfolio through complementary technologies and additional systems expertise. Key criteria for an acquisition are that the acquired company has a strong technological base and growth potential. In addition, the customer base should allow for regional expansion. The criteria of integrability and cultural fit are also relevant. Against the background of the planned focus on core photonic expertise, however, the discontinuation of existing business activities or the sale of parts of the company is also being continuously examined.

Internationalization

Due to the continuing strengthening of domestic industrial production in the Americas and Asia/Pacific regions, we continue to see particularly great potential for future growth in these regions. The further expansion of on-site value creation should help to better address local customer needs, providing support through regional service.

The acquisition of BG Medical and the SwissOptic Group has enabled us to further expand our global presence in strategically important markets with attractive locations and to significantly extend our global production network including modern clean room capacities. This will enable Jenoptik to better manage capacity utilization at the individual sites in the future, thereby realizing additional growth potential.

In the future, Jenoptik will also continue to invest in the establishment and expansion of new and existing sales and service structures. We rely both on our own direct distribution channels and on dealer structures.

Employees – our most important resource

In order to grow profitably in the long term, we must attract highly qualified and committed employees, and ensure their long-term retention in the company. Structured HR planning is necessary in all countries where we are present to achieve this in an environment which is becoming increasingly demanding from a demographic viewpoint. Jenoptik utilizes targeted employer branding to position itself as an attractive employer. Personnel development measures, an interdisciplinary and intercultural work environment as well as an open and dialog-oriented corporate culture should help to strengthen employees' loyalty to the company. The basis for this are our values – open, driving, confident – which help to bring Jenoptik's employees closer together across different cultural and legal systems. As part of our personnel work, the anchoring of the values in everyday corporate life is therefore a further focal point in the realization of our strategic objectives. As we are convinced that more diversity in the company leads to greater innovation and creativity, we have set ourselves diversity targets and defined measures to implement them: Further information on this can be found in the Non-financial Report.

We want to continue our cultural change in the years to come. Since we have made good progress in establishing a more open corporate culture, we will focus more on the values "driving" and "confident" in the slogan "Driving Confident Performance" until 2025.

Further information on employees and the corporate culture can be found in the Non-financial Report

Sustainability is part of our corporate strategy

For us, our corporate activities are not only aimed at achieving economic goals but are also an obligation to the environment and society. Consequently, the subject of sustainability is firmly rooted throughout the entire Jenoptik organization. As a so-called enabler, we want to use our innovative products and solutions to make an important contribution to overcoming social and climate challenges, and enable our customers worldwide to contribute more efficiently and sustainably to greater resource conservation and climate protection.

Further information on sustainability, measures and goals can be found in the Non-financial Report

Priorities for strategy implementation 2022

As part of the “More Value” strategy, we had set ourselves the following priorities for 2022:

- adaptation of the organizational structures to the new positioning of the Group,
- integration of BG Medical and the SwissOptic Group into the Jenoptik Group structure,
- expansion of our business in Smart Mobility Solutions,
- continuation of the integration of our Optical Test & Measurement business (including TRIOPTICS) and consistent addressing of growth regions.

The new organizational structure was established in the course of the first quarter of 2022. Jenoptik is now active with the two divisions Advanced Photonic Solutions and Smart Mobility Solutions. Non-photonic activities, particularly for the automotive market, are operated as independent brands within the Non-Photonic Portfolio Companies.

The integration of BG Medical and the SwissOptic Group is proceeding as planned. The SwissOptic Group continues to operate as an independent entity, integration is taking place gradually, and changes have already been made in the IT area.

The Smart Mobility Solutions division increased its revenue only slightly in 2022 due to supply bottlenecks at the beginning of the year. In contrast, the order intake increased significantly in the reporting year.

In the fiscal year 2022, we also continued the integration of our Optical Test & Measurement businesses to further promote the use of synergies. For example, processes were further aligned for this purpose.

Future strategic orientation of the operating business

The photonic divisions of the Group are interconnected in many ways, and infrastructures and cross-section functions are also being increasingly used jointly, for example for global procurement or in the expansion of the international sales network. Shared locations and the use of infrastructure facilitate market entry, enable the company to achieve critical mass more quickly in key regions around the world, and help to optimize the cost base through the leverage of synergies. Cost benefits are realized and currency risks minimized through global sourcing and production.

The business activities of the Advanced Photonic Solutions division will continue to focus on the semiconductor & electronics and life science & medical technology markets. Here we use our expertise in photonics as a key technology and, as an enabler, want to support our customers in improving their competitiveness and environmental sustainability. In 2025, the division aims to achieve revenue of around 600 million euros in the semiconductor & electronics market and around 300 million euros in the life science & medical technology market.

The acquisition of BG Medical and the SwissOptic Group in 2021 has enabled us to strengthen our global photonics business and, in addition to the semiconductor equipment business, noticeably expand the medical technology business in particular. The acquisition has significantly expanded the global production network including modern clean room capacities at sites in Berlin, Heerbrugg (Switzerland) and Wuhan (China). In the future, this will enable the division to better manage capacity utilization at the individual sites and to exploit cost advantages. In addition, the acquisition has given the division better access to Asian customers and suppliers, enabling it to realize additional growth potential.

We are continuing to consistently focus our optical and micro-optical systems business in the Semiconductor & Advanced Manufacturing area on the “digitization” mega trend, which market assessments, such as those from Researchandmarkets, indicate is set to intensify. In addition, we believe that Jenoptik can benefit from the trend that both the USA (US Chips Act) and Europe (European Chips Act) are attempting to bring semiconductor production, which is currently mainly located in Asia, back to these regions. In order to meet the expected further increased demand for chips, and therefore also for the equipment required to manufacture them, targeted investments are being made, such as in a new highly functional clean room factory in Dresden.

Through ongoing internationalization, including in Asia, expansion of the systems business, focus on key customers as well as the use of economies of scale we aim to achieve further sustainable profitable growth. The semiconductor business of the SwissOptic Group, acquired in 2021, further rounds off the product portfolio in the semiconductor equipment sector with a complementary range, enabling existing and new customers to be offered an even broader range of solutions. In the long term, we also want to position ourselves even more strongly as a system-relevant supplier to our customers.

On the basis of our optical and micro-optical solutions, we aim to target further markets in the digital world in addition to the semiconductor equipment sector. Jenoptik is already positioning itself in the market for optical information and communication technology, where we expect further growth. The focus here is on optical data transmission and laser material processing, where we intend to concentrate on high-end components and intelligent system solutions. In order to also successfully target these high-tech markets in the future, innovation, technological development, and differentiation remain key issues.

In the Biophotonics sector, we are focusing on the "health" mega trend. We want to position ourselves even more strongly as one of the leading and profitably growing partners for the development of photonic modules and system solutions for the medical technology and life science industries. In doing so, we rely on our product portfolio with light sources and imaging systems for diagnostic and analytical applications in the life science sector as well as laser-based solutions and camera systems for diagnostic and therapeutic applications in ophthalmology, aesthetics, dentistry, as well as minimally invasive and robotic surgery. To do this, we are focusing both on the development of customer-specific products and on unique selling points.

In the area of Optical Test & Measurement, combining expertise in optics and industrial imaging will enable us to further expand what we consider to be a technologically leading position and gain associated market shares. Here we can rely on what we consider to be good positioning in terms of the measuring accuracy of our systems and many years of experience in testing and measurement in large-volume production. We see important potential here, for example, in the growing markets for new virtual and augmented reality applications in the industrial and consumer segments. With its well-developed presence and established access to key TRIOPTICS customers in Asia, Jenoptik wants to expand its existing market shares in strategically important markets such as China, Taiwan, and Korea. In addition, by expanding our range of services, we expect to further strengthen our position in North America, particularly with regard to local customers in the digital and communications sectors.

We are also participating in the trend for more mobility and efficiency with innovative industrial applications. One focus of business activities is on expanding volume business with optoelectronic and polymer optical high-performance components and modules. In addition, we are continuing to pursue promising growth options with technologies for innovative applications centered on our core areas of expertise, such as driver assistance systems or technologies for autonomous driving (LiDAR). We also want to become an internationally operating supplier in these fields.

In addition, the Advanced Photonic Solutions division also includes laser material processing. In the context of smart manufacturing, we are focusing on the automated processing of plastics. We believe that our solutions can help to optimize production steps, thereby creating more efficiency for our customers. We want to further establish ourselves as a niche supplier focusing on the core business of laser airbag weakening.

In the Smart Mobility Solutions division, we are pursuing two further future trends with the focus on mobility and public safety. In the field of traffic monitoring systems, we continue to support our customers – primarily public-sector customers (B2G) – in achieving their targets to improve traffic safety with complete solutions. Urbanization and digitization of smart cities lead to moderate but sustainable growth in demand for traffic regulation and control. Initiatives such as "Vision Zero" also contribute to this. The coronavirus pandemic and climate change have also intensified discussions about traffic management in inner cities, congestion charges and clean air zones. In addition, the threat of terrorist attacks and regional lockdowns has increased the need for protection and proactive policing.

In the coming years, the Smart Mobility Solutions division wants to continue to grow both organically and through acquisitions, increasing revenue to around 300 million euros by 2025. The expansion of the value chain and customer relationships, especially in North America, should contribute to the organic growth. Furthermore, we want to establish a product portfolio with a platform approach. The goal is to offer entry-level products for emerging markets and high-end solutions for developed, homologated markets with additional applications/functionalities. To do this, we want to expand our technology and software expertise and make greater use of artificial intelligence. Our goal is to implement our product road map and new business models, which include software-as-a-service. We will continue to expand our partner network and will work closely with a small number of technology partners to accelerate new product launches. Our investment in deep learning will continue to help increase the performance and functionality of our systems in coming years.

In addition, possible acquisitions should help to expand the market share and the share of the value chain or to expand the technology or product range.

In the global traffic safety technology market, there is also a noticeable trend towards larger projects with a combination of equipment business and services, known as traffic service provision. That is why we are focusing on strengthening this profitable service business. By 2025, the share of recurring revenue is expected to increase to approximately 50 percent of the division's revenue. In addition to road safety, adjacent markets such as civil security and road user charging are also gaining in importance. Based on the existing systems and software applications, the division aims to develop into an integrated solution provider for civil security and future smart cities, while at the same time positioning itself for a future in which autonomous driving is part of everyday life. In the future, we also want to develop new technologies and solutions which are optimized for emerging sectors such as networked and autonomous vehicles.

With the Non-Photonic Portfolio Companies, we are, as a supplier of products, automation solutions and services for industrial customers, primarily addressing the trend towards more flexibility and efficiency in production processes, particularly in the automotive industry.

In the area of Automation & Integration, we offer our own products and systems, automated system concepts through to complete process solutions for efficient manufacturing environments.

With its inspection and production measurement technology, Jenoptik offers solutions for reducing fuel consumption and CO_2 emissions, particularly in combustion engines. However, the business is significantly influenced by the current trend in the automotive industry towards more and more e-mobility. We will continue to focus on the development of applications in the area of e-mobility as well as outside the automotive industry, for example in production metrology for machining processes.

Strategy development and processes

Strategy development for the Group and the divisions – as most recently in 2021 with the further development from "More Light" to "More Value" – is followed by a phase of strategy implementation lasting several years. The Corporate Center and the divisions work closely together on strategic planning and the implementation of measures. The focus is primarily on the most important cornerstones for underpinning the Group's growth targets.

In the annual strategy reviews with the Executive Management Committee and the Supervisory Board, on the one hand the strategic orientation is validated on the basis of current market developments, whereby there may be selected adjustments to the strategic road map. On the other hand, current focal points, which underpin the strategic goals and further advance active portfolio management, are discussed and approved. In addition to targeted investment in organic growth, this may also be supported by company acquisitions.

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Further information on the segments can be found in the Segment Report and the "Business Model and Markets" chapter

Control System

The corporate control system is geared toward the long-term corporate strategy and the Group's short to medium-term objectives. The Executive Board is responsible for overall planning and thus for achieving the stated objectives as part of the strategic corporate development.

With the support of the Executive Management Committee (EMC), the Executive Board uses a strategy process to steer the development of the business units. It monitors the implementation of defined measures at quarterly business reviews. On the basis of global trends, growth paths are defined, opportunities and risks are evaluated, portfolio decisions are made, and the focuses of in-house research and development are determined using technology roadmaps at annual strategy meetings. Strategy and planning meetings provide a planning basis for the following year and in medium-term group planning.

A planning forecast for the coming year and a five-year period is made annually on the basis of the long-term corporate strategy. It is based on the market-driven strategic planning of the key indicators that uses a bottom-up/top-down approach.

In the course of a fiscal year, the planning for that year is updated in several forecast cycles. Alongside quarterly forecasts, a rolling three-month forecast for revenue and order intake updated monthly is used to manage the company's development.

For operational management purposes, the monthly results of the Group and the divisions are discussed at the EMC meetings. At these meetings, the division heads/regional managers report to the Executive Board on the economic situation, the development of customer relationships, the competitive situation, and any special business events. Their reports employ standardized reporting methods and special analyses largely involving performance indicators, information parameters, and qualitative assessments, which are then used to define further operating and strategic measures to achieve the objectives in the event of planning deviations. The internal reports for the monthly Executive Board meetings provide aggregated financial and non-financial information for the divisions and the Corporate Center, which is essential to managing the Group on a global level, allocating resources in a targeted manner, and passing resolutions on the Executive Board.

G08 Performance indicators for corporate management

	Financial indicators		Non-financial indicators	
Key performance indicators	Growth	Revenue, order intake, capital expenditure		
	Liquidity	Cash conversion rate		
	Profitability	EBITDA margin		
Information parameters	Growth	Order backlog	Environment	Green electricity ratio, CO_2 reduction
	Return	ROCE	Employees	Diversity ratio, engagement score
	Profitability	EBIT margin	Suppliers	CSR rate (sustainable supply chain)
	Liquidity	Net debt, working capital	Innovation	Vitality index

A business intelligence environment enables and supports continuous improvement in business development analysis, reporting, and planning processes.

The indicator system used in internal reports and to manage the business units in 2022 comprises the "key performance indicators" (high-priority performance indicators). It also covers other financial and non-financial information parameters. All the indicators focus on shareholder value, the interests of our stakeholders, the requirements of the capital market, and the corporate strategy. The key indicators are shown in chart G08.

Information parameters such as order backlog, number of employees, or non-financial indicators are used for management purposes at business unit level. The most important non-financial information parameters (sustainability indicators) are taken into account in Executive Board remuneration and group financing.

Explanation of the indicator base

EBITDA means earnings before interest, taxes, depreciation, and amortization (including impairment losses and reversals) in the continuing operations. The EBITDA margin is the ratio measuring EBITDA to revenue.

The free cash flow is calculated from the cash flows from operating activities before tax payments, less capital expenditure and receipts from the sale of intangible assets and property, plant, and equipment.

The cash conversion rate is the ratio measuring free cash flow to EBITDA.

The ROCE (return on capital employed) is calculated by dividing income from operations (EBIT) by the average capital employed. The average capital employed comprises non-current non-interest-bearing assets (e.g., intangible assets including goodwill, property, plant, and equipment, and investment property) and current non-interest-bearing assets (essentially made up of inventories, receivables from operating business, and other current receivables), less non-interest bearing borrowings (e.g., provisions – excluding pensions and taxes –, liabilities from operating business, and other current liabilities). The calculation of averages uses the twelve month-end balances in the period under review and the opening balance at the start of the year.

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For more information on the non-financial information parameters, see the Non-Financial Report

For information on the planned development of key performance indicators, see the Forecast Report

Research and Development

As a technology group, research and development (R+D) is of key importance to Jenoptik. Our products and services give us competitive advantages which determine our performance and thus our economic success. One of our key strategic aims is therefore to expand our innovative capabilities in the photonics growth markets and to be a driver of innovation. We also develop technologies, products and platforms with unique selling points, protecting them where possible by means of industrial property rights. With our products and solutions, we do not only want to improve our customers' performance and profitability, we also want to contribute to greater energy efficiency and the responsible use of resources. In doing so, Jenoptik functions as a so-called "enabler".

Innovation management is an important tool used by Jenoptik to systematically identify and implement promising ideas. With networked processes, its primary intention is to generate capital from knowledge by uniting market and corporate viewpoints. Our innovation management has a uniform group-wide process landscape which is adapted within the divisions to meet the requirements of the respective industry. These framework conditions help to drive developments forward in order to make positive value contributions for the entire Group. Innovation management at Jenoptik lies within the remit of the Chairman of the Executive Board. In innovation management, the focus on photonics is further strengthened by the instruments of continuous improvement (Kaizen) as well as process-related anchoring.

The innovation team therefore works closely with various areas of business, such as controlling and investment management, and is intensively involved in the rolling strategy and planning processes.

Innovation process

Innovation, development and operational excellence in the launch of new products are one of the pillars of the Strategy 2025. The first stage of the Jenoptik innovation process involves identifying growth potential based on a strategic analysis of global trends and the requirements of our customers. Innovation projects are then created in line with our core areas of expertise and often with the direct cooperation of key customers. Strategic development projects are planned in road maps on the basis of corresponding milestones. This applies to product, technology and process innovations. Innovation projects can now be implemented more quickly in the early phases of development, enabling innovative solutions to reach the market sooner. With the introduction of the Jenoptik Business Systems (JBS) a standardized product planning group will be established at the operational level. This will make it even easier to prioritize projects in a targeted manner, adapt products to market needs, and continuously fill the product pipeline.

Including customer-specific developments, our R+D output amounts to 8.9 percent of revenue. We measure the success of our innovation activities using the Vitality Index. The percentage of revenue with products and platforms developed in the last three years is expected to increase continuously as a percentage of total revenue. In the past fiscal year, the Vitality Index increased to 23.7 percent compared with the prior year (prior year: 22.2 percent). Thus, the target value of 20 percent for 2022 was exceeded. In order to be viable on the market and to target new markets, we must rely both on our own developments and on those with external cooperation partners in order to produce more agile innovations.

Innovation culture

In addition to the creation of an optimal process-based innovation landscape, strengthening the innovation culture also plays an important role in exploiting the full potential of our company. Central here are communication, networking and the transfer of knowledge. Examples include best practice communities, creative co-working and employee podcasts for technology and innovation.

New areas of technology and use were further investigated in the reporting year. The emerging technology field of quantum technology, in which photonic components play an essential role, deserves special mention. With areas of use such as quantum computing, quantum communication and quantum sensing & imaging, numerous disruptive applications are expected to emerge here in the future. With its photonic expertise, Jenoptik is already supplying components to companies and the scientific community at this early stage. In order to continue to promote innovative projects in the area of new photonic technologies and other areas in the future, an additional innovation budget is available in Innovation Management. In addition, Innovation Management coordinates the opportunities for external research funding to support innovative projects and ideas.

Employees in research and development

The experience and expertise of our employees are essential to the success of our research and development work, and the qualification standards we expect of them are correspondingly high. Their knowledge is used both for specific tasks and across all divisions in corresponding development projects. In total, 641 employees worked in Research and Development in 2022 (prior year: 599 employees). T04

T04 Employees in R+D[1]

	2022	2021
Number of employees in R+D	641	599
Percentage of overall workforce (%)	14.1	14.2

[1] Values relate to the continuing operations without VINCORION

Memberships in associations

Jenoptik procures additional external expertise with the help of targeted cooperation arrangements. Through research cooperations, projects can be realized in a market-driven manner, development times can be reduced and specialist expertise can be successfully built up. Jenoptik works with both universities and non-university research institutions as well as with industrial partners and key customers.

Jenoptik is also active in numerous industry and technology-oriented associations. Examples include the Optonet Photonics Network at regional level, SPECTARIS at national level and the European Photonics Industry Consortium (EPIC) at European level. In addition to active membership, the future aim is to interact more closely with the above networks in order to exploit the range and cooperation potential for disruptive innovations. Jenoptik is also active in the field of quantum technology, becoming a member of the European Quantum Industry Consortium (QuIC) in 2022. The Group is also set to join the Quantum Economic Development Consortium (QED-C) in 2023.

Development output

At 87.1 million euros, the R+D output including developments on behalf of customers was up on the prior year (prior year: 63.6 million euros). The R+D expenses also increased significantly to 54.6 million euros (prior year: 38.9 million euros). The costs for developments on behalf of customers increased to 28.0 million euros, primarily due to the contribution of the Advanced Photonic Solutions division, and are included in the cost of sales (prior year: 20.3 million euros). In 2022 development services including patents were capitalized in the amount of 4.5 million euros (prior year: 4.4 million euros). The capitalization rate, i.e. the capitalized development costs divided by total R+D expenses, reduced to 8.2 percent in 2022 (prior year: 11.3 percent). Information on the depreciation of internally generated intangible assets can be found in the section “Intangible assets” in the Notes.

R+D output is distributed among the divisions as shown in the table T05.

R+D output in the Advanced Photonic Solutions division included expenses arising from developments on behalf of customers in the amount of 25.1 million euros (prior year: 17.3 million euros), which were significantly above the previous year's value, especially in the semiconductor equipment and biophotonics segment. The R+D expenses in 2022 amounted to 34.8 million euros (prior year: 20.2 million euros).

The R+D output of the Smart Mobility Solutions division included developments on behalf of customers of 0.8 million euros (prior year: 0.6 million euros). The R+D expenses came to 15.5 million euros (prior year: 14.4 million euros).

In 2022 the R+D output of the Non-Photonic Portfolio Companies was 5.6 million euros (prior year: 6.7 million euros). Of this, 2.1 million euros were developments on behalf of customers (prior year: 2.4 million euros).

Patents

Our R+D capital expenditure is protected via central IP management in close cooperation with the operating areas. We are increasingly focusing on high-quality applications and internationalize these in important growth markets such as China and the USA. In 2022, a total of 26 new first patents were filed by Jenoptik subsidiary companies (prior year: 25 patents) as well as a further 32 subsequent international registrations carried out. The focus continued to be in the area of optical components and optical modules.

The number of patents does not include registered designs, utility models or brand registrations. For competition reasons, Jenoptik does not publish information on the receipt and issue of licenses.

Key projects and results

The solutions described in the table T07 are some of those developed and brought to the market by Jenoptik in 2022.

T05 R+D output by segment (in million euros)

	2022	2021	Change in %
Group	87.1	63.6	36.9
Advanced Photonic Solutions	63.1	41.9	50.6
Smart Mobility Solutions	17.6	15.0	17.2
Non-Photonic Portfolio Companies	5.6	6.7	−17.2
Other	0.8	0.0	

T06 R+D output [1] (in million euros)

	2022	2021	2020	2019	2018
R+D expenses	54.6	38.9	39.4	44.1	47.4
Capitalized development costs including patents	4.5	4.4	4.0	4.0	1.5
Developments on behalf of customers	28.0	20.3	13.5	20.4	20.2
R+D output	87.1	63.6	56.9	68.4	69.2
R+D ratio 1 (R+D output/revenue) in %	8.9	8.5	9.2	8.0	8.3
R+D ratio 2 (R+D expenses/revenue) in %	5.6	5.2	6.4	5.2	5.7

[1] Values for the years 2018 to 2019 are data for the Group including VINCORION

T07 Key projects and results in 2022

Market	Products and solutions developed and launched in 2022
Semiconductor equipment	Semiconductor lithography and inspection machines: • Optical assemblies and modules for use in systems for the EUV wavelength range as well as novel manufacturing technology for the production of even higher performance micro-optical products • Introduction of a new, complex coating technology in order to continue to provide the best possible support in the DUV wavelength range for the constantly increasing demands on extreme quality and service life for high-precision optical and micro-optical products Specific product and technology optimizations: • Especially for optical components with regard to improved manufacturability, yield and greater production throughput in order to increase production capacity
Information and communication technology	The UFO Probe™ Card enables electronic as well as optical components on wafers to be tested simultaneously with only one probe card – without active setup on each individual chip. In 2022, the UFO Probe™ Card was awarded the 25th Thuringia Innovation Prize in the "Industry & Material" category. ImageMaster® HR 2 is the completely revised new version of the ImageMaster® HR – the global standard for image quality testing of small and medium sized lenses, e.g. for smartphone, photo and film cameras, with improved usability, high reproducibility and extended range of measurable samples. OptiSurf LTM with Lens Gage System for the contactless measurement of center thickness without information on the lens material and determination of group refractive index / glass type of lenses. ATS-C – CNC alignment rotation for short cycle times and the rapid integration of the machine into existing production processes with optimized cycle times, processing of free-form cell designs and intuitive machine operation for quick and easy implementation.
Life science and medical technology	Photonic solutions for diagnostic and therapeutic applications in the area of light sources and imaging systems, laser-based solutions and camera systems in ophthalmology, aesthetics, dentistry as well as minimally invasive and robotic surgery, such as: • Further development of existing device series in the area of DNA sequencing to make them more robust, cost-effective and high-performance. • Next-generation white light sources with improved imaging and illumination for vitreoretinal surgery, cataract surgery and endoscopy. • The new 760-nm wavelength facilitates the effective treatment of different skin and hair types with just one hand-held device. Laser bars with three different wavelengths can now be installed in the Jenoptik multi-wavelength laser stacks. • Newly developed digital microscopy subsystem JENOPTIK SYIONS® Raman module for point-of-care applications for targeted, personalized diagnostics in the context of antibiotic therapies.
Laser material processing	• New JENscan® product family for chipless laser material removal for ultimate precision and process stability. • JENSCAN® STYLE facilitates light design for the individualization of vehicle interiors and exteriors via the partial removal of the non-transparent coating of the translucent plastic components. • The prototyping technology of JENscan® Tire is used to manufacture newly designed tires based on the CAD model. This allows for significantly faster development cycles in the tire industry.
Traffic safety technology	• Further development of the SR390 radar-based system for traffic monitoring with enhanced functions such as illegal turning, illegal lane changing or tailgating violations. • TraffiPole, the winner of the Intertraffic 2022 Green Globe Award, has been ergonomically improved for increased heat dissipation and lower production costs. • New products GardoVia and NexoVia for the traffic enforcement, civil security and road user charging markets were presented in the reporting year. • 2022 saw the delivery of a new generation of Jenoptik TLE backoffice software for traffic monitoring, TraffiDesk pro, for the processing of violation data. • Creation of the first multi-platform algorithm libraries called libAlgo, initially for DL ANPR, and in the future for other algorithms. Integration of video analytics into the Vector platform to improve recognition rates in challenging environments and to identify illegal driver behavior.

Employees

Development of employee numbers

As of December 31, 2022, with 4,435 employees (incl. trainees), Jenoptik recorded growth of 5.5 percent in its workforce (31/12/2021: 4,205 employees). The number of Jenoptik employees abroad rose by 4.6 percent to 1,595 (31/12/2021: 1,525 employees). At 36.0 percent, the proportion of employees working abroad has remained constant in comparison with the prior year (31/12/2021: 36.3 percent).

Temporary workers were also employed in the past fiscal year to cover production peaks and short-term order intakes as well as for major projects. They were employed mainly in the operating areas and the number fluctuated during the year. On the reporting date of December 31, 2022, 114 temporary workers were employed by Jenoptik (31/12/2021: 130).

At 347.2 million euros, personnel expenses in 2022 (wages, salaries, social security contributions, costs for retirement provision) were up 26.5 percent compared with the prior year's figure of 274.4 million euros. In addition to the usual salary increases, the rise resulted primarily from the growth in the workforce in the semiconductor equipment area in the Advanced Photonic Solutions division, and from the first-time inclusion of BG Medical and the SwissOptic Group for the full year.

Revenue per employee (including temporary employees) measured in full time equivalent rose by 18.4 percent to 235.8 thousand euros in the fiscal year 2022 (prior year: 199.2 thousand euros).

T08 Employees by region (incl. trainees)

	31/12/2022	31/12/2021	Change in %	Absolute change
Germany	2,840	2,680	6.0	160
Germany in %	64.0	63.7		0
Abroad	1,595	1,525	4.6	70
Abroad in %	36.0	36.3		0
Europe (excl. Germany)	593	544	9.0	49
America	592	569	4.0	23
Asia/Pacific	410	412	−0.5	−2

The employee age distribution, as can be seen in the table below, is balanced. The figures are largely unchanged compared with the prior year.

The proportion of women (in Germany and abroad) was 30.5 percent on December 31, 2022, an increase in comparison with the prior year (31/12/2021: 28.4 percent).

At 6.5 percent, the absenteeism rate among Jenoptik employees in Germany in 2022 was above the level of the prior year (prior year: 4.6 percent). This effect is also in line with the general trend in Germany. The fluctuation rate increased to 7.1 percent compared to the prior year (prior year: 5.9 percent). This is a fundamental trend in the labor market and reflects the current rather employee-driven applicant market. The fluctuation rate is calculated by dividing the number of employees leaving the company in the fiscal year by the number of employees as of the reporting date of the prior year plus those who joined the company in the fiscal year. Temporary workers are not included in the calculation.

T09 Revenue per employee (in thousand euros)

	2022	2021	Change in %
Revenue per employee (including temporary employees)	235.8	199.2	18.4

T10 Group age distribution of continuing operations

	under 30	30–39	40–49	50–59	60–65	over 65	Total
31/12/2022	15.9%	29.7%	24.7%	21.1%	7.1%	1.5%	100.0%
31/12/2021	14.7%	28.0%	24.1%	23.3%	7.8%	2.2%	100.0%

Training & HR development

As of December 31, 2022, 154 trainees and students of the Cooperative State Universities were employed in the continuing operations (31/12/2021: 152). Of these, 47 were new hires (prior year: 36). At the same time, 37 trainees and students of the Cooperative State Universities were able to successfully complete their training in the reporting year (prior year: 25).

At the Villingen-Schwenningen, Jena, and Triptis sites, the new trainees receive job-specific training for optical, precision engineering, electronic, and commercial occupations in training centers. Jenaer Bildungszentrum gGmbH – Schott, Zeiss, Jenoptik – in which Jenoptik is a partner, has now established itself as a training center for optics and photonics at a national level.

At around 2.7 million euros, Jenoptik invested more in the professional development of its employees in 2022 than it did in the prior year (prior year: 1.9 million euros). The rise is primarily due to the integration of the SwissOptic Group, but also includes an increase in costs due to catch-up effects and a higher number of in-person events following the end of the stringent coronavirus measures. These costs include both the expenses for trainees and students at the Cooperative State Universities and the costs for further training of our employees. The overall development needs in the Group are assessed in regular staff appraisals. Suitable qualification measures are then derived from these and implemented.

Further information on this can be found in the Non-financial Report

Economic Report

Macro-economic and Sectoral Developments

In 2022, the global economy was weighed down by three main factors: the global fight against inflation, the war in Ukraine, and a revival of the Corona pandemic in China. However, over the course of the year, the global economy proved more resilient than initially feared, as the International Monetary Fund (IMF) reported in early January 2023. In many countries, consumer spending and investment had proved more robust than forecast in the third quarter of 2022. In addition, inflation had peaked in many countries, which was now leading to better financing conditions. Government action to mitigate the impact of the energy crisis on companies and private households has had a positive effect, according to the IMF, as has the increasing economic momentum in global trade. Supply bottlenecks have eased, transport costs have fallen, and this has led to an upswing in previously constrained sectors, such as the automotive industry. According to the IMF, however, in the final quarter this positive development weakened in many industrialized nations – with the exception of the US; many economic indicators such as indices on business and consumer confidence pointed to a slowdown.

According to the National Bureau of Statistics of China, the Chinese economy grew just 3.0 percent in 2022 compared to the prior year, when it had grown 8.4 percent. This meant that China also missed its own GDP target of 5.5 percent, partly due to its long-standing zero-Covid policy and strict lockdowns.

T11 Change in gross domestic product (in percent)

in percent	2022*	2021
World	3.4	6.2
USA	2.0	5.9
Eurozone	3.5	5.3
Germany	1.9	2.6
China	3.0	8.4
India	6.8	8.7
Emerging countries	3.9	6.7

Source: International Monetary Fund, World Economic Outlook (Update), January 2023
* Estimate

Despite high inflation and rising interest rates, the US economy posted year-on-year price-adjusted growth of 2.1 percent in 2022, according to the US Department of Commerce. After a weak start, annualized gross domestic product (GDP) rose 2.9 percent in the final quarter, slightly lower than the 3.2-percent increase in the third quarter. Key interest rate hikes to combat inflation slightly dampened economic activity – companies did not increase their investments in the fourth quarter as much as in the summer; exports decreased by 1.3 percent, imports by as much as 4.6 percent compared with the prior quarter. In 2022, the US passed the Inflation Reduction Act (IRA), an important scheme to promote domestic factories for green technologies, for example for electric cars, the hydrogen economy, or wind farms.

Despite inflation, the war in Ukraine, the energy crisis, and supply chain issues, GDP in Germany rose 1.8 percent year-on-year in 2022, as stated by the German Federal Statistical Office in late January 2023. A significant portion of this growth, however, was seen in the first quarter, before the stresses of the Ukraine war became apparent. In the final quarter, GDP declined 0.2 percent on the prior quarter, contrary to the expected stagnation, mainly due to lower consumer spending. For the year as a whole, industrial production fell 0.6 percent year-on-year. Despite recovering over the course of the year following a sharp slump in the spring, as reported by the Federal Statistical Office, it fell again and unexpectedly at the end of the year. Reasons included declining production in the construction industry and renewed curbs on production in energy-intensive industries such as metals, chemicals, and paper. In the context of a weak global economic environment, exports also fell at the end of the year, as reported by the Federation of German Industries (BDI). For the year as a whole, the German export industry would have exported more than ever before and exceeded the previous record value from 2021 by 14.3 percent. This, however, was due to price increases; adjusted for prices, German exports would have grown 2 percentage points less than global trade in 2023, according to the BDI.

Photonics is considered a key enabling technology for many future markets. Many photonics applications have made a significant indirect contribution to containing the pandemic and are assisting in the digital transformation. For the German photonics industry and on the basis of performance in the first half-year 2022, the Spectaris industry association expects annual revenue in the industry to have increased in the high single-digit percentage range from the 47 billion euros in the prior year.

The global semiconductor industry had another record year in 2022, as reported by the Semiconductor Industry Association (SIA). Global revenue rose 3.2 percent to 573.5 billion US dollars, although demand did slow toward the end of the year. The Americas region saw the strongest growth for the year as a whole, and China remained the largest single market. Based on its provisional figures, market observer Gartner reported that worldwide semiconductor revenue grew only 1.1 percent to 601.7 billion US dollars in 2022. As it states, inflation and a weak economy reduced demand for PCs, memory chips, and smartphones in the second half of the year.

Semiconductor equipment manufacturers had a record year: According to its initial assessment at the end of the year, the Semiconductor Equipment and Materials International (SEMI) industry association reported that global revenue was 5.9 percent up on the prior-year figure, at 108.5 billion US dollars. China, Taiwan, and South Korea were again the regions with the highest level of investment.

Despite the difficult situation, 2022 was a strong year for the German electrical and digital industry, as reported by the German Electrical and Electronic Manufacturers' Association (ZVEI). According to its figures, production rose 3.7 percent from January through November, almost exactly in line with the annual forecast of 4 percent growth. Year-on-year revenue increased 12 percent to 224 billion euros, with the strongest growth seen in electronic components, followed by information and communications technology, batteries, energy technology, and automation systems.

According to VDMA Machine Vision, the German machine vision industry generated revenue of 3.3 billion euros last year, 8 percent more than in 2021, as most recently stated in October 2022. The strongest demand came from abroad.

Based on data supplied by the German Federal Statistical Office, Spectaris most recently reported its expected 2022 earnings for the German medical technology industry in November 2022. The association is expecting year-on-year industry growth of 3.5 percent, equating to revenue of 37.7 billion euros. Burdens included the war in Ukraine, major supply chain disruptions, drastically rising material, energy, and logistics costs, and the impact of the European Medical Devices Regulation. According to market researcher Fortune Business Insights, the global market volume was 495.5 billion US dollars in 2022, slightly up on the prior-year figure of 489 billion US dollars.

Burdened by the overall economic situation and international supply chain issues, the German mechanical and plant engineering industry posted an overall decline of 4 percent in order intakes, despite initial growth in orders over the first three quarters, as demand for capital goods dropped off toward the end of the year – in the final quarter by a considerable 16 percent on the prior year, as reported by the German Mechanical Engineering Industry Association (VDMA). The VDMA had been assuming a small production increase of 1 percent for 2022. According to the VDMA, machine production in China was similarly weak, while in the US it was 5 percent above the prior-year figure. Global revenue was 3 percent up on the prior year, according to VDMA calculations.

The automotive industry was impacted by supply bottlenecks and material shortages, particularly for semiconductors, rising prices, and regionally exacerbated, additional shortages in the value chain, reported industry associations. The situation did, however, improve by the end of the year, allowing automakers to start working off their high order backlogs. By contrast, many automotive suppliers remained in crisis mode, mainly as a result of disrupted supply chains and cost increases for raw materials and logistics.

According to calculations by analysts MarketsandMarkets, the revenue volume of the global market for traffic safety technology in 2022 was 4.035 billion US dollars, 9.4 percent more than in the prior year. In Germany, the German Federal Statistical Office's provisional accident statistics for 2022 indicated an increase in the number of road deaths compared with 2021, which was at an all-time low partly due to lower traffic volumes during the coronavirus pandemic. In the US, the National Highway Traffic Safety Administration (NHTSA) reported at the beginning of 2023 that the number of road deaths had fallen slightly in the first nine months compared with the same period in the prior year – the second quarter in succession after almost two years of rising figures.

Legal Framework Conditions

The legal framework conditions governing business operations essentially remained constant in 2022 and therefore had no significant impact on the business development of the Jenoptik Group.

Earnings, Financial, and Asset Position

Comparison of actual and forecast course of business

On release of the preliminary results in February 2022, the Jenoptik management forecast further profitable growth for the fiscal year 2022 on the basis of a good order intake in the fourth quarter of 2021, a high order backlog, and ongoing promising developments in the core photonics businesses, especially the semiconductor equipment business. On publication of the final figures on March 29, 2022, the Executive Board confirmed this guidance. It expected revenue growth of at least 20 percent for the continuing operations in 2022, including BG Medical and the SwissOptic Group, which were consolidated for a full fiscal year for the first time. It also anticipated strong year-on-year growth in EBITDA (earnings before interest, taxes, depreciation, and amortization, including impairment losses and reversals) excluding the one-off effect. The EBITDA margin was expected to be around 18 percent. This outlook was confirmed on publication of the first-quarter earnings 2022.

On the basis of the good performance in the first half of 2022 and the well-filled project pipeline, the Executive Board raised its guidance for 2022 in the continuing operations on publication of the half-year earnings in August 2022. At this time, it expected revenue to come in at between 930 and 960 million euros. EBITDA was also expected to increase significantly year-on-year excluding the one-off effect, with the EBITDA margin improving accordingly to between 18.0 and 18.5 percent.

In view of the good performance in the first nine months, the Executive Board specified its August guidance at the end of November 2022 and now expected revenue in the upper half of the existing range of between 930 and 960 million euros and an unchanged EBITDA margin of between 18.0 and 18.5 percent.

In the year covered by the report, Jenoptik generated revenue of 980.7 million euros, which was slightly above the upper end of the expected range.

The group EBITDA margin rose to 18.8 percent (prior year: 16.7 percent (excluding one-off effect / 20.7 percent including one-off effect), thus exceeding the forecast range of 18.0 to 18.5 percent.

Revenue and EBITDA of the divisions and their forecast development are shown in the table.

Following the strong order intake in 2021, the Executive Board expected more restrained growth in the fiscal year 2022. At the end of the year, the order intake was higher than expected, in particular due to business with the semiconductor equipment industry.

In the March forecast, a cash conversion rate of 45 to 55 percent had been assumed, and the actual rate achieved by the end of 2022 was 44.9 percent (prior year: 27.7 percent).

It was expected that capital expenditure in the fiscal year 2022 would be significantly above the level in the prior year. Capital expenditure amounted to 106.0 million euros and was thus, as expected, sharply up on the figure of 49.9 million euros in the prior year. T12

Earnings Position

The tables in the Management Report, which show a breakdown of the key indicators by segment, include the Corporate Center (holding company, shared services, real estate) and consolidation effects under “Other”. Jenoptik operates in the following reportable segments: the Advanced Photonic Solutions division, the Smart Mobility Solutions division, and the Non-Photonic Portfolio Companies.

Unless otherwise specified, the following text shows the figures for the continuing operations (the Advanced Photonic Solutions and Smart Mobility Solutions divisions and the Non-Photonic Portfolio Companies). Following signing of the contract to sell VINCORION in November 2021, this division is shown as a discontinued operation in accordance with IFRS 5 and is therefore no longer included in the revenue, EBITDA, order intake, or order backlog disclosures for the continuing operations. The sale process was completed on the closing date of June 30, 2022.

Earnings position

Even given the challenges of the Russia-Ukraine war, the persistence of the Covid-19 pandemic in 2022, inflation, and supply bottlenecks, Jenoptik is confident that it still has, in large part, a crisis-resistant business model and is in a good financial and balance sheet position.

In the fiscal year 2022, the continuing operations generated revenue of 980.7 million euros, 30.6 percent more than in the prior year (prior year: 750.7 million euros). Organic growth in 2022 amounted to 10.9 percent. The former BG Medical and the SwissOptic Group, both acquired in late 2021, contributed combined revenue of 160.4 million euros.

Over the reporting period, growth came primarily from the Advanced Photonic Solutions division, facilitated by sustained high demand in semiconductor equipment business and good growth in biophotonics, among others. The Smart Mobility Solutions division also made a stronger contribution to revenue.

The quarter with the highest revenue both in the fiscal year 2022 and the prior year was the fourth, with 282.7 million euros (prior year: 231.3 million euros).

More information on the development of revenue in the divisions can be found in the Segment Report

T12 Actual and forecast of business for the Jenoptik Group (in million euros / or as stated)

Indicator	Year-end 2021	2022 forecast		Year-end 2022	Change in %
Revenue	750.7	February: March[3]: August: November:	Further growth Growth of at least 20 percent (incl. BG Medical and SwissOptic) 930 – 960 million euros in the upper half of the existing range of between 930 and 960 million euros	980.7	30.6
Advanced Photonic Solutions	495.6	March[3]:	Growth in the mid-double-digit percentage range	729.6	47.2
Smart Mobility Solutions	110.1	March[3]:	Growth in the mid-single-digit percentage range	114.3	3.8
Non-Photonic Portfolio Companies	141.3	March[3]:	Growth in the low double-digit percentage range	132.3	−6.4
EBITDA / EBITDA margin[1]	125.2 / 16.7 %	March[3]: August:	Marked EBITDA growth / margin approx. 18.0 percent 18.0 and 18.5 percent	184.1 / 18.8 %	18.2
Advanced Photonic Solutions	143.4	March[3]:	Growth in line with revenue	170.0	18.6
Smart Mobility Solutions	19.2	March[3]:	Slightly above prior year	19.3	0.8
Non-Photonic Portfolio Companies	5.4	March[3]:	Growth stronger than revenue	2.7	−49.8
Order intake	936.7	March[3]:	Slightly below prior year	1,185.4	26.6
Cash conversion rate	27.7 %	March[3]:	Between 45 and 55 percent	44.9 %	
Capital expenditure[2]	49.9	March[3]:	Markedly above prior year	106.0	112.2

[1] 2021 excluding one-off effects
[2] Excluding capital expenditure on financial investments
[3] in the Management Report of the 2021 Annual Report

In the fiscal year 2022, Jenoptik saw revenue growth in all regions. Both organic growth and the companies acquired in 2021 contributed to the strong increase in revenue seen in Germany, Europe, and the Americas. Combined revenue for the two regions of the Americas and Asia / Pacific came to 440.3 million euros, or 44.9 percent of total revenue (prior year: 378.6 million euros or 50.4 percent). At 751.7 million euros, the continuing operations generated 76.7 percent of revenue abroad in the past fiscal year (prior year: 611.3 million euros or 81.4 percent).

In 2022, Jenoptik generated its largest share of revenue, of 363.8 million euros or 37.1 percent, with the semiconductor equipment / electronics industry (prior year: 242.1 million euros or 32.2 percent), due to strong demand and as a result of the acquisition. The share of revenue in the automotive and mechanical engineering markets fell to 31.3 percent (prior year: 34.9 percent). Due to acquisitions, but also as a result of organic growth, appreciably higher revenue was generated in the medical technology market in 2022. The share of revenue generated with medical technology rose to 14.2 percent (prior year: 9.5 percent).

In the fiscal year 2022, our top three customers accounted for 25.8 percent of revenue of the continuing operations (prior year: 21.4 percent).

The cost of sales rose 28.6 percent to 635.0 million euros (prior year: 493.8 million euros) and thus at a slightly lower rate than revenue, partly due to product mix effects and economies of scale. This increase was primarily the result of increased material and personnel costs, in part due to price increases but also the 2021 acquisition. This item also includes expenses arising from developments on behalf of customers, totaling 28.0 million euros (prior year: 20.3 million euros), which were offset by corresponding revenues. The increase was mainly the result of customer projects in the Advanced Photonic Solutions division.

Gross profit was sharply up on the prior-year figure of 256.9 million euros and came to 345.7 million euros. Thanks to an improved product mix, the gross margin rose to 35.3 percent (prior year: 34.2 percent).

T13 Revenue by segment (in million euros)

	2022	2021	Change in %
Continuing operations	980.7	750.7	30.6
Advanced Photonic Solutions	729.6	495.6	47.2
Smart Mobility Solutions	114.3	110.1	3.8
Non-Photonic Portfolio Companies	132.3	141.3	−6.4
Other	4.5	3.7	21.0

T14 Revenue by region (in million euros)

	2022	2021	Change in %
Continuing operations	980,7	750.7	30.6
Germany	229,0	139.4	64.3
Europe	275,7	208.4	32.3
Americas	244,1	205.7	18.7
Asia / Pacific	196,2	172.9	13.5
Middle East / Africa	35,7	24.3	46.5

In 2022, research and development expenses amounted to 54.6 million euros (prior year: 38.9 million euros), also reflecting impacts from the above-mentioned acquisition. The share of R+D expenses as a proportion of revenue thus increased to 5.6 percent (prior year: 5.2 percent). At 87.1 million euros, the R+D output, including developments on behalf of customers, was sharply up on the prior-year figure (prior year: 63.6 million euros).

Selling expenses increased 19.9 percent in 2022, to 107.6 million euros (prior year: 89.7 million euros), mainly due to the acquisition of the former BG Medical and the SwissOptic Group, as well as higher amortization in connection with PPA impacts, in particular on customer relationships. At 11.0 percent, the selling expenses ratio was down on the prior-year level (prior year: 11.9 percent).

General administrative expenses increased to 65.5 million euros (prior year: 53.5 million euros), entirely due to the companies acquired in 2021. The administrative expenses ratio fell to 6.7 percent (prior year: 7.1 percent).

Other operating income fell sharply compared to the prior-year period, from 52.9 million euros to 21.5 million euros. In the prior year, this item included a positive one-off effect of 30.5 million euros in connection with the valuation of conditional purchase price components arising from the acquisitions of TRIOPTICS and INTEROB. By contrast, higher currency gains of 12.0 million euros (prior year: 8.6 million euros) had a positive effect.

Other operating expenses rose to 37.7 million euros (prior year: 19.7 million euros). Following a review and reassessment of business prospects, especially those of INTEROB, impairment losses totaling 13.9 million euros for intangible assets, property, plant and equipment, and goodwill were recognized in this item. At 14.0 million euros, currency losses exceeded the prior-year figure of 8.6 million euros and thus also contributed to the increase.

Overall, other operating income and expenses came to minus 16.1 million euros (prior year: 33.3 million euros).

Following strong operating performance in the Advanced Photonic Solutions division, profitability improved significantly in the fiscal year 2022. Earnings before interest, taxes, depreciation, and amortization (incl. impairment losses and reversals) (EBITDA) increased to 184.1 million euros and were thus 18.2 percent up on the prior-year figure of 155.7 million euros. The prior year’s EBITDA also included the above-mentioned positive one-off effect worth 30.5 million euros. The EBITDA margin for the continuing operations was 18.8 percent in 2022 (prior year: 20.7 percent, excluding one-off effect: 16.7 percent). In terms of EBITDA, the fourth quarter was also the strongest, with 66.3 million euros (prior year: 46.1 million euros); the EBITDA margin improved to 23.4 percent (prior year: 19.9 percent, excluding one-off effects: 17.8 percent).

More information on research and development can be found in the "Research and Development" chapter

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T16 Key items in the Statement of Comprehensive Income (in million euros)

	2022	2021	Change in %
Revenue	980.7	750.7	30.6
Cost of sales	635.0	493.8	28.6
R+D expenses	54.6	38.9	40.4
Selling expenses	107.6	89.7	19.9
Administrative expenses	65.5	53.5	22.5
Other operating income	21.5	52.9	−59.4
Other operating expenses	37.7	19.7	91.5

Detailed information on the composition of other operating income and expenses can be found in point 4.5 and 4.6 of the Notes

T15 Revenue by target market (in million euros and as % of total revenue of continuing operations)

	2022		2021	
Semiconductors & electronics	363.8	37.1 %	242.1	32.2 %
Automotive & mechanical engineering	307.2	31.3 %	261.7	34.9 %
Medical technology	138.8	14.2 %	71.3	9.5 %
Traffic	130.7	13.3 %	130.3	17.4 %
Other	40.1	4.1 %	45.3	6.0 %
Continuing operations	**980.7**	**100.0 %**	**750.7**	**100.0 %**

EBIT (income from operations) came to 101.9 million euros, 5.8 percent down on the prior-year figure of 108.1 million euros. The main reasons for this were, in addition to the aforementioned positive one-off effect in the prior year, the impairment losses of 13.9 million euros, and higher scheduled depreciation and amortization of 68.3 million euros (prior year: 47.6 million euros), of which impacts arising from the purchase price allocations of minus 26.5 million euros in the reporting year (prior year: minus 14.3 million euros).

Information on the segment EBITDA and EBIT can be found in the Segment Report

In particular due to the substantially higher average tied capital and the slight decline in EBIT, the ROCE (return on capital employed) in the continuing operations fell to 7.9 percent as of December 31, 2022 (prior year: 13.4 percent). The calculation of the ROCE is explained in the Control System chapter and shown in the following table. The calculation of averages uses the twelve month-end balances in the period under review and the opening balance at the start of the year.

Over the reporting period, the financial result decreased to minus 6.0 million euros (prior year: minus 5.6 million euros). The increase in financial expenses was attributable, in particular, to higher interest expenses as a result of the increased debt. By contrast, discount effects on provisions had a positive effect (prior year: compounding of conditional purchase price components). Both currency gains and losses grew compared with the prior year, but in total more or less offset each other. Investment income decreased marginally.

The lower EBIT was also reflected in earnings before tax, which at a total of 96.0 million euros were 6.4 percent down on the prior year (prior year: 102.5 million euros).

The current income taxes of the continuing operations of 20.0 million euros were above the level of the prior year (prior year: 14.0 million euros). Of these, 10.3 million euros (prior year: 8.6 million euros) were attributable to Germany and 9.7 million euros (prior year: 5.4 million euros) to other countries. The increase is primarily due to the rise in earnings abroad.

The cash effective tax rate, the ratio between the current income taxes and earnings before tax, increased to 20.8 percent (prior year: 13.6 percent), due both to higher foreign share of taxable income and non-tax-effective losses abroad, but in view of the domestic earnings and deductible tax loss carryforwards was at a comparatively low level for a German company.

Non-cash deferred taxes came to 12.1 million euros in the past fiscal year (prior year: minus 4.3 million euros). The increase was mainly due to the utilization of tax loss carryforwards in

T17 ROCE for continuing operations (in million euros)

	2022	2021
Non-current non-interest bearing assets	1,060.3	724.7
Current non-interest bearing assets	480.4	347.0
Non-interest bearing borrowings	−255.7	−264.0
Average tied capital	1,284.9	807.7
EBIT	101.9	108.1
ROCE (in percent)	7.9	13.4

T18 EBITDA (in million euros)

	2022	2021	Change in %
Continuing operations	184.1	155.7	18.2
Advanced Photonic Solutions	170.0	143.4	18.6
Smart Mobility Solutions	19.3	19.2	0.8
Non-Photonic Portfolio Companies	2.7	5.4	−49.8
Other	−8.0	−12.2	34.5

T19 EBIT (in million euros)

	2022	2021	Change in %
Continuing operations	101.9	108.1	−5.8
Advanced Photonic Solutions	123.0	116.6	5.5
Smart Mobility Solutions	13.9	14.1	−1.4
Non-Photonic Portfolio Companies	−20.4	−4.5	−349.2
Other	−14.6	−18.0	19.0

Germany. The tax rate thus amounted to 33.5 percent (prior year: 9.4 percent); income taxes totaled 32.1 million euros (prior year: 9.7 million euros).

See point 4.8 in the Notes for detailed information on the subject of taxes

Discontinued operation

Earnings after tax of the discontinued operation (VINCORION) amounted to minus 6.8 million euros (prior year: 8.5 million euros). In addition to VINCORION's earnings up to the closing date, it also includes earnings from the sale of the discontinued operation (see also point 4.9 in the Notes).

In 2022, Jenoptik generated earnings after tax of 57.0 million euros (prior year: 53.8 million euros, without one-of effect/ 84.3 million euros incl. one-off effect). At 55.1 million euros, earnings attributable to shareholders were consequently down on the prior-year figure of 82.0 million euros (incl. one-off effect). Earnings per share improved to 0.96 euros compared with the prior-year figure of 0.90 euros (excluding one-off effect), but were significantly lower than the figure of 1.43 euros per share (including one-off effect). The continuing operations achieved earnings per share of 1.05 euros in 2021 excluding the one-off effect (1.58 euros including the one-off effect) and 1.08 euros in 2022.

Order position

Strong demand in the first nine months continued into the fourth quarter. In 2022, the order intake for the continuing operations increased by a significant 26.6 percent over the reporting year to 1,185.4 million euros (prior year: 936.7 million euros), both organically and through the new orders of the companies acquired in 2021. The order intake thus exceeded the one-billion-euro mark for the first time. The former BG Medical and the SwissOptic Group contributed 211.9 million euros to this figure. In the Advanced Photonic Solutions division, most new orders were posted in the semiconductor equipment, biophotonics, and industrial solutions areas. The Smart Mobility Solutions division also improved its

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T20 Order intake (in million euros)

	2022	2021	Change in %
Continuing operations	1,185.4	936.7	26.6
Advanced Photonic Solutions	891.8	674.9	32.1
Smart Mobility Solutions	125.8	116.5	7.9
Non-Photonic Portfolio Companies	163.4	141.6	15.4
Other	4.5	3.7	21.0

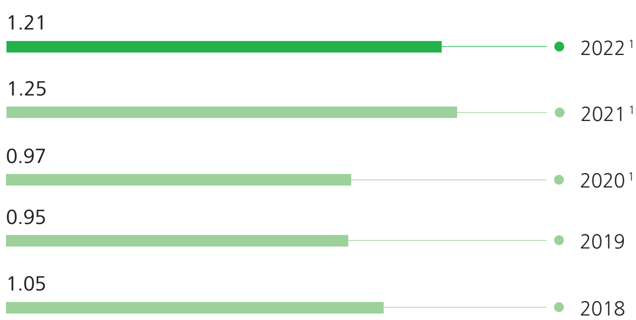
T21 Order backlog (in million euros)

	2022	2021	Change in %
Continuing operations	733.7	543.5	35.0
Advanced Photonic Solutions	581.4	430.2	35.1
Smart Mobility Solutions	65.7	54.3	21.0
Non-Photonic Portfolio Companies	86.6	58.9	46.9

T22 Book-to-bill ratio

	2022	2021
Continuing operations	1.21	1.25
Advanced Photonic Solutions	1.22	1.36
Smart Mobility Solutions	1.10	1.06
Non-Photonic Portfolio Companies	1.24	1.00
Other	1.00	1.00

G09 Development of the book-to-bill ratio



[1] Figures for continuing operations

order intake compared to the prior-year period. Here the order intake is strongly influenced by projects and thus subject to significant fluctuations. The order intake of the Non-Photonic Portfolio Companies also improved on the prior-year period.

See the Segment Report for detailed information on the order intake in the divisions

The book-to-bill ratio for the continuing operations was 1.21 (prior year: 1.25). Both the two divisions and the Non-Photonic Portfolio Companies had a book-to-bill ratio of more than 1 in the reporting period.

See point 8.2 of the Notes for more information on factoring

The order backlog of the continuing operations increased to 733.7 million euros at the end of 2022 (31/12/2021: 543.5 million euros). Of this order backlog, 83.4 percent (prior year: 85.9 percent) will be converted to revenue in 2023.

Financial Position

The war in Ukraine, the impact of the Covid-19 pandemic, inflation, and supply bottlenecks continued to represent significant uncertainty factors in the fiscal year 2022, and were reflected in the financial management of the Jenoptik Group. In the assessment of the Executive Board, the Group continues to ensure healthy balance sheet ratios and an ample supply of liquidity, and is thus in a good financial position.

Financial management principles

The central Treasury department plans the need of and controls the provision of liquid resources within the Group. The Group's financial flexibility and solvency is guaranteed at all times on the basis of multi-year financial planning and quarterly forecasts. A cash pooling system also ensures the liquidity supply to all the major companies in Europe and North America. Companies not integrated in the cash pooling system are usually supplied with liquidity through internal group loans or, in exceptional cases, credit lines from local banks.

Jenoptik utilizes a program to sell trade receivables (factoring). The volume of this instrument was increased from 25 to 50 million euros in 2022; approx. 25 million euros were actually used.

See point 5.7 of the Notes for more information on liquidity

Primarily using currency forward transactions, Jenoptik hedges orders and internal loan receivables in foreign currencies, thereby reducing the impacts of exchange rate fluctuations on earnings and cash flow. Derivative financial instruments are used exclusively to hedge the operational business as well as financial transactions required for operational purposes.

As a result of the above measures, the existing financing instruments – essentially the syndicated loan and debenture bonds –, and the available cash and cash equivalents, the liquidity of all group companies in the past fiscal year was sufficiently secured at all times.

Capital structure and financing analysis

With an equity ratio of 50.4 percent as of December 31, 2022, net debt of 479.0 million euros, and leverage (net debt in relation to EBITDA) of 2.6, the Executive Board believes that the Group enjoys a solid and viable financing structure, as well as healthy balance sheet ratios. This gives Jenoptik the flexibility and financial latitude to finance future organic growth and potential acquisitions in the process of implementing its "Agenda 2025".

In March 2021, Jenoptik placed sustainability-linked debenture bonds worth 400 million euros on the capital market on attractive terms. The debenture bonds comprised several tranches with terms of five, seven, and ten years, which were issued not only in euros but also, to a lesser extent, in US dollars (59 million US dollars). Investors from Germany and abroad were offered both fixed and variable interest rate options.

In December 2021, Jenoptik also refinanced a revolving syndicated loan and increased it from 230 to over 400 million euros. The term of the loan provided by seven banks was originally five years and was extended by a further year in 2022. If approved by the lenders, the term can be extended by a further year and the volume increased to 600 million euros if required. This financing instrument, too, for the first time included sustainability components. Further information can be found in the Notes (8.2. Financial instruments).

In addition to cash and cash equivalents of 56.8 million euros and current financial investments of 1.0 million euros, the Group also had unused credit lines totaling 380 million euros to fall back on at the end of 2022. This means that, at the end of 2022, Jenoptik had over 430 million euros available for corporate development projects.

The following information on the financial position for the fiscal year 2022 relates to the continuing operations in the Jenoptik Group.

In 2022, non-current financial debt increased significantly to 477.7 million euros (31/12/2021: 448.7 million euros). This item included financial debt to banks in the amount of

435.4 million euros (31/12/2021: 421.2 million euros) and lease liabilities of 42.4 million euros (31/12/2021: 27.5 million euros). At the end of 2022, non-current financial debt accounted for around 89 percent of Jenoptik's financial debt (31/12/2021: 75 percent).

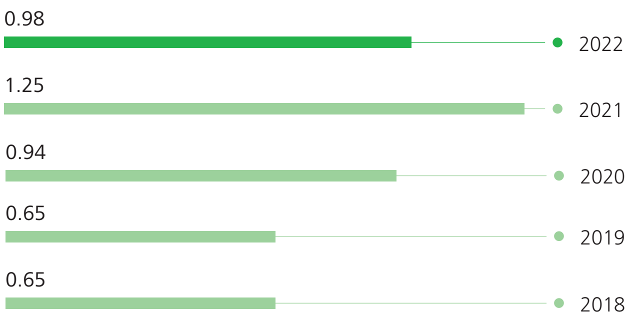
In part due to repayment of the final tranche of the debenture bonds issued in 2015, current financial debt fell sharply to 59.1 million euros (31/12/2021: 149.0 million euros).

The debt-to-equity ratio was 0.98 at the end of 2022 (31/12/2021: 1.25), The debt-to-equity ratio is defined as the ratio between borrowings (828.5 million euros) and equity (843.3 million euros).

The net cash position is defined as the total cash, cash equivalents, and current financial investments minus current financial debt. At the end of 2022, it improved to a figure of minus 1.2 million euros (31/12/2021: minus 92.6 million euros), mainly due to a reduction of current financial debt. Cash and cash equivalents, including current financial investments, were virtually unchanged at 57.8 million euros (31/12/2021: 56.4 million euros).

Over the reporting period, the reduction in financial debt also resulted in net debt falling to 479.0 million euros as of December 31, 2022 (31/12/2021: 541.4 million euros).

G10 Debt-to-equity ratio [1]



[1] Values for the years 2018 through 2020 are data for the Group including VINCORION

Analysis of capital expenditure

The focus of capital expenditure is derived from the group strategy and is in line with the planned growth targets and the asset structure of the Group. To ensure this, the individual investments are systematically reviewed with respect to sustainability or their value contribution on the basis of performance and financial indicators, and all risks and opportunities are thoroughly analyzed.

In 2022, Jenoptik invested 106.0 million euros in intangible assets and property, plant, and equipment (prior year: 49.9 million euros). Capital expenditure was primarily made to create the conditions for growth and new customer orders.

At 95.5 million euros, the largest share of capital expenditure was once again on property, plant, and equipment (prior year: 39.9 million euros). These funds were used to expand manufacturing capacity and acquire new technical equipment, in particular for the semiconductor equipment industry, for construction of the factory in Dresden, the new site for the former BG Medical in Berlin, and the employee restaurant in Jena.

Capital expenditure for intangible assets remained largely stable at 10.5 million euros (prior year: 10.1 million euros). Investment was mainly attributable to costs in connection with the new IT system (SAP S/4 HANA) and the development costs from internal projects to be capitalized, which in the reporting period amounted to 4.2 million euros (prior year: 4.2 million euros).

T23 Net and gross debt (in million euros) [1]

	2022	2021	2020	2019	2018
Non-current financial debt	477.7	448.7	138.4	122.6	111.4
Current financial debt	59.1	149.0	130.9	37.0	10.1
Gross debt	**536.8**	**597.7**	**269.3**	**159.6**	**121.5**
minus current financial investments	1.0	1.6	4.9	69.7	59.5
minus cash and cash equivalents	56.8	54.8	63.4	99.0	89.3
Net debt	**479.0**	**541.4**	**201.0**	**−9.1**	**−27.2**

[1] Values for the years 2018 through 2020 are data for the Group including VINCORION

Scheduled depreciation and amortization of the continuing operations increased to 68.3 million euros (prior year: 47.6 million euros), in particular due to the acquisitions in the fiscal year 2021, including PPA impacts.

More information on capital expenditure in the divisions can be found in the Segment Report; on future investment projects in the Forecast Report

Scheduled depreciation on property, plant, and equipment came to 37.2 million euros (prior year: 28.8 million euros) and was thus significantly below the figure for capital expenditure on property, plant, and equipment.

Scheduled amortization on intangible assets amounted to 30.9 million euros (prior year: 18.7 million euros), and, as in the prior year, primarily included amortization of software, as well as intangible assets identified in the course of company acquisitions.

Analysis of cash flows

The Group's cash flows from operating activities improved significantly to 142.7 million euros in the reporting year (prior year. 98.0 million euros). This increase is due mainly to a considerable improvement in cash-effective income and lower negative impacts arising from the increase in working capital.

In 2022, the Group's cash flows from investing activities amounted to minus 13.4 million euros (prior year: minus 413.6 million euros), Over the reporting period, this item was particularly influenced by significantly higher capital expenditure for property, plant, and equipment and liquidity flows in connection with the sale of VINCORION. In the prior year, it was mainly influenced by the payments for the acquisition of BG Medical and the SwissOptic Group, as well as the remaining 25 percent (second purchase price tranche) for TRIOPTICS.

Due to higher cash flows from operating activities before taxes, the free cash flow of the continuing operations of 82.7 million euros was significantly up on the prior-year figure of 43.2 million euros, despite the increase in expenditure from investing

T24 Capital expenditure and depreciation / amortization in continuing operations (in million euros)

	2022	2021	Change in %
Capital expenditure	106.0	49.9	112.2
Intangible assets	10.5	10.1	3.9
Property, plant, and equipment	95.5	39.9	139.6
Depreciation/amortization/impairment losses and reversals	82.2	47.6	72.7
Intangible assets	44.2	18.7	136.6
Property, plant, and equipment	37.8	28.4	33.4
Investment properties	0.1	0.5	−75.7

T25 Capital expenditure by segment – intangible assets and property, plant and equipment as well as investment properties (in million euros)

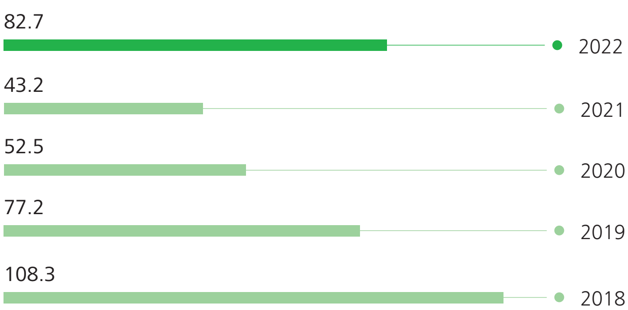
	2022	2021	Change in %
Continuing operations	106.0	49.9	112.2
Advanced Photonic Solutions	79.6	30.7	159.6
Smart Mobility Solutions	7.8	8.1	−3.4
Non-Photonic Portfolio Companies	3.8	1.7	130.0
Other	14.8	9.5	55.3

activities. At group level, it amounted to 79.6 million euros (prior year: 62.8 million euros). The free cash flow is calculated as the group cash flows from operating activities before taxes in the amount of 157.5 million euros (prior year: 108.3 million euros) and cash flows from operating investing activities, i.e., the balance of receipts and payments of funds for intangible assets and property, plant, and equipment, amounting to minus 77.9 million euros (prior year: minus 45.5 million euros).

In the fiscal year 2022, the cash conversion rate of the continuing operations came to 44.9 percent (prior year: 27.7 percent).

The Group's cash flows from financing activities amounted to minus 127.3 million euros in the period covered by the report (prior year: 304.2 million euros), and were particularly influenced by proceeds from the take-up of loans (in the prior year, the issue of debenture bonds) and repayment of the remaining tranche of the debenture bond placed in 2015. Dividends of 17.6 million euros were also paid out to shareholders of the parent company and minority shareholders in 2022 (prior year: 16.1 million euros), of which 14.3 million euros were paid to JENOPTIK AG shareholders and 3.3 million euros to TRIOPTICS minority shareholders.

G11 Free cash flow (in million euros) [1]



[1] Values for the years 2018 through 2019 are data for the Group including VINCORION

Asset Position

In the fiscal year 2022, the completion of the sale of VINCORION led to changes in the Consolidated Statement of Financial Position. At the end of 2021, assets and liabilities were shown as separate items in respect of assets and liabilities – "assets held for sale" and "liabilities related to assets held for sale".

Compared with the end of 2021, the Jenoptik Group's total assets as of December 31, 2022 were down by 85.3 million euros to 1,671.8 million euros (31/12/2021: 1,757.0 million euros), primarily due to the above-mentioned sale.

On the assets side, non-current assets increased to 1,128.5 million euros (31/12/2021: 1,110.8 million euros), particularly due to the rise in property, plant, and equipment following the investments made. Other non-current financial assets also increased due to derivatives. By contrast, intangible assets fell in value from 753.2 million euros to 730.6 million euros, mainly due to amortization and impairment losses on intangible assets, as well as deferred taxes mainly due to JENOPTIK AG's utilization of the tax loss carryforward.

T26 Group cash flow (incl. VINCORION) (in million euros)

	2022	2021	2020	2019	2018
Cash flows from operating activities	142.7	98.0	89.7	108.9	135.5
Cash flow from investing activities	−13.4	−413.6	−188.4	−54.4	−117.5
Cash flow from financing activities	−127.3	304.2	63.7	−46.1	−60.9
Cash-effective change in cash and cash equivalents	2.0	−11.4	−35.0	8.4	−42.9
Non-cash-effective change in cash and cash equivalents	−0.1	2.8	−0.6	1.4	−0.1
Change in cash and cash equivalents	**1.9**	**−8.6**	**−35.6**	**9.8**	**−43.1**
Cash and cash equivalents at end of fiscal year	**56.8**	**54.8**	**63.4**	**99.0**	**89.3**

Property, plant, and equipment increased from 266.7 million euros at the end of 2021 to 324.6 million euros as of December 31, 2022. This was in part due to the increase in technical equipment and machinery, advances paid, assets under construction, and the buildings item.

More information on the intangible assets and property, plant, and equipment can be found in points 5.1 and 5.2 of the Notes

Over the past fiscal year, current assets fell to 543.3 million euros (31/12/2021: 646.3 million euros). This was primarily due to the completion of the VINCORION sale process and the associated disposal of the assets held for sale (31/12/2021: 156.8 million euros). Lower contract assets of 58.1 million euros (31/12/2021: 81.4 million euros) also contributed to the decline; here, a significant decrease was posted in particular in the Non-Photonic Portfolio Companies due to the completion of a major project. It was offset by the increase in inventories, trade receivables, and other current non-financial assets. Inventories increased to 265.0 million euros (31/12/2021: 200.2 million euros), as services and supplies were made in advance for future revenue, critical stocks were built up, and the availability of primary products was secured. The increase in trade receivables was mainly due to revenue growth, particularly in the fourth quarter. At 56.8 million euros, cash and cash equivalents remained largely unchanged (31/12/2021: 54.8 million euros).

The working capital of the continuing operations rose to 287.4 million euros as of December 31, 2022 (31/12/2021: 260.6 million euros). On the assets side, inventories and trade receivables increased considerably more strongly than trade accounts payable and contract liabilities on the liabilities side. The working capital ratio, that of working capital to revenue based on the last twelve months, improved to 29.3 percent at the end of 2022 (31/12/2021: 34.7 percent) as a result of the increase in revenue.

As of December 31, 2022, equity of 843.3 million euros was sharply up on the figure at year-end 2021 (31/12/2021: 780.7 million euros), with net profit for the period, currency effects, and actuarial effects all having a particularly positive impact. By contrast, the dividend for the shareholders of JENOPTIK AG and the minority shareholders of TRIOPTICS, a total of 17.6 million euros, had an equity-reducing effect. The equity ratio, that of equity to total assets, improved significantly to 50.4 percent (31/12/2021: 44.4 percent).

Non-current liabilities increased to 519.0 million euros (31/12/2021: 503.1 million euros), in 2022 mainly influenced by the rise in non-current financial debt to 477.7 million euros as a result of borrowings and new lease agreements (31/12/2021: 448.7 million euros). Pension provisions reduced due to a rise in interest rates (see the Notes, chapter “Provisions for pension obligations,” point 5.12).

Current liabilities fell to 309.5 million euros (31/12/2021: 473.3 million euros), in particular due to the disposal of liabilities in connection with assets held for sale following completion of the sale of VINCORION (31/12/2021: 93.6 million euros). In addition, the last tranche of the debenture bonds issued in 2015 was repaid, producing a reduction of current financial debt to 59.1 million euros (31/12/2021: 149.0 million euros). Other current financial liabilities also fell from 22.0 million euros at the end of 2021 to 10.3 million euros at the end of 2022. As of the reporting date, current trade payables grew to

T27 Components of working capital (in million euros)

	2022	2021	Change in %
Inventories	256.0	200.2	27.8
Trade receivables	138.8	120.5	15.2
Contract assets	58.1	81.4	−28.6
Trade accounts payable	100.6	94.2	6.8
Contract liabilities	64.9	47.3	37.0
Total	**287.4**	**260.6**	**10.3**

100.6 million euros (31/12/2021: 94.2 million euros). The increase in advances received for projects with revenue recognition at a point in time, in particular, resulted in higher contract liabilities of 64.9 million euros (31/12/2021: 47.3 million euros).

Acquisitions and disposals

The acquisitions and disposals made in the fiscal year 2022 are set out in the Group Structure chapter. There were no other purchases or sales of companies in 2022.

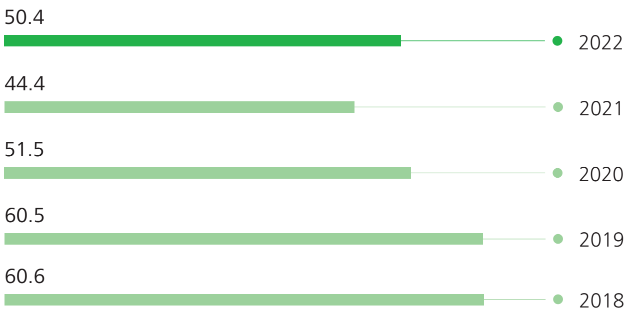
Assets and obligations not recognized in the statement of financial position

The value of the Jenoptik brand is one of the main assets we do not include in the balance sheet. Jenoptik operates in the highly fragmented photonics market, which is characterized by a multitude of highly-specialized companies. We aim to further boost awareness of our brand, especially on the international stage, in the coming years. Since early 2019, Jenoptik has been on the market with new brand positioning and a new corporate design. Strategically, Jenoptik is positioning itself as a photonics specialist.

Non-capitalized tax loss carryforwards. Tax loss carryforwards arise from losses in the past that have not yet been offset against taxable profits. They represent potential future cash flow benefits, since actual tax payments can be reduced by these losses being offset against taxable profits.

For more information on the acquisition and sales of entities, see point 2.4 of the Notes

G12 Equity ratio (in percent)



T28 Financial debt by due date (in million euros)

	Up to 1 year		1 to 5 years		More than 5 years		Total through 31/12	
	2022	2021	2022	2021	2022	2021	2022	2021
Liabilities to banks	47.1	137.6	203.1	201.9	232.3	219.3	482.5	558.8
Liabilities from leases	11.9	11.4	27.8	25.4	14.6	2.2	54.3	38.9
Total	**59.1**	**149.0**	**230.9**	**227.3**	**246.8**	**221.5**	**536.8**	**597.7**

T29 Components of financial debt (in million euros)

	2022	2021	Change in %
Current	59.1	149.0	−60.4
Liabilities to banks	47.1	137.6	−65.7
Lease liabilities	11.9	11.4	4.4
Non-current	477.7	448.7	6.5
Liabilities to banks	435.4	421.2	3.4
Lease liabilities	42.4	27.5	53.9

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For non-usable tax loss carryforwards, deferred tax assets are not recognized for corporation tax purposes in the amount of 27.6 million euros (prior year: 25.5 million euros) and trade tax purposes in the amount of 1.2 million euros (prior year: 11.8 million euros), as they are unlikely to be used within a determined planning time frame. Equally, no deferred tax assets were recognized for deductible timing differences in the amount of 3.0 million euros (prior year: 2.0 million euros).

Off-balance sheet financing instruments for the financial and asset position. Jenoptik uses a factoring program as an additional instrument to manage its liquidity and working capital. This involves the sale of trade receivables from selected customers to a factoring company and allows Jenoptik to convert some long-term receivables into liquidity at short notice. The volume of this instrument was increased from 25 to 50 million euros in 2022; approx. 25 million euros were actually used. Since the economic opportunities and risks associated with the receivables are transferred to the buyer when the receivables are sold, those receivables are no longer recognized on Jenoptik's statement of financial position ("real factoring"). Jenoptik does not use any other significant off-balance sheet financing instruments.

Information on guarantees, other commitments, and contingent liabilities can be found in point 8.3 of the Notes.

Clauses in contracts concluded by JENOPTIK AG, which apply in the event of a change of control within the ownership structure of JENOPTIK AG following a takeover bid, exist for financing agreements with a total utilized volume of approximately 456.8 million euros (prior year: 549.6 million euros). More information can be found in the Information on Takeover Law chapter.

General Statement by the Executive Board on the Development of Business

Jenoptik reported good performance in terms of order intake, revenue, and earnings (on a comparable basis) in the fiscal year 2022. Overall, the war in Ukraine, Covid-19, and issues such as inflation and supply bottlenecks did not have any significant negative impact on the operating activities of the Jenoptik businesses in the reporting year and therefore on the Group's earnings, financial, and asset position. Jenoptik was able to raise its guidance during the year and in the fiscal year 2022 generated revenue and EBITDA margin figures that were slightly above the ranges forecast. Despite the challenging environment and the higher debt compared with prior years as a result of the acquisitions, the Executive Board also believes that the Group continued to ensure healthy balance sheet ratios.

The continuing operations generated appreciable revenue growth in 2022, sustained by strong ongoing demand in semiconductor equipment business, good developments in the biophotonics market, and in the Industrial Solutions area in the Advanced Photonic Solutions division. Revenue in the Smart Mobility Solutions division was also up on the prior year, while it was down in the Non-Photonic Portfolio Companies.

In the fiscal year 2022, the continuing operations also increased their EBITDA. On a comparable basis, i.e., excluding the one-off effect in connection with the revaluation of purchase price components in connection with the acquisitions of TRIOPTICS and INTEROB in the fiscal year 2021, profitability also improved appreciably in the past fiscal year.

All three segments saw considerable order intake growth in 2022. The Group's order backlog at the end of 2022 was also up on the good level of the prior year and thus represents, in the opinion of the Executive Board, a solid basis for further profitable growth.

Thanks to higher cash flows from operating activities, the free cash flow of the continuing operations was up on the prior-year figure, which allowed for an appreciable reduction in net debt over the course of the year. In the opinion of the Executive Board, Jenoptik thus continues to have the financial latitude required for investments in the core photonics business and possible further acquisitions. This has created a good basis for further growth.

In the view of the Executive Board, the balance sheet and financing structure is sound. The equity ratio rose to 50.4 percent at the end of the year.

In view of the ongoing challenging environment in 2022, the Executive Board was very satisfied overall with the company's performance.

Segment Report

The two divisions, Advanced Photonic Solutions and Smart Mobility Solutions, together with the Non-Photonic Portfolio Companies, represent the segments as defined in IFRS 8. Prior-year information in the Segment Report has been adjusted to the new structure of the Jenoptik Group.

For information on group structure see "Group Structure" chapter

The divisions' product portfolio and competitive positioning are set out in greater detail in the Group Business Model chapter.

The revenue, order intake, and order backlog figures provided in the Segment Report concern business with external parties only.

Information on the various markets can be found in the Sector Report, on future developments in the Forecast Report

Advanced Photonic Solutions

On the closing date of November 30, 2021, Jenoptik successfully completed the acquisition of the former BG Medical and the SwissOptic Group, and integrated them into the Advanced Photonic Solutions division. BG Medical was merged into Jenoptik Optical Systems GmbH in 2022. The companies were not included in the financial statements for 2021 until the closing date and are therefore only included for one month in the prior year's figures such as revenue, earnings, and order intake. The acquired companies' contributions to revenue, order intake, and order backlog are disclosed in the text below.

The Advanced Photonic Solutions division acts as a partner to support its customers with a broad photonics technology portfolio covering everything from development to volume production. Cooperation as a development and production partner with numerous international companies was again an important part of the business in the reporting year 2022.

Advanced Photonic Solutions generated revenue of 729.6 million euros in 2022 (prior year: 495.6 million euros). The fourth quarter was the strongest, with 200.5 million euros in revenue (prior year: 146.0 million euros). Business with the semiconductor equipment industry saw particular growth in 2022, but the Biophotonics, Industrial Solutions, and Optical Test & Measurement areas also contributed to the good business performance. Combined revenue of the former BG Medical and the SwissOptic Group came to a total of 160.4 million euros (prior year: 9.6 million euros). The division thus grew organically by 17.4 percent in the reporting period. The Advanced Photonic Solutions division's share of Jenoptik's revenue rose to 74.4 percent (prior year. 66.0 percent).

In total, around 77.2 percent of the division's revenue was generated abroad in 2022 (prior year: 85.6 percent). Revenue increased in all regions. Due in part to the acquired companies' contributions, revenue in Europe (including Germany) increased to 396.8 million euros (prior year: 227.4 million euros) and continued to account for the largest share, followed by Asia/Pacific, where revenue saw a rise from 141.6 million euros to 165.8 million euros, particularly due to the contribution from the SwissOptic Group, which was included for the first time.

More information on revenue in the regions can be found in the Segment Report in the Notes

T30 Advanced Photonic Solutions at a glance (in million euros)

	2022	2021	Change in %
Revenue	729.6	495.6	47.2
EBITDA	170.0	143.4	18.6
EBITDA margin in % [1]	23.3	28.6	
EBIT	123.0	116.6	5.5
EBIT margin in % [1]	16.8	23.2	
Capital expenditure	79.6	30.7	159.6
Free cash flow	100.1	79.0	26.7
Cash conversion rate in %	58.9	55.1	
Order intake	891.8	674.9	32.1
Order backlog	581.4	430.2	35.1
Employees	2,995	2,721	10.1

[1] Based on total external and internal revenue

At 170.0 million euros (including negative PPA impacts of 1.2 million euros), earnings before interest, taxes, depreciation, and amortization (EBITDA) were appreciably up on the prior-year figure of 143.4 million euros (including PPA impact of 2.1 million euros). Very good performance in the areas of Semiconductor Equipment and Biophotonics was chiefly responsible for this growth. The prior-year earnings had included a positive one-off effect worth 30.5 million euros in connection with the conditional purchase price components arising from the acquisitions of TRIOPTICS and INTEROB. The EBITDA margin came to 23.3 percent in the reporting period, above the comparable prior-year figure, excluding one-off effect, of 22.8 percent but down on the prior year's 28.6 percent (including one-off effect).

Compared to the prior year, which had included the above-mentioned one-off effect, the division's EBIT improved to 123.0 million euros (prior year: 86.1 million euros (without one-off effect) / 116.6 million euros (incl. one-off effect). The EBIT included PPA impacts arising from the 2020 and 2021 acquisitions of minus 22.6 million euros (prior year: minus 10.8 million euros). The EBIT margin was 16.8 percent (prior year: 17.4 percent excluding one-off effect / 23.2 percent including one-off effect).

Demand for products made by the division remained at a consistently high level in 2022. At 891.8 million euros, the order intake exceeded the prior-year figure of 674.9 million euros by 32.1 percent. The division posted its strongest contribution in the fourth quarter, with orders worth 221.3 million euros (prior year: 207.7 million euros). This includes the first tranche of a frame contract with a total volume in the high double-digit million euro range and a term of three years, which was concluded with a global technology group at the end of 2022.

Order intake growth was particularly seen from the semiconductor equipment industry and in the Biophotonics and Industrial Solutions areas, with new orders from BG Medical and the SwissOptic Group worth 211.9 million euros (prior year: 9.9 million euros) also contributing to this increase. Set against revenue, this resulted in a book-to-bill ratio of 1.22 for the reporting period (prior year: 1.36).

Due to the higher order intake, the division's order backlog rose by 151.1 million euros, to 581.4 million euros, at the end of 2022 (31/12/2021: 430.2 million euros). Of this figure, the former BG Medical and the SwissOptic Group posted an order backlog worth 115.0 million euros (prior year: 62.7 million euros).

In the light of very good business performance, the free cash flow before interest and income taxes increased to 100.1 million euros (prior year: 79.0 million euros), despite the significant increase in capital expenditure. The cash conversion rate consequently rose from 55.1 percent in the prior-year period to 58.9 percent at year-end 2022. The division continued to utilize factoring as a financing instrument in 2022.

By contrast, a strong increase was seen in the working capital, in part due to the significant build-up of inventories, from 179.1 million euros at the end of 2021 to 204.2 million euros as of December 31, 2022.

As of December 31, 2022, Advanced Photonic Solutions had a total of 2,995 employees, 274 more than in the prior year (prior year: 2,721), with the greatest rise seen in the Semiconductor Equipment area. At the end of 2022, the division had 115 trainees (prior year: 111).

Including development services on behalf of customers, the division's R+D output came to 63.1 million euros, sharply up on the prior-year figure of 41.9 million euros. R+D expenses in the past fiscal year totaled 34.8 million euros (prior year: 20.2 million euros). The share of total R+D costs in division revenue was 8.6 percent (prior year: 8.5 percent).

Capital expenditure on intangible assets and property, plant, and equipment rose strongly, by 159.6 percent to 79.6 million euros (prior year: 30.7 million euros). To meet growing customer requirements, the division is investing in machinery and equipment, as well as in a new development and production site in Berlin. As a result of rising demand for optics and sensors for the semiconductor industry, Jenoptik is also expanding its manufacturing capacities and will invest over 70 million euros in a state-of-the-art production building for micro-optics and sensors and a new office complex in Dresden. Groundbreaking took place in September 2022, with production at the new factory due to begin in early 2025.

Capital expenditure was offset by scheduled depreciation/amortization in the sum of 47.0 million euros (prior year: 26.8 million euros), up due to PPA impacts in connection with the acquisitions made in recent years and higher depreciation/amortization on intangible assets and property, plant, and equipment.

For more information on the key development topics, see the "Research and Development" chapter

Smart Mobility Solutions

The Smart Mobility Solutions division is responsible for the Group's business with systems and services related to traffic safety, such as speed and red light monitoring systems and custom solutions for identifying other traffic violations, and for the fields of public safety and road user charging. The business is predominantly project-based.

In 2022, the division generated revenue of 114.3 million euros (prior year: 110.1 million euros), 3.8 percent more than in the prior year. After a slow start to the year due to supply bottlenecks, the division was able to increase its revenue from quarter to quarter over the course of the year and posted its highest revenue of 38.5 million euros in the fourth quarter (prior year: 37.8 million euros). Smart Mobility Solution's share of revenue in the past fiscal year came to 11.7 percent (prior year: 14.7 percent).

At around 67.3 percent, the share of revenue generated abroad in 2022, reflecting project volumes, was down on the prior-year figure of 72.0 percent. The division saw growth in Europe, including Germany, and in the Middle East/Africa region. By contrast, revenue in the Americas declined.

For information on the key development topics, see the "Research and Development" chapter

At 19.3 million euros, EBITDA was marginally down on the prior-year figure of 19.2 million euros. A considerable contribution to earnings of 10.9 million euros (prior year: 10.6 million euros) was generated in the fourth quarter. As revenue increased at a stronger rate than EBITDA, the EBITDA margin of 16.9 percent in 2022 was slightly down on the prior year's 17.4 percent. In the fourth quarter, the division achieved an EBITDA margin of 28.3 percent, a little above the prior-year figure of 28.0 percent.

The division's order intake is subject to typical fluctuations in project business. In 2022, Smart Mobility Solutions received new orders worth a total of 125.8 million euros, more than in the prior year (prior year: 116.5 million euros).

Over the period covered by the report, the division secured larger orders in North America, Europe, South America, and the Middle East/Africa region. The book-to-bill ratio increased to 1.10 (prior year: 1.06).

Due to the higher order intake, the order backlog grew strongly, to 65.7 million euros as of December 31, 2022 (31/12/2021: 54.3 million euros).

With a total of 485 employees, the number of people employed in the division at the end of 2022 was virtually unchanged (31/12/2021: 491 employees). At the end of December, the division had 9 trainees, the same as in the prior year.

In 2022, the division's R+D expenses of 15.5 million euros were up on the prior-year figure of 14.4 million euros. Overall, the division's R+D output increased to 17.6 million euros (prior year. 15.0 million euros).

T31 Smart Mobility Solutions at a glance (in million euros)

	2022	2021	Change in %
Revenue	114.3	110.1	3.8
EBITDA	19.3	19.2	0.8
EBITDA margin in % [1]	16.9	17.4	
EBIT	13.9	14.1	−1.4
EBIT margin in % [1]	12.1	12.8	
Capital expenditure	7.8	8.1	−3.4
Free cash flow	4.2	−4.4	n. a.
Cash conversion rate in %	22.0	<0	
Order intake	125.8	116.5	7.9
Order backlog	65.7	54.3	21.0
Employees	485	491	−1.2

[1] Based on total external and internal revenue

In the year covered by the report, the division invested 7.8 million euros in intangible assets and property, plant, and equipment (prior year: 8.1 million euros), primarily in connection with traffic service provision (TSP) projects, especially in North America and Europe. The traffic safety technology used for these projects is installed and operated by Jenoptik on behalf of the customer. As a result, in 2022 the level of capital expenditure was 3.4 percent lower than in the prior year. Capital expenditure was offset by scheduled depreciation/amortization totaling 5.5 million euros (prior year: 5.1 million euros).

As of December 31, 2022, the working capital came to 34.1 million euros, up on the prior-year figure of 25.6 million euros, primarily the result of increases in inventories due to disrupted supply chains and trade receivables.

More minor negative impacts arising from the increase in working capital, in particular, resulted in a higher free cash flow (before interest and income taxes) of 4.2 million euros in the fiscal year (prior year: minus 4.4 million euros). As a result, the cash conversion rate was also significantly up on the prior-year figure (prior year: <0).

Non-Photonic Portfolio Companies

The Non-Photonic Portfolio Companies particularly focus on solutions for the automotive industry in the Metrology and Automation & Integration business areas.

Their business continued to feel the impacts of the coronavirus pandemic, supply bottlenecks, and structural issues in 2022.

Revenue of the Non-Photonic Portfolio Companies came to 132.3 million euros in 2022 (prior year: 141.3 million euros), with growth seen in the Automation & Integration field in North America. The prior-year period had still included the revenue contributions from the non-optical process metrology business for grinding machines, sold as of July 30, 2021. The reporting year's highest quarterly revenue of 41.2 million euros (prior year: 45.3 million euros) was achieved in the fourth quarter. The Non-Photonic Portofolio Conmpanies' share of the continuing operations' revenue fell to 13.5 percent in 2022 (prior year: 18.8 percent).

At around 84.1 percent, the division again generated most of its revenue abroad in 2022 (prior year: 76.2 percent). While revenue in the Americas, in particular the US, was sharply up on the prior-year figure (rise from 69.2 to 79.4 million euros), it was down in Europe, including Germany, and in the Asia/Pacific region.

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T32 Non-Photonic Portfolio Companies at a glance (in million euros)

	2022	2021	Change in %
Revenue	132.3	141.3	−6.4
EBITDA	2.7	5.4	−49.8
EBITDA margin in % [1]	2.0	3.8	
EBIT	−20.4	−4.5	−349.2
EBIT margin in % [1]	−15.3	−3.2	
Capital expenditure	3.8	1.7	130.0
Free cash flow	14.0	−13.5	n. a.
Cash conversion rate in %	520.8	<0	
Order intake	163.4	141.6	15.4
Order backlog	86.6	58.9	46.9
Employees	657	692	−5.1

[1] Based on total external and internal revenue

EBITDA fell 49.8 percent to 2.7 million euros (prior year: 5.4 million euros), in part strongly impacted by projects in the Automation area. The prior year had also included income of 3.5 million euros from the above-mentioned sale of the metrology business for grinding machines, as well as impacts arising from the reversal of provisions, in particular in connection with the restructuring and cost-cutting measures put in place in 2020. The EBITDA margin fell to 2.0 percent, compared with 3.8 percent in the prior year. With EBITDA of 5.5 million euros, a margin of 13.2 percent was achieved in the fourth quarter (prior year: 1.0 million euros or 2.1 percent).

EBIT in the Non-Photonic Portfolio Companies decreased to minus 20.4 million euros (prior year: minus 4.5 million euros), and included impacts arising from the purchase price allocation (scheduled depreciation / amortization) for the acquisitions of INTEROB, Prodomax, and Five Lakes Automation amounting to minus 4.9 million euros (prior year: minus 5.2 million euros). In addition, following a review and reassessment of the business prospects of INTEROB in particular, impairment losses of 4.7 million euros were recognized on intangible assets and property, plant, and equipment. Due to the associated reduction in the division's expected future cash flows, coupled with increased capital costs, an impairment loss of 9.2 million euros was also recognized on goodwill. The EBIT margin fell to minus 15.3 percent (prior year: minus 3.2 percent).

Very good performance was seen in the order intake, which grew to 163.4 million euros in the fiscal year 2022. This equated to a 15.4-percent increase in new orders posted in the Automation area in North America and in the Metrology area compared to the 141.6 million euros in 2021. At 54.1 million euros (prior year: 29.0 million euros), the highest order intake was posted in the fourth quarter. The book-to-bill ratio in 2022 reached a figure of 1.24 (prior year: 1.00).

At the end of 2022, the order backlog was worth 86.6 million euros, 46.9 percent above the figure at the end of 2021 (31/12/2021: 58.9 million euros).

Higher cash flows from operating activities, in part due to positive effects in the working capital, were particularly responsible for the substantial increase in the free cash flow (before interest and income taxes) to 14.0 million euros (prior year: minus 13.5 million euros). The working capital decreased from 69.0 million euros at the end of 2021 to 58.7 million euros at the end of the reporting year, chiefly due to the decline in contract assets.

As of December 31, 2022, the Non-Photonic Portfolio Companies had 657 employees (31/12/2021: 692 employees). Twenty-one people were in trainee positions as of the reporting date (31/12/2021: 20 trainees).

The R+D output fell to 5.6 million euros (prior year: 6.7 million euros), and included developments on behalf of customers in the amount of 2.1 million euros (prior year. 2.4 million euros). R+D expenses came to 3.5 million euros (prior year: 4.3 million euros). In 2022, the share of R+D output in total revenue in the Non-Photonic Portfolio Companies was 4.2 percent (prior year. 4.8 percent).

Capital expenditure on intangible assets and property, plant, and equipment rose to 3.8 million euros (prior year. 1.7 million euros), this rise attributable to the area of Automation in North America. In 2022, capital expenditure was offset by scheduled depreciation / amortization in the sum of 9.2 million euros (prior year: 9.9 million euros). This includes depreciation / amortization resulting from PPA impacts.

General Statement by the Executive Board on the Development of the Segments

The Advanced Photonic Solutions division benefited from good revenue and a good order intake with the semiconductor equipment industry in 2022, but the significant growth was also due to good performance in the areas of Biophotonics and Industrial Solutions, and the contributions made by the former BG Medical and the SwissOptic Group, acquired in late 2021. The division also achieved an appreciable improvement in EBITDA and free cash flow.

In 2022, the Smart Mobility Solutions division generated a year-on-year increase in revenue, with the figures rising from quarter to quarter. EBITDA also improved slightly. Good performance was also seen in the order intake, which resulted in a noticeable increase in the order backlog. In 2022, the division further succeeded in generating a positive free cash flow following a negative figure in the prior year.

A difficult environment and structural challenges were reflected in the business performance of the Non-Photonic Portfolio Companies in 2022. Key indicators such as revenue and earnings did not match prior-year´s figures but the growth in the order intake and the positive free cash flow achieved were pleasing.

Over the course of the past fiscal year, Jenoptik boosted its capital expenditure on expanding production capacity and developing new products.

In the opinion of the Executive Board, Jenoptik also managed to establish a broader range of systems and secure both international projects and new customers in 2022. Both divisions and the Non-Photonic Portfolio Companies were able to post more orders and a higher order backlog in 2022 than in the prior year. This created a good basis for the Group's further development. In terms of revenue, we also posted increases in all three segments subject to reporting requirements.

Management Report of JENOPTIK AG

(Abridged version according to HGB)

Supplementary to the reports on the Jenoptik Group, the development of JENOPTIK AG is set out below.

JENOPTIK AG is the parent company of the Jenoptik Group and based in Jena. Its asset, financial, and earnings position is fundamentally defined by its capacity as the holding company of the Jenoptik Group. The operating activities of JENOPTIK AG primarily cover the provision of services for subsidiary companies and the subleasing of commercial premises.

The Annual Financial Statements of JENOPTIK AG are prepared in accordance with German commercial law (HGB) and the supplementary regulations of the German Stock Corporation Act (AktG). The Consolidated Financial Statements are prepared in accordance with the International Financial Reporting Standards (IFRS) valid on the reporting date and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) whose application is mandatory within the European Union, as well as the regulations under commercial law in accordance with § 315e (1) of the HGB that apply on a supplementary basis. This gives rise to differences in the accounting and measurement methods, chiefly concerning fixed assets, derivatives, provisions, deferred taxes, leases, and revenue recognition.

The Group's strategic policy entails a greater focus on photonics growth markets and thus its transformation into a globally positioned photonics company.

T33 Abbreviated income statement of JENOPTIK AG (in thousand euros)

	1/1–31/12/2022	1/1–31/12/2021
Revenue	52,345	44,167
Cost of sales	46,361	44,047
Gross profit	5,984	119
Selling expenses	1,210	1,643
General administrative expenses	12,698	14,487
Research and development expenses	838	57
Other operating result	2,613	1,094
Income and expenses from profit and loss transfer agreements and income from investments	71,140	88,937
Financial result	– 1,873	– 48,483
Income taxes	7,735	9,437
Earnings after tax	55,383	16,045
Net profit	55,383	16,044
Retained profits from prior year	20,000	30,000
Accumulated profit	75,383	46,044

Asset, Financial, and Earnings Position

Earnings Position

Revenue was up 8.2 million euros on the prior year, at 52.3 million euros, mainly the result of higher revenue and intra-group services.

Selling expenses of 1.2 million euros (prior year: 1.6 million euros) covered costs for communications, advertising, sponsorship, and strategic brand projects.

Administrative expenses fell year-on-year by 1.8 million euros, to 12.7 million euros, and primarily included personnel costs in the amount of 5.3 million euros (prior year. 8.3 million euros). The sharp decline in personnel costs is due in part to a higher internal allocation, which resulted in a corresponding disclosure to the cost of sales.

JENOPTIK AG posted research and development expenses amounting to 0.8 million euros (prior year: 0.1 million euros), primarily covering expenditure for innovation management and the coordination of R+D work in the Jenoptik Group.

The other operating result included other operating income of 27.9 million euros (prior year: 19.2 million euros), which was offset by 25.3 million euros of other operating expenses (prior year: 18.1 million euros).

Other operating income primarily included currency gains worth 9.4 million euros (prior year: 4.7 million euros), intra-group cost allocations of 2.0 million euros (prior year: 8.4 million euros), and income arising from the reversal of provisions in the sum of 0.2 million euros (prior year: 1.5 million euros). In addition, other operating income in the fiscal year 2022 included income of 16.1 million euros from the sale of financial investments in connection with the sale of VINCORION.

Key items in the other operating expenses were currency losses of 9.6 million euros (prior year: 6.1 million euros) and expenses for intra-group cost allocations of 2.6 million euros (prior year: 8.7 million euros). In addition, other operating expenses were affected by unscheduled write-downs on short-term loans to an associate amounting to 8.8 million euros. In the prior year, both income and expenses for intra-group cost allocations were heavily influenced by consulting costs for M+A activities.

The financial result of minus 1.9 million euros (prior year: minus 48.5 million euros) included unscheduled write downs of 0.2 million euros (prior year: 0.2 million euros) on loans to associates. In addition, in the prior year, impairment losses of 47.2 million euros were recognized on the investment carrying amounts of subsidiaries.

T34 JENOPTIK AG Statement of financial position (in thousand euros)

	31/12/2022	31/12/2021
Assets		
Intangible assets, property, plant, and equipment	87,007	79,587
Financial investments	982,739	1,047,663
Non-current assets	**1,069,747**	**1,127,250**
Inventories, trade receivables, and other assets	146,264	135,732
Cash and cash equivalents	779	3,305
Current assets	**147,043**	**139,036**
Accruals and deferrals	5,487	1,764
	1,222,276	**1,268,051**
Liabilities		
Share capital	148,819	148,819
(Conditional capital 14,950 thousand euros)		
Capital reserves	180,756	180,756
Revenue reserves	298,836	287,101
Accumulated profit	75,383	46,044
Equity	**703,794**	**662,721**
Provisions	**19,663**	**16,978**
Liabilities to banks	442,429	531,538
Trade accounts payable	7,920	11,914
Other liabilities	48,471	44,271
Liabilities	**498,819**	**587,723**
Accruals and deferrals	0	629
	1,222,276	**1,268,051**

Income taxes were 1.7 million euros below the figure for the prior year due to lower taxable income of the companies consolidated for tax purposes in the fiscal year 2022.

JENOPTIK AG's net profit increased overall by 39.3 million euros, to 55.4 million euros (prior year: 16.0 million euros). The company's earnings position was mainly influenced by the subsidiaries' earnings, which are paid to JENOPTIK AG on the basis of existing control and profit and loss transfer agreements. The net earnings contribution of the subsidiaries declined on the prior year, by 17.4 million euros to 71.1 million euros. This was the result of good earnings performance with the semi-conductor equipment and medical technology industries, as well as the positive development in the areas of Biophotonics and Industrial Solutions. This was offset by the negative result of JENOPTIK Advanced Systems GmbH, which was only compensated for the short fiscal year January 1 to June 30, 2022, due to the sale of VINCORION in the past fiscal year.

Contrary to the forecast for 2022, revenue increased significantly, resulting in particular from intra-group services. The result forecast for 2022, which had been expected to be stable compared with the prior year, was significantly better than expected with an increase in net profit before profit and loss transfers from subsidiaries of 56.5 million euros. This was due to significantly lower write-downs on financial investments and marketable securities amounting to 9.1 million euros (prior year: 47.3 million euros), significantly higher other operating income in connection with the sale of VINCORION (16.1 million euros), and increased revenue from price increases for intra-group services.

Asset and Financial Position

At 1,222.3 million euros, JENOPTIK AG's total assets were 3.6 percent down on the prior-year figure of 1,268.1 million euros.

The assets side of the Statement of Financial Position reflects JENOPTIK AG's status as a holding company. Alongside a capitalization ratio of 87.5 percent, of which 80.4 percent was attributable to financial investments and 7.1 percent to other fixed assets (in particular real estate), the total assets are also dominated by a high level of loans to associates (10.9 percent).

The 64.9-million-euro decrease in financial investments was mainly due to the sale of shares in associates and loans to associates in connection with the sale of VINCORION (58.6 million euros). In addition, loans to subsidiaries in the amount of 9.5 million euros were reclassified to current assets due to their shorter maturity.

Receivables from associates of 133.2 million euros (31/12/2021: 134.3 million euros) essentially concerned cash pool balances of subsidiaries worth 124.5 million euros (31/12/2021: 127.8 million euros) and short-term loan receivables against two subsidiaries, which were still valued at 5.9 million euros on the reporting date.

The reduction in cash and cash equivalents by 2.5 million euros as of the balance sheet date was the result of active liquidity management.

As a holding company, the financial position of JENOPTIK AG is significantly affected by the liquidity situation of the Group. Overall we assess our liquidity situation as comfortable. In this regard we refer to the section "Financial position".

Accruals and deferrals essentially comprised accrued costs for IT service and maintenance contracts.

On the liabilities side, the financing function of JENOPTIK AG as a holding company for the Jenoptik Group was particularly evident. Equity came to 703.8 million euros (57.6 percent of total assets), liabilities to banks to 442.4 million euros (36.2 percent of total assets).

In particular thanks to the positive annual result in the sum of 55.4 million euros, equity improved by 41.1 million euros, rising from 662.7 to 703.8 million euros. This was countered by the payment of dividends of 14.3 million euros for the fiscal year 2021. The equity ratio increased from 52.3 percent to 57.6 percent, also due to the reduction in loan liabilities.

Provisions were up from 17.0 million euros to 19.7 million euros, the increase of 2.7 million euros due in particular to higher other provisions of 12.2 million euros (31/12/2021: 9.6 million euros). These include provisions for personnel and outstanding invoices, as well as provisions of 3.1 million euros recognized in the fiscal year 2022 for indemnifications in connection with the sale of VINCORION.

The 89.1-million-euro decrease in loan liabilities, from 531.5 million euros to 442.4 million euros, relates to the repayment of the last tranche of the debenture bonds from 2015 in the amount of 55.0 million euros and the reduction in the utilization of the syndicated loan from 75.0 million euros to 45.6 million euros.

Other liabilities essentially comprised 29.4 million euros of cash pool liabilities and 14.0 million euros to offset losses at a subsidiary.

Over the reporting year, JENOPTIK AG's debt ratio changed, primarily due to the decrease in loan liabilities, from a 47.8-percent to a 42.4-percent share of total assets.

As of December 31, 2022, JENOPTIK AG had 283 employees, of which 30 were temporary workers and trainees (31/12/2021: 261 employees, of which 27 temporary workers and trainees).

General statement by the Executive Board on the business development

The business performance of JENOPTIK AG is dependent on the development of the business development of the Group as a whole. In this respect we refer to statements in the section "General statement by the Executive Board on the development of business".

Risks and opportunities

Due to its function as a holding company, JENOPTIK AG's development of business is subject to the same risks and opportunities as the Jenoptik Group. JENOPTIK AG generally participates in the risks of investments and subsidiaries in line with their equity interests and financial investments. The risks and opportunities of the Group and the segments are set out in the Risk and Opportunity Report.

Forecast report

The annual result of JENOPTIK AG is largely dependent on the development of contributions to earnings by the subsidiaries.

Based on the development of business set out in the Group Forecast Report, JENOPTIK AG is expecting substantially higher revenue in the fiscal year 2023 due to significantly higher revenue from expected price increases for energy and ancillary rental costs. The increased revenue will be offset by equally increased costs for ancillary rental costs. Revenue from holding company services and service allocations will remain at the prior-year level.

JENOPTIK AG's earnings – prior to transfer of subsidiaries' earnings contributions and excluding any effects from corporate transactions and unscheduled depreciation and amortization – is expected to remain stable compared to the past fiscal year. For a detailed presentation of the expected future development of the Jenoptik Group and its segments, we refer to the Forecast Report.

Risk and Opportunity Report

Principles of Risk and Opportunity Management (Enterprise Risk Management) at Jenoptik

Jenoptik operates in a global and complex business environment and is therefore constantly exposed to internal and external influences on its business activities. Every business decision therefore involves weighing the risks and opportunities within the corporate environment. This consideration, for Jenoptik, is one of the principles of responsible and value-oriented corporate management.

Jenoptik's comprehensive opportunity and risk management system is based on an interactive and management-oriented approach. Its enterprise risk management (ERM) system accounts for both risks and opportunities, and is integrated throughout the company. The goal is to support the implementation of the group strategy and to define actions that create an optimum balance between growth and return targets on the one side and the associated risks on the other. In implementing the strategy, it is necessary to identify strategic, operational, financial as well as compliance-related risks and opportunities, and within these categories sustainability risks, early on, and to present, evaluate, and manage them transparently and in a way that facilitates comparison. This is achieved by promoting an open risk culture, and through regular further development of the enterprise risk management system guided by the ISO 31000 standard. G13

Structure and organizational integration of enterprise risk management

The Supervisory Board's Audit Committee monitors the existence and effectiveness of Jenoptik's enterprise risk management. Overall responsibility for the ERM system in the Jenoptik Group lies with the Executive Board. The group-wide approach is set out in a risk manual. The structure and process is shown in figure G14.

Functional responsibility lies with the central Compliance & Risk Management department, which reports on group risk management directly to the CFO, who is also defined as the Group's risk officer.

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G13 Risk assessment

Metrics	Probability of occurence	Consequences / extent of damage		
		Qualitative		Quantitative EBITDA impact
5 = High	up to 50%	The goal of the Group or the risk reporting unit is jeopardized	or	> 20%
4 = Medium-high	up to 40%	The goal of the Group or the risk reporting unit has to be adapted immediately	or	> 15 to 20%
3 = Medium	up to 30%	The goal of the Group or the risk reporting unit has to be adapted in the medium term	or	> 10 to 15%
2 = Low	up to 20%	Further measures are necessary in order to achieve the goals of the Group or the risk reporting unit	or	> 5 to 10%
1 = Very low	up to 10%	Minor consequences	or	> 0 to 5%

The Risk Committee consists of the members of the Executive Board and the Head of Central Compliance & Risk Management. It consolidates all aggregated reporting results into an overall evaluation of the Group's risk position.

The definition and ongoing development of the system takes place in the close cooperation of central Compliance & Risk Management, the Executive Board, and the Audit Committee of the Supervisory Board. The Executive Board is responsible for the system and approves it. The Head of Central Compliance & Risk Management communicates the current requirements of the risk management system, advises on its practical implementation, and monitors the measures and results of the risk management processes.

Central Compliance & Risk Management also organizes and manages the system, working closely with the other central departments and the risk officers in the divisions. These, in turn, are responsible for implementing the ERM system in the respective risk reporting units. The risk reporting units are defined reporting units that are employed to accurately identify and allocate risks and opportunities. They can be both business units and individual subsidiaries or regionally consolidated units.

While Internal Audit monitors the effectiveness, appropriateness, and efficiency of enterprise risk management, the Supervisory Board's Audit Committee performs the external monitoring for or in conjunction with the Supervisory Board.

As part of the audit of the Annual Financial Statements, the early risk warning system of JENOPTIK AG is examined by the auditor with regard to the requirements of stock corporation law. The audit for the fiscal year 2022 showed that Jenoptik's ERM system complies with the legal requirements for an early risk warning system and that it is suitable for the early detection of developments that could jeopardize the continued existence of the Group.

The group of consolidated companies exposed to risk corresponds to those included in the consolidated financial statements.

Enterprise risk management system procedure and processes

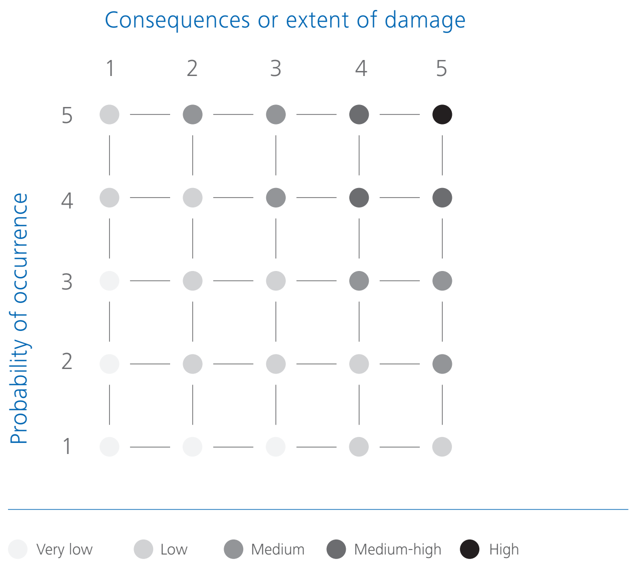
Risks are defined as potential developments and events that may result in a negative divergence from objectives and forecasts for the company and involve uncertainty regarding the occurrence of an event. Correspondingly, opportunities are events that may result in a positive divergence from expected targets.

G14 Process of risk reporting

Risk Officers in the divisions and central departments	Assessment of single risks
Central Functions	Review of aggregated risks
Corporate Compliance & Risk Management department	Review and analysis of group risks
Risk Committee	Analysis of group risks
Executive Board	Final assessment of group risks
Audit Committee Supervisory Board	Evaluation of group risks

The self-contained, regular, and IT-supported risk management process consists of various risk assessments, which are carried out using a combination of top-down and bottom-up elements. In order to ensure the most in-depth risk identification and comparability possible within the company, a risk register was developed to support management in the evaluation of risks. It comprises several specified categories, further divided up into subcategories, which are associated with predefined risk symptoms and provide the risk reporting units with a framework to assign potential risks and opportunities. This is to ensure that each risk reporting unit deals with the entire risk landscape and that, simultaneously, an aggregation of the results is guaranteed across the specified categories. While operational and financial targets are analyzed over a time frame of up to two years, strategic and compliance-related topics are considered for periods of up to four years. In the current system, sustainability risks are not yet identified in a separate risk category but are covered in the existing risk categories. G16

G15 Calculation of risk scores



G16 Risk and opportunity categories

Operational Risks / Opportunities	Strategic Risks / Opportunities
Supply Chain Management / Safety and Environmental Protection / Production (incl. Quality Management) / Marketing & Sales / Patents & IP rights / Human Resources Management / IT / Compliance / Legal Affairs / Real Estate	Market Development / Product Development (incl. Research and Development) / Corporate Development (Portfolio and Structure) / Organizational Setup (Processes and Resources)
Financial Management Risks / Opportunities	**Compliance Risks / Opportunities**
Accounting / Finance Management (Treasury) / Controlling / Taxes	Corporate / Criminal / Competition Compliance Data Protection / Data Security

Within the scope of the risk analysis, the risk reporting units determine the risks and opportunities, recorded by divisional risk managers, in order to be able to undertake a valid risk assessment in the next stage regarding the assessment methods (qualitative or quantitative) and the measures already taken or still required. The information is recorded using both the gross and net methods. Only the assessed residual risks (net risks) are used for aggregation and reporting, i.e., mitigating measures are already included in the assessment. The assessment of a risk is the product of the probability of occurrence and the quantitative amount of loss or the qualitative extent of damage. The opportunities are evaluated in the same way.

There is a scale of 1 to 5 for both assessment factors mentioned, i.e. the probability of occurrence and amount of loss, with 1 being the smallest and 25 the greatest possible risk indicator. G15

Every six months, the results of the assessments are requested by central Compliance & Risk Management at the risk reporting units and aggregated to the Group Risk and Opportunity Report. The findings are then validated by the central Corporate Center prior to discussion on the Risk Committee. The Executive Board makes a general assessment, is informed of the impact on risk-bearing capacity, which is determined as part of a Monte Carlo simulation and, as necessary, approves required further action. IDW audit standard 340 on auditing the early risk warning system, applicable since January 1, 2021, is taken into account by integrating a suitable risk-bearing capacity concept into our enterprise risk management process. The Group Risk and Opportunity Report is then presented to and discussed by the Audit Committee of the Supervisory Board and the Supervisory Board itself.

In addition, any risks identified during the year that have a high probability of occurrence and significant potential for damage are communicated without delay to the Head of Central Compliance & Risk Management and the Executive Board. Following joint analysis with the technical departments, they decide on further measures to be taken and, if necessary, the required communication.

Risk prevention and assurance of compliance

Prevention is a key element of the risk management system, and an integral part of regular business operations and committee work. It essentially comprises risk monitoring as part of a range of assessments and special approval procedures. Consequently, risks and opportunities, as well as their impact on the company, are discussed during the monthly meetings of the Executive Board, the EMC meetings, and the quarterly business reviews. At the same time, potential risks to achieving the strategic goals can be considered directly in the strategy development process and suitable measures adopted.

Compliance with national and international compliance requirements is an integral part of risk prevention and of the processes of Jenoptik's risk management system. In order to improve employee awareness and achieve a company-wide uniform understanding of our compliance standards, regular training is provided on subjects relevant to compliance, such as anti-corruption or anti-trust law, as well as data protection issues. Online training on key compliance issues is obligatory for all employees. More information can be found in the Corporate Governance Statement. A help desk is available on the intranet to assist employees on any risk or compliance issues they may have. The guidelines implemented within the Group with regard to important business processes are regularly reexamined, expanded, and updated. They are published on the intranet. Together with the Code of Conduct for Jenoptik employees, they are a further aspect of risk prevention.

The Codes of Conduct for suppliers and sales partners of Jenoptik oblige contractors of Jenoptik to comply with various compliance requirements in accordance with international standards. Central business partner screening (third-party due diligence) is used to check whether a cooperation is viable from a compliance perspective.

Jenoptik therefore has a preventive system of regulations, processes, and controls that enable it to identify any possible deficits in the company and to minimize them using appropriate measures at an early stage.

Alongside the risk and compliance management systems, the Internal Control System (ICS) is a key element of corporate governance. It covers technical and organizational regulations and control steps to ensure compliance with guidelines and prevent damages, as well as clear divisions of responsibility and function, in adherence to the principle of double-checking. In particular, its intention is to ensure the security and efficiency of transaction processing as well as the reliability of financial reporting. In the past fiscal year, ICS self-assessments were again carried out at all group companies, which had to be made by the respective management. Monitoring and evaluation of the completed self-assessments is carried out by Internal Audit. Reported deficits are analyzed and appropriate countermeasures are defined to ensure they are permanently eliminated. In addition, the fiscal year 2022 saw the start of the introduction of a globally uniform, documented, and tool-supported ICS for the larger Jenoptik companies (number of employees > 30) in the financial area. This will be monitored by regular specific ICS audits carried out by Internal Audit. There are plans to extend the system to significant non-financial processes in 2023, and to introduce system-based effectiveness monitoring. In the long term, the documented internal control system will replace the ICS self-assessment currently still carried out at the larger Jenoptik companies.

Internal Audit supports the Jenoptik Group in achieving its goals by using a systematic and comprehensive approach to assessing and improving the effectiveness of its risk management, control, and monitoring processes. It is responsible for the risk-oriented audit of all processes in the divisions, regions, group companies, operating sites/facilities, strategic business units or functions/specialist areas of the Group (“audit universe”), and follow-up of measures for any deficiencies identified. 17 audits were carried out in 2022. In order to ensure the greatest possible independence and objectivity, the function is a staff function of the Executive Board at JENOPTIK AG. In addition to ongoing reporting to the Executive Board, reports are also submitted directly to the Audit Committee every six months.

Key features of the Internal Control and Risk Management System (ICS) with regard to the accounting processes of the Group and JENOPTIK AG (§ 289 (4) and § 315 (4) of the German Commercial Code [HGB])

The accounting-related internal control system is part of the overall ICS of the Jenoptik Group. Its purpose, in part, is to ensure a due and proper process in preparing the Consolidated Financial Statements, guaranteeing compliance with statutory regulations, accounting rules, and internal guidelines for uniform accounting and valuation principles, which are binding for all companies included in the Consolidated Financial Statements. New regulations and changes to existing rules are analyzed and implemented promptly. All employees involved in the accounting process receive regular training. Regional financial delivery centers carry out some operational accounting processes. They also support the harmonization of processes, their efficiency and quality, and thus also the reliability of the internal control system.

Access restrictions in the respective IT systems protect the financial systems against abuse. Centralized control and regular backup of the IT systems reduce the risk of data loss.

In order to prepare the Consolidated Financial Statements, data from the companies is recorded directly by them in the consolidation tool. The transferred data of the statements and financial statements of consolidated companies is verified by manual and technical system inspections. All the consolidation processes required for the preparation of the Consolidated Financial Statements are documented. These processes, systems, and controls enable Jenoptik to ensure a group accounting process that complies with both the IFRS and statutory requirements. The group auditor audits the Consolidated Financial Statements prepared in accordance with IFRS as well as the Annual Financial Statements of JENOPTIK AG in accordance with § 317 HGB and the EU Regulation on Auditors (No. 537/2014) in compliance with the German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW).

The Group's Risk and Opportunity Profile

The Group's risk profile for 2022 and subsequent years was determined with the aid of the risk and opportunity assessments from the segments. Part of the risk assessment of the segments is a review by the central departments of the Corporate Center, whose risk assessments are then included in the segment reporting and in the final group assessment. Our processes for identifying, managing, and controlling risks involve non-financial environmental, social, and corporate governance risks, including climate-related risks, at all levels. Our risk and opportunity management makes possible a direct comparison of the individual risk profiles at the level of risk symptoms. The risk assessment at the level of the risk and opportunity categories in the individual subcategories is shown in more detail in the following chart. T35

The Group's overall risk is calculated after weighting the individual segments according to their shares of total group EBITDA.

Overall, the risk to which the Group is exposed remained in the medium risk range. No significant changes on the prior year were identified.

Once again, strategic risks and opportunities for the Group were on average assessed as the most important, compared to operational and finance management risks, in 2022. Our focus on photonic market segments represents both an opportunity and a risk to the Group.

With the gradual phasing-out of the global emergency regulations relating to the Covid-19 pandemic and, in particular, the official end of China's zero-Covid strategy, the risks that may arise from possible actions to contain the pandemic and that

T35 Risk profile of the Jenoptik Group 2022

	Group risk assessment	
	Current (2022)	Prior year (2021)
Strategic risks		
Market development	Medium	Medium
Product development (incl. R+D)	Medium	Medium
Corporate development (portfolio und structure)	Medium	Medium
Organizational setup (processes and resources)	Medium	Medium
Operational risks		
Supply chain management	Medium	Medium high
Safety and environmental protection	Medium	Low
Production (incl. quality management)	Medium	Medium
Marketing and sales	Medium	Medium
Patents and IP rights	Low	Low
Human resources management	Medium	Medium
IT	Medium high	Medium
Legal affairs	Low	Low
Real estate	Medium	Low
Financial management risks		
Accounting	Low	Low
Finance management	Low	Low
Controlling	Medium	Low
Taxes	Medium	Low
Compliance risks		
Corporate/criminal, and competition compliance	Medium	Medium
Data security and data protection	Medium	Medium
Total risks	Medium	Medium

could have an influence on Jenoptik's business activities are decreasing. There is still the possibility of regional outbreaks and new mutations, which require regular reassessment.

The global trend toward the lifting of coronavirus restrictions offers opportunities for our business activities, such as customer service and visits, trade show participation, and international travel.

There remain uncertainties arising from trade and geopolitical conflicts, some of which are increasing again in a number of regions. For example, the increasing economic decoupling of the US and China due to rising trade barriers and technical regulations may impede global growth. The tensions between China on the one hand and the partners Taiwan and the US on the other hand cannot be assessed with certainty at present. Despite the international orientation of the semiconductor industry, a significant impact on the global semiconductor market can be assumed in the event of escalation due to Taiwan's strong position in some manufacturing stages. Russia's war against Ukraine with the associated sanctions does not pose any direct risks due to the almost non-existent business activities with both countries. Indirectly, it may continue to have an impact above all on energy supplies and influence their price development as well as the short-term availability of raw materials. This could further fuel currently high inflation and pose the risk of a continuing wage-price spiral. Similarly, the blocking of financial transactions may also have an impact on the procurement or distribution of non-sanctioned goods. Both could severely impact on overall economic development in Jenoptik's growth markets and on the success of our business activities by negatively affecting our cost structure through price increases in raw materials and intermediate goods. Jenoptik is attempting to counter this through various measures in purchasing, through further optimization of the internal cost structure, and, if necessary, through price adjustments in close cooperation with our customers. At this point in time, the war situation remains dynamic, and an escalation and expansion of the conflict, including NATO involvement, cannot be ruled out. An expansion of the war would have a significant impact on the European economies.

Jenoptik is dependent on the economic development of specific industries and markets, and so we are particularly affected by the ongoing weakness of the automotive markets. The global trend toward digitization and various (supra-)national support programs to strengthen the local semiconductor industry continue to drive demand for optical technologies in the semiconductor equipment industry and offer major opportunities for Jenoptik, but are also accompanied by challenges.

Jenoptik is exposed to intense competition throughout its business. The company counters the risk of being squeezed out by competitors with, for example, innovative USPs, specific and flexible changes to its product range, or customization options for existing products and solutions. In addition, mergers and acquisitions in the markets we target may intensify the competitive environment, and potentially improved cost structures of competitor companies, with a corresponding increase in pricing pressure, may have negative effects on group earnings. Jenoptik counters this risk by continuously analyzing its portfolio, i.e., by determining whether and how specific acquisitions and disposals may usefully support its strategy to generate lasting profitable growth. M + A activities and the integration of acquisitions pose a fundamental risk to the Group. This risk is proactively countered with extensive due diligence and a structured integration process tailored to the acquired company.

Operational risks and opportunities were assessed with low to medium-high risk indicators for the entire Group on average, the Group's risk level is medium.

The increasing number of complex international projects, particularly those of a technically challenging nature, place enormous operational demands on all parts of the business. Supplier management and production are predominantly responsible for assuring the quality of our products. The use of single-source suppliers and the continuing possibility of insolvencies, for example, may increase the risk of dependency on or the loss of individual suppliers. Inflationary pressures may also continue to increase the price pressure on products purchased by our suppliers. Ongoing refinement of our purchasing and production organization therefore aims to ensure that our customers continue to receive high-quality, tailored solutions when they need them.

Global IT systems and processes are of great significance to Jenoptik in all its divisions. The security and availability of these systems have top priority. Data is stored on redundant storage media and secured against data loss by means of a partially tiered archive and backup system. This aims to enable rapid data recovery in the event of a crisis situation. Due to increasing IT threats worldwide, for example in the form of social engineering such as phishing attacks or ransomware, Jenoptik is actively taking both preventive and corrective measures to reduce the risk of cyber attacks. As examples, all IT security issues are coordinated by the Chief Information Security Officer, existing processes are continuously scrutinized and adjusted, technical measures are implemented, and employees in positions of responsibility are provided with internal training. Jenoptik has also set up a Security Operations Center (SOC) to better ensure protection of its IT infrastructure. It integrates, monitors, and analyzes all security-related systems such as our corporate networks, servers, workstations, and internet services, alerts the affected units, and takes action to protect our data and applications. However, these measures to protect our IT infrastructure, intellectual property, and portfolio can never result in complete risk mitigation.

Our employees make the most important contribution to the company's success. As an international technology company, Jenoptik needs dedicated and highly qualified colleagues – now and in the future. Due to the difficulties in attracting qualified employees, particularly in Germany, Jenoptik is also exposed to the risk of not being able to fill vacant positions as they arise. This risk is countered with a large range of targeted measures, including the establishment of a succession planning process for management positions, leadership and professional career programs, an employer branding campaign, and both attractive and personalized incentive and loyalty schemes.

T36 Risk profiles of the segments 2022

	Advanced Photonic Solutions division		Smart Mobility Solutions division		Non-Photonic Portfolio Companies division	
	2022	2021	2022	2021	2022	2021
Strategic risks						
Market development	Low	Low	Medium	Medium	Medium high	Medium high
Product development (incl. R+D)	Medium	Medium	Medium high	Medium high	Medium	Medium
Corporate development (portfolio & structure)	Medium	Medium	Medium	Medium	Medium	Medium
Organizational setup (processes and resources)	Medium	Medium	Medium	Medium	Medium	Medium high
Operational risks						
Supply chain management	Medium	Medium high	Medium high	Medium high	Medium	Medium high
Safety and environmental protection	Medium	Low	Medium	Medium	Low	Low
Production (incl. quality management)	Medium high	Medium high	Medium	Medium	Medium	Medium
Marketing and sales	Low	Medium	Medium	Medium	Medium	Medium
Patents and IP rights	Low	Low	Medium	Medium	Low	Low
Human resources management	Medium	Medium high	Medium	Medium	Medium high	Medium
IT	Medium high	Medium high	Medium	Medium	Medium	Medium
Legal affairs	Low	Low	Low	Low	Low	Low
Real estate	Medium high	Medium high	Low	Low	Medium	Very low
Financial management risks						
Accounting	Low	Low	Low	Low	Low	Low
Finance management	Low	Low	Low	Low	Medium	Medium
Controlling	Medium	Medium	Low	Low	Low	Low
Taxes	Medium	Medium	Medium	Medium	Medium	Low
Compliance risks						
Corporate/criminal and competition compliance	Medium	Medium	Medium	Medium	Low	Low
Data protection & data security	Medium	Medium	Medium	Medium	Medium	Low
Total risks	Medium	Medium	Medium	Medium	Medium	Medium

In view of Jenoptik's international business operations, one group-wide risk is non-compliance with legal, ethical, and contractual requirements. Successfully completed M+A activities, in particular, require careful integration and coordination processes to ensure full integration of the acquired companies into our corporate governance. The continuous improvement of our compliance structures and processes assists all departments and business units in this regard. As a company with customers and business partners in numerous countries and global clients in the public sector, Jenoptik must grapple with many, partly growing, compliance requirements in a wide range of different markets. Although the necessary organizational structures and measures to minimize potential compliance violations have been implemented with a group-wide export control and data protection organization, the central Compliance and Risk Management department, and corresponding processes, such violations cannot be entirely ruled out. Strict adherence to the compliance program and the continuous development of the compliance management system aim to close up any process gaps and ensure that processes comply with laws and regulations.

In 2022, financial management risks were assessed on average as low throughout the Group. The issues cited below also include the segment-specific risks. One key task of the central Treasury department is to safeguard and coordinate the financing of all group companies over the long term. For this purpose, Jenoptik has access to a range of financing instruments.

Currency-related risks arising from the Group's international activities are identified together with the group companies and reduced by adopting suitable measures such as the conclusion of currency forward transactions.

The risk of changing interest rates is in part reduced by the conclusion of fixed interest loans. Interest derivatives are also used where required.

Group-wide liquidity planning aims to identify liquidity risks at an early stage and systematically minimize them. Regular treasury reports and quarterly planning updates have been established for liquidity control and monitoring.

In the Controlling and Accounting departments, opportunities predominantly arise from the continuing expansion and optimization of the standardized SAP system, and from the centralization of accounting activities for continuous quality improvement. Thanks to the establishment of new financial controlling instruments based on modern IT solutions, Jenoptik counters the risk of lacking business-critical information in internal reporting.

From this year on, compliance risks are identified and shown as a separate risk category. These risks, which include corporate, criminal, and competition law risks, as well as data protection, are at a medium level throughout the Group.

Risk and Opportunity Profiles of the Segments

The risk and opportunity profile of the Jenoptik Group was derived from the risk profiles of the Advanced Photonic Solutions division, the Smart Mobility Solutions division, and the Non-Photonic Portfolio Companies. Financial management risks are shown in a consolidated form in the Group risk and opportunity profile. T36

Advanced Photonic Solutions

Strategic risks and opportunities primarily arise on the basis of demand in the semiconductor equipment industry. They may have a significant positive or negative effect on results. Beyond this, the focus on individual larger customers and the resulting customer concentration fundamentally harbors the risk that poor business performance or the loss of customers may impact severely on revenue and earnings. On the other hand, the loyalty of such customers enables profitable revenue growth due to economies of scale. Due to the highly specialized technology portfolio of both Jenoptik and its key customers, the dependency exists in both directions. Although there is always an inherent threat posed by the growing number of mainly Asian competitors and the trend among suppliers and customers toward forward and/or backward integration, it may still be achieved through the continuous expansion of existing competitive advantages, in-house development activities, and internationalization. In addition, the division addresses this risk by continuously reviewing vertical integration with the aim of supplying more system and service solutions to its customers.

With regard to the use of financial instruments, we refer to the Notes, section 8.2

Both, the growing importance of digitization, further accelerated by the Covid-19 pandemic, and the (supra-)national industrial policy that aims to reduce dependency in the semiconductor sector on individual countries, offer major opportunities for the division both in the current situation and in coming years, accompanied by increasing challenges in operational issues such as supply chain management, attracting skilled workers, and increasing production capacity. In these areas, Jenoptik competes with other companies in the semiconductor equipment industry. America's subsidy policy is accompanied by increasing requirements in export handling, as it is associated with geopolitical interests. The relentless progress being made in medical technology and demographic developments, especially in Asia and the Americas, are also boosting demand for product solutions. Ongoing development of the product portfolio and the strategic acquisition of BG Medical GmbH in the field of medical technology, as well as Jenoptik's stronger market orientation, mean that the requirements of our customers can be better served. Increasing financial problems in healthcare systems, however, are resulting in growing price pressure among suppliers. The trend toward increasing complexity in the market environment makes clear and reliable forecasts more difficult, especially in innovative areas of application.

The exacting technology and quality requirements placed on Jenoptik and our suppliers with regard to source materials and production technology result in particular operational risks and opportunities in supplier management and production processes. For many components manufactured in the division, there are only a very limited number of qualified suppliers that are able to meet the necessary specifications in a timely manner. When such a supplier is lost or the customer changes specifications, this can result in corresponding problems in the development or production process. To ensure a stable base of suitable suppliers in the medium and long term, the division's partners are subject to ongoing qualification with the help of Strategic Purchasing. In addition, special supplier development teams support our suppliers where there is a need to further develop their organizational arrangements or business processes. Strained supply chains may also pose risks, especially at a time of increased demand for our products. For specific materials, these risks may be seen in fixed allocations by suppliers or sharp price increases. Jenoptik is attempting to overcome these challenges by setting up dedicated task forces.

Specific customer requirements, especially regarding the quality and growing number of complex high-end products, and the dynamic growth of some business areas, lead to rising demands on production technologies, capacities, and floor area concepts, which are met through targeted expansion or replacement investment. Delays in necessary investments may increase the risk of quality and performance requirements not being met to the agreed schedule, or at all, resulting in either delivery delays or non-acceptance by the customer.

The division is investing in new sites and continuously developing existing sites around the world while maintaining operations in order to better serve growing demand in the future.

Smart Mobility Solutions

Uncertain economic and political developments around the world represent the main strategic risks and opportunities currently affecting the Smart Mobility Solutions division. As a supplier to international public-sector customers in particular, Jenoptik is exposed to both the political and economic development of the respective countries. Particularly in the event of unrest or regime change, this may result in projects being delayed or even abandoned. Due to the tight budgetary situation following the Covid-19 pandemic and the realignment of public budgets in the wake of the war in Ukraine, cuts in public investment for traffic monitoring projects cannot be ruled out for the future.

Consolidation of the traffic safety market through Verra Mobility's acquisition of Redflex in 2021 continues to pose sales market risks, especially in the United States, but also in other international markets due to the market entry of Asian competitors. The division is currently working on realigning its activities on the American market and on further product development in line with divergent regional requirements. The highly regulated European traffic safety market, which has certain barriers to market entry due to its high approval requirements, also has a supporting effect here.

At the same time, the growing demand for safety technologies, intelligent traffic flow solutions ("smart cities"), the levying of congestion charges for the use of inner-city traffic infrastructure, and compliance with emission values for air pollutants, especially in metropolitan areas, present good opportunities for the division. We aim to improve our strategic competitive position by continuously optimizing our product range and establishing a standardized platform capable of addressing the above-mentioned future issues.

The operational risks and opportunities are dominated by the difficult situation in parts of the supply chain. The products made by the Smart Mobility Solutions division require technical approval, particularly in European countries, the duration of which cannot be influenced. It is therefore not always an easy process to substitute purchased materials or modules without applying for an updated operating license. In many cases, therefore, only a very limited number of companies are qualified as suppliers. If one of these suppliers is lost or products are discontinued, challenges may arise due to the need for new approvals, modified production processes, delivery bottlenecks, and negative impacts on long-term sales. The division's partners are subject to qualification with the help of Strategic Purchasing to ensure a stable base of suitable suppliers in the medium and long term.

In addition, the division is compelled to meet strict compliance requirements, whether imposed by customers or legislation. They entail the risk of delays in our business processes or of additional costs that could adversely affect earnings. In the field of traffic safety technology, the requirements of the General Data Protection Regulation are of particular significance. They are met thanks to the further expansion of a standardized group-wide data protection organization.

Non-Photonic Portfolio Companies

The strategic risks and opportunities in the Non-Photonic Portfolio Companies are strongly influenced by the development of the automotive industry and its investments. The industry continues to face challenges due to the technological transformations and sales developments of vehicles with conventional drive trains, which pose risks to our business success as an equipment supplier to this industry. A focus on larger customers in the field of process automation is generally associated with the risk that negative business performance or the loss of customers may impact severely on revenue and earnings. Moving the division's strategy away from major, integrated projects and toward smaller one-off projects may in the short term result in a need to adjust the working capital. By addressing other branches of industry with our product portfolio, we aim to reduce our dependence on the automotive industry in the future.

In terms of operational risks and opportunities, the increasing internationalization of projects and parts of the value chain is reflected in increased demands on supplier management, manufacturing, marketing, sales, and HR management. The consistent expansion of efficient service and sales structures is of crucial importance to achieving the growth targets, particularly abroad.

Financial pressure on stakeholders throughout the automotive supply chain is steadily increasing, and may result in increased risks to the Non-Photonic Portfolio Companies due to cash flow optimization on the part of customers as well as the loss of suppliers. To counter this, we have initiated a more efficient receivables management system and the further qualification of suitable suppliers.

VINCORION

Following completion of the sale of this division on June 30, 2022, no risks and opportunities for the VINCORION business are listed here. There remain minor net risks from the utilization of indemnification granted. These have not been included in the Group's risk assessment.

For the Group, the sale of the division gives rise to opportunities relating to the share price, as the share of revenue with security and defense technology has fallen below the five percent mark. As a result, the Jenoptik share is once again available as an investment opportunity to institutional providers who have to comply with strict ESG criteria, which may have positive effects on the share price.

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General statement by the executive board on the group's risk and opportunity situation

The major and controllable risks and opportunities were identified and assessed on the basis of our risk and opportunity management system. Overall, in terms of strategic, operational, and financial management risks, the Jenoptik Group's exposure to risk is marginally increased on the prior year, and currently remains in the medium risk range. The risks addressed are limited – as far as possible – by the initiation and follow-up of appropriate measures.

In addition to the specific risks set out in the Group Management Report, however, unforeseeable events may occur at any time that have a significant impact on market development, our sales and production processes, and the reputation of the company. The medium and long-term effects of the unstable geopolitical situation, such as Russia's ongoing war in Ukraine but also the increasing tensions between China on the one hand and the partners Taiwan and the US on the other, cannot be assessed with certainty at present. These may have consequences for the supply and pricing of energy, raw materials, and logistics and construction services. Despite the international orientation of the semiconductor industry, a significant impact on the global semiconductor market may be assumed in the event of escalation due to Taiwan's strong position in some stages of production. Downstream, this could result in inflation remaining high or rising in the coming years.

Overall, it can be said that a consistent focus on the Group's strategic market segments (with the help of "Strategy 2025") may gradually help to reduce the existing strategic risks. The growing importance of the photonics industry and the strong related demand for applications and devices, both from private households and companies, continues to offer Jenoptik the potential for good further growth. As mentioned in the section on Advanced Photonic Solutions, (supra-)national industrial policy in the context of the American CHIPS and Science Act and the European Chips Act can also have a supporting effect here.

Overall, there is an acceptable relationship between risks and opportunities in the Jenoptik Group. No risks were identified that may jeopardize the continued existence of the Group.

Forecast Report

Framework conditions: Future Development of the Economy as a whole and the Jenoptik Sectors

The International Monetary Fund (IMF) expects 2023 to be a difficult year economically, as the three most important economic regions – the US, the EU, and China – are all showing signs of weakness at the same time; half of the countries in the EU will see recession in 2023, as may a third of all countries worldwide. The IMF, however, sees the outlook for the global economy as "less gloomy" than last feared in the October 2022 forecast, as many economies have proved more resilient than expected and the end of the zero-Covid strategy in China could become a driver for the economy. On the other hand, a worsening of the coronavirus situation in China due to rapidly rising infections could also become a risk for the domestic and global economy. The IMF sees further risks in the possible escalation of the Ukraine war or from the impacts resulting from it, such as high energy prices. In addition, although central banks' strict monetary policies are increasingly curbing inflation, they are also increasing the risk of a possible debt crisis in many emerging and developing economies.

For 2023, the IMF is expecting year-on-year global economic growth of 2.9 percent – 0.2 percentage points higher than assumed in October 2022. Growth of 3.1 percent is forecast for 2024. T37

T37 Gross domestic product growth forecast (in percent)

	2023*	2024*
World	2.9	3.1
US	1.4	1.0
Eurozone	0.7	1.6
Germany	0.1	1.4
China	5.2	4.5
India	6.1	6.8
Emerging countries	4.0	4.2

Source: International Monetary Fund, World Economic Outlook (Update), January 2023
* Forecast

Although the IMF raised its growth forecast for China by 0.8 percentage points compared with its October forecast, it still sees considerable risks. The unpredictable further course of the coronavirus pandemic following the end of the zero-Covid policy, a crisis in the real estate market, and weaker global demand could all particularly impact on China's economic growth.

According to the IMF, the US could avoid or see only a very mild recession in 2023. In its view, labor markets are stable and consumer demand is strong, despite interest rate hikes to reduce inflation. The subsidy law passed in 2022, the Inflation Reduction Act, is intended to provide very large subsidy incentives and tax cuts in the US to green the economy. It is coupled with regulations for domestic production in the US, which is why the EU sees this subsidy program, worth around 430 billion US dollars, as discriminating against European companies that want to export environmentally friendly products to the US, or the risk that companies may relocate their investments and plants to the US. In response, the EU therefore plans to simplify its regulations for subsidies and speed up approvals, as reported by the EU Commission at the beginning of 2023.

In the eurozone, the IMF forecasts economic growth of 0.7 percent in the current year and 1.6 percent in 2024. The forecast, which is slightly higher than in October, reflects the ECB's faster rate hike and lower wholesale energy prices, as well as additional announcements to strengthen purchasing power in the form of energy price controls and financial aid. The EU Commission expects economic growth in the eurozone of 0.9 percent in 2023.

According to the IMF's January 2023 assessment, the German economy has proved surprisingly robust, making it possible to avoid a recession in the current year. After the weak growth of 0.1 percent forecast for 2023, the economy could grow by 1.4 percent year-on-year in 2024. The German government expects a year-on-year increase in gross domestic product in 2023, rather than shrinking by 0.4 percent as was feared in the fall. It is expecting a difficult year for Germany's export industry, with exports likely to grow just 2.2 percent.

Thanks to digitization, the photonics industry remains part of a growing environment, according to the Spectaris industry association. The use of lighting technologies is making an essential contribution to global market growth and has become indispensable for many innovations, e.g., as a basic technology for autonomous driving, for industry 4.0 and big data applications, for the "smart laboratory" in analytical and biotechnology, and through the use of quantum technology, which may provide photonics with its next source of growth momentum. According to Spectaris, efforts to better protect the climate and promote sustainability are expected to make a positive contribution. Light-based technologies deployed in the service of "green photonics" are key here: Spectaris expects that photonics will help to cut almost 3 billion tons of CO_2 by 2030.

Industry experts see a number of trends that will influence the photonics industry. For example, more photonic solutions may be needed in the semiconductor equipment industry as new chip factories will be built in the wake of funding programs such as the CHIPS and Science Act in the US, the Chips Act in the EU, or similar state initiatives in China, South Korea, and Taiwan. The market for industrial lasers, especially for cutting and welding applications, could also grow by 5 to 10 percent in 2023, but with uncertainties regarding China. In the semiconductor industry, EUV (extreme ultraviolet) technology is also helping to produce ever smaller chip structures. Another growing market segment for photonic components is free space optical communication: The next generation of satellites will need laser terminals for optical communication in space.

Industry experts expect a compound annual growth rate (CAGR) for the global photonics industry of at least 6 percent in the coming years: Market researcher Tematys (together with Photonics21) is forecasting a CAGR of 6 percent by 2025, to 900 billion euros, MarketsandMarkets 7.1 percent to 837.8 billion US dollars by 2025, and Triton 8.1 percent to 921.7 billion US dollars by 2028. Growth will primarily be driven by the increasing use of photonics products in the healthcare sector, in industry, and in IT and communications.

In view of strong chip demand in many industries, but also potential trade conflicts, countries and regions such as the US or the EU plan to increase their own chip capacities with support programs and thus become less dependent on supplies from abroad. Under the auspices of the European Chips Act, the EU Commission plans to build new chip factories in Europe in the medium to long term, doubling Europe's share of global chip production to 20 percent by 2030. The US also plans to promote investment and innovation in US chip manufacturing with the CHIPS Act passed in August 2022. According to the SIA, the construction of 23 new chip factories and the expansion of 9 fabs have already been announced, which in turn will lead to investment by suppliers and equipment manufacturers. The semiconductor equipment manufacturers association, SEMI, also confirmed the positive impact of government efforts to expand production capacity and strengthen supply chains: As it says, the global semiconductor industry will invest more than 500 billion US dollars in 84 chip fabs through the end of 2023.

In terms of short-term chip demand, market analyst IC Insights expects weakness in the memory market to persist through the first half of the year, leading to a 25 percent decline in memory capital spending in 2023. In addition, US sanctions on Chinese semiconductor manufacturers adopted in October 2022, especially those related to the acquisition of chip manufacturing equipment from US companies, would cause a year-on-year drop of 30 percent in capital spending by Chinese companies in 2023. In early 2023, the US agreed with the Netherlands and Japan on further export restrictions against China, and this could impact on supply chains in the semiconductor equipment industry. For the global semiconductor equipment market, the SEMI association expects a decline from 108.5 billion US dollars in the prior year to 91.2 billion US dollars in 2023 and renewed revenue growth to 2022 levels in 2024.

The German Electrical and Electronic Manufacturers' Association (ZVEI) expects the German electrical and digital industry to achieve a break-even point in production in 2023, corresponding to consolidation at a very high level.

Despite the overall economic uncertainties, the growth prospects for the machine vision industry remain good for the next few years, according to VDMA Machine Vision, which states that economic recovery in "seeing machines" has continued and that machine vision is a key component in automation systems. According to market research company MarketsandMarkets, the market for augmented reality and virtual reality (AR/VR) applications could grow by an average of 25.3 percent per year through 2027, which would then correspond to a volume of 114.5 billion US dollars based on 2022 revenue of 37.0 billion US dollars.

For the German medical technology industry, the Spectaris industry association is anticipating revenue growth in 2023 below the level of 2022. Growth will also be accompanied by cost increases, which will worsen earnings. A majority of companies in the industry are experiencing production constraints due to material shortages and a lack of skilled workers. According to Spectaris, long-term growth drivers are opportunities due to demographic developments, particularly in industrial nations, and high healthcare investments in many emerging countries. The pandemic has further intensified digitization within the industry; as a consequence, manufacturers' business models are moving from traditional instrument engineering via solution providers in the current decade toward suppliers of digital and holistic healthcare solutions in the next decade. Based on assessments by Frost & Sullivan, the global medical technology market will grow by an average of over 6 percent a year to 582 billion US dollars in 2025. Market researcher Fortune Business Insights forecasts the global market for medical technology devices to grow at an annual growth rate of 5.5 percent to reach a market volume of 718.9 billion US dollars by 2029. It sees development of the market being driven, for example, by increasing demand for wearable healthcare devices such as fitness trackers, the spread of chronic diseases, and the shift to home care, which requires portable, easy-to-use equipment. For the point-of-care diagnostics market segment, market researcher MarketsandMarkets calculated average growth of 10.7 percent to 75.5 billion US dollars in 2027, based on the 2022 value (45.4 billion US dollars), due to the continuing prevalence of respiratory, cardiovascular, and infectious diseases, which can be better contained with PoC diagnostics.

In the German mechanical and plant engineering industry, the VDMA industry association anticipates a minor 2-percent decline in production in 2023, as well as a year-on-year decline in revenue of 2.9 percent. The export-oriented sector will be impacted by the expected continued weak growth in China, high energy prices as a result of the war in Ukraine, and rising interest rates, it states.

Only slow improvement is expected in the automotive industry: In Germany, production and new registrations will rise again compared with the prior year, but will still be well below pre-crisis levels, according to the German Association of the Automotive Industry (VDA). The VDA expects a similar picture in the US. Only in China the car market will grow more slowly, as it has already recovered from the crisis.

The global traffic safety market is expected to grow by an annual average of 12.4 percent, to 6.6 billion US dollars, through 2028, according to the US market research company Grand View Research in its May 2021 market report. Market researcher MarketsandMarkets is expecting average annual growth of 9.6 percent through 2026, with key roles for increasing urbanization and expansion in the transport and traffic sector, the further development of smart systems, and initiatives for greater road safety such as "Vision Zero". Within the speed monitoring segment, automatic license plate recognition (ALPR) accounts for a significant portion of industry revenue, and demand here is forecast to remain solid through 2028. Also becoming more important are services, or the ability to provide end-to-end monitoring and maintenance services.

Globally, the "Decade of Action for Road Safety 2021-2030" aims to largely prevent road traffic deaths and injuries. According to an EU regulation, all new vehicle types must be equipped with an Intelligent Speed Assistant (ISA) from July 2024 on. This assistance system is to become a supporting speed brake in the vehicle by means of sensor fusion between traffic sign recognition, cruise control, and navigation system. In the US, the Department of Transportation wants to improve traffic statistics and safety with a new "Safe Systems" strategy. By the end of 2023, it plans to provide advice and 5 billion US dollars in funding to enable US states to introduce speed limits or launch pilot programs to increase the use of speed cameras.

Expected Development of the Business Situation

Planning assumptions for the Group and the divisions

The forecast for business growth in 2023 is based on the group planning set out in the fall of 2022.

Since the first quarter of 2022, Jenoptik operates in the following reportable segments: Advanced Photonic Solutions, Smart Mobility Solutions, and Non-Photonic Portfolio Companies.

The starting point is formed by the separate plans from the divisions and operational business units, which are harmonized and integrated in the group planning. Potential acquisitions, divestments, and exchange rate fluctuations are generally not taken into account in the planning process.

The system of key performance indicators covers the revenue, EBITDA margin, order intake, capital expenditure, and cash conversion rate indicators. Other indicators will also be regularly compiled in the future and are used by top management for informational purposes.

See the "Control System" chapter for more information on the key performance indicators

With our strategic Agenda 2025, "More Value", we are targeting lasting profitable growth in the core photonics markets of semiconductor & electronics, life science & medical technology, and smart mobility. We aim to push on with our plans to become a pure, globally leading photonics group.

See the "Business Model and Markets" and the "Targets and Strategy" chapters for more information on the strategy and the division structure

See the "Framework Conditions" chapter for more information on the future development of the Jenoptik sectors

Overall, the Executive Board anticipates consistently good business performance, with an increase in revenue and earnings, in the Advanced Photonic Solutions division in 2023. We will enable this by stepping up our activities as an active global supplier of solutions and products based on photonic technologies, by focusing on key sales markets, by growing our global reach, and with innovative products and a larger range of integrated system solutions. The division should continue to benefit here from strong demand for optical and micro-optical system solutions for semiconductor production. In the Biophotonics area (medical technology and life science), existing cooperation arrangements with key international customers are to be further expanded and new customers acquired in the current fiscal year, thus generating further growth. Good performance is also expected for the area of Optical Test & Measurement, which will also be supported by applications in the field of virtual and augmented reality.

In the current fiscal year, the Advanced Photonic Solutions division will invest in its operational performance and sales to help promote future growth. Key measures in this regard include the construction of a new clean room factory in Dresden and the expansion of our site in Berlin.

For the 2023 fiscal year, the Executive Board expects further growth in the Smart Mobility Solutions division. This is to be supported by new products, the expansion of own sales channels, and a promising project pipeline. By optimizing the product pipeline, also in the form of new business models such as software-as-a-service, and a broader range of products in the value chain, the aim is to increase the share of recurring revenue contributions in the division. On a regional level, Jenoptik is primarily expecting growth momentum benefiting the Smart Mobility Solutions division to come from North America and Australia.

In 2022, business growth in the Non-Photonic Portfolio Companies was still impacted by the effects of the Covid-19 pandemic, negative impacts due to projects in the automation area, but also by structural changes in the automotive industry. For 2023, the Executive Board expects to see good growth in the segment, particularly in the Automation & Integration business in North America.

2023 earnings position forecast

Based on the good order intake and backlog in the fiscal year 2022 and ongoing promising developments in the core photonics businesses, especially in the semiconductor equipment sector, the Executive Board is confident of further profitable growth in the fiscal year 2023.

In order to achieve the planned growth, we continue to assume that the political and economic conditions will not deteriorate. In particular, these include economic trends, the war in Ukraine, regulations at European level, the pandemic situation, and further macropolitical developments in our sales markets.

Possible portfolio changes were not considered in the forecast.

For 2023, Jenoptik is expecting revenue growth to between 1,050 million and 1,100 million euros (2022: 980.7 million euros).

At present, the Executive Board is expecting EBITDA (earnings before interest, taxes and depreciation/amortization, incl. impairment losses and reversals) to show strong year-on-year growth in the current fiscal year 2023 (2022: 184.1 million euros). The EBITDA margin is due to come in at between 19.0 and 19.5 percent (2022: 18.8 percent).

The order intake is in part affected by major orders, particularly in the Smart Mobility Solutions division. In the past fiscal year, the continuing operations received new orders worth 1,185.4 million euros and had thus built up a good order base at year-end 2022. 83.4 percent of the order backlog as of December 31, 2022 is expected to be converted to revenue in 2023. For the current fiscal year 2023, the Executive Board expects the order intake to be roughly at the very high level of the prior year.

The Advanced Photonic Solutions division is expecting revenue growth in the low double-digit percentage range for 2023. EBITDA is expected to grow in line with revenue.

The Smart Mobility Solutions division also expects growth in 2023, with a revenue increase in the high single-digit percentage range. EBITDA is expected to show a stronger rate of growth than revenue.

The Non-Photonic Portfolio Companies are expecting revenue to grow in the mid single-digit percentage range in 2023. EBITDA is expected to show a significantly stronger rate of growth than revenue partly due to the elimination of negative impacts from projects in the automation area.

Group asset and financial position forecast

Jenoptik expects that capital expenditure in the fiscal year 2023 will be significantly above the prior-year level of 106.0 million euros. Capital expenditure on property, plant, and equipment will focus on the growth areas within the divisions or take place within the scope of new customer projects. It aims to expand capacities, thereby ensuring future growth, e.g., through construction of the new cleanroom facility in Dresden.

The Executive Board expects growth in the cash conversion rate (ratio of free cash flow to EBITDA) to over 50 percent in 2023 (31/12/2022: 44.9 percent).

Important note. The actual results may differ significantly from the forecasts of anticipated development made above and summarized below. This may arise, in particular, if one of the uncertainties mentioned in this report were to materialize or worsen, or if the assumptions upon which the statements are based prove to be inaccurate in relation to the economic and macroeconomic development, market risks, and geopolitical risks, especially the Ukraine war and associated sanctions.

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T38 Summary of targets for Group and segments (in million euros)

	Actual 2022	Forecast for 2023 (without major portfolio changes)
Revenue	980.7	1,050 to 1,100 million euros
Advanced Photonic Solutions	729.6	Growth in the low double-digit percentage range
Smart Mobility Solutions	114.3	Growth in the high single-digit percentage range
Non-Photonic Portfolio Companies	132.3	Growth in the mid single-digit percentage range
EBITDA/EBITDA margin	184.1/18.8%	Marked growth/19.0 to 19.5 percent
Advanced Photonic Solutions	170.0	Growth in line with revenue
Smart Mobility Solutions	19.3	Growth stronger than revenue
Non-Photonic Portfolio Companies	2.7	Growth stronger than revenue
Order intake	1,185.4	Roughly at the very high level of the prior year
Cash conversion rate	44.9%	>50 percent
Capital expenditure[1]	106.0	Significantly above the prior-year level

[1] Without capital expenditure on financial investments

General Statement by the Executive Board on Future Development

In the current fiscal year 2023, the Jenoptik Group will push on with its strategic Agenda 2025, concentrating on three core photonics markets. In terms of economic development, our key focus remains on profitable growth. We believe that revenue growth, a positive product mix, economies of scale, and more efficient and faster processes will result in higher earnings. Thanks to the continuing good asset situation and a viable financing structure, the Executive Board believes that Jenoptik has sufficient room for maneuver to finance both investments in further organic growth and potential acquisitions.

Achieving our targets is dependent on the development of the economic and political environment, in particular in connection with the Ukraine war and associated sanctions.

On the basis of very good order intake growth in the fiscal year 2022, the current order backlog, and ongoing promising developments in the core photonics business, the Executive Board remains positive for the fiscal year 2023 and expects revenue growth to between 1,050 and 1,100 million euros in the current fiscal year. The EBITDA margin is due to come in at between 19.0 and 19.5 percent.

In 2023, we will again invest a significant portion of our funds in developing innovative products and expanding capacities. As part of our active portfolio management, potential acquisitions are closely scrutinized; divestments have not been ruled out.

Based on the information available at the time this report was created, the Executive Board expects the Jenoptik Group to see positive business development in 2023.

Jena, March 20, 2023
JENOPTIK AG

Dr. Stefan Traeger
President & CEO

Hans-Dieter Schumacher
Chief Financial Officer

Dr. Prisca Havranek-Kosicek
Member of the Executive Board

Dr. Ralf Kuschnereit
Member of the Executive Board

Information and Notes Relating to Takeover Law

Explanatory Report in accordance with § 176 (1) (1) of the German Stock Corporation Act (AktG) and Reporting on § 289 a and § 315 a of the German Commercial Code (HGB) in accordance with the German Takeover Directive Implementation Act

1. Composition of the share capital

As of the balance sheet date on December 31, 2022, the subscribed capital totaled 148,819 thousand euros (prior year: 148,819 thousand euros). It is divided into 57,238,115 no-par value registered shares (prior year 57,238,115). Each share is therefore worth 2.60 euros of the nominal capital.

The same rights and obligations apply to all the shares of the company. Each share represents one vote at the Annual General Meeting and is the determining factor for the shareholders' proportion of company profits (§ 58 (4), § 60 of the German Stock Corporation Act (AktG)). The shareholders' rights also include the subscription right to shares in the event of increases in capital (§ 186 of the German Stock Corporation Act). In addition, the shareholders are entitled to administrative rights, e.g. the right to participate in the Annual General Meeting and the authority to put forward questions and motions and to exercise their right to vote. The shareholders' additional rights and duties are defined in the German Stock Corporation Act, in particular in § 12, 53 a et seq., § 118 et seq., and § 186. Under § 4 (3) of the Articles of Association, any claim by a shareholder to the securitization of their shares is excluded.

2. Restrictions relating to voting rights or the transfer of shares

In accordance with § 136 (1) of the German Stock Corporation Act, legal restrictions affecting voting rights exist with respect to votes for annual approval regarding shares which are held directly or indirectly by members of the Executive and/or Supervisory Boards. Violations of reporting obligations as specified in § 33 (1) or (2) and § 38 (1) or § 39 (1) of the German Securities Trading Act may nullify voting rights, at least temporarily, in accordance with § 44 of this Act.

Pursuant to § 67 (2) of the German Stock Corporation Act, rights and obligations arising from shares shall exist in relation to JENOPTIK AG only for and against those persons entered in the share register. To be recorded in the share register, shareholders must provide JENOPTIK AG with the information required by law (name or company name, address, registered office if applicable, email address, date of birth and number of shares they hold). The extent to which the shares belong to the person who is recorded as the holder in the share register is also to be disclosed in accordance with the Articles of Association. Shareholders who do not comply with these disclosure obligations may not exercise their voting rights pursuant to § 67 (2) (2) and (3) of the German Stock Corporation Act.

In connection with Article 19 (11) of the EU Market Abuse Regulation (EU 596/2014) and due to internal Group requirements, certain restraints of trade shall apply to members of the Executive and Supervisory Boards and to certain employees in connection with the publication of quarterly statements and reports, preliminary figures as well as the Annual and Consolidated Financial Statements.

3. Direct or indirect participations in the capital exceeding 10 percent of the voting rights

Information on direct or indirect investments in capital which exceed 10 percent of the voting rights, can be found in the Notes of the Annual Financial Statements under point 3.

4. Holders of shares with special rights conferring controlling powers

There are no shares in JENOPTIK AG that entail special rights.

5. Form of controlling voting rights if employees own shares and do not directly exercise their control rights

There are no employee shareholdings and therefore no resultant control of voting rights.

6. Statutory regulations and provisions of the Articles of Association relating to the appointment and dismissal of Executive Board members and changes to the Articles of Association

The appointment and dismissal of Executive Board members is carried out exclusively in accordance with the statutory regulations of § 84 and § 85 of the Stock Corporation Act and § 31 of the Codetermination Act (MitbestG). In accordance with this, the Articles of Association stipulate in § 6 (2) that the appointment of members to the Executive Board, the revocation of their appointment and the conclusion, modification and termination of contracts for services with members of the Executive Board shall be carried out by the Supervisory Board. In accordance with § 31 (2) of the Codetermination Act, a majority of at least two thirds of the members of the Supervisory Board is required for the appointment of Executive Board members. Revocation of appointment as a member of the Executive Board is only possible for serious due cause (§ 84 (3) of the Stock Corporation Act).

§ 6 (1) (1) of the Articles of Association stipulates that the Executive Board of JENOPTIK AG must have at least two members. In the absence of a required Executive Board member, the court must appoint the member on the application of a stakeholder (§ 85 (1) (1) of the Stock Corporation Act) in urgent cases. The Supervisory Board can appoint a Chairman of or Spokesperson for the Executive Board (§ 84 (2) of the Stock Corporation Act, § 6 (2) (2) of the Articles of Association).

In accordance with § 119 (1) (5), § 179 (1) (1) of the Stock Corporation Act, changes to the content of the Articles of Association are passed by the Annual General Meeting. However, changes relating purely to the wording of the Articles of Association may be passed by the Supervisory Board in accordance with § 179 (1) (2) of the Stock Corporation Act in conjunction with § 13 (3) of the Articles of Association. This also includes the corresponding adaptation to the Articles of Association following the utilization of the Authorized Capital 2019 and of the Conditional Capital 2021. According to § 24 (1) of the Articles of Association, resolutions by the Annual General Meeting require a simple majority of the votes cast unless stipulated otherwise by law. In those cases in which the law requires a majority of the nominal capital represented for a resolution to be passed, a simple majority of the nominal capital represented is sufficient, unless specified otherwise by the law.

7. Authority of the Executive Board to issue and buy back shares

Detailed information on the authority of the Executive Board to issue shares, i.e. Authorized Capital 2019 and Conditional Capital 2021, as well as the authority of the Executive Board to buy back treasury shares, can be found in the Group Notes under the point "Equity".

8. Key agreements in the event of a change of control resulting from a takeover bid

Clauses in contracts concluded by JENOPTIK AG, which apply in the event of a change in control within the ownership structure of JENOPTIK AG following a change of control, exist for the financing agreements described below with a total utilized volume as of December 31, 2022 of 456,8 million euros (prior year: 549.6 million euros).

The conditions for accepting a change in control are formulated differently in each of the loan agreements. For the debenture bonds with a total utilized volume of 405.3 million euros (prior year: 456.8 million euros) a change in control gives the lenders the right to demand the repayment of the loan amount plus interest accumulated up to the repayment date within 30 banking days of receipt of the change of control notification. A change of control applies if one or more persons acting in concert, who are not attributable to the group of main shareholders existing on the date the contract is concluded, acquire more than 50 percent of the outstanding nominal capital or more than 50 percent of the voting rights, directly or indirectly at any time.

Under the revolving syndicated loan, every change in the current shareholder base of JENOPTIK AG, as a result of which at least 50 percent of the shares or voting rights are held by one or several persons acting in concert as described in § 2 (5) of the

Securities Acquisition and Takeover Act, results in the possibility that lenders (i) may refuse to participate in further disbursements and (ii) may terminate loan commitments, in full or in part, and call in payments made and sub-loan liabilities, in full or in part, including accrued interest. The syndicated loan has a total volume of 400 million euros, of which 51.5 million euros had been utilized as of December 31, 2022 (prior year: 92.9 million euros).

9. Compensation agreements by the company with Executive Board members or employees in the event of a change of control

No right to give notice of termination in the event of a change of control, i.e. the acquisition of at least 30 percent of voting rights by a third party, has been agreed with the members of the Executive Board. In such cases, they also have no claim to any severance payment. If the premature termination of an Executive Board role is agreed with an Executive Board member due to a change of control, the amount of a severance payment is limited to a maximum of two years' annual compensation in accordance with the respective recommendations of the German Corporate Governance Code, as amended on April 28, 2022. Under no circumstances, however, may the severance payment be greater than the compensation due for the remaining term of the service contract.

Corporate Governance Statement (with Corporate Governance Report)

In this statement, the Executive Board and Supervisory Board report on the corporate governance of the company in accordance with § 289 f, § 315 d of the German Commercial Code (HGB) and Principle 23 of the German Corporate Governance Code (the Code).

The JENOPTIK AG Executive Board and Supervisory Board affirm their commitment to responsible corporate governance and control, geared towards lasting value creation and encompassing all units within the Group. They see good corporate governance as the foundation for sustained corporate success and, at the same time, an important contribution to strengthening the trust in Jenoptik on the part of shareholders, business partners, employees, and the general public.

Corporate Governance

In December 2022, the Executive and Supervisory Boards jointly adopted the following Declaration of Conformity in accordance with § 161 of the German Stock Corporation Act (AktG), which is permanently available to shareholders on the company's website at https://www.jenoptik.com under the section Investors/Corporate Governance. If, in the future, changes arise at Jenoptik which have an impact on a declared compliance, the Declaration of Conformity will be updated during the year.

Declaration of Conformity by the Executive Board and Supervisory Board of JENOPTIK AG in the Fiscal Year 2022

According to § 161 (1) (1) of the German Stock Corporation Act, the Executive and Supervisory Boards of a listed company are required to issue a declaration once a year that the recommendations of the "Government Commission on the German Corporate Governance "("Code") as published by the Federal Ministry of Justice in the official section of the Federal Gazette [Bundesanzeiger] have been and are complied with, or to indicate which recommendations have not been or are not applied and why not.

The Executive Board and the Supervisory Board of JENOPTIK AG support the recommendations of the Code and state that as pursuant to § 161 (1) (1) of the German Stock Corporation Act:

I. Since the last Declaration of Conformity in December 2021, the recommendations of the Code in the version dated December 16, 2019 **were complied** with until the new version of the Code came into force on April 28, 2022 ("Code 2022"), with the following exception:

In accordance with recommendation C.4 of the Code a Supervisory Board member who is not a member of any Executive Board of a listed company shall not accept more than five Supervisory Board mandates at non-group listed companies or comparable functions, with an appointment as Chair of the Supervisory Board being counted twice.

Our Supervisory Board member, Ms. Doreen Nowotne, also chairs the Supervisory Board of Franz Haniel & Cie. GmbH (not listed on a stock exchange) as well as of Brenntag AG (listed company) and is Supervisory Board member of Lufthansa Technik AG (not listed on a stock exchange). If the mandate at Jenoptik, which from Jenoptik's point of view is an internal mandate, is included in the addition of the mandates according to C.4 Ms. Nowotne has a total of six Supervisory Board mandates. Therefore, a deviation has been declared purely as a precautionary measure. The Supervisory Board has ensured that Ms. Nowotne has sufficient time available to discharge her duties at JENOPTIK AG.

II. Since the Code 2022 came into force, all the recommendations contained here **have been complied** with, with the following exceptions:

In accordance with recommendation C.4 of the Code 2022 a Supervisory Board member who is not a member of any Executive Board of a listed company shall not accept more than five Supervisory Board mandates at non-group listed companies or comparable functions, with an appointment as Chair of the Supervisory Board being counted twice.

In accordance with the recommendation A.5 of the Code 2022, the main characteristics of the entire internal control system and risk management system should be described in the company's management report, and a statement should be made on the appropriateness and effectiveness of these systems. According to recommendation C.1 of the Code 2022, the implementation status of fulfilling the overall profile of required skills and expertise for the Supervisory Board shall *be disclosed in the form of a qualification matrix in the corporate governance statement.*

As the two aforementioned recommendations A.5. and C.1 did not yet exist at the time the last Annual Report was prepared, the required reporting contents were not yet fully included in the 2021 management report and not included in the 2021 corporate governance statement. However, both recommendations will be implemented in the future.

III. In future, JENOPTIK AG **will comply** with all recommendations of the Code 2022 with the following exception which has been declared purely as a precautionary measure:

In accordance with recommendation C.4 of the Code 2022 a Supervisory Board member who is not a member of any Executive Board of a listed company shall not accept more than five Supervisory Board mandates at non-group listed companies or comparable functions, with an appointment as Chair of the Supervisory Board being counted twice.

We refer to the explanatory statement in Section I of this Declaration of Conformity regarding the mandates held by our Supervisory Board member, Ms. Doreen Nowotne, at other companies. The Supervisory Board has ensured that Ms. Nowotne has sufficient time available to discharge her duties at JENOPTIK AG.

Ms. Nowotne has publicly announced that she will resign as Chairman of the Supervisory Board at Franz Haniel & Cie. GmbH in April 2023. **From this date Jenoptik will fully comply with the recommendation C.4 and thus with all recommendations of the Code.**

December 14, 2022 | JENOPTIK AG

On behalf of the Executive Board	On behalf of the Supervisory Board
Dr. Stefan Traeger	Matthias Wierlacher

Information on Methods of Corporate Governance

Code of conduct, opportunity and risk management, compliance

At Jenoptik, economic success and responsibility for our actions are inextricably linked. For us, respect, fairness and openness as well as compliance with statutory provisions and internal group regulations are essential factors for responsible conduct with all stakeholders. Jenoptik's most important principles of conduct have been summarized in a Code of Conduct which is equally binding on all employees, managers and the Executive Board of the Jenoptik Group. It sets out minimum standards and general rules for our actions within the company as well as towards external partners and the public. This enables us to ensure a high level of integrity as well as ethical and legal standards within the Jenoptik Group. In the event of questions regarding the Code of Conduct or suspected illegal or unlawful matters, all Jenoptik employees may speak in confidence to their respective manager or the contact persons named in the Code of Conduct. In addition, employees may report significant violations that must be handled confidentially via a digital whistleblowing system available to all employees in many languages via our internal platforms as well as on the Jenoptik website. It is operated independently by EQS Group AG. The data is stored on protected servers in Germany. The content of the reports, which can also be submitted by telephone or email, is processed exclusively by Jenoptik employees trained in the confidential complaints procedure.

The Code of Conduct can be found at www.jenoptik.com, under the section Investors / Corporate Governance / Code of Conduct

Requirements for our suppliers and sales partners are set out in the Jenoptik Group's Code of Conduct for Business Partners, which applies to all business partners worldwide. Jenoptik has also signed the Diversity Charter and is a member of the UN Global Compact.

For Jenoptik, good corporate governance also includes continuous and systematic management of opportunities and risks. The enterprise risk management (ERM) accounts for both risks and opportunities, and was implemented throughout the entire organization. The goal is to support the implementation

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of the group strategy and to define actions that create an optimum balance between growth and return targets on the one side and the associated risks on the other.

Detailed information on enterprise risk management can be found in the Risk and Opportunity Report

Compliance with national and internationally recognized compliance requirements is an essential element of our risk prevention and the processes of the Jenoptik compliance management system (CMS). The Jenoptik values, the Code of Conduct, and the group guidelines and process descriptions form the basis of the CMS. Compliance with them is a basic prerequisite for the trust of our business partners, shareholders and the public in Jenoptik's performance and integrity. The CMS is continuously developed and adapted in line with changing conditions.

With the group guidelines for key business processes, the Jenoptik Group has a globally uniform framework. Central departments, divisions, and regions can reinforce this set of rules with more detailed regulations in accordance with their respective requirements. The guidelines are regularly reviewed, and extended or updated as necessary. This system of processes and controls is intended to identify any possible deficits in the company at an early stage and to take appropriate actions to minimize or eliminate them. In the course of its audits, Internal Audit has not gained any knowledge that the internal control system is not appropriate and effective.

For further information on the internal control system see Risk and Opportunity Report

On the Executive Board, Dr. Stefan Traeger is responsible for the central Compliance & Risk Management department. Global compliance activities are coordinated by the center of excellence in Germany and supported by local colleagues in the North America and Asia/Pacific regions.

In order to familiarize employees with these topics and to improve employee awareness, regular online training courses and classroom events are held on subjects relevant to compliance, such as anti-corruption, anti-trust law, export control, IT security as well as data protection. The aim of this is to create company-wide uniform understanding of our compliance standards. Main training courses are offered for new employees as well as mandatory e-learning refresher courses for all employees. In addition, employees can contact the central Compliance & Risk Management department with any questions relating to compliance or risk issues at Jenoptik, as well as use a help desk on the intranet or an app on their smartphone.

Further information on compliance and supplier management can also be found in the chapter "Non-financial Report"

Sustainability

Jenoptik's understanding of sustainability is based on the conviction that the economic goals of the company and thus lasting profitable growth can only be achieved by behaving responsibly in line with the environment and society. The separate Combined Non-financial Report contains detailed information on Jenoptik's sustainability management in the areas of employee and environmental matters, human rights, anti-corruption and the supply chain, quality as well as social commitment of the Group.

Composition and Mode of Operations of the Executive Board, Supervisory Board and its Committees

JENOPTIK AG is a stock corporation under German law with a dual management system, comprising the Executive Board and Supervisory Board. Their tasks and powers as well as structure and working methods are essentially determined by the German Stock Corporation Act, the Articles of Association of JENOPTIK AG and the Rules of Procedure. The Executive Board runs the company on its own responsibility and in the interests of the company with the aim of sustainably increasing the company's value. It takes into account the concerns of all stakeholders, in particular shareholders and the Group's employees. The Supervisory Board advises and monitors the Executive Board in its management of the company and is involved in decisions of fundamental importance to the company.

Executive Board

The members of the JENOPTIK AG Executive Board are appointed by the Supervisory Board. In accordance with the Articles of Association, the Executive Board shall comprise at least two persons. They share common responsibility for the overall management of the Group and decide on primary matters of company policy, the corporate strategy in which environmental and social objectives are given appropriate consideration alongside long-term economic goals, as well as planning with financial and sustainability-related targets. In the fiscal year 2022, the Board had two members. With effect from January 1, 2023, the Executive Board shall be expanded to three persons (for more details, see section "1. Diversity Concept for the Executive Board"). The Executive Board has not set up any committees. It is supported in the management of the company by the Executive Management Committee (EMC), which, as of December 31, 2022, comprised the members of the Executive Board, head of Personnel, the head of Corporate Controlling & Accounting, the heads of the North America and Asia / Pacific regions as well as the heads of the two divisions Advanced

Photonic Solutions and Smart Mobility Solutions. At monthly meetings, this committee provides the Executive Board with information on all relevant incidents for the company and the economic situation of the divisions.

The Executive Board is also responsible for ensuring compliance with statutory provisions and internal regulations. It is responsible for the preparation of interim reports and announcements, consolidated and annual financial statements, and for setting up the control and risk management system geared to the company's risk situation and the compliance management system. The Executive Board ensures that the risks and opportunities for the company associated with social and environmental factors, as well as the environmental and social impact of the company's activities are systematically identified and assessed. The specific allocation of responsibilities and tasks within the Executive Board (including the responsibility for sustainability topics (environment, social, governance)) is regulated in an organizational chart as an appendix to the Executive Board's Rules of Procedure. 2

The members of the Executive Board work closely together in a collegial manner and continually inform one another of important measures and events within their assigned areas. Executive Board meetings take place at least once a month. The Supervisory Board has issued Rules of Procedure for the Executive Board. These define which significant business transactions require the approval of the Executive Board as a whole or the Supervisory Board. In addition, the internal workings of the Executive Board and the methods of reporting to and coordinating with the Supervisory Board are regulated in greater detail.

The Chairman of the Executive Board coordinates the cooperation of the Executive Board with the Supervisory Board. Members of the Executive Board are required to disclose conflicts of interest to the Supervisory Board without delay and to inform the other members of the Executive Board of this.

Supervisory Board

With equal representation in accordance with the German Codetermination Act, the Supervisory Board of JENOPTIK AG consists of twelve members, six of whom are elected by the shareholders at the Annual General Meeting and six of whom are nominated by employees in accordance with the Codetermination Act. The Supervisory Board is composed in such a way that, as a whole, it is endowed with the knowledge, abilities, and professional experience necessary to carry out its tasks in an orderly manner. Each member shall ensure that they have sufficient time available to perform their duties. Six of its twelve members, three shareholder and three employee representatives, are female, currently exceeding the requirements of § 96 (2) (1) of the German Stock Corporation Act. The shareholder representatives were elected individually at the 2022 Annual General Meeting, three of them for a term of office until the end of the 2024 Annual General Meeting and three until the end of the 2025 Annual General Meeting. The concept of diversity pursued with respect to the composition of the Supervisory Board is described in section "2. Diversity Concept for the Supervisory Board" of this statement. 1

The Chairman of the Supervisory Board is elected by the members of the Supervisory Board. In the past fiscal year, Mr. Matthias Wierlacher was re-elected Chairman of the Supervisory Board following his election by the Annual General Meeting on June 15, 2022. He coordinates the work of the Supervisory Board, presides over its meetings and represents the body externally. The Chairman maintains regular contact with the Executive Board, which provides the Supervisory Board chairman with immediate information on important events which are of crucial importance to the position and development of the company. In the event of a tied vote by the Supervisory Board, a second round of voting is conducted in which the board chairman casts two votes, insofar as this is permitted by law. The Chairman of the Supervisory Board also chairs the Personnel, Mediation, Investment and Nomination Committees, but not the Audit Committee.

The Supervisory Board meets at least four times a year, but as a rule meets five times a year because of the Supervisory Board's strategy meeting which takes place in the fall. Taking into account the results of the audit and the recommendations of the Audit Committee, the Supervisory Board examines and approves the Financial Statements and Consolidated Financial Statements, the Combined Non-financial Report and the Combined Management Report for JENOPTIK AG and the Group and adopts the Annual Financial Statements. Ernst & Young GmbH, Wirtschaftsprüfungsgesellschaft, Stuttgart, was appointed to audit the Annual and Consolidated Financial Statements for the fiscal year 2022. The Supervisory Board also decides on the Executive Board's proposal for the appropriation of accumulated profits, which is then submitted to the Annual General Meeting for resolution. It decides and regularly reviews the system for the remuneration of Executive Board members. Together with the Executive Board, the Supervisory Board is also responsible for preparing the Remuneration Report. It also deals with sustainability issues.

The Supervisory Board carries out a review of the efficiency of its activities at regular intervals. The Supervisory Board has decided to have the review externally evaluated every three years. In the intervening period, it will be discussed and

1 Further details on the composition of the Supervisory Board and its committees can be found in § 11 of the Articles of Association of JENOPTIK AG, in the Report of the Supervisory Board, and in the Annual Financial Statements 2022 of JENOPTIK AG

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2 Further information on the members of the Executive Board as well as details on the allocation of responsibilities can be found in the Annual Financial Statements 2022 of JENOPTIK AG as well as on the Internet at www.jenoptik.com in the section About Jenoptik / Management / Executive Board

Further information about the function and structure of the Executive Board can be found in the Executive Board's Rules of Procedure at www.jenoptik.com in the section About Jenoptik / Management / Executive Board reviewed internally on an annual basis. The last external review took place in 2020 and presented a positive picture – also reflected in benchmarking – of the work of the Supervisory Board and its committees. Based on suggestions from the 2021 internal evaluation, the Investment Committee reviewed its task profile and working methods, among other things in 2022. An internal self-assessment of the Supervisory Board, largely reconstituted since the Annual General Meeting, was also carried out again in the fiscal year 2022. This review also revealed no fundamental need for change, and the results confirmed the professional cooperation within the Supervisory Board.

All Supervisory Board members are to disclose any conflicts of interest to the Supervisory Board without delay. In the fiscal year 2022, there were no conflicts of interest requiring disclosure among members of the Supervisory Board.

The Rules of Procedure for the Supervisory Board govern key aspects of cooperation within the board and with the Executive Board. The rules also mandate the creation of committees as a means of improving efficiency when it comes to Supervisory Board work on complex topics.

The Rules of Procedure of the Supervisory Board can be found at www.jenoptik.com under the heading "About Jenoptik"

The Supervisory Board currently has five committees that, with the exception of the Nomination Committee, which is composed only of shareholder representatives, are made up of equal numbers of shareholder and employee representatives. The candidates' professional and personal expertise is taken into account in the formation of committees.

The committees prepare decisions for the Supervisory Board and may, in individual cases, make decisions in place of the Supervisory Board insofar as this is permitted by law. The respective committee chairmen report to the Board on the content discussed and the resolutions and recommendations approved no later than at the next Supervisory Board meeting.

The Audit Committee meets at least four times each year. Its key tasks are monitoring accounting and the accounting process, and dealing with auditing of the financial statements and the effectiveness, appropriateness and ongoing development of the compliance, risk management, and internal control systems. After obtaining a declaration of independence from the auditor, it prepares the Supervisory Board's recommendation to the Annual General Meeting for appointment of the auditor, grants the audit assignment, and sets out the main points for the audit. It consults with the auditor on the assessment of the audit risk, audit strategy and planning, and regularly assesses the quality of the audit. On the basis of the auditor's reports, and following its own review, the Audit Committee submits proposals to the Supervisory Board for the adoption of the Annual Financial Statements of JENOPTIK AG and for the approval of the Consolidated Financial Statements. The Chairman of the Audit Committee also discusses the progress of the audit with the auditor and reports to the Committee on this. The Audit Committee also consults regularly with the auditor without the Executive Board being present. The duties of the Audit Committee also include preparing the Supervisory Board's decision on the Combined Non-financial Report. Jenoptik's Internal Auditing reports regularly to the Audit Committee.

T39 Committee memberships of the Supervisory Board members

Member of Personnel Committee	Member of Mediation Committee	Member of Nomination Committee
Matthias Wierlacher, Chairman	Matthias Wierlacher, Chairman	Matthias Wierlacher, Chairman
Stefan Schaumburg, Deputy Chairman	Evert Dudok	Evert Dudok
Evert Dudok	Alexander Münkwitz (since 15/06/2022)	Elke Eckstein (since 15/06/2022)
Elke Eckstein (since 15/06/2022	Stefan Schaumburg	Heinrich Reimitz (until 15/06/2022)
Dörthe Knips (since 15/06/2022)	Dieter Kröhn (until 31/03/2022)	
Franziska Wolf (since 15/06/2022)		
Thomas Klippstein (until 15/06/2022)		
Heinrich Reimitz (until 15/06/2022)		
Frank-Dirk Steininger (until 15/06/2022)		

Both Mr. Thomas Spitzenpfeil as Chairman of the Audit Committee and Ms. Doreen Nowotne as his deputy have expertise in both accounting and auditing as defined by § 100 (5) of the German Stock Corporation Act. It is the opinion of the Supervisory Board that both are independent members (for detailed information, please refer to "2. Diversity Concept for the Supervisory Board"). They are not former members of the Executive Board of JENOPTIK AG. Mr. Spitzenpfeil's expertise in accounting consists of the application of accounting principles, internal control, and risk management systems due to his professional background and his current position as CFO of the Schenck Process Group. His expertise in auditing consists of specialist knowledge and many years of experience in supporting the audits at various corporations, some of which are listed on the stock exchange, in positions of responsibility.

Ms. Nowotne has expertise in the field of accounting due to both her education and her professional background at an audit firm. In addition, due to her extensive expertise as the chair of the Supervisory Board at a number of corporations, and as a long-standing member of the Audit Committee at Jenoptik, she has comprehensive knowledge of auditing financial statements and, in this context, additional expertise in sustainability reporting and the associated auditing. Jenoptik has been publishing a Non-financial Report for five years now, and throughout this period Ms. Nowotne has been involved in the compilation and partial audit of this report with so-called limited assurance.

The Personnel Committee convenes at least once a year. It deals with the long-term succession planning for the members of the Executive Board and prepares their appointment by the Supervisory Board. The Personnel Committee regularly reviews the remuneration system for the Executive Board members, which is then approved by the Supervisory Board and submitted to the Annual General Meeting for approval in accordance with the statutory provisions. The Personnel Committee also prepares the conclusion and settlement of the target agreements for the short-term and long-term variable remuneration for the Executive Board members. If necessary, it may be supported by external, independent consultants.

The Nomination Committee proposes to the Supervisory Board suitable candidates for election to the Supervisory Board at the Annual General Meeting and meets only when required. Its proposals are developed taking into account the requirements and skills profile for the Supervisory Board as well as the Diversity Statement. In doing so, the Committee also takes into account whether overall compliance with the gender ratio has been objected to in accordance with § 111 (5), 96 (2) of the German Stock Corporation Act (AktG) (for detailed information, please refer to "2. Diversity Concept for the Supervisory Board").

The Investment Committee advises the Executive Board and supports the Supervisory Board on investment and divestment decisions requiring approval in accordance with the Executive Board's Rules of Procedure, in particular with the preparation and operational implementation of resolutions on the acquisition or sale of equity interests in companies or parts of companies.

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Further details of the work of Ms. Nowotne and Mr. Spitzenpfeil in these areas can be found in the CVs of both members on the Jenoptik website

Member of Audit Committee

Thomas Spitzenpfeil, Chairman (since 15/06/2022)
Doreen Nowotne, Deputy Chairman
Dörthe Knips (since 15/06/2022)
Alexander Münkwitz (since 15.06.2022)
Heinrich Reimitz, Chairman (until 15/06/2022)
Astrid Biesterfeldt (until 15/06/2022)
Thomas Klippstein (until 15/06/2022)

Member of Investment Committee

Matthias Wierlacher, Chairman
Stefan Schaumburg, Deputy Chairman
Elke Eckstein
André Hillner (since 15/06/2022)
Doreen Nowotne
Christina Süßenbach (since 15/06/2022)
Dörthe Knips (until 15/06/2022)
Dieter Kröhn (until 31/03/2022)
Alexander Münkwitz (01/04/2022 until 15/06/2022)

The Mediation Committee, which deals with matters relating to § 31 (3) (1) of the Codetermination Act, only meets when necessary.

Further details on the activities of the Supervisory Board and its committees in the fiscal year 2022 (as well as individual attendance at meetings) can be found in the Supervisory Board Report in this Annual Report. The allocation of responsibilities of the individual committees can be found in the Rules of Procedure of the Supervisory Board published on our website.

Remuneration of the Executive Board and Supervisory Board

The remuneration for the members of the Executive and Supervisory Boards is described in this Annual Report. The last vote on the adjusted remuneration system for the members of the Executive Board was made by the Annual General Meeting on June 9, 2021, which approved the remuneration system for the Executive Board with 75.96 percent. The resolution on the remuneration system for the members of the Supervisory Board at the 2022 Annual General Meeting was approved by 99.77 percent.

The Remuneration Report of the Executive Board and Supervisory Board for the last fiscal year, the auditor's report on this Remuneration Report and the applicable remuneration system in accordance with § 87a (1) and (2) (1) of the German Stock Corporation Act (AktG) and the last remuneration resolution as per § 113 (3) AktG are also available on the Internet at www.jenoptik.com under the categories Investors / Corporate Governance or Annual General Meeting. The Remuneration Report, including the auditor's opinion, is also included in the chapter of the same name in this Annual Report.

Specifications for Promoting the Participation of Women in Management Positions / Targets for the Proportion of Women

In accordance with § 111 (5) and § 96 (2) of the German Stock Corporation Act, the Supervisory Board of JENOPTIK AG must be comprised of at least 30 percent women and 30 percent men. With Elke Eckstein, Prof. Dr. Ursula Keller and Doreen Nowotne on the shareholder side and Dörthe Knips, Christina Süßenbach and Franziska Wolf on the employee side, a total of six women are currently represented on the Supervisory Board. This equates to 50 percent, so Jenoptik currently significantly exceeds the legally required gender quota on the Supervisory Board.

In accordance with § 111 (5) of the German Stock Corporation Act, the Supervisory Board of Jenoptik is also required to determine targets for the proportion of women on the Executive Board. As Jenoptik's Executive Board comprised just two persons until December 31, 2022, the target ratio of zero percent set by the Supervisory Board on June 8, 2020 shall continue to apply until June 30, 2023. The requirements of the German Stock Corporation Act, as amended by the Second Management Positions Act, shall not apply until the Executive Board consists of at least four persons. The actual ratio achieved as of December 31, 2022 is zero percent. In the case of the two-member board, the determination of a higher quota would have had the mandatory consequence that, in the event of a vacancy, a woman would always have to be appointed. The Supervisory Board would, however, want to be able to make appointments giving due consideration to the professional expertise and personal integrity of who is, in its opinion, the most suitable candidate, irrespective of their gender.

With effect from March 1, 2023, the Jenoptik Executive Board will include a woman – Dr. Prisca Havranek-Kosicek. Due to the expansion of the Executive Board to three persons, the Supervisory Board shall also set a new target for the proportion of women on the Executive Board in the first half of 2023.

In accordance with § 76 (4) of the German Stock Corporation Act, the Executive Board of JENOPTIK AG resolved at its meeting on June 24, 2022 a new target figure of 25 percent for the proportion of women for the first management level below the Executive Board. This target figure is to be achieved by June 30, 2027. The first management level below the Executive Board of JENOPTIK AG includes all Executive Vice Presidents, Vice Presidents, and Directors employed at JENOPTIK AG. As of December 31, 2022, the proportion of women in the first management level below the Executive Board equated to 10.5 percent due to a change of one female manager (prior year: 16.7 percent). However, the Executive Board has taken various measures to increase the proportion of women again in the medium to long term. A target for the second management level has not been set because JENOPTIK AG as a Corporate Center has flat management structures and therefore has no continuous second management level.

At the end of 2022, women made up 54.4 percent of all employees at JENOPTIK AG. Jenoptik has also voluntarily set itself a further target figure, the so-called diversity rate, which is calculated from the average percentage of managers with an international background as well as female managers throughout the Group. The diversity rate was 30.6 percent as of December 31, 2022 and is expected to increase to 33 percent by 2025. To further accelerate this change in corporate culture, numerous measures have been implemented in the Jenoptik Group. For example, there are internal and external recruitment campaigns, women's networks, and regular (online) events for the mutual exchange of ideas. Regular regional "Jenoptik Diversity Councils" have also been established as internal contacts for questions on diversity within the company.

Description, Goals, and Implementation of Diversity Policy with Results Achieved

1. Diversity policy for the Executive Board including the results achieved in the fiscal year 2022

The diversity policy for the Executive Board facilitates a long-term and orderly selection process for the appointment of new Executive Board members. The aim is to fill the Executive Board in such a way that it has the knowledge, skills, and professional experience which, when taking into account the statutory framework, are necessary for the proper performance of the Executive Board's duties, and essential for the activities of the Jenoptik Group.

The Supervisory Board makes decisions for the long-term succession planning of the Executive Board and is supported in this by the Personnel Committee. Both the Personnel Committee and the Supervisory Board itself regularly discuss the contract terms and renewal options for current Executive Board members and, where relevant, also discuss possible successors. The Supervisory Board and the Personnel Committee base their deliberations on the requirements and skills profile for the Executive Board and continuously develop this further. This is an integral element of the diversity concept and defines various criteria which must be fulfilled, such as education, professional background, and the personality requirements of the candidate. When necessary, the Personnel Committee and the Supervisory Board are supported by independent, external experts as required.

In the past fiscal year, the Supervisory Board, with the support of the Personnel Committee, revised and updated the requirements profile as part of the expansion of the Executive Board to three people from January 1, 2023 and the search for a successor to Hans-Dieter Schumacher, who will leave the company on March 31, 2023. When appointing people to the Executive Board, appropriate consideration is to be given to the international nature of the company and its dealings with other cultures. The diversity concept also takes into account the specifications of the Supervisory Board's Rules of Procedure with regard to the appointment of Executive Board members. For instance, the maximum age limit for the appointment of Executive Board members is 65 years at the time of the appointment. The initial appointment of Executive Board members shall be for a maximum of three years in accordance with the Code, unless the Supervisory Board agrees on a longer initial appointment period due to special circumstances in individual cases. The weighting of the individual criteria is based on the respective Executive Board seat to be filled and the associated areas of responsibility. The aim is to ensure that the Executive Board members as a whole complement each other as well as possible in terms of their skills, abilities, and experience.

The composition of the Executive Board as of December 31, 2022 fully complies with the requirements and skills profile. With the appointment of Dr. Ralf Kuschnereit as a member of the Executive Board as of January 1, 2023, and the associated expansion of the Executive Board to three persons, the photonic and operational expertise on the Executive Board has been further strengthened. Together with Dr. Prisca Havranek-Kosicek, who is appointed to the Executive Board as of March 1, 2023, and who will take over the post of Chief Financial Officer following the departure of Hans-Dieter Schumacher, a wide spectrum of knowledge and experience as well as educational and professional backgrounds is now covered in the Executive Board as a whole due to the different personalities, educational backgrounds, professional careers and diverse international experience provided by each member of the Executive Board. The members of the Board also represent different age groups.

2. Diversity concept for the Supervisory Board

The diversity concept for the Supervisory Board is intended to ensure that the Supervisory Board is filled in such a way that, as a whole, the board has the necessary knowledge, skills, and professional experience to perform its duties. This ensures professional and qualified control by the Supervisory Board, which complies with the applicable requirements of the German Stock Corporation Act, the German Corporate Governance Code, the Articles of Association, and the Rules of Procedure of the Supervisory Board of JENOPTIK AG.

The diversity policy is implemented in the election of shareholder representatives. When searching for candidates for seats on the Jenoptik Supervisory Board, the Nomination Committee

Further information on measures implemented to increase diversity within the Jenoptik Group can be found in chapter "Employee matters" of the Combined Non-financial Report

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More information on the CVs of the members of the Executive Board can be found on our website at www.jenoptik.com/about-jenoptik/management

of the Supervisory Board ensures that the objectives for the composition of the Supervisory Board ("Diversity Statement"), the requirements of the German Stock Corporation Act and the German Corporate Governance Code, and the requirements and skills profile are taken into account. In doing so, it also takes into account the existing skills and abilities of the elected employee representatives and subsequently submits suitable candidate proposals for the election of Supervisory Board members representing the shareholders to the Annual General Meeting. When selecting the respective candidates, the Supervisory Board ensures that they are able to devote the necessary time to performing their duties.

At the end of 2021, with the support of an external consultant, the requirements profile drawn up by the Supervisory Board detailing the necessary abilities and skills required for the Supervisory Board was updated and further developed with a view to the election of new Supervisory Board members representing the shareholders by the Annual General Meeting. The requirements profile specifies various criteria with regard to diversity, functional and structural expertise as well as strategic and company-related skills. The criteria relate to the requirements of the Supervisory Board mandate at Jenoptik as a global photonics group in a challenging competitive environment. With the help of this requirements profile, suitable candidates could be proposed for election by the Annual General Meeting on June 15, 2022.

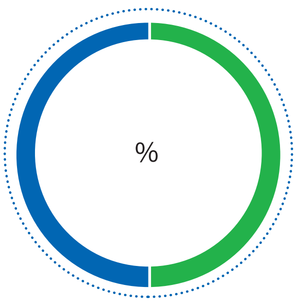
It is the opinion of the Supervisory Board that, in its current composition, the required abilities, experience and skills are fulfilled in their entirety. The twelve members of the Supervisory Board contribute a wide range of specific knowledge and expertise to the work of the Supervisory Board.

The following graphics G17 and table T40 on pages 102 and 104 show the qualification matrix of the Supervisory Board of JENOPTIK AG. This is based on the revised skills profile of the Supervisory Board and the new composition of the Supervisory Board since the Annual General Meeting on June 15, 2022. The diversity of the professional and educational backgrounds of the individual members of the Supervisory Board can also be seen in the CVs published on our website and updated annually in February in the section About Jenoptik / Management / Supervisory Board.

In accordance with its Diversity Statement, the Supervisory Board currently includes at least three members with extensive international experience. Furthermore, the Supervisory Board should include at least four women. With three women on the shareholder side and three women on the employee side, the proportion of at least 30 percent required by the German Stock Corporation Act is exceeded with a current figure of 50 percent.

G17 Composition of the Supervisory Board

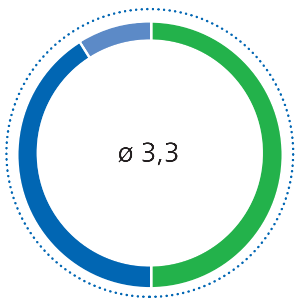
Gender ratio in the Supervisory Board of JENOPTIK AG*



■ male 50 % ■ female 50 %

*in accord. with § 96 (2) (1) AktG

Length of service



■ 0 – 4 years 6 members ■ 5 – 8 years 5 members ■ 9 – 12 years 1 member

Average age

52.6 years

5 members 40 – 49 years
3 members 50 – 59 years
4 members ≥ 60 years

Last updated: 31/12/2022

With regard to the length of service, the Supervisory Board has decided not to establish a regular limit applicable to all members because there is no compelling link between the length of service and the independence of the member concerned. It is the view of the Supervisory Board that an across-the-board regular limit does not take into account individual factors that may justify a longer length of service for individual Supervisory Board members with continued independence. The Supervisory Board can benefit significantly from individual members with a long length of service, in particular from their experience and in-depth knowledge of the company, which promotes the quality of the work of the entire board. The average length of service for members of the Jenoptik Supervisory Board is currently only 3.3 years.

No member of the Supervisory Board shall take either an advisory or an executive role with customers, suppliers, creditors or other business partners of JENOPTIK AG, which shall lead to a significant and not merely temporary conflict of interest. The Supervisory Board is of the opinion that Mr. Dudok's post as Executive Vice President of Connected Intelligence at Airbus Defense & Space is not detrimental to his independence, especially as in June 2022 the sale of Jenoptik's VINCORION division was concluded. The Advanced Photonic Solutions division also has business relationships with the Airbus Group. However, none of these transactions between the division and Airbus concerned the operations for which Mr. Dudok is responsible at Airbus. The revenue of the Advanced Photonic Solutions division with companies of the Airbus Group amounted to 2.9 million euros in 2022 and thus less than 0.3 percent of Jenoptik Group revenue. They are therefore not material for the Jenoptik Group.

As a whole, the members are familiar with the photonics sector in which Jenoptik operates.

In accordance with the specifications of the Rules of Procedure, all members were under 70 years old, not only at the time of their respective election, but also at the beginning of 2022. Four members are older than 60, three members are between 50 and 59 years old and five members are between 40 and 49 years of age, which means that different age groups are adequately represented on the Supervisory Board.

It is the view of the Supervisory Board that all shareholder representatives are independent. They are Matthias Wierlacher, Elke Eckstein, Prof. Dr. Ursula Keller, Doreen Nowotne, Evert Dudok, and Thomas Spitzenpfeil.

Further information on the Executive Board and Supervisory Board, in particular on their working methods, including work in the committees, participation in meetings, and other mandates held by members, can be found in the Supervisory Board Report and in the Notes of the Annual Financial Statements of JENOPTIK AG.

The CVs of the Supervisory Board members including the mandates they hold can be found at www.jenoptik.com/about-jenoptik/management

Further Information on Corporate Governance

Annual General Meeting

JENOPTIK AG shareholders exercise their rights at the Annual General Meeting which takes place at least once a year. Each share is accorded one vote – there are no special voting rights. The shares of JENOPTIK AG are registered shares and the holders of the shares are entered in the share register of JENOPTIK AG. Only shareholders entered in the share register have the right to vote at the Annual General Meeting. They may either participate directly in the Annual General Meeting, or exercise their voting rights via a company-nominated proxy who is bound by the shareholder's instructions, via postal voting, or by authorizing a person of their choice. The shareholders are adequately supported by the company in this process. The use of electronic means of communication, in particular the Internet and the shareholder portal, makes it easier for shareholders to participate in the Annual General Meeting. The documents and information required by law for the Annual General Meeting are available on our website www.jenoptik.com in the section Investors / Annual General Meeting. The speech by the Executive Board and, after the Annual General Meeting, the attendance and voting results are also published there.

Due to the coronavirus pandemic, the Executive Board, with the approval of the Supervisory Board, decided to also hold the Annual General Meeting in the fiscal year 2022 as a virtual AGM, i.e. without the physical presence of shareholders or their proxies. Consequently, the shareholders were given the opportunity to cast their votes, in particular by means of electronic communication, e.g. via the Internet-based shareholder portal available on the Jenoptik website, and to watch the Annual General Meeting there. The shareholders were able to submit questions up to one day before the start of the Annual General Meeting and to send comments and video messages. The speech by the Executive Board was published in advance on the website and broadcast live on the Internet.

T40 Qualification matrix

	Matthias Wierlacher	Evert Dudok	Elke Eckstein	André Hillner*	Prof. Ursula Keller
Length of service / initial appointment	2012	2015	2017	2022	2022
Year of birth	1963	1959	1964	1979	1959
Gender	Male	Male	Female	Male	Female
Nationality	Austrian	Dutch	German	German	Swiss
Governance-specific skills					
Independence [1]	✓	✓	✓	n. a.	✓
Availability, number of positions held [2]	✓	✓	✓	✓	✓
Corporate governance experience	✓				
(Supervisory or Executive Board) experience in listed companies	✓		✓		
CEO experience (in non-listed companies)	✓	✓	✓		
CFO experience (in non-listed companies)	✓				
Financial and business skills	✓				
Functional / structural skills					
Personnel expertise, codetermination and social matters	✓	✓	✓	✓	
Sales and marketing expertise		✓	✓		
Operational expertise		✓	✓	✓	
Strategic and company-related skills in the following areas					
Digitization, innovation, IT		✓	✓		✓
Technology		✓	✓	✓	✓
Strategy and growth / M+A / portfolio management	✓		✓		
Markets and internationality		✓	✓		✓
Entrepreneurship / management	✓	✓	✓		✓
Capital markets	✓				
Specific industry / sector experience			✓	✓	
ESG expertise			✓		

[1] According to the Supervisory Board's self-assessment for the shareholder representatives
[2] The criterion for number of positions is not considered to be met if there is a deviation from the recommendation pursuant to section C.4 of the Code
✓ = Criterion is deemed to be met on the basis of a self-assessment by the Supervisory Board if there is good knowledge or experience in the dimension concerned. These can be acquired through existing qualifications or as part of the work as a member of the Supervisory Board (for example, many years of service on the Audit Committee)
* Employee representative

Dörthe Knips *	Alexander Münkwitz*	Doreen Nowotne	Stefan Schaumburg *	Thomas Spitzenpfeil	Christina Süßenbach *	Franziska Wolf *
2017	2022	2015	2017	2022	2022	2022
1974	1978	1972	1961	1962	1980	1982
Female	Male	Female	Male	Male	Female	Female
German	German	German	German	German	German	German
n. a.	n. a.	✓	n. a.	✓	n. a.	n. a.
✓	✓		✓	✓	✓	✓
		✓	✓	✓		
		✓	✓	✓		
				✓		
		✓		✓	✓	
✓	✓		✓		✓	✓
✓					✓	
	✓			✓		
		✓		✓		
		✓		✓		
		✓		✓		
				✓	✓	
		✓				

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Transparent information

As part of our investor relations work, we report comprehensively on the position and development of the company. We use the Internet in particular for this purpose and information is made available at www.jenoptik.com in the Investors section.

For further information on investor relations activities, please refer to the chapter "The Jenoptik share"

Jenoptik immediately publishes major changes to its shareholder structure when it is informed that reportable voting rights tresholds have been reached, fallen below or exceeded. All publications are available on the JENOPTIK AG website under www.jenoptik.com in the category Investors / Share / Voting rights announcements. Further information can also be found in the separate Financial Statements of JENOPTIK AG.

Directors' dealings

Reportable securities transactions by members of the Executive Board or Supervisory Board pursuant to Article 19 of the EU Market Abuse Regulation are published at www.jenoptik.com under Investors / Corporate Governance / Directors' Dealings. In the fiscal year 2022, we received two notifications from Dr. Stefan Traeger.

Accounting and auditing

Jenoptik prepares the Consolidated Financial Statements as well as Consolidated Interim Reports in accordance with the International Financial Reporting Standards (IFRS) and the additional requirements of commercial law according to § 315e (1) of the German Commercial Code (HGB), as they are to be used in the European Union. JENOPTIK AG's Financial Statements, which are decisive for the dividend payment, are compiled in accordance with the requirements of the German Commercial Code and the German Stock Corporation Act. The Consolidated Financial Statements and the Annual Financial Statements, including the Combined Management Report, are examined by the auditor. On June 15, 2022, the Annual General Meeting selected Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart ("EY") as the auditor for the fiscal year 2022 on the recommendation of the Supervisory Board. EY was initially appointed in the fiscal year 2016 following an external tender. The position of responsible auditor for the auditing of the Consolidated Financial Statements and the Annual Financial Statements as well as the Combined Management Report was taken on for the fourth time by Steffen Maurer. The auditor's report was signed by Steffen Maurer and Alexander Murrmann in 2022. In 2021, it was signed by Steffen Maurer and Uwe Pester, in 2019 and 2020 by Michael Blesch and Steffen Maurer, and from 2016 to 2018 by Michael Blesch and Uwe Pester. The statutory provisions regarding the rotation obligations have been fulfilled. The Remuneration Report was also formally audited by EY. The audit of the Combined Non-financial Report was undertaken with so-called "limited assurance" by Price-WaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft.

The Supervisory Board has agreed with the auditor that they shall inform the Supervisory Board Chairman of all important events and findings that emerge during the audit. This includes occasions when inaccuracies are established during the audit in the Declaration of Conformity submitted by the Executive Board and Supervisory Board in accordance with § 161 of the German Stock Corporation Act.

Prior to submitting the election proposal to the Annual General Meeting, EY confirmed to the Supervisory Board in a declaration of independence that there were no business, financial, personal or other links between EY, its board members and audit managers on the one side and the company and its board members on the other, that could give rise to doubts about the independence of the auditor. EY also reported in its declaration on the degree to which non-audit services have been provided for Jenoptik over the past fiscal year or which have been contractually agreed for the current year. In the summer of 2022, the Audit Committee reviewed EY's non-audit services provided in the past year and updated the catalog of approved, predefined non-audit services.

Remuneration Report

3

Remuneration Report

Contents

With this report, the Executive Board and Supervisory Board inform, as per § 162 AktG, on the remuneration granted and owed to the current and former members of the Executive Board and Supervisory Board of JENOPTIK AG and companies of the Jenoptik Group for the fiscal year 2022, including a comparative presentation of the annual change in remuneration for the members of the Executive Board, the development of the company's earnings, and the average remuneration of the employees. At its meeting on August 9, 2022, the Audit Committee appointed Ernst & Young Wirtschaftsprüfungsgesellschaft GmbH, Stuttgart, to carry out a formal audit of the Remuneration Report in accordance with § 162 (3) AktG.

2022 was dominated in particular by the war in Ukraine and its economic and geopolitical consequences. For Jenoptik, however, the fiscal year 2022 was another very good year in terms of revenue and profitability. With year-on-year revenue growth of 30.6 percent and an EBITDA margin of 18.8 percent in the challenging geopolitical and macroeconomic environment, Jenoptik performed excellently and once again demonstrated its resilience and ability to grow. In line with the "Pay for Performance" principle, this performance by Jenoptik is also reflected in the variable remuneration for the Executive Board.

A Remuneration for the Executive Board

I. Executive Board remuneration system

Following preparation by the Personnel Committee, the Supervisory Board is responsible for specifying the remuneration system and determining the total remuneration for the individual Executive Board members. The criteria for defining the appropriateness of the individual total remuneration are primarily the respective tasks and areas of responsibility of the members of the Executive Board, their personal performance, as well as the economic situation, the success of the company and its future prospects. Standard practice within the comparative environment and in relation to established comparative groups within the company is another factor in the remuneration.

Jenoptik's corporate strategy focuses on its core expertise in photonics and optics, combined with increased investment in research and development and an active portfolio management. At the same time, internationaly growth is targeted. The remuneration system for members of the Executive Board aims to provide key incentives for implementing this corporate strategy by setting ambitious targets in line with the strategy. In a similar way to the control system, the remuneration system is geared toward the long-term corporate strategy and, in addition, is aligned with the Group's short to medium-term objectives. The company control system's key indicators are used to assess the performance of the Executive Board. The long-term targets are in line with envisaged business performance and aim to enable a clear assessment of its attainment. Jenoptik aims to promote long-term and sustainable development with a multi-year variable remuneration component and a consideration of sustainability criteria (ESG: environmental, social, governance criteria) in the one-year variable remuneration.

G18 An overview of the remuneration system

Relative share of total target remuneration	Remuneration components	Description
35 %–40 %	Basic salary	
<2 %	Fringe benefits	
12 %–15 %	Company pension plan	
17 %–23 %	One-year variable remuneration	- **Scheme type:** Target bonus model - **Limit:** max. 200 % of target amount - **Performance criteria:** • 40 % revenue growth • 40 % EBITDA margin • 20 % cash conversion rate • Multiplier (0.8 to 1.2) to assess individual and collective performance of the Executive Board and ESG targets
25 %–30 %	Multi-year variable remuneration	- **Scheme type:** Virtual performance share plan - **Performance period:** Four years - **Limit:** • Target attainment: max. 150 % per target • Payout: max. 200 % of target amount - **Performance criteria:** • 30 % return on capital employed (ROCE) • 70 % relative total shareholder return (TSR) compared to TecDax
	Malus & clawback	- Opportunity to reduce bonus via the multiplier in the sense of a malus - Right of the company to repayment of the multi-year variable remuneration (clawback)
	Maximum remuneration pursuant to § 87a(1)(2) AktG	- Chairman of the Executive Board: 2,550,000 euros p.a. - Ordinary member of the Executive Board: 1,800,000 euros p.a.

If the targets set are not met, the variable remuneration may be reduced to zero. At the same time, if the targets are exceeded, it can only increase up to a clearly defined upper limit ("cap") in terms of amount, thereby avoiding the incentive to take excessive risks.

The system of remuneration applicable for the Executive Board in the fiscal year 2022 was decided by the Supervisory Board with the assistance of an independent external remuneration advisor and approved by the Annual General Meeting on June 9, 2021 with a majority of 75.96 percent of the votes. A presentation of the remuneration system is published on the Jenoptik website at www.jenoptik.com/about-jenoptik/management/executive-board-and-executive-management-committee-emc. Please refer to Section A. III. 4 of this Remuneration Report for information on the renewed revision of the remuneration system that has taken place in the meantime.

II. Determination of total target remuneration, appropriateness of Executive Board remuneration

The Supervisory Board has determined the amount of the total target remuneration for the members of the Executive Board in accordance with the remuneration system for Executive Board members approved by the 2021 Annual General Meeting. The target total remuneration for Executive Board members remained unchanged in 2022.

T41 Target remuneration for the fiscal year 2022 in euros

	Dr. Stefan Traeger President & CEO			Hans-Dieter Schumacher Executive Board member		
	Target remuneration	Min.	Max.	Target remuneration	Min.	Max.
Non-performance-related remuneration						
Fixed remuneration	650,000	650,000	650,000	450,000	450,000	450,000
Fringe benefits	18,161	18,161	18,161	21,532	21,532	21,532
Pension contribution	200,000	200,000	200,000	160,000	160,000	160,000
Total	**868,161**	**868,161**	**868,161**	**631,532**	**631,532**	**631,532**
Performance-related remuneration						
One-year variable remuneration (bonus for fiscal year 2022)	320,000	0	640,000	200,000	0	400,000
Multi-year variable remuneration						
of which performance shares 2022	430,000	0	860,000	300,000	0	600,000
Total	**750,000**	**0**	**1,500,000**	**500,000**	**0**	**1,000,000**
Total remuneration	**1,618,161**	**868,161**	**2,368,161**	**1,131,532**	**631,532**	**1,631,532**

Maximum remuneration. The maximum remuneration (including pension contributions and fringe benefits) set by the Supervisory Board for the members of the Executive Board and approved by the 2021 Annual General Meeting is 2,550,000 euros per fiscal year for the Chairman of the Executive Board and 1,800,000 euros for ordinary members of the Executive Board. The basic remuneration is a fixed amount. The upper limits for the one-year and multi-year variable remuneration granted and owed in 2022 – as shown in table T42 – were not reached. Although achievement of the performance targets for the 2022 installment of performance shares will not be measured until the first quarter of 2026, it is already certain that the fixed maximum remuneration for the fiscal year 2022 will be complied with, even if the maximum target is achieved in 2026.

Customary level of the specific total remuneration in comparison with other companies and within the company. The review of the appropriateness of the remuneration was last carried out in mid-2022 by comparing the level and structure of the remuneration with that at companies in the TecDax and SDax indices. These two indices were chosen as the companies included are largely comparable with Jenoptik in terms of country and sector and Jenoptik itself is listed in both indices. In order to take the size of the company into account, Jenoptik was classified into the comparison groups on the basis of the criteria of revenue, employees, and market capitalization; the size-adjusted remuneration bands derived from this were analyzed. In addition, a vertical review was also made with the remuneration of managers and the workforce as a whole. The Supervisory Board came to the conclusion that the remuneration agreed with the members of the Executive Board is customary and appropriate in a horizontal and vertical comparison in accordance with the requirements of the German Corporate Governance Code.

III. Specific configuraion of the remuneration system

The remuneration for the Executive Board of Jenoptik consists of non-performance-related and performance-related components.

1. Non-performance-related remuneration

Fixed remuneration. The non-performance-related basic salary is paid on a pro rata basis each month. In 2022, it totaled 650,000 euros for Dr. Stefan Traeger (prior year: 650,000 euros) and 450,000 euros for Hans-Dieter Schumacher (prior year: 450,000 euros).

Retirement benefits. Agreements relating to occupational retirement benefits have been concluded with the members of the Executive Board. The commitment is based on a pension fund reinsured by a life insurance policy. This is a defined contribution scheme within the framework of a provident fund. The annual and the long-term costs for Jenoptik are clearly defined. On reaching retirement age, the payouts will no longer affect Jenoptik – with the exception of a possible subsidiary liability. In 2022, the contributions for the provident fund totaled 200,000 euros for Dr. Stefan Traeger and 160,000 euros for Hans-Dieter Schumacher. They have remained unchanged for Dr. Stefan Traeger since he joined in 2017 and for Hans-Dieter Schumacher since he joined in 2015. The surrender value of the pension commitment in accordance with § 169 of the German Insurance Contract Act (VVG) came to 1,083,541 euros for Dr. Stefan Traeger (prior year: 895,746 euros) and 1,254,533 euros for Hans-Dieter Schumacher (prior year: 1,072,198 euros) as of December 31, 2022.

Fringe benefits. There is accident insurance and directors and officers liability insurance for the members of the Executive Board. The latter comprises the contractual obligation to pay a deductible amounting to 10 percent of the loss per claim, however up to a maximum sum of 150 percent of the fixed remuneration of the Executive Board member in question. Executive Board members are also entitled to the private use of a company vehicle.

2. Performance-related remuneration components

The variable remuneration of the Executive Board is based on target agreements concluded with each member of the Executive Board in the first quarter of each calendar year. Jenoptik's long-term and sustainable development is promoted by granting a multi-year variable remuneration component and a consideration of sustainability criteria (ESG: environmental, social, governance criteria) in the one-year variable remuneration. The same targets are agreed upon with both members of the Executive Board, as the Executive Board works as a team and implements the targets together.

The variable remuneration comprises two components:

The (one-year) bonus (approx. 40 percent of the variable remuneration) is based on the achievement of certain targets within a fiscal year and is paid in the subsequent year.

The second part of the variable remuneration (approx. 60 percent of the variable remuneration) is granted in the form of performance shares. To this end, virtual shares are allocated to the members of the Executive Board on an annual basis. For each installment of performance shares granted, the target attainment is determined at the end of a four-year performance period, and the amount determined in accordance with a predefined calculation method is paid out.

The total variable remuneration for 2022 may be between 0 euros and a maximum of 1,500,000 euros for Dr. Stefan Traeger, and between 0 euros and a maximum of 1,000,000 euros for Hans-Dieter Schumacher. The value is 0 when less than 50 percent of all targets are achieved. For the respective maximum amount, 200 percent of the targets for one-year variable remuneration and 150 percent of the targets for multi-year variable remuneration must be achieved.

a) Bonus.

(i) Bonus system. 40 percent of the bonus is dependent on the Group's revenue growth: 75 percent of this (i.e., 30 percent of the bonus) is reached at 100 percent if the revenue growth from the annual plan adopted by the Supervisory Board for the Jenoptik Group is achieved for the corresponding year without taking into account companies or parts of companies acquired or sold. 25 percent of the revenue growth target (i.e., 10 percent of the bonus) is achieved at 100 percent if a certain level of revenue attributable to new acquisitions is achieved (regardless of the acquisition date in relation to the entire fiscal year). 40 percent of the bonus is calculated on the basis of the EBITDA margin contained in the annual plan. The third sub-target, with a 20 percent share of the bonus, is achieved at 100 percent if the ratio of free cash flow to EBITDA for the year in question (the cash conversion rate) reaches the value from the annual plan approved by the Supervisory Board.

The yardstick for determining the degree of target attainment does not need to be linear. This means that a target attainment of 200 percent does not necessarily require a doubling of the initial value of the financial key indicator. In the same way, a 50 percent target attainment does not necessarily have to be achieved at half of the originally defined financial baseline for 100 percent. The precise calibration of the targets is based on historical experience and future expectations, as well as the adopted budget of the respective year.

(ii) Targets for 2022. The financial targets agreed with the members of the Executive Board for 2022 were:

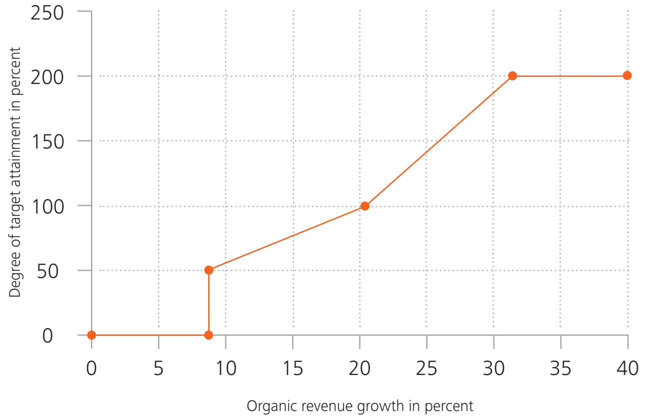
T42 Financial targets agreed for 2022

Target	Weighting for 100 % target achievement	Targets for 2022 in %		
		100	50 (lower Cap)	200 (upper cap)
Organic revenue growth in %*	30 %	20.4	9.1	31.2
Non-organic revenue growth in million euros **	10 %	80.0	40.0	100.0
EBITDA margin in %	40 %	17.7	12.0	23.0
Cash conversion rate in %	20 %	51.8	25.0	80.0

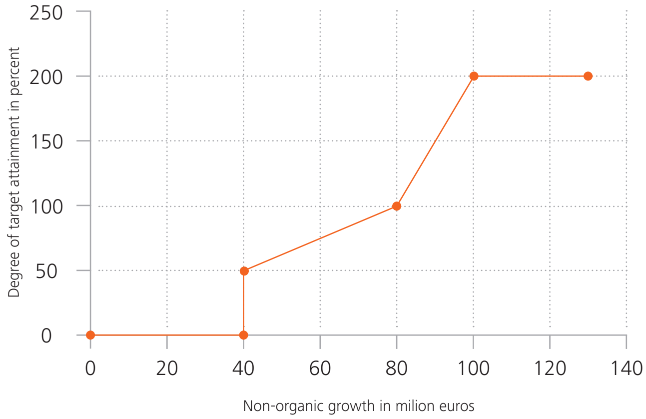
* Acquisitions in the years 2021 and 2022 are not included. Divestments are not included if the proceeds from the sale are at least equivalent to the enterprise value for this fiscal year
** The calculation is based on the total revenue of the acquired target in the full calendar year 2022 (irrespective of the acquisition date in the fiscal year)

The following charts illustrate the target attainment curves for the 2022 bonuses:

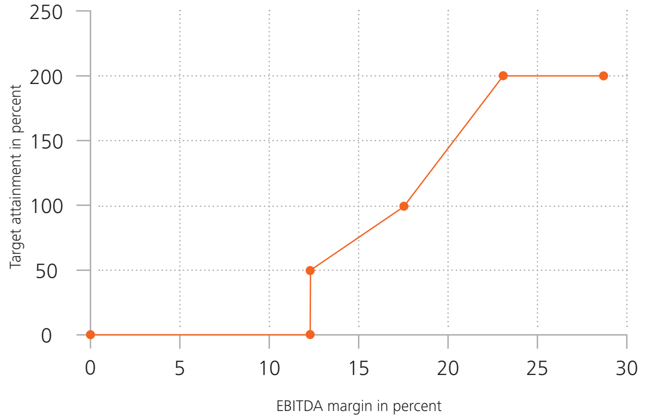
G19 Organic revenue growth



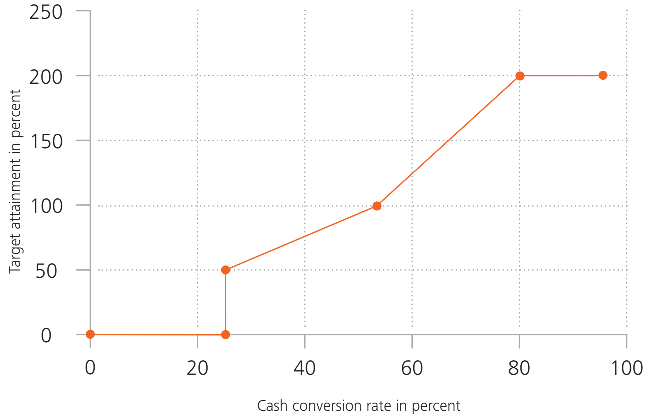
G20 Non-organic revenue growth



G21 EBITDA margin



G22 Cash conversion rate



To take account of non-financial aspects, the bonus amount for the respective Executive Board member resulting from the target attainment is then multiplied by a performance factor, the multiplier. Its value can be between 0.8 and 1.2. The multiplier is determined on the basis of the individual performance of the Executive Board member, the collective performance of the Executive Board as a whole, and the non-financial targets. These targets are derived from the Jenoptik Group's ESG road map described in the Sustainability Report and published on our website at www.jenoptik.com/sustainability/sustainability-targets. They are in line with the ESG targets agreed used in group financing. The non-financial targets agreed for 2022 and their attainment are shown in table T44.

The Supervisory Board can use the multiplier to reduce the variable bonus in the sense of a malus arrangement by up to 20 percent even if the financial targets are met or exceeded, if, for example, the behavior of the Executive Board member strongly warrants it, but is not serious enough to justify termination or liability due to breach of duty or a reduction in remuneration in accordance with § 87 (2) AktG is not possible.

With 100 percent target attainment and a multiplier of 1.0 for the fiscal year, Dr. Stefan Traeger receives a bonus of 320,000 euros (prior year: 320,000 euros) and Hans-Dieter Schumacher 200,000 euros (prior year: 200,000 euros). In each case, the bonus for 2022 for Dr. Stefan Traeger is limited to a maximum of 640,000 euros (prior year: 640,000 euros), for Hans-Dieter Schumacher to 400,000 euros (prior year: 400,000 euros). The bonus is paid with the subsequent payroll after the target settlement and approval of the Annual Financial Statements.

G23 One-year variable remuneration (bonus)

12 months

	Target attainment (0 % – 200 %)		
Target ×	Financial targets ×	Multiplier (0.8 – 1.2) =	Payout (cap 200 % of the target)
	30 % organic revenue growth +	Individual performance	
	10 % revenue of newly acquired companies +	Collective performance of the Executive Board	
	40 % EBITDA margin +	ESG targets	
	20 % cash conversion rate		

(iii) Target attainment 2022. On the basis of its assessment, and taking into account all relevant aspects for the fiscal year 2022, the Personnel Committee of the Supervisory Board has decided to propose to the Supervisory Board that a multiplier of 1.10 be used for both members of the Executive Board. In particular, the overachievement of the non-financial targets presented in table T44 below was weighted positively. In addition, the integration of the major companies of the TRIOPTICS and BG Medical / SwissOptic groups acquired in the two previous years, which continued to progress very successfully in 2022, and the unsatisfactory development of the smaller Spanish company Interob, acquired at the beginning of 2020, were taken into account.

The actual target attainment of the one-year variable remuneration for 2022 and the resulting payments for the 2022 fiscal year are as follows:

T43 Target attainment of the one-year variable remuneration for 2022 and payment in euros

Indicator	Fiscal year 2022 Actually attained	Target attainment in %	Payment to Dr. Stefan Traeger	Payment to Hans-Dieter Schumacher
Organic revenue growth in %*	30.6	194.44	186,662	116,664
Non-organic revenue growth in million euros	0	0	0	0
EBITDA margin in %	18.8	120.75	154,560	96,600
Cash conversion rate in %	44.9	87.13	55,763	34,852
Subtotal			396,985	248,116
Multiplier			1.10	1.10
Total			436,684	272,928

* Acquisitions made in 2021 and 2022 are not included.. Divestments are not included if the proceeds from the sale are at least equivalent to the enterprise value for this fiscal year

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T44 Target attainment of non-financial objectives

		2022 target	Target attainment
Diversity rate	**Increase in diversity:** Proportion of managers with an international background and female managers Calculation: ~ Ø (proportion of international managers + proportion of female managers)	30.0 %	30.6 %
Vitality index	**Increase in innovative strength:** percentage of revenue generated by products and services developed within the last 3 years	20.0 %	23.7 %
CSR rate	**Increased transparency in the supply chain** to protect human rights and the environment: CSR rate: the percentage of suppliers of production materials with an annual purchase volume in excess of 200,000 euros for which full CSR self-assessments are available.	40.0 %	51.4 %
Green electricity rate	**Active reduction of the CO_2 emissions:** Green electricity share as a proportion of the total electricity demand used by the main production sites	70.0 %	85.4 %
Employee satisfaction	**Global Engagement Score:** Our employees' engagement, i.e., 76% of our employees identify positively with their duties at Jenoptik in 2022 and are active participants.	72.2 %	76.0 %

b) Performance shares.

(i) System of the performance shares. Based on a value of 430,000 euros (prior year: 430,000 euros) for Dr. Stefan Traeger and 300,000 euros (prior year: 300,000 euros) for Hans-Dieter Schumacher ("initial value" for 2022), performance shares are to be provisionally allocated to the member of the Executive Board in the first quarter of each fiscal year, usually at the balance sheet meeting of the Supervisory Board in the second half of March.

In order to calculate the provisional number of performance shares to be allocated, the initial value, with effect from the 2022 installment, is divided by the volume-weighted average closing price (VWAP) of the Jenoptik share on the last 60 trading days of the fiscal year preceding the provisional allocation. The VWAP for the specified 2021 period was 33.906 euros (prior year: 24.114 euros). Consequently, Dr. Stefan Traeger was provisionally allocated a total of 12,682 performance shares and Hans-Dieter Schumacher 8,848 for the 2022 installment. Long-term performance targets are agreed for each installment, the achievement of which is measured at the end of each four-year "performance period". For the performance shares provisionally allocated in 2022, the measurement will take place at the beginning of 2026.

The performance shares not yet paid out are:

T45 Performance shares

	Number of provisionally allocated performance shares		
Installment	Dr. Stefan Traeger	Hans-Dieter Schumacher	Payout year
2019	12,512	9,384	2023
2020	18,933	13,687	2024
2021	17,832	12,441	2025
2022	12,682	8,848	2026

(ii) Targets for the 2022 installment. The performance targets to be attained over the performance period are the return on capital employed (ROCE) with a weighting of 30 percent and the total shareholder return (TSR) of Jenoptik compared with the TecDax with a weighting of 70 percent.

An average ROCE of 14 percent is currently set as the target value for the ROCE target. The ROCE target is achieved at 50 percent if the average ROCE over the performance period is 5 percentage points below the target ("lower cap"). If the average ROCE is more than 5 percentage points below the target value, target attainment is 0 percent. The target attainment for the ROCE target can be a maximum of 150 percent. This is achieved if the average ROCE over the performance period is 5 percentage points or more above the target value of 14 percent ("upper cap"). Exceeding the ROCE target value by more than 5 percentage points does not result in a higher target attainment

The ROCE is calculated by dividing group EBIT by the average tied operating capital. The average tied operating capital comprises non-current non-interest-bearing assets (e.g., intangible assets including goodwill, property, plant, and equipment, and investment properties) and current non-interest-bearing assets (essentially inventories, receivables from the operating business, and other current receivables), less non-interest bearing borrowings (e.g. provisions – excluding pensions and taxes –, liabilities from the operating business, and other current liabilities). The calculation of averages uses the twelve month-end balances in the period under review and the opening balance at the start of the year.

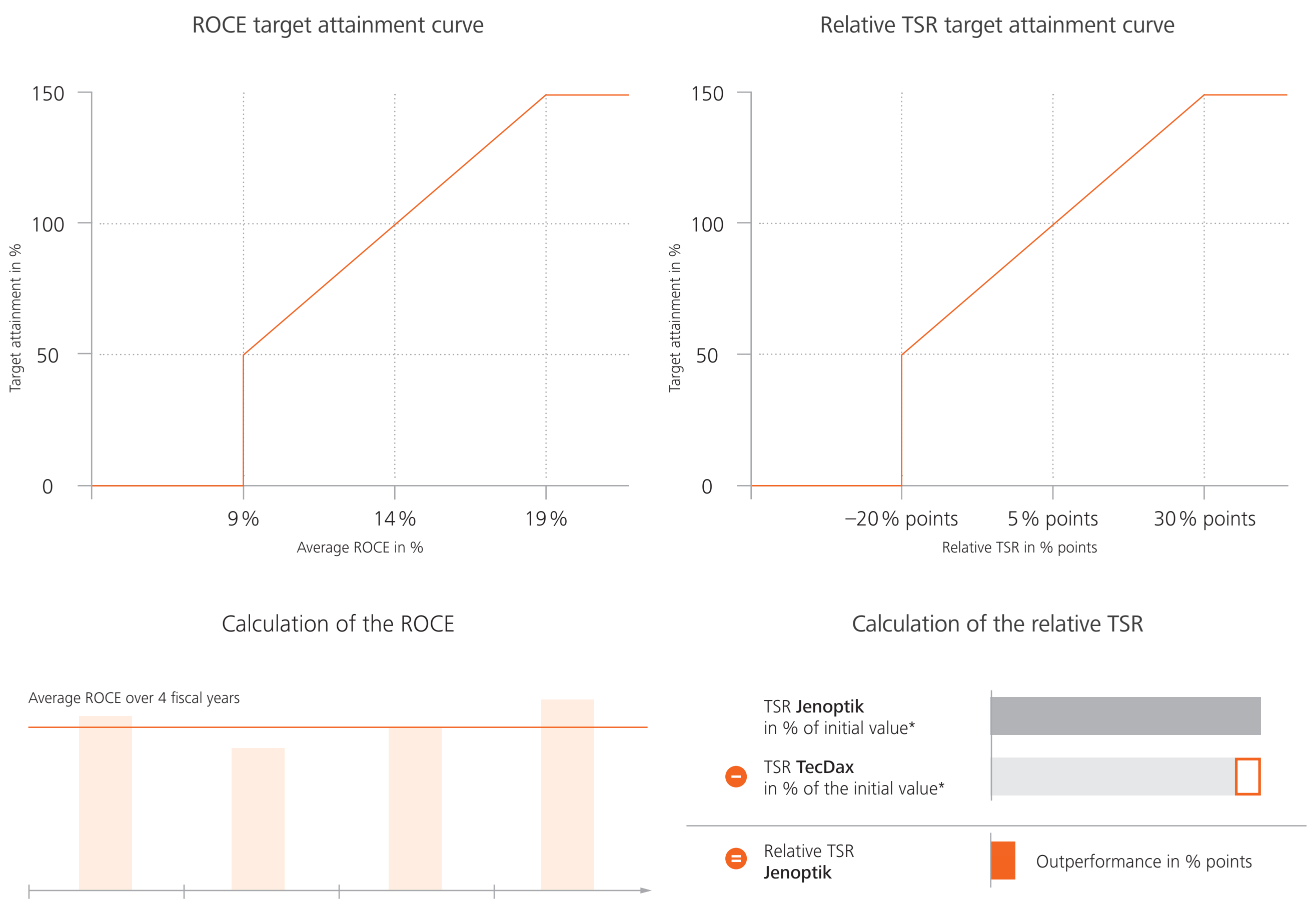
A relative TSR of plus 5 percentage points is set as the target value for 100 percent target attainment of the TSR target, i.e., the performance of the Jenoptik share price, including dividend, over the performance period exceeds the performance of the TecDax by 5 percentage points. A relative TSR of minus 20 percentage points equates to a target attainment of 50 percent ("lower cap").

If the relative TSR is lower than minus 20 percentage points, target attainment falls to 0 percent. Similarly, target attainment is capped at an upper limit of 150 percent, and is achieved with a relative TSR of plus 30 percentage points or more (“upper cap”).

The relative TSR is determined as the difference in percentage points between the change in the Jenoptik share price including reinvested dividends and the change in the TecDax performance index.

Again, the yardstick for determining the degree of target attainment does not need to be linear here.

G24 The multi-year variable remuneration – target attainment curves



* The initial and end values are the average of the 60 trading days prior to the beginning or end of the performance period.

(iii) Calculation of the payout amount for the 2022 performance share installment in 2026. Depending on the level of target attainment, the number of performance shares to be finally allocated is determined at the end of the four-year performance period. It is limited to one and a half times the number of provisionally allocated performance shares (“allocation cap”). If the level of target attainment is less than 50 percent, the entitlement to final allocation of performance shares shall no longer apply.

The number of finally allocated performance shares is multiplied by the VWAP of the Jenoptik share on the last 60 trading days of the last fiscal year of the performance period (“payout rate”). The resulting amount shall be paid after the adoption of the annual financial statements. The payout amount is limited to a maximum of 200 percent of the initial value, ("payout cap"), i.e. 860,000 euros (prior year: 860,000 euros) for Stefan Traeger and 600,000 euros (prior year: 600,000 euros) for Hans-Dieter Schumacher for the 2022 installment.

In the event of termination of the Executive Board mandate, performance shares which have not yet been allocated finally, but only provisionally, shall not be prematurely finally allocated and paid out, but evaluated, allocated and then paid out in accordance with the regular procedure at the end of the respective performance period. Should JENOPTIK AG terminate the employment relationship for a good reason for which the member of the Executive Board is responsible, all provisionally allocated performance shares for which the performance period has not yet expired shall be forfeited without substitution or compensation.

The Executive Board service contracts contain provisions for capital and conversion measures and the event of a delisting, which are aimed at ensuring that the performance shares are financially equivalent to real shares.

(iv) Calculation of the payout amount for the 2019 performance share installment. The fiscal year 2022 was the last year of the performance period of the performance shares provisionally allocated to the members of the Executive Board in 2019 (2019 installment). The long-term variable remuneration is deemed to be granted and owed in the final year of the performance period. The relevant share price for determining the number of performance shares to be provisionally allocated in 2019 was 31.970 euros (prior year: 28.165 euros), so Dr. Stefan Traeger and Hans-Dieter Schumacher were provisionally allocated 12,512 and 9,384 performance shares respectively for the 2019 installment. Of these, 3,754 shares in the case of Dr. Stefan Traeger and 2,815 shares in the case of Hans-Dieter Schumacher related to the ROCE target (30 percent) and 8,758 shares and 6,569 shares respectively to the TSR target (70 percent).

The arithmetic mean of the ROCE achieved for the 2019 to 2022 performance period was 11.8 percent, which, using the target achievement curve (linearly interpolated), corresponded to a target attainment of 58.00 percent, as the ROCE target for the 2019 installment was 16 percent and the lower cap was 11 percent. Thus, a total of 2,177 performance shares were finally allocated to Dr. Stefan Traeger and 1,633 to Hans-Dieter Schumacher for the performance shares allocated to the ROCE target. The amount to be paid out thereafter was then calculated by multiplying the number of performance shares finally allocated by the volume-weighted average price on the last 60 trading days of the last fiscal year of the performance period ("payout rate"), i.e. the year 2022. The payout price calculated in this way was 24.682 euros. In 2023, Dr. Stefan Traeger will therefore be paid 53,732.71 euros (equivalent to 2,177 shares * 24.682 euros) and Hans-Dieter Schumacher 40,305.71 euros (equivalent to 1,633 shares * 24.682 euros) for the ROCE sub-target.

T46 2019 Performance share installment

	Number of performance shares provisionally allocated for the 2019 installment (allocation rate: 31.970 euros)	ROCE target value for 100 percent target attainment	TSR target value for 100 percent target attainment	ROCE achieved in % = target attainment	TSR achieved in % = target attainment	Number of finally allocated performance shares	Payout amount in euros with payout rate 24.682 euros
Dr. Stefan Traeger	12,512, of which 3,754 for ROCE target and 8,758 for TSR target	16 percent	+5 percent	11.8 = 58 percent	−31.7 = 0 percent	2,177	53,732.71
Hans-Dieter Schumacher	9,384 of which 2,815 for ROCE target and 6,569 for TSR target	16 percent	+5 percent	11.8 = 58 percent	−31.7 = 0 percent	1,633	40,305.71

As the relative TSR target attainment level in the relevant measurement period was minus 31.7 percentage points (and therefore less than minus 20 percentage points), target attainment was 0 percent. Therefore, no final allocation and no payout were made for the performance shares provisionally allocated in 2019 for the relative TSR target.

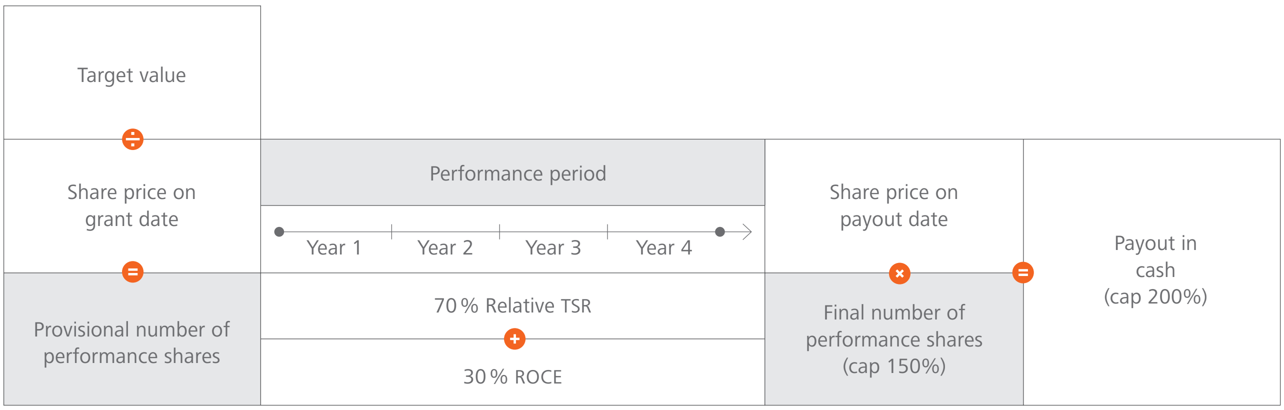
(v) Summary. The system of remuneration with performance shares is summarized as follows:

Year 1: Agreement of a performance target for the year 1 installment ("installment 1") with the member of the Executive Board; provisional allocation of performance shares for installment 1; calculation of the provisional number by dividing the initial value by a VWAP of the last 60 trading days of the prior year.

Years 1–4: Performance period for installment 1.

Year 5: Measurement of target attainment, from which determination of the number of performance shares to be allocated finally for installment 1, taking into account the allocation cap; multiplication of this final number by a VWAP of the last 60 trading days of year 4. Payout of this amount to the member of the Executive Board, taking into account the payout cap.

G25 Multi-year variable remuneration



3. Other agreements

Clawback. The company has a right to repayment of the multi-year variable remuneration (clawback) if, within three years after payout of the multiple variable remuneration, it becomes apparent that one of the audited and approved consolidated financial statements during the four-year performance period was objectively incorrect and therefore had to be subsequently corrected in accordance with the relevant accounting standards. In addition, the Supervisory Board has the option to reduce the one-year variable remuneration by selecting a low multiplier if there are significant reasons relating to the behavior of a member of the Executive Board in addition to any statutory claims for damages under § 93 (2) of the AktG or a reduction in remuneration under § 87 (2) of the AktG. Should JENOPTIK AG terminate the employment relationship for a good reason for which the member of the Executive Board is responsible, all provisionally allocated performance shares for which the performance period has not yet expired shall be forfeited without substitution or compensation. There was no reason to exercise this option in the fiscal year 2022, i.e. no variable remuneration components were clawed back.

Third-party benefit commitments. In the past fiscal year, no benefit commitments were promised or granted to any Executive Board member by a third party with regard to his activity as a member of the Executive Board.

Benefit commitments in the event of regular termination of employment. Dr. Stefan Traeger and Hans-Dieter Schumacher are not entitled to payment of bridging payments following their regular departure from the company. Nor was any right of termination agreed with them in the event of a change of control.

Benefits in the event of the premature termination of employment. In the event of a member of the Executive Board being dismissed in accordance with § 84 (3) AktG in conjunction with the relevant provisions of the German Codetermination Act, the rights under the employment contract shall remain unaffected. In this case, however, the member of the Executive Board is entitled to terminate the employment relationship extraordinarily and with immediate effect. At the same time, Jenoptik is entitled to release the Executive Board member from their obligation to render services.

In the event that the appointment as member of the Executive Board and the employment contract end prematurely without good cause within the meaning of § 626 BGB, a severance payment may be agreed. This amounts to a maximum of two years' remuneration (plus fringe benefits) or the remuneration due for the remaining term of the service contract, whichever is lower ("severance payment cap"). The annual remuneration comprises the basic remuneration, the variable remuneration components, and the annual pension contribution. For the one-year variable remuneration, a target attainment of 100 percent and a neutral multiplier of 1.0 are assumed. Virtual performance shares that have already been provisionally allocated but whose performance period has not yet expired are not forfeit in the event of premature termination. They are measured in accordance with the normal procedure at the end of the performance period depending on the attainment of the performance criteria, finally allocated, and paid out.

However, should, the company terminate the employment relationship for a good reason for which the member of the Executive Board is responsible, as per § 626 BGB, all provisionally allocated virtual performance shares for which the performance period has not yet expired shall be forfeited without substitution or compensation.

Non-competition clause. A post-contractual non-competition clause was agreed with Dr. Stefan Traeger for a period of one year following the end of his contract of employment. An amount of 50 percent of the annual remuneration including variable remuneration (with a target attainment level of 100 percent) and pension contributions has been agreed as compensation for the non-competition clause. Any severance payment shall be offset against the compensation. Prior to termination of the employment relationship, Jenoptik may also waive the post-contractual non-competition clause by means of a written declaration.

Ancillary activities. The acceptance of seats on a supervisory board, advisory board or comparable supervisory bodies of companies outside the Group requires the approval of the Supervisory Board.

Rejection of the remuneration system. Should the Annual General Meeting reject the remuneration system and/or the remuneration report, the members of the Executive Board have committed themselves to enter into discussions on an adaptation of the remuneration system.

4. Revision of the remuneration system

With effect from January 1, 2023, the Executive Board of JENOPTIK AG was expanded to three persons; Dr. Ralf Kuschnereit was appointed as a further member of the Executive Board. With effect from April 1, 2023, Dr. Prisca Havranek-Kosicek will succeed Hans-Dieter Schumacher, who will leave the company on March 31, 2023, as Chief Financial Officer; from March 1, 2023, Dr. Havranek-Kosicek will be a member of the Executive Board without areas of responsibilty. In the light of these new appointments to the Executive Board and as announced in last year's Remuneration Report, the Personnel Committee and Supervisory Board revised the Executive Board remuneration system in the fiscal year 2022. The focus was in particular on the introduction of share ownership guidelines and an adjustment of the multi-year variable remuneration. The remuneration system thus revised and approved by the Supervisory Board is to be submitted for approval to the Annual General Meeting on June 7, 2023.

The main changes compared with the current remuneration system are as follows:

The main features of the performance share plan for multi-year variable remuneration will be retained. In addition to the performance targets of relative TSR and ROCE, however, ESG targets will be introduced with a weighting of 20 percent. The basis for the selection of targets for each installment is a catalog of criteria derived from the materiality analysis. From this catalog of criteria, two to four ESG targets are selected at the beginning of each fiscal year and their weighting defined. The specific ESG targets, the actual achievement of the targets, and the weighting will be published ex post in the Remuneration Report. With the introduction of additional ESG targets, the weighting of the relative TSR will decrease from 70 to 50 percent. In addition, the relative TSR will in future no longer be measured exclusively against the TecDax; half of it will also be measured against an individual comparison group consisting of at least ten listed companies operating in markets addressed by Jenoptik. Furthermore, the measurement method was adapted to a ranking procedure. This means that in future the determination of the target achievement of the relative TSR will be based on a ranking within the comparison group and no longer on a percentage deviation from an average value.

In addition, a share ownership guideline will be introduced for Executive Board members. This will oblige the members of the Executive Board to acquire shares in JENOPTIK AG worth 100 percent of their annual gross basic remuneration over a four-year build-up phase and to hold them until the end of their Executive Board term of office.

In addition to the existing performance clawback (see A. III. 3 of this report), a compliance clawback has been introduced. Under this, in the event of intentional breaches of duty by the Executive Board member in his capacity as Executive Board member, the Supervisory Board may reduce the variable remuneration not yet paid out for the year in which the breach of duty occurred (malus) or demand partial or full repayment of the variable remuneration already paid out for the year in which the breach of duty occurred (clawback).

IV. Detailed presentation of the total remuneration for the members of the Executive Board

T47 Remuneration granted and owed in the fiscal years 2021 and 2022

	Dr. Stefan Traeger President & CEO				Hans-Dieter Schumacher Executive Board member			
	2022		2021		2022		2021	
	in euros	in %	in euros	in %	in euros	in %	in euros	in %
Non-performance-related remuneration								
Fixed remuneration	650,000	47.8	650,000	45.0	450,000	47.6	450,000	31.3
Fringe benefits	18,161	1.3	18,250	1.3	21,532	2.3	21,532	1.5
Pension contribution	200,000	14.7	200,000	13.9	160,000	16.9	160,000	11.1
Total	**868,161**	**63.9**	**868,250**	**60.2**	**631,532**	**66.8**	**631,532**	**43.9**
Performance-related remuneration								
One-year variable remuneration (bonus for fiscal year 2022)	436,684	31.1	n.a.		272,928	28.8	n.a	
One-year variable remuneration (bonus for fiscal year 2021)	n.a.		446,428	30.9	n.a.		279,017	19.4
Multi-year variable remuneration (performance shares 2019)	53,733	4.0	n.a.		40,306	4.2	n.a.	
Multi-year variable remuneration (performance shares 2018 and LTI 2017*)	n.a.		128,572	8.9	n.a		539,447	36.7
Total	**490,417**	**36.1**	**574,999**	**39.8**	**313,234**	**33.2**	**808,465**	56.1
Total remuneration	**1,358.578**	**100.0**	**1,443,249**	**100.0**	**944,766**	**100.0**	**1,439,997**	100.0

* Payout of 2017 installment of the LTI model applicable for Hans-Dieter Schumacher until 2017

Table T47 shows the remuneration components granted and owed for the past fiscal year to Dr. Stefan Traeger and Hans-Dieter Schumacher. In this context, remuneration granted and owed is understood to mean remuneration granted for professional activities performed in the fiscal year 2022, irrespective of whether payout takes place in 2022 or later. The long-term variable remuneration is deemed to be granted and owed in the last year of the performance period, even if payout is not made until the following year, because only then can it be determined that all performance criteria were fulfilled. This means that the performance shares allocated in 2019 are deemed to be granted and owed in the fiscal year 2022, even if payment will be made in April 2023 after the 2022 Annual Financial Statements have been adopted.

V. Comparative presentation of the annual change in remuneration, the company’s development of earnings as well as the average remuneration for employees considered over the last five fiscal years

Firstly, the table T48 presents the total remuneration granted and owed to the members of the Executive Board and Supervisory Board in the years 2018 to 2022.

The Executive Board’s total remuneration comprises the fixed remuneration, the one-year and multi-year variable remuneration, fringe benefits, and pension contributions. Should a member not have worked for Jenoptik for the full calendar year, the amount is extrapolated to a full 12 months.

The Supervisory Board’s total remuneration comprises the fixed remuneration paid for 2022 for membership of the Supervisory Board and the committees, as well as the attendance fees for meetings held in 2022.

Also presented is the average remuneration for the total workforce and for employees paid in accordance with collective agreements in Germany over the last five fiscal years. The total workforce includes all employees below Executive Board level (including non pay-scale employees and senior executives) including TRIOPTICS and BG Medical for the first time in 2022 with the exception of employees of VINCORION, the sale of which was completed on June 30, 2022 and Hillos GmbH. The table also shows the average remuneration for all pay-scale employees in Germany. Pay-scale employees are salaried employees covered by collective bargaining agreements and employees on a par with the collective bargaining agreement but not bound by it. In addition to the basic salary, the average remuneration for the total workforce and pay-scale employees includes bonuses, special payments, variable remuneration for the year in question (for the year 2022 the provision amount) and the employer’s share of social security contributions, but not any severance pay or sign-on bonuses. Should an employee not have worked for Jenoptik for the full calendar year, the amount is extrapolated to a full 12 months. Due to differing salary levels worldwide, the presentation is restricted to employees working in Germany, particularly as both members of the Executive Board are also employed and based in Germany.

The company’s development of earnings is presented on the basis of the Jenoptik´s key performance indicators of revenue, EBITDA, and free cash flow of the Jenoptik Group. The overview was supplemented by a comparative presentation of the development of the annual net profit of JENOPTIK AG as per the HGB.

T48 Comparative presentation of the change in remuneration for the Executive Board, the Supervisory Board, the employees, the company's and development of earnings

	2022		2021		2020		2019		2018
Remuneration in euros	2022 Amount	Change in %	2021 Amount	Change in %	2020 Amount	Change in %	2019 Amount	Change in %	2018 Amount
Development of earnings (in million euros) [1]									
Revenue	980.7	30.6	895.7	16.7	767.2	−10.3	855.2	2.5	834.6
EBITDA	184.1	18.2	177.2	58.8	111.6	−16.7	134	5.1	127.5
Free cash flow (before income taxes)	82.7	31.7	62.8	0.8	62.3	−19.3	77.2	−28.7	108.3
JENOPTIK AG annual net profit as per German Commercial Code	55.4	346.3	16	−56.9	37.2	−33.2	55.6	−29.6	79
Average remuneration for employees [2,5]									
Total workforce in Germany (excluding the Executive Board) [2]	75,000	0	75,000	2.8	73,000	0	73,000	1.4	72,000
Pay-scale employees in Germany [2]	69,000	0	69,000	3.0	67,000	4.8	65,000	0	64,000
Remuneration granted and owed to the Executive Board									
Dr. Stefan Traeger	1,358,578	−5.87	1,443,249	19,6	1,206,741	20,2	1,003,786	−24.9	1,336,620
Hans-Dieter Schumacher [3]	946,766	−34.39	1,439,997	16,7	1,234,072	−9.5	1,363,020	41,4	963,613
Remuneration granted and owed to the Supervisory Board [4]									
Matthias Wierlacher	135,432	11,93	121,000	19,2	101,500	−8.6	111,000	4,4	106,308
Stefan Schaumburg	91,199	14,72	79,500	57,5	50,470	−6.5	54,000	8	50,000
Astrid Biesterfeldt (until June 15, 2022)	26,171	−54,88	58,000	11,5	52,000	−14.1	60,500	1,7	59,500
Evert Dudok	65,466	48,79	44,000	14,3	38,500	−15.4	45,500	0	45,500
Michael Ebenau (until October 15, 2020)	/	/	/	/	57,536	−28.5	80,500	4,7	76,904
Elke Eckstein	67,432	28,44	52,500	11,7	47,000	−9.6	52,000	3,2	50,404
André Hillner (since June 15, 2022)	36,062	/	/	/	/	/	/	/	/
Prof. Dr. Ursula Keller (since Januar 21, 2022)	48,774	/	/	/	/	/	/	/	/
Thomas Klippstein (until June 15, 2022)	29,938	−53,58	64,500	5,7	61,000	−11.6	69,000	3	67,000
Dörthe Knips	68,432	29,12	53,000	10,4	48,000	−10.3	53,500	5,1	50,904
Dieter Kröhn (until March 31, 2022)	12,596	−76,46	53,500	12,6	47,500	−10.4	53,000	4,1	50,904
Alexander Münkwitz (since April 1, 2022)	49,603	/	/	/	/	/	/	/	/
Doreen Nowotne	76,466	10,02	69,500	8,6	64,000	−11.1	72,000	3	69,904
Heinrich Reimitz (until June 15, 2022)	37,240	−52,86	79,000	14,5	69,000	−11.5	78,000	2,6	76,000
Thomas Spitzenpfeil (since June 15, 2022)	44,260	/	/	/	/	/	/	/	/
Frank-Dirk Steininger (until June 15, 2022)	23,404	−53,66	50,500	517,6	9,757	/	/	/	/
Christina Süßenbach (since June 15, 2022)	36,062	/	/	/	/	/	/	/	/
Prof. Dr. Andreas Tünnermann (until December 31, 2021)	/	/	57,000	21,3	47,000	−11.3	53,000	2,9	51,500
Franziska Wolf (since June 15, 2022)	36,562	/	/	/	/	/	/	/	/

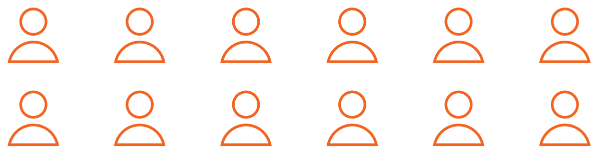
[1] Figures for revenue, EBITDA and free cash flow of continuing operations in 2022; until 2021 based on Group (including VINCORION)
[2] Personnel expenses including employer share of social security contributions without severance pay and sign-on bonuses. Excluding VINCORION and Hillos. Employees covered by collective bargaining agreements include employees covered by collective bargaining agreements and employees on a par with but not covered by collective bargaining agreements. Total workforce includes non-pay-scale employees and managerial staff in addition to those covered by collective agreements. 2022 including TRIOPTICS and BG Medical for the first time
[3] In the case of Hans-Dieter Schumacher since 2019 including LTI payout under the LTI model applicable until 2017 (for the last time in 2021)
[4] In the Corona year 2020, the members of the Supervisory Board waived 10 percent of their fixed remuneration
[5] Correction of prior-year figures (due to adjusted calculation basis)

B. Supervisory Board Remuneration

Current remuneration for the members of the Supervisory Board is governed by § 19 of the Articles of Association of JENOPTIK AG and was approved by the Annual General Meeting on June 15, 2022 with a majority of 99.77 percent.

G26 Supervisory Board Remuneration

Basic remuneration for the Supervisory Board



Chairman* of the Supervisory Board	**Deputy***	**Member***
100,000 euros	75,000 euros	50,000 euros

* with effect since June 15,2022

Additional remuneration for committee work

in euros	Audit Committee	Personnel Committee	Investment Committee	Nominations Committee
Chairman	20,000	10,000	10,000	10,000
Deputy	15,000			
Member	10,000	5,000	5,000	5,000

With effect from the end of the Annual General Meeting on June 15, 2022, each member of the Supervisory Board receives fixed annual remuneration of 50,000 euros (until June 14, 2022: 40,000 euros) for their activities. No variable remuneration is provided. This ensures independent control of the Executive Board by the Supervisory Board. The Chairman of the Supervisory Board receives double and his deputy one-and-a-half times this amount.

In addition, each member of a committee receives an annual remuneration in the sum of 5,000 euros per year. The Chairman of the committee receives double this amount. The annual remuneration for members of the Audit Committee, whose duties are particularly labor- and time-intensive, is 10,000 euros. The Chairman of the Audit Committee receives double and their deputy one-and-a-half times this amount. These allowances are intended to take account of the particular responsibility and greater time commitment associated with individual roles on the Supervisory Board. This also implements the recommendation of Point G.17 of the German Corporate Governance Code.

Members of committees that have not met during the fiscal year receive no remuneration. Members of the Supervisory Board who have only served on the Supervisory Board or a committee for part of the fiscal year receive a pro rata temporis payment. All the aforementioned remuneration is payable on expiry of the fiscal year.

The members of the Supervisory Board are paid a meeting allowance of 1,000 euros for attending a meeting. This also applies to participation in conference calls or video conferences. If several meetings are held on the same day, only half of the attendance fee is paid from the second meeting onwards. Verified expenses incurred in connection with a meeting are reimbursed in addition to the meeting allowance, but limited to an amount of 1,000 euros for meetings held in Germany. JENOPTIK AG also reimburses the members of the Supervisory Board for any value added tax due on their remuneration.

The members of the Supervisory Board are covered by a directors and oficers-liability insurance.

There are no further remuneration-related agreements between the company and the members of the Supervisory Board that go beyond the provisions of § 19 of the Articles of Association. In particular, in the event of a member leaving the Supervisory Board, there is no provision granting remuneration to the members of the Supervisory Board after the end of their term of office.

Jenoptik did not pay any other remuneration or benefits to the members of the Supervisory Board for services rendered personally by them, in particular consulting and intermediary services.

The following table T49 shows the remuneration granted and owed to the members of the Supervisory Board of JENOPTIK AG for the fiscal year 2022 in accordance with § 162 (1) (1) AktG:

T49 Supervisory Board Remuneration

	Total remuneration in euros	in %	Fixed remuneration 2022 in euros	in %	Renumeration for committee work in euros	in %	Meeting allowances in euros	in %
Matthias Wierlacher (Chairman)	135,432	100	90,932	67.1	30,000	22.2	14,500	10.7
Stefan Schaumburg (Deputy Chairman)	91,199	100	68,199	74.8	10,000	11.0	13,000	14.3
Astrid Biesterfeldt (until June 15, 2022)	26,171	100	18,137	69.3	4,534	17.3	3,500	13.4
Evert Dudok	65,466	100	45,466	69.5	10,000	15.3	10,000	15.3
Elke Eckstein	67,432	100	45,466	67.4	10,466	15.5	11,500	17.1
André Hillner (since June 15, 2022)	36,062	100	27,329	75.8	2,733	7.6	6,000	16.6
Prof. Dr. Ursula Keller (since Januar 21, 2022)	48,774	100	43,274	90.6	0	0	5,500	11.3
Thomas Klippstein (until June 15, 2022)	29,938	100	18,137	60.6	6,801	22.7	5,000	16.70
Dörthe Knips	68,432	100	45,466	66.4	10,466	15.3	12,500	18.3
Dieter Kröhn (until March 31, 2022)	12,596	100	9,863	78.3	1,233	9.8	1,500	11.9
Alexander Münkwitz (since April 1, 2022)	49,603	100	35,603	71.8	6,500	13.1	7,500	15.1
Doreen Nowotne	76,466	100	45,466	59.5	20,000	26.2	11,000	14.4
Heinrich Reimitz (until June 15, 2022)	37,240	100	18,137	48.7	13,603	36.5	5,500	14.8
Thomas Spitzenpfeil (since June 15, 2022)	44,260	100	27,329	61.8	10,932	24.7	6,000	13.6
Frank-Dirk Steininger (until June 15, 2022)	23,404	100	18,137	77.5	2,267	9.7	3,000	12.8
Christina Süßenbach (since June 15, 2022)	36,062	100	27,329	75.8	2,733	7.6	6,000	16.6
Franziska Wolf (since June 15, 2022)	36,562	100	27,329	74.8	2,733	7.5	6,500	17.8
Total	**884,096**		**611,596**		**145,000**		**127,500**	

At regular intervals and at the latest every four years, the Supervisory Board reviews whether the remuneration received by its members is appropriate in view of their duties and the company situation. Due to the special nature of the Supervisory Board's work, a vertical comparison with the remuneration paid to company employees is not generally used when reviewing Supervisory Board remuneration. The remuneration system for the Supervisory Board can be found on our website at www.jenoptik.com / investors / corporate-governance under the heading Supervisory Board.

Jena, March 27, 2023

For the Executive Board

Dr. Stefan Traeger
Chairman of the
Executive Board

Hans-Dieter Schumacher
Chief Financial Officer

Dr. Prisca Havranek-Kosicek
Member of the
Executive Board

Dr. Ralf Kuschnereit
Member of the
Executive Board

For the Supervisory Board

Matthias Wierlacher
Chairman of the
Supervisory Board

Report of the independent auditor on the audit of the remuneration report pursuant to Sec. 162 (3) AktG

To JENOPTIK AG

Opinion

We have audited the formal aspects of the remuneration report of JENOPTIK AG, Jena, for the fiscal year from 1 January to 31 December 2022 to determine whether the disclosures required by Sec. 162 (1) and (2) AktG ["Aktiengesetz": German Stock Corporation Act] have been made therein. In accordance with Sec. 162 (3) AktG, we have not audited the content of the remuneration report.

In our opinion, the disclosures required by Sec. 162 (1) and (2) AktG have been made in the accompanying remuneration report in all material respects. Our opinion does not cover the content of the remuneration report.

Basis for the opinion

We conducted our audit of the remuneration report in accordance with Sec. 162 (3) AktG and in compliance with the IDW Auditing Standard: Audit of the Remuneration Report in Accordance with Sec. 162 (3) AktG (IDW AuS 870). Our responsibilities under this provision and standard are further described in the "Responsibilities of the auditor" section of our report. As an audit firm, we applied the IDW Standard on Quality Management: Requirements for Quality Management in the Audit Firm (IDW QS 1). We complied with the professional obligations pursuant to the WPO ["Wirtschaftsprüferordnung": German Law Regulating the Profession of Wirtschaftsprüfer (German Public Auditor)] and the BS WP/vBP ["Berufssatzung für Wirtschaftsprüfer/vereidigte Buchprüfer": Professional Charter for German Public Accountants/German Sworn Auditors] including the requirements regarding independence.

Responsibilities of the management board and supervisory board

The management board and supervisory board are responsible for the preparation of the remuneration report and the related disclosures in compliance with the requirements of Sec. 162 AktG. In addition, they are responsible for such internal control as they determine is necessary to enable the preparation of a remuneration report and the related disclosures that are free from material misstatement, whether due to fraud or error.

Responsibilities of the auditor

Our objectives are to obtain reasonable assurance about whether the disclosures required by Sec. 162 (1) and (2) AktG are made in the remuneration report in all material respects and to express an opinion thereon in a report.

We planned and performed our audit so as to determine the formal completeness of the remuneration report by comparing the disclosures made in the remuneration report with the disclosures required by Sec. 162 (1) and (2) AktG. In accordance with Sec. 162 (3) AktG, we have not audited the accuracy of the disclosures, the completeness of the individual disclosures or the fair presentation of the remuneration report.

Consideration of misrepresentations

In connection with our audit, our responsibility is to read the remuneration report considering the knowledge obtained in the audit of the financial statements and, in doing so, remain alert for indications of whether the remuneration report contains misrepresentations in relation to the accuracy of the disclosures, the completeness of the individual disclosures or the fair presentation of the remuneration report.

If, based on the work we have performed, we conclude that there is a misrepresentation, we are required to report that fact. We have nothing to report in this regard.

Stuttgart, 27 March 2023

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Murrmann	Maurer
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Combined Non-financial Report

Separate Combined Non-financial Report in Accordance with the CSR Directive Implementation Act

Position and Business Model

Jenoptik sees its entrepreneurial activity as more than purely the realization of commercial objectives; it is equally a commitment to society and the environment. Together with our customers, we shape forward-looking trends in the fields of healthcare, environment, mobility, and safety. As an international photonics group, innovation is our driving force and the basis of our success in business. Innovation and responsibility also form the core of our sustainability strategy. With our expertise and innovative products, Jenoptik is making an important contribution as an "enabler" to overcoming social and climate challenges and enabling customers worldwide to contribute more efficiently and sustainably to greater resource conservation and climate protection.

More information on the business model and markets can be found in chapter Business Model and Markets

Jenoptik provides the majority of its products and services to the photonics market and is a supplier to the capital goods industry. The Group is thus primarily a technology partner to industrial companies and public sector contractors. According to the current SPECTARIS Trend Report, photonic solutions can make a significant contribution to reducing greenhouse gas emissions due to their properties, applications and effects, and enable resource-saving production processes as well as energy savings and reduce material consumption. According to SPECTARIS, the use of photonic technologies will reduce global greenhouse gas emissions by at least 11 percent by 2030.

As an enabler, Jenoptik not only enables customers to contribute to greater resource conservation and environmental protection, but it also supports the achievement of the United Nations Sustainable Development Goals (SDGs) through its products and solutions. We are improving health and well-being through our biophotonics products (SDG 3), helping to make cities and communities more sustainable through our road safety solutions (SDG 11), strengthening industry, innovation and infrastructure (SDG 9) and enabling responsible production through smart manufacturing (SDG 12). We promote more diversity among our employees (SDG 5) and continue to intensify our efforts to reduce greenhouse gases (SDG 13). By joining the UN Global Compact – the world's largest initiative for responsible corporate governance – Jenoptik is committing itself to comprehensively complying with the ten principles in the areas of human rights, labor standards, environmental protection, and anti-corruption.

On June 30, 2022, Jenoptik successfully completed the disposal of VINCORION, reaching an important milestone in its transformation into a pure and globally leading photonics group. Accordingly, VINCORION is no longer included in the non-financial KPIs for 2022 and the prior year 2021. For this reason, the prior-year figures differ from those presented in the 2021 Annual Report. The companies acquired at the end of 2021, BG Medical Applications GmbH and the SwissOptic Group, were included in the non-financial reporting in 2022.

Our Take on Sustainability

Our understanding of sustainability is based on the conviction that we can only achieve our economic goals, thereby sustaining profitable growth, by behaving responsibly towards the environment and society. To satisfy this demand, the issue of sustainability is within the responsibility of the Chairman of the Executive Board. Responsibility for the group-wide coordination of Jenoptik's sustainability management lies with the Investor Relations & Sustainability department, which coordinates this cross-cutting issue in close cooperation with the divisions' environmental management officers. The Executive Board and Supervisory Board are regularly updated on current projects. An ESG Committee, comprising representatives of the divisions with relevance to sustainability, regularly discusses relevant cross-cutting issues and coordinates the implementation and enforcement of new regulations, for example.

The separate Combined Non-financial Report published here serves the purpose of fulfilling the requirements of the CSR Directive Implementation Act (CSR-RL-UG) in accordance with § 289b (3) and 315b (3) of the German Commercial Code (HGB). The reporting requirements pursuant to Article 8 of the EU Taxonomy Regulation relating to the disclosure of environmentally sustainable business activities also apply. The report covers the key issues in the areas of employees, the environment, social commitment, human rights as well as anti-corruption and supplier management in the fiscal year 2022. The information in the non-financial report applies equally to the Group and JENOPTIK AG; any information that differs is indicated. The GRI standard served as an orientation for the selection of key figures, but was not used for further detailing. This includes information on the number of employees, employees on parental leave or the fluctuation rate. In addition, to maintain clarity of reporting, no framework was used. The materiality analysis and the risk assessment were prepared in accordance with the requirements of CSR-RL-UG. In accordance with § 315b (1) (3) of the German Commercial Code, reference is occasionally made to other information available in the Group Management Report. The list below shows all the relevant passages in the Management Report that are relevant to the separate Combined Non-financial Report.

- Business model page 30
- Strategy from page 34 on
- R+D / Innovation management from page 42 on
- Risks & opportunities from page 73 on
- Diversity policy from page 101 on

Information on the EU Taxonomy Regulation

With the taxonomy regulations, the EU Commission has defined uniform standards for ecological management and specifies, among other things, when an economic activity is to be classified as ecologically sustainable. The aim is to increase the transparency of the sustainability level of companies and to direct the flow of more money into so-called green technologies in order to achieve climate neutrality by 2050. In accordance with Article 8 of the EU Taxonomy Regulation, the Jenoptik Group also fulfills the transparency requirements to ensure transition to a climate-neutral, resource-efficient and circular economy for the long-term competitiveness of the EU.

With regard to the taxonomy environmental objectives (1) climate protection and (2) adaptation to climate change, in addition to taxonomy eligibility, the taxonomy alignment of the corresponding business activities must also be addressed since fiscal year 2022. In addition to the verification of the essential contribution of the “Do No Significant Harm” (DNSH) requirements, compliance with the Minimum Safeguards is also a prerequisite for taxonomy conformity.

With regard to the disclosure of environmentally sustainable business activities, a screening of all significant activities of the Jenoptik Group was carried out in 2021, and updated in fiscal year 2022, with regard to the environmental objectives “climate protection” and “adaptation to climate change” regulated in Article 9. The conclusion was that the business activities of Jenoptik are not regulated in the EU taxonomy and that the NACE codes as well as the activities of both Annexes I and II do not apply. As a technology group, Jenoptik’s business activities – like those of other suppliers – do not fall within the sectors regulated in the EU-taxonomy. Consequently, Jenoptik does not generate any revenue associated with environmentally sustainable business activities as defined in the EU taxonomy. Consequently, no investment and operating expenditure associated with a revenue-generating economic activity are taxonomy-eligible in 2022 either.

Nevertheless, Jenoptik invests in sustainability and contributes to environmental protection and resource conservation. Sustainable investments as well as operating expenditure as per Annex I of the EU taxonomy within the scope of business activities, 6.5. transportation by passenger cars and light commercial vehicles, 7.1. New build and 7.3. Installation, maintenance and repair of energy efficient appliances, 7.4. Installation, maintenance and repair of charging stations for electric vehicles, and 7.5. Installation, maintenance and repair of equipment for measuring, regulating, and controlling the overall energy performance of buildings were made in the reporting year. The composition of the capex and opex KPIs is therefore explained below. Jenoptik makes use of the option not to include joint ventures in the consideration.

The tables T61 – T63 at the end of the Non-financial Report provide an overview of the key performance indicators (KPIs) to be disclosed.

The **capital expenditure** (capex) was determined in accordance with the requirements of the Taxonomy Regulation. In order to determine Jenoptik’s taxonomy-eligible capital expenditure, we first analyzed the additions to property, plant and equipment, intangible assets and rights of use in the reporting year to determine what proportion of these relate to the acquisition of products from taxonomy-eligible business activities and individual measures through which the target activities are carried out in a low-carbon manner or the emission of greenhouse gases is reduced (numerator). It was explicitly pointed out in the dialog with the responsible persons that double counting must be avoided. The taxonomy-eligible capital expenditure determined in this way was set in proportion to the total capital expenditure reported in the Notes (denominator).

Additions to property, plant, and equipment, intangible assets and rights of use amounted to 106.0 million euros in 2022. The investment of the Jenoptik Group in the acquisition of products from taxonomy-eligible business activities comprised a total of 10.2 million euros in 2022 (prior year: 0.5 million euros), which equated to 9.6 percent of the total capex volume. This includes, for example, investment in energy-efficient equipment, charging stations for electric vehicles and technologies for renewable energies, the new construction of our employee restaurant in Jena as well as leasing of cars. To verify the taxonomy compliance of energy-efficient equipment, the suppliers of the relevant equipment were contacted. As a result, not all evidence could be provided, so no taxonomy aligned capex is available.

The determination of **operating expenditure** (opex) was carried out in accordance with Article 8, item 1.1.3. of the Regulation. As for capital expenditure, Jenoptik only reports operating expenditure for the acquisition of products from taxonomy aligned business activities and individual measures through which the emission of greenhouse gases is reduced. In order to determine Jenoptik's taxonomy-eligible operating expenditure, the first step was to analyze the expenses in the reporting year to determine what proportion of these were related to direct, non-capitalized costs, to research and development, building refurbishment measures, short-term leasing, maintenance and repair as well as all other direct expenses in connection with the day-to-day maintenance of assets in property, plant, and equipment (numerator). Total operating expenses (denominator) covered by the taxonomy amounted to 79.7 million euros. As a result of the analysis, no significant taxonomy-eligible and, consequently, no taxonomy aligned operating expenses could be identified.

Materiality Analysis

Jenoptik is in continuous dialog with all of its stakeholders. In 2020, an update of the materiality analysis was made in the form of an online survey by means of an independent assessment of all non-financial aspects which are essential for sustainable business development – both from a corporate perspective and from the perspective of the respective external target groups (customers and business partners, suppliers, employees, shareholders, investors, and the general public). The results of the overall assessment are summarized in table T50 and are regularly reviewed. Due to the new regulatory requirements from the Corporate Sustainability Reporting Directive (CSRD), an update will be carried out in 2023 taking into account double materiality. In 2022, topics such as the reduction of CO_2 emissions, resource conservation and sustainable supplier management have gained further importance. The Jenoptik materiality matrix forms the basis of all our long-term ESG activities and is incorporated into the corporate strategy.

What follows is information on sustainability issues which are essential to a better understanding of our business performance and the company's development in the future.

Sustainability Targets

Sustainability plays a crucial role in our corporate culture and is firmly anchored in the Group's corporate strategy. Management's clear commitment to greater sustainability is evident in the wide range of sustainability targets, some of which are also reflected in remuneration for the Executive Board and group financing. Both our debenture bond and the syndicated loan are aligned to the ESG targets diversity rate, green electricity rate, and the Group's CSR rate.

T50 Jenoptik's key topics

Employees	Evironment	Social commitment	Human rights	Anti-corruption	Other topics
Corporate culture	Energy management	Social commitment in science, education, art & culture as well as social projects	Compliance with human rights and social standards in the supply chain	Responsible business relationships and fair business practices	Innovation: Environmentally friendly products and efficient use of materials
HR development	Reduction of CO_2 emissions		Sustainable supplier management	Integrity and compliance	Innovation-friendly environment
Recruiting and employer attractiveness	Water management			Data protection	Customer satisfaction
Fair working conditions	Protection of resources			Data security	
Occupational safety					

The Group's overall sustainability targets cover all ESG areas and are summarized in table T51. The sustainability targets are explained in detail in the respective subsequent sections of the Non-financial Report. Statements on the Vitality Index can be found in the Research and Development chapter.

For more on the topic of innovation management see the R+D chapter

T51 Non-financial targets and performance indicators

Aspects	Aspiration	Performance indicators	Status 2021 *	Status 2022	Target
Employees	We want to increase the satisfaction and commitment of the employees and the attractiveness of Jenoptik as an employer	• Fluctuation (attributable to employees)	5.9 %	7.1 %	<5 %
		• Engagement score	72 %	76 %	72 %
		• Absenteeism	4.6 %	6.5 %	<5 %
	We want to increase our diversity and employ more women and employees of international origin in management positions	• Diversity rate [1]	30.0 %	30.6 %	30 % by 2022 33 % by 2025
	We want to fill more vacancies with our own trainees	• Training rate	3.6 %	3.5 %	>4 %
		• Number of trainees taken on (retention rate)	96.0 %	83.8 %	100 %
Innovation	Securing and boosting competitiveness, revenue and earnings through successful innovations				
	• We want to increase our R+D output including customer-specific developments	• R+D output	8.5 %	8.9 %	10 % by 2022
	• We want to increase the share of revenue generated by products and platforms which have been developed in the last three years	• Vitality Index	22.2 %	23.7 %	20 % by 2022 22 % by 2025
Environment	Reduction in CO_2 emissions:				
	• We want to increase the proportion of green electricity used at our main sites	• Proportion of green electricity at main sites	76.1 %	85.4 %	70 % by 2022 75 % by 2025
	• We want to reduce our CO_2 emissions	• CO_2 reduction (Scope 1+2) in comparison to the base year 2019 (10,161 t)	39.3 %	35.9 %	30 % by 2025
	• We want to expand our fleet of cars with alternative drive technologies and build up a corresponding infrastructure	• Number of cars in the fleet with alternative drives	14	16	Increase
		• Number of charging columns/charging points	21	23	Increase
Suppliers	We want to increase transparency in our supply chain in order to guarantee the protection of human rights and the environment	• CSR rate [2]	38.9 %	51.4 %	40 % by 2022 50 % by 2025

1 Diversity rate: average percentage of the number of managers with an international background as well as female managers
2 CSR rate: Corporate Social Responsibility Rate: percentage of all suppliers of production materials with an annual purchasing volume in excess of 200,000 euros for which complete CSR self-assessments assessed as non-critical exist
* Deviations from the figures published in the 2021 Annual Report due to the sale of VINCORION

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The group-wide recording of all key performance indicators (KPIs) for sustainability reporting has been carried out quarterly since 2021 within the framework of the existing LucaNet financial reporting system. The creation of a uniform reporting process guarantees the provision of regular information to the boards as well as the management of these KPIs.

Risks in Connection with Non-financial Aspects

Weighing up corporate risks and opportunities is one of Jenoptik's principles of responsible corporate governance. The Group has a risk manual and a system of guidelines, thus providing a reliable reference framework for all employees worldwide. Our group guidelines structure provides a globally uniform framework which can be supported with more detailed regulations.

See Corporate Governance Statement

In two risk periods per year, Compliance & Risk Management identifies all risks within the Group and discusses the top issues – set in net terms – with the Executive Board and the Supervisory Board. Our processes for the identification, management and control of risks involve non-financial environmental, social and corporate governance risks, including climate-related risks in the form of physical risks and transition risks. Physical climate risks result from the physical effects of climate change, e.g. plant damage due to extreme weather events or losses due to long periods of drought. Transition risks are understood as the risks for business models resulting from decarbonization and the transition to CO_2-free economic structures. They are divided, for example, into political / regulatory risks (e. g. rising prices for CO_2 emissions), legal risks (e. g. liability suits for climate damage), market risks (e. g. falling demand for fossil fuels), technology or competitive risks (e. g. outdated environmental technology), and risks to reputation (e. g. changing consumer preferences) in response to climate change.

The net analysis did not identify any risks that are very likely, now or in the future, to have a serious negative impact on the specified key non-financial aspects of Jenoptik.

Detailed information on our risk management system and risks, including non-financial aspects, can be found in the Risk and Opportunity Report

Employee Matters

HR at Jenoptik covers all employee-related operating and strategic measures for the implementation of the Group's objectives and is thus an essential component of the overall leadership and management process. HR offers local service on site in the respective country for all employees and managers, supports division-specific projects and offers expert knowledge in the areas of recruiting, employer branding, HR development, labor law and remuneration. The HR department reports directly to the Chairman of the Executive Board, who is also HR Director, via the function Head of Global HR. The first point of contact for all HR-related issues in day-to-day business concerning the Group's employees and managers are our colleagues from HR Operations. Each division has an HR Business Partner who is part of the management team. Working with Division Management, the HR Business Partners develop and implement HR strategic topics. The end of 2021 saw the global launch of our "Introduction of SAP Success Factors" project to digitize and standardize all HR processes. All modules are expected to be completed worldwide by the fourth quarter of 2023.

Jenoptik's corporate culture is characterized by initiative, respect for diversity, and equal opportunities. The basis for this is formed by our Jenoptik values – open, driving, confident.

For further information on the topic of corporate culture, please refer to the strategy chapter

The focus was on diversity also in 2022. Increasing the diversity rate, calculated as the average percentage of managers with an international background and female managers, to 30 percent by 2022 and to 33 percent by 2025 is therefore a key objective of the Group. In the fiscal year 2022, the diversity rate has already improved to 30.6 percent (prior year: 30.0 percent). Detailed information on gender equality and targets for the proportion of women on the Supervisory Board, Executive Board and the management level below the Executive Board can be found in the Corporate Governance Statement.

Our regional diversity councils have supported us in our activities, promoting implementation in the various countries. For external benchmarking, we took part in the Women's Career Index (FKI) audit in 2022. In the overall index, we scored 83 points, five points above the industry average. We will continue to focus on all these topics in 2023.

Jenoptik promotes equal pay in the workplace and ensures comparability and fairness through a group-wide uniform, person-independent assessment of all jobs. Using a standardized software solution, jobs will be continuously classified in terms of requirements, tasks and responsibilities. Even within divisions or areas of activity with a binding collective wage agreement, new jobs undergo a structured classification process. This counteracts gender-specific salary differences for comparable activities in these areas. Remuneration for positions exempt from collective wage agreements shall be regularly compared with the market situation.

We have measured the satisfaction and commitment of our employees using an employee survey. This is carried out annually worldwide. When completing the survey, employees evaluate the various facets of the corporate and leadership culture. The commitment of our employees (so-called Engagement Score) and the recommendation rate (so-called Net Promoter Score) are also measured.

A total of 63 percent of our employees took part in the 2022 survey (prior year: 68 percent). The engagement score was 76 percent, i.e. 76 percent of the employees who took part in the survey positively identify with their duties at Jenoptik and actively contribute (prior year: 72 percent). With a “Net Promoter Score” of 74 percent (prior year: 68 percent) more than two thirds of the participating employees would recommend Jenoptik as a good employer.

Jenoptik is family-friendly and responds to the needs of its employees with flexible working hour models. Flextime, part-time work, and flexible parental leave all make it easier for our employees to strike their own balance between family and working life. In 2022, 165 employees made use of parental leave in Germany (prior year: 135 employees). The number of part-time contracts in Germany rose to 13.3 percent in 2022 and, globally, 10.6 percent of our employees are part-time workers (prior year: 12.9 percent in Germany and 9.7 percent worldwide). In 2022, the global employee turnover rate was 7.1 percent (prior year: 5.9 percent). One of the most important preconditions for balancing career and family is the availability of childcare. For several years, Jenoptik has been investing in flexible childcare models in daycare centers at the Jena, Wedel, and Monheim sites. This means that a fixed quota of places in daycare centers is available to our employees.

HR development is a key factor that determines the future viability of the company and the commitment of our employees. To help promote them in line with their potential and interests, the development needs are analyzed in regular staff appraisals. In our employee survey, we verified whether staff appraisals are held at all sites. In 2022, Jenoptik invested around 2.7 million euros (prior year: 1.9 million euros) in the professional development of its employees. This includes both the costs for trainees and students at the Cooperative State Universities and the costs for further training for our employees.

Learning at Jenoptik is structured according to the 70:20:10 principle: as employees and their supervisors are the experts for their own further development, 70 percent of learning takes place in the workplace and 20 percent through learning from others. Classroom or online training makes up 10 percent.

We have also been following the 70:20:10 learning principle in the development of our managers: there are three target-group specific programs aimed at high-potential employees, new managers and experienced managers. We will again offer refresher training for our experienced managers in 2023.

HR Recruitment

Jenoptik’s HR requirements are guided by the Group’s international growth strategy, resulting in a greater need for recruitment in particular in Germany, UK and the US. The audiences addressed by recruitment and thus also HR marketing are primarily junior staff, specialists and skilled workers in the natural and engineering sciences.

In order to fill more vacant positions with internal specialists trained at Jenoptik, the training ratio was increased, taking into account the retirement of employees in the context of succession planning. In the reporting period, the training ratio was 3.5 percent (prior year 3.6 percent). Thus, at the end of 2022, a total of 154 trainees were employed by the Group worldwide (prior year 152 worldwide). The retention rate for trainees who successfully completed their vocational training in 2022 was 83.8 percent (prior year: 96.0 percent). These trainees were taken on for an unlimited period by the company.

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Specific support for high-potential school students, university students and graduates is part of the Group's expertise strategy, ensuring early loyalty to the company and thus simplifying the recruitment process. A selection of targeted initiatives and cooperation arrangements is shown in the following table T52.

Further information on our social commitment can be found in the section "Social commitment"

Increasing attractiveness as an employer is the focus of employer branding at Jenoptik. Clear and distinctive positioning as an attractive employer should support recruitment and develop a positive and unmistakable employer image as a future-oriented, innovative high-tech company in the photonics industry. Social media channels as well as training and university fairs are used for this purpose.

Occupational health and safety are also key topics affecting the basic needs of our employees and their satisfaction in the workplace. They are firmly anchored in the Group's operating processes and aim to minimize risks arising in the work environment, work processes as well as work and operating equipment, that may endanger employees. Their principles apply to all Jenoptik employees. The Jenoptik companies are each responsible for applying the law on all aspects of occupational health and safety. The department of occupational health and safety issues is part of Corporate Real Estate Management, currently falling within the remit of the Chief Financial Officer. It shall provide advice to all companies, coordinate tasks and support the Executive Board in implementing measures. Occupational health and safety committee meetings are held in all divisions each quarter. In addition, all employees are briefed on issues relating to health and safety at work at least once a year. At all the German locations, around ten percent of the workforce are trained as first-aiders. The number of reportable workplace and commuting accidents in Germany in 2022 was 9.9 per 1,000 employees (prior year: 6.5). The rate of workplace accidents (without commuting accidents) for the Group as a whole was 4.3. Compared to the other member companies of the ETEM trade association (Energy, Textile, Electronics and Media Products), Jenoptik is still significantly below the average figure of 17.1 in 2021.

In the interests of our employees' health and performance, the Group also offers regular preventive medical checkups in line with the employees' working conditions and tasks, in addition to occupational health management measures. In 2022, the focus was also on managing the coronavirus pandemic. With the aid of the already established and regularly adapted hygiene concept at all sites, it was possible to limit the spread of infection at the operating facilities while maintaining the ability to work in all areas. Opportunities for remote working also helped to maintain the ability to work as far as possible in 2022, thus contributing significantly to the success.

Company health management at Jenoptik in Germany is centrally managed by the HR department in the Corporate Center. The cooperation agreement with the Techniker Krankenkasse (TK) health insurance fund and the establishment of local "health steering groups" to support the implementation of on-site activities further enabled the implementation of employee offerings as part of our "Move It!" project.

T52 Initiatives and cooperations (selection)

Jenoptik supports	• career guidance projects at schools, also offering their students the opportunity to complete an internship • young researchers in Thuringia as a longstanding state-level corporate sponsor of the "Jugend forscht" initiative • various industry organizations to promote professional development activities • students in the form of degree theses, internships, and scholarships
Jenoptik works with	• selected universities around the world with regards to HR marketing and recruitment, for research purposes, and to foster the professional development of its employees • selected universities around the world via projects and is active through a range of committees and networks in an advisory capacity

Environmental Matters

The protection of our environment is of high priority to Jenoptik. We see it as our corporate responsibility to grow sustainably in harmony with the environment and society and to use resources efficiently at all our sites worldwide.

Environmental management is a key part of our business practices. We comply with national and international statutes and ensure that our products are manufactured in line with resource conservation and energy efficiency. However we also require our suppliers and contractual partners to comply with relevant laws to minimize environmental risks. As a manufacturing company, we focus on efficient resource management so as to reduce energy consumption and greenhouse gas emissions to the best of our ability, use commodities and materials in a safe and resource-saving manner and to largely avoid producing hazardous waste. We espouse good environmentally friendly design and the economical use of resources as early as the development stage, while minimizing the impact on people, the environment and nature through regulated recycling and disposal. In line with their environmental relevance, selected Jenoptik companies are certified in accordance with the ISO 14001 environmental management standard, which sets out globally recognized requirements for an environmental management system.

Environmental protection topics are part of Corporate Real Estate Management and fall within the remit of the Chief Financial Officer. Active operational environmental management is carried out in the divisions. The Jenoptik companies are each responsible for applying the law on all aspects of environmental protection. The central environmental protection officer from Safety, Occupational and Environmental Protection is available to provide assistance where required and, for example, reviews all group investment projects with regard to their environmental relevance. Waste officers take care of all matters relating to the prevention, accrual, recycling, and disposal of hazardous and non-hazardous waste.

Even though Jenoptik does not belong to one of the most energy-intensive industries, the photonics group actively contributes to climate protection. Jenoptik has set itself the goal of reducing CO_2 emissions (Scope 1 + 2) by 30 percent by 2025 compared to the base year 2019. In this way, the Group supports climate policy goals and is closely aligned to the requirements of the Science Based Targets Initiative (SBTi), which aims to limit the average rise in world temperatures to significantly below 1.5 degrees. The savings will come from direct emissions released by Jenoptik itself (Scope I) as well as the indirect emissions from purchased energy (Scope II). Specific measures include further expanding the proportion of green electricity as well as energy efficiency measures in buildings and facilities at Jenoptik sites worldwide. The proportion of green electricity used at the main sites is to increase to 75 percent of total electricity requirements by 2025, the vehicle fleet is to be expanded to include vehicles with alternative drive systems, and an appropriate infrastructure for charging all battery-powered vehicles is to be provided at the sites.

In 2022 the third group-wide sustainability competition focusing on environmental protection took place. The numerous project entries from our employees indicate the level of commitment to greater sustainability at Jenoptik. An independent internal jury evaluated the project entries, and the winners were awarded prizes at the beginning of 2023.

Projects from the 2022 sustainability competition:

- With great commitment, employees in Japan organized a beach cleanup in cooperation with the "Coastal Environmental Foundation".
- With the iTASCAR, our Smart Mobility Solutions developers succeeded in creating a sustainable and environmentally friendly solution for measuring temporary average speed. Previously, power grids or diesel generators were required for the connection. Now, only renewable and carbon-free energy from wind, solar and hydrogen power is used for this purpose.
- In cooperation with the Jena Beekeepers' Association, Jenoptik sponsors two bee colonies, contributing to species conservation and greater biodiversity.
- The Smart Mobility Solutions division received ISO 14001 certification for seven European sites. In addition to introducing reusable packaging for customers, a charging infrastructure for e-bikes was installed and the outdoor lighting concept was adapted with twilight and timer switches for the adjacent nature reserve and neighbors in Monheim.
- Calcium fluoride lenses assessed as rejects are used for other blanks in order to produce other lenses from them in the sense of the circular economy. This enables resources to be conserved and the waste of high-quality materials is reduced.
- It is no longer necessary to completely replace the honeycomb filters used in mobile speed cameras thanks to the

See section on quality management in the Non-financial Report

efficient solution developed by the team at Monheim. A 3D printed frame allows the silicone layer of the filter to be replaced so that it must no longer be disposed of completely due to a defective subcomponent, thereby reducing waste.

In the Real Estate area, Jenoptik implements the statutory requirements relating to nature conservation and environmental protection for all new buildings, extensions and the modernization of production facilities. For example, state-of-the-art technologies for saving resources and protecting the environment are utilized when fitting out production facilities. With LEED Gold certification (Leadership in Energy and Environmental Design), a recognized sustainability standard in the construction industry, which is to be implemented for all newly constructed buildings, the Group far exceeds the statutory requirements in terms of sustainability. Costing more than 10 million euros, the new Conference Center with employee restaurant in Jena was officially opened in September 2022. With the aim of achieving the internationally recognized LEED Gold Standard sustainability certification environmental and social aspects have been implemented to a particularly high degree. This includes the installation of a photovoltaic system, e-charging columns, covered bicycle racks, low-emission interior materials or measures for reduced water consumption. In addition, Jenoptik's open culture is reflected in the spatial design and furniture structures, along with the future orientation in the use of modern materials (e.g. Alucobond and glass facades or metal fabrics for sun protection).

The groundbreaking ceremony on September 6, 2022 marked the start of construction for the Jenoptik Group's new high-tech factory (Fab) at Airportpark Dresden, where production is scheduled to begin in early 2025. The high-tech fab, with an investment volume of more than 70 million euros, will not only provide precise manufacturing conditions but also meet stringent environmental standards. By complying with the "KfW 40 Standard" and "LEED Gold Certification", Jenoptik aims to fulfill to comprehensive and strict building criteria in terms of sustainability. In order to achieve this, plans include a photovoltaic system, the use of recycled materials in construction, an ultra efficient building envelope including extensive vegetation, cold and heat recovery, as well as the recycling of water.

At several sites around the world, there are ongoing conversion measures to switch existing lighting to LED lighting, taking into account cost and environmental aspects.

In addition, the course was set for the further development of an energy monitoring system. With the help of ultra efficient building control technology (BCT) and a computer-aided facility management system (CAFM), data quality is to be further increased, evaluation facilitated and transparency improved.

The successive development of an e-charging network – especially at the headquarters in Jena and beyond – will create the basis for a vehicle fleet utilizing alternative drive technologies.

Greenhouse gases: As a technology company, Jenoptik generates only small volumes of emissions within its plants. The majority of its pollutant emissions is attributable to procured and externally purchased energy from electricity, gas, or district heating suppliers. Jenoptik is reporting its CO_2 emissions for the past fiscal year, with the values stated being based on existing invoices and meter readings as well as estimated values, and is disclosing these separately according to Scope 1 and Scope 2 emissions. We only use very low amounts of other greenhouse gases in our production processes, so we do not report them for reasons of materiality.

The group-wide total energy consumption is shown in table T53 and is largely derived from electricity, gas and district heating. At 66,263 MWh, this figure was up on the prior year due to acquisitions (2021: 52,876 MWh).

In addition to absolute energy consumption, we are also reporting the energy consumption in relation to revenue, thus making the development of energy efficiency in our production transparent. In 2022, the total energy consumption of 67.6 MWh per 1 million euros of group revenue was less than in the prior year (2021: 70.4 MWh per 1 million euros of group revenue).

Throughout Germany, Jenoptik has used the targeted purchase of renewable energies to source almost exclusively green electricity, backed by certificates of origin, from European hydro power. In the year covered by the report, for example, our newly acquired SwissOptic site in Switzerland and our site in Jupiter (USA) were successfully converted to green electricity. Our other international sites are also gradually converting to renewable energy sources. These measures have enabled us to significantly increase the share of green electricity used in the last two years. In this reporting year, we have therefore already achieved our target of increasing the share of green electricity used at our main sites to 70 percent of total electricity requirements by 2022 and to 75 percent by 2025. In 2022, the share of renewable energies in total electricity increased to 85.4 percent (2021: 76.1 percent).

The consumption of various media (electricity, district heating, gas, heating oil, wood pellets, and diesel/gasoline) at all major sites was used to determine the CO_2 emissions. Despite acquisitions and an increase in revenue, group-wide CO_2 emissions increased by just 5.6 percent in 2022, to 6,514 tons (2021: 6,167 tons). Relative to the base year 2019, CO_2 emissions in 2022 were already reduced by 35.9 percent. The main reason for this, in addition to a higher proportion of green electricity, is the sale of VINCORION.

Direct emissions from gas, heating oil, diesel, and gasoline (Scope 1) amounted to 2,010 tons in 2022 (prior year: 1,708 tons), while indirect emissions from electricity and district heating totaled 4,505 tons (prior year: 4,459 tons).

Water: Jenoptik does not require large volumes of water for its manufacturing processes. Water is only used as a coolant, as a process medium and for sanitary purposes and comes primarily from the public drinking water supply and from groundwater. Nevertheless, as part of our water management, we take care to keep water consumption as low as possible at all our sites. For the current 2022 reporting year, reporting on water consumption and waste quantities was based as far as possible on available invoices throughout the year and valid estimates of the remaining consumption. In 2022, 98,874 m³ of water were consumed at our main sites (prior year: 59,166 m³), primarily due to the companies acquired in 2022.

Due to low volumes of water required for production processes, we do not see ourselves encountering any key risks in this area. Conservation regulations only play a very minor role

T53 Total energy consumption in 2022 by energy source (in MWh)

	Electricity	Gas	Wood pellets	District heating	Heating oil	Diesel/gasoline	Energy consumption
Germany	28,562	1,546	628	8,359	376	1,528	40,998
Europe	10,167	72	0	0	0	71	10,310
Americas	8,268	3,855	0	0	0	159	12,282
Asia/Pacific	2,673	0	0	0	0	0	2,673
Total	**49,670**	**5,473**	**628**	**8,359**	**376**	**1,758**	**66,263**
CO_2 emissions (in t)	**3,657**	**1,419**	**0**	**848**	**120**	**471**	**6,514**

T54 Energy consumption and CO_2 emissions by the major Jenoptik sites (in MWh and t)

	Energy consumption		CO_2 emissions	
	2022	2021*	2022	2021*
Germany	40,998	39,715	2,031	2,028
Europe	10,310	969	59	61
Americas	12,282	11,843	2,661	3,841
Asia/Pacific	2,673	349	1,764	237
Total	**66,263**	**52,876**	**6,514**	**6,167**
of which Scope 1			2,010	1,708
of which Scope 2			4,505	4,459

* Differences from the figures published in the 2021 Annual Report result from the sale of VINCORION

for the Group due to its business purpose and the location of its sites outside conservation areas.

T55 Water consumption (in m³)

	2022	2021*	2020*
Total	98,874	59,166	52,287

* Differences from the figures published in the 2021 Annual Report result from the sale of VINCORION

Waste: Increasing the reusability or recycling of electronic components, for example, plays an important role in product development at Jenoptik, contributing to a reduction in avoidable waste.

Within the scope of our business activities, however, hazardous waste is also generated to a small extent in a few production processes, for example, adhesive residues or solvents. Our goal is to avoid producing such waste that is generated during production as far as possible or to recycle it and, if this is not possible, to dispose of it properly in order to minimize negative effects on the environment. In the production of semiconductor lasers in Berlin-Adlershof, for example, a new process has reduced the solvents used. Volumes sent for recovery or recycling are recorded locally, and we distinguish between hazardous and non-hazardous waste within these categories.

Waste types at Jenoptik are systematically recorded, categorized, and their quantities calculated. The waste volumes are reported group-wide for all main sites. In 2022, the volume of hazardous waste disposed of at treatment and disposal facilities rose to 175 tons (prior year: 64 tons) due to the acquisitions. The quantity of non-hazardous waste increased to 1,305 tons (prior year: 1,014 tons). In general, Jenoptik recycles its waste through certified waste management companies. For example, the introduction of digital production control at the Triptis site has resulted in paper being saved and more plastic materials being returned to the recycling process. This has conserved resources, avoided expenditure on disposal, and even generated income.

Resource Management

Many innovative Jenoptik products and solutions contribute to the efficient and responsible use of resources and support the UN's Sustainable Development Goals (SDGs). As an "enabler", we enable our customers to design production processes and products more efficiently, thereby saving energy and resources. The table below provides an overview of the contribution made by selected Jenoptik products to resource conservation.

T56 Hazardous and non-hazardous waste (in t)

	2022	2021*	2020*
Non-hazardous waste	1,305	1,014	1,007
Paper and cardboard in t	198	195	169
Mixed packaging in t	197	212	192
Household-type commercial waste in t	366	290	260
Metals in t	189	133	105
Other non-hazardous waste in t	356	185	280
Hazardous waste	175	64	50

* Differences from the figures published in the 2021 Annual Report result from the sale of VINCORION and actual settlements now available

T57 Contribution of our products to resource conservation

Jenoptik Products & Solutions	Contribution to resource conservation, environmental and health protection
Optical systems and components for semiconductor equipment or information and data transfer … for medical diagnostics … sensor solutions for the automotive industry in the field of autonomous driving or traffic monitoring	• Ongoing development toward ever-smaller crystalline structures in semiconductor production opens up a growing number of new uses • Customized measurement solutions from TRIOPTICS check the image quality, for example, of smartphone camera lenses or AR/VR systems, thereby helping to reduce waste • Improving communication options and extending Internet access to remote regions • Efficient and time-saving production processes conserve resources and improve, for example, the data volumes while simultaneously reducing production costs, waste, and power consumption • Thermography solutions facilitate the monitoring and optimization of solar power panels • Optical systems improve imaging and diagnostics in real-time disease detection, enhancing health and well-being • Imaging technology is enabling advances in autonomous driving, for example, improving traffic flow and reducing emissions
Jenoptik diode lasers and laser systems for a wide range of applications, e.g. in the automotive industry or in medical technology for the treatment of glaucoma in ophthalmology	• Most efficient available light sources with an efficiency of up to 70 percent conserve resources and enable efficient production, especially in comparison with conventional processing methods, when machining high-strength steels with a lower weight. • Increasing health and well-being through minimally invasive surgical methods, e.g. in ophthalmology
Traffic monitoring systems check the compliance with current road traffic regulations and improve traffic flow Cooperation agreement with SFC-Energy to increase traffic safety with environmentally friendly technologies **Green cameras** improve the air quality **Toll payment monitoring systems** on federal highways	• Increased safety on the roads and in public squares through reduction of accidents and resilient infrastructures • Improvement of living conditions through reduced noise pollution and environmental pollution • Traffic monitoring with TraffiPole as a sustainable and environmentally conscious solution with reduced power consumption and elimination of cooling due to special design, housing made entirely of recyclable materials, with option for self-sufficient operation using solar panels • SFC fuel cell technology reliably supplies Jenoptik speed monitoring systems with green energy • Average speed cameras not only improve compliance with speed limits and traffic flow, but also deliberately reduce emissions in so-called "clean air zones" • Installation at the side of the road limits interference in the environment (no installation of monitoring gantries)
Metrology systems and equipment for checking shape and roughness, particularly in the automotive industry, stabilize production processes, and reduce failure rates	• The results are more precise surfaces and tighter tolerances in engine components (downsizing) and thus vehicles requiring less fuel and generating fewer emissions • More complex transmissions for hybrid vehicles in the field of electromobility demand the increased use of metrology • Flexible design and long service life, often in excess of 10 years, allow upgrades and overhauls for a long time, thus conserving resources

Social Commitment/Corporate Citizenship

Supporting young people in their education and scientific activities, as well as in social projects, is at the heart of our social commitment. Jenoptik supports a whole range of non-profit projects, organizations and initiatives and is chiefly involved in the following three funding areas:

- A commitment to the younger generation with projects in science, education, and in the social arena
- Art and cultural projects to lend an attractive design to our company locations
- Creation of conditions to improve our employees' work/life balance
- Commitment to integration and internationality, to strengthen the foundations of business and society in the future.

As a responsible and socially committed company, we want to play an active role in shaping our own environment, relying here on close and long-term partnerships that go beyond purely financial aspects. With our commitment to society, we want to strengthen the confidence placed in Jenoptik and boost the employees' sense of identification with the company. We also expect this to have a positive effect on our brand image, reputation and our attractiveness as an employer.

The duties of Corporate Citizenship are the responsibility of Corporate Communications, which reports directly to the Chairman of the Executive Board. Group-wide guidelines govern the principles of a structured and standardized approach to defining "Jenoptik as a Corporate Citizen" and ensure a standardized method of handling donations and sponsorship queries, as well as carrying out sponsorship projects.

Our commitment to our region is of particular relevance. Since 1996, the Group has supported the Adult Initiative for Children with Cancer Jena e.V. Donations both made by Jenoptik and collected from partners as well as the organization of diverse events help to support children with cancer and their parents. Another pillar of social commitment is the group-wide "Mitarbeiter im Ehrenamt (Employees and Volunteering)" program. Many Jenoptik employees around the world are committed to this and are supported by Jenoptik in doing so.

T58 Social commitment – examplary projects 2022

Social	Jenoptik supports	• Summer camps for children of Jenoptik employees and children of recognized refugee families • Promotion of "Mitarbeiter im Ehrenamt" • Thanksgiving food collections for the needy in Jupiter and Rochester Hills
Science & Education	Jenoptik is a partner for	• Experimentarium Imaginata Jena e.V. • Thuringian young researcher competitions for students • Applied Photonics Award • Lothar Späth Award for Outstanding Innovations in Science and Business • Global competition "SPIE Startup Challenge"
Art & Culture	Jenoptik supports cultural projects with partners	• Light art on the facade of the Ernst Abbe high-rise • Summer concert series at the Thalbürgel monastery church • Open-air Cultural Festival "Kulturarena" organized by the city of Jena • Easter charity concert by the International Young Orchestra Academy on behalf of the Elterninitiative für krebskranke Kinder Jena e.V.

Jenoptik promotes the work/life balance with a comprehensive concept that takes into account working hour models, comprehensive employee information, and childcare. As a member of the "Familienfreundliches Jena e.V." support group, the Group works with numerous partners to support projects conducted by the "Jenaer Bündnis für Familie (Jena Alliance for the Family)". Once again there was a joint summer camp for the children of Jenoptik employees and children from refugee families.

Since 2021, Jenoptik has been the main sponsor of Imaginata Jena, an experimentarium for the senses and an extraordinary learning and events venue. The aim of Imaginata, to get young people excited about science and technology at an early age, fits in very well with one of the central issues of Jenoptik's social commitment – encouraging young people socially and in education.

Responsible Corporate Governance

In a globalized market environment, Jenoptik is fully committed to responsible corporate governance and law-abiding, compliant conduct. We make our business decisions with this in mind and always work to ensure that our actions are in accordance with regulations, laws and our values. Compliance & Risk Management therefore lies within the remit of the Chairman of the Executive Board and reports directly and regularly to him. The Director of Compliance & Risk Management is in close contact with all employees throughout the organization and controls the Group's enterprise risk management system in close cooperation with the central departments and the divisions' risk officers. Our compliance organization comprises a central Compliance Competence Center with specialist responsibility for compliance, risk management, data protection as well as customs and export control. In the North America and Asia/Pacific regions, the team is strengthened by regional compliance officers.

Respect for human rights is a high priority for Jenoptik, especially in the supply chain. Jenoptik is committed to internationally recognized standards of human rights and does not tolerate any form of slavery, forced labor, child labor, human trafficking or exploitation in its own business operations or those of the supply chain. We also expect our suppliers to comply with and respect internationally recognized human rights standards, e.g. the Slavery and Human Trafficking Statement. Codes of conduct for sales partners and suppliers define the Jenoptik Group's requirements on our business partners and require them to comply with nationally and internationally applicable statutes, regulations and standards. In order to identify violations and high-risk business partners in good time, a whistleblowing system and a platform for group-wide supplier screening regarding compliance with all sustainability criteria was implemented. Cooperation only takes place with those business partners who accept Jenoptik's compliance declaration.

Anti-corruption: Jenoptik fights all forms of active and passive corruption and expects all its business partners to do the same. For detailed information on Jenoptik's compliance management system, the company guidelines and codes of conduct for employees, suppliers and sales partners, our online training, and our whistleblowing system, we refer you to the Corporate Governance Statement and the Risk and Opportunity Report.

Supply Chain Management

Sustainability in the supply chain: Part of our awareness as a sustainable company is to assume responsibility along the value chain. We have established various measures to implement and demand sustainability standards from our suppliers.

A code of conduct applicable to suppliers and sales partners defines the requirements for our business partners with regard to compliance with human rights, the prohibition of corruption and bribery, fair conduct in the market and competition, commitment to environmental protection, and the responsible handling of substances, mixtures and products as well as conflict minerals. International guidelines and standards, such as the UN Global Compact, are of particular relevance to us when it comes to protecting the environment and resources and complying with human rights. Our Code of Conduct is an integral part of all supply contracts and is binding on all suppliers.

As a high-tech company, Jenoptik is dependent on a wide range of raw materials. In the face of an increasing scarcity of resources, Jenoptik is committed to making sparing use of the materials it requires. Supply bottlenecks in connection with the coronavirus pandemic were offset by targeted supplier management measures, such as weekly coordination and planning meetings with critical suppliers as well as support for suppliers in the procurement of critical components. We comply with the applicable regulations, for example the requirements of the European chemicals regulation REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) and the European RoHS directive (Restriction of certain Hazardous Substances), and are involved on associated committees. In order to implement efficient processes for collecting relevant data, the Product Compliance project was also continued in 2022. In the future, declarations from suppliers, raw material

Further information on compliance & risk management can be found in the Risk and Opportunity Report chapter

and chemical data can be systematically and automatically evaluated and the respective declarations issued. The objective of our purchasing processes is to meet all regulations relating to conflict minerals in compliance with the Dodd-Frank Act and the EU Conflict Minerals Regulation. Our Code of Conduct requires that our suppliers do not supply products that violate these requirements. To minimize risks, we have been using a central digital platform to query the relevant suppliers since 2021. This platform is used to obtain the standardized form (CMRT) of the Responsible Minerals Initiative. The information provided by the suppliers is checked for possible risks and measures to minimize them are derived.

When assessing our suppliers, we evaluate not only a certified quality management system, but also proof of a certified environmental management system that complies with the international standard ISO 14001. Among other things, this ISO standard requires the definition of a corporate environmental policy, environmental goals, and an environmental program, in conjunction with the establishment of a corresponding management system to implement the achievement of objectives. In 2023, we plan to add ISO 50001 certification (compliance with and implementation of an energy management system).

Another component for reviewing and evaluating the sustainability performance of suppliers is our assessment as part of a strategic supplier evaluation. This has been expanded to include the main criterion of sustainability and covers the topics of sustainability, compliance, CO_2 management as well as innovations in the field of sustainability. For the evaluation of the first two criteria, we assess the responses of our suppliers on a global ESG risk management platform with regard to the fulfillment of environmental and energy standards, precautions against bribery and corruption, and compliance with human rights. The establishment and publication of the CO_2 emissions of purchased goods and services (Scope 3.1) as well as the definition of reduction measures are rewarded with a higher score. A supplier achieves the maximum score for the main criterion of sustainability if he actively undertakes additional initiatives beyond the statutory requirements.

Purchasing in the Jenoptik Group is globally positioned and responsible for all procurement activities and supplier management. The Vice President for Corporate Supply Chain Management & Procurement reports directly to the CFO of JENOPTIK AG. Compliance with and optimization of sustainability standards in the supply chain is overseen by Group Procurement. This department provides process descriptions and guidelines for implementing our sustainability requirements in the internal procurement processes and conducts corresponding training courses. Regular consultations are held with the Compliance & Risk Management and Legal central departments to define objectives and to implement them within the Group.

Compliance in the supply chain: As a global company, we work with suppliers of products, materials, and services from more than 33 countries. More than 82 percent of our procurement activities are in Europe.

Compliance in the supply chain is guided by our requirement to always comply with statutes, internal regulations and voluntary self-commitments. In order to further increase transparency in the supply chain, identify compliance violations in good time and initiate suitable measures to minimize risks, we subject our supplier base to regular risk analyses. For all suppliers of production materials with a significant purchasing volume, surveys are conducted on ESG issues such as environmental protection, compliance management, human rights and the prohibition of child labor, ensuring health and safety, as well as anti-corruption and sustainability. Currently, 862 suppliers have been audited. This equates to a coverage rate of 84 percent of the global direct purchasing volume. In the event of violations, or where there is potential for improvement, the cause is determined in dialog with the suppliers and joint action plans for improvement are developed and implemented. The Corporate Social Responsibility Rate (CSR), indicates the percentage of suppliers of production materials with an annual purchasing volume in excess of 200,000 euros for which completed CSR self-assessments evaluated as non-critical exist. In 2022, the CSR rate was 51.4 percent (prior year: 38.9 percent). In comparison with the 2022 target of 40 percent, this is a very pleasing development, as it has been possible to integrate suppliers into the platform more quickly in the past fiscal year, and the willingness of our suppliers to fulfill the ESG criteria and to complete ESG self-assessments has increased significantly. The CSR rate is to be 50 percent by 2025.

A further objective in the reporting year was to carry out a preliminary analysis of compliance with the requirements of the Supply Chain Due Diligence Act in order to ensure that the specified human rights and environmental due diligence obligations are being adequately observed in its supply chains.
In preparation and as a result of the preliminary analysis, the new due diligence requirements were examined and a timetable and action plan was drawn up for identified gaps. The

adaptation of the risk management approach has already been implemented. To this end, suppliers with a specific country risk were additionally included in the survey on ESG topics. The remaining measures (e.g. an expansion of our Code of Conduct for Suppliers) will be implemented in the current reporting year in order to meet the requirements of the Supply Chain Due Diligence Act on time.

Quality Management

Quality Management

The key to Jenoptik's success as a technology company primarily lies in the quality of its components, products, and solutions. Longstanding collaborations with key customers, sometimes in the form of development partnerships, and the confidence placed in us by our partners are proof that our products and solutions are convincing in their quality worldwide. We are committed to actively ensuring that the quality of our products and services is above average in many of our product areas. For more than 30 years, Jenoptik has been a member of the German Association for Quality (DGQ e.V.).

T59 Examples of the divisions` KPIs

Criterion	Examples for KPIs of the divisions
Quality from a customer perspective	• Customer satisfaction • Complaints costs ratio • Warranty and guarantee costs • Delivery reliability
Quality as an internal operations partner	• Internal audits (number of improvements) • Measures in the process of continual improvement (number) • Process and product quality - Production yield / quality level - Reworking costs - Scrap costs • Policy Deployment Matrix (PDM)
Quality from the supplier's perspective	• External supplier audits (number of improvements) • Suitable suppliers (number) • Complaints ratio • Complaints costs • Guarantee and warranty costs • Delivery reliability

Quality management at Jenoptik is managed locally in the business units and falls within the responsibility of the division managers. Each division applies individual customer and market-related quality indicators. The following overview summarizes essential Key Performance Indicators (KPIs) for quality management in the Jenoptik Group. Group-wide, the Jenoptik Business System (JBS) was established to support the divisional QM system in 2022.

One measure to ensure and further improve our quality is our process optimizations (Plan-Do-Check-Act (PDCA) and lean cycles), the impact of which can be felt in all areas of the business – from the development of new products via quality planning to the quality of the finished product (safe launch). Topics such as international quality and occupational health and safety as well as environmental protection programs were developed on the basis of the Jenoptik and divisional strategies. 2022 saw the implementation of additional modules such as test equipment management, Computer Aided Quality Systems (CAQ Systems) for more efficient planning, execution and evaluation of business processes. For example, the Smart Mobility Solutions division set up a "Supplier Quality Development Area" to establish an independent quality check for incoming goods inspections and the qualification of suppliers. Currently, the focus is on the further development and improvement of the SAP system, such as integration of the EHS module for product compliance.

In addition to certifications, further issues in quality management at Jenoptik include standardization, process improvements, tests as well as continuous dialog with customers, e.g. analyses of customer satisfaction. Our group companies comply with the requirements of the ISO 9001 quality management standard. All production sites worldwide are certified in accordance with ISO 9001.

Selected companies meet the requirements of the ISO 14001 environmental management system.

Table T60 shows a selection of group certifications and the actions undertaken in 2022. The Advanced Photonic Solutions division has successfully passed the multi-site certification in accordance with the ISO 9001 and ISO 14001 international standards for quality and environmental management for several sites. Similarly, some manufacturing sites have obtained ISO 13485 (medical) or IATF 16949 (automotive) certification. In all audits, the auditors from the DQS (Deutschen Gesellschaft zur Zertifizierung von Managementsystemen) and TÜV Rhineland positively highlighted the further development of the quality and environmental management system, the high degree of integration of environmental topics into company processes, and the large number of improvement measures planned and implemented in particular. In addition, they certified that the employees have a very high level of qualification. In the fall, the production area at the Shanghai site successfully passed an ISO 9001 audit by the DQS.

Smart Mobility Solutions has also been successful with regard to certifications. Environmentally compatible action is one of the top priorities here. For this reason, environmental management in accordance with ISO 14001 was integrated into the management system for the first time as part of the re-certification of ISO 9001 and successfully certified in October 2022.

Due to its assignment to the new Non-Photonic Portfolio Companies division, Jenoptik Industrial Metrology GmbH replaced its matrix certification with a site-specific certification (ISO 9001 / ISO 14001 / ISO 45001) in the fiscal year 2022. When doing so, the corporate processes were rewritten, combined and certified in an integrated management system.

T60 Certification within the Group (selection)

Certification	Description	2022 actions
ISO 9001	Certification of quality management processes	• Matrix certification of all national and international sites of Advanced Photonic Solutions incl. Trioptics GmbH, SwissOptic GmbH, former Berliner Glas Medical GmbH • Certification with the new scope of the HOMMEL ETAMIC site in Villingen-Schwenningen as well as re-certification of the Rochester Hills (USA) site of Jenoptik Industrial Metrology • Successful surveillance audit at the Shanghai site • Re-certification in the Smart Mobility Solutions division for sites in Germany and the Netherlands
ISO 13485	Certification for the medical market with respect to the design, development and manufacture of medical products	• Certification in the Advanced Photonic Solutions division at the Jena and Triptis (Germany) and Jupiter (USA) sites
ISO 14001	Certification of the environmental management system	• Certification of the German sites of the Advanced Photonic Solutions division and the Swiss site of SwissOptic GmbH • First certification as matrix certification at Smart Mobility Solutions for seven sites • Certification with the new scope of HOMMEL ETAMIC site Villingen-Schwenningen
DIN EN ISO/IEC 17025:2018	Accreditation of the calibration laboratory	• Re-certification with the new scope of HOMMEL ETAMIC site Villingen-Schwenningen
ISO 45001	Certification of the occupational health and safety management system	• Re-certification with the new scope of HOMMEL ETAMIC site Villingen-Schwenningen
IATF 16949	Certification for the automotive industry	• Surveillance audit and special audit at the Triptis site
DIN EN 16247-1	Energy audit to increase energy efficiency	• Certification with the new scope of the HOMMEL ETAMIC site in Villingen-Schwenningen
ILO-OSH-2001 / OHSAS 18001or DIN ISO 45001	Certification of occupational safety and health management	• Re-certification with the new scope of the HOMMEL ETAMIC location Villingen-Schwenningen

T61 Share of revenue from goods or services related to taxonomy-aligned business activities – disclosure for 2022

Figures in thousand euros				Criteria for a significant contribution		DNSH criteria ("No significant impact")									
Business activities	Code(s) (2)	Absolute revenue (3)	Share of revenue (4)	Climate protection (5)	Adaptation to climate change (6)	Climate protection (11)	Adaptation to climate change (12)	Water and marine resources (13)	Circular economy (14)	Environmental pollution (15)	Biological diversity and ecosystems (16)	Minimum protection (17)	Taxonomy-aligned share of revenue, 2022 (18)	Category (enabling activities) (20)	Category "(transitional activities)" (21)
			%	%	%	J/N	J/N	J/N	J/N	J/N	J/N	J/N	%	E	T
A. Taxonomy-Eligible Activities															
A.1. Environmentally sustainable activities (taxonomy-aligned)															
Revenue from environmentally sustainable activities (taxonomy-aligned) (A.1)		0	0.0										0.0		
A.2 Taxonomy-eligible, but not environmentally sustainable activities (non taxonomy-aligned activities)															
Revenue from taxonomy-eligible but not environmentally sustainable activities (non taxonomy-aligned activities) (A.2)		0	0.0												
Total (A.1 + A.2)		**0**	**0.0**										**0.0**		
B. Non Taxonomy-Eligible Activities															
Revenue from non taxonomy-eligible activities		980,684	100.0												
Total (A + B)		**980,684**	**100.0**												

T62 Capex share from goods or services associated with taxonomy-aligned business activities – disclosure for 2022

Figures in thousand euros				Criteria for a significant contribution		DNSH criteria (“No significant impact”)									
Business activities	Code(s) (2)	Absolute CapEx (3)	CapEx share (4)	Climate protection (5)	Adaptation to climate change (6)	Climate protection (11)	Adaptation to climate change (12)	Water and marine resources (13)	Circular economy (14)	Environmental pollution (15)	Biological diversity and ecosystems (16)	Minimum protection (17)	Taxonomy-aligned CapEx share, 2022 (18)	Category (enabling activities) (20)	Category “(transitional activities)” (21)
			%	%	%	J/N	J/N	J/N	J/N	J/N	J/N	J/N	%	E	T
A. Taxonomy-Eligible Activities															
A.1. Environmentally sustainable activities (taxonomy-aligned)															
Capex environmentally sustainable activities (taxonomy-aligned) (A.1)		0	0.0										0.0		
A.2 Taxonomy-eligible, but not environmentally sustainable activities (non taxonomy-aligned activities)															
6.5. Transportation by passenger cars and light commercial vehicles		1,631	1.5												
7.1. New build		6,897	6.5												
7.3. Installation, maintenance and repair of energy efficient appliances		1,676	1.6												
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking lots belonging to buildings)		24	0.0												
Capex taxonomy-eligible but not environmentally sustainable activities (non taxonomy-aligned activities) (A.2)		10,227	9.6												
Total (A.1 + A.2)		**10,227**	**9.6**										**0.0**	**0.0**	
B. Non Taxonomy-Eligible Activities															
Capex from non taxonomy-eligible activities		95,756	90.4												
Total (A + B)		**105,983**	**100.0**												

T63 Opex share from goods or services associated with taxonomy-aligned business activities – disclosure for 2022

Figures in thousand euros				Criteria for a significant contribution		DNSH criteria ("No significant impact")									
Business activities	Code(s) (2)	Absolute OpEx (3)	OpEx share (4)	Climate protection (5)	Adaptation to climate change (6)	Climate protection (11)	Adaptation to climate change (12)	Water and marine resources (13)	Circular economy (14)	Environmental pollution (15)	Biological diversity and ecosystems (16)	Minimum protection (17)	Taxonomy-aligned OpEx share, 2022 (18)	Category (enabling activities) (20)	Category "(transitional activities)" (21)
		T€	%	%	%	J/N	J/N	J/N	J/N	J/N	J/N	J/N	%	E	T
A. Taxonomy-Eligible Activities															
A.1. Environmentally sustainable activities (taxonomy-compliant)															
Opex environmentally sustainable activities (taxonomy-aligned) (A.1)		0	0.0												
A.2 Taxonomy-eligible, but not environmentally sustainable activities (non taxonomy-aligned activities)															
Opex taxonomy-eligible but not environmentally sustainable activities (non taxonomy-aligned activities) (A.2)		0	0.0												
Total (A.1 + A.2)		**0**	**0.0**										**0,0**	**0,0**	
B. Non Taxonomy-Eligible Activities															
OpEx non taxonomy-aligned activities (B)		79,656	100.0												
Total (A + B)		**79,656**	**100.0**												

Independent Practitioner's Report on a Limited Assurance Engagement on Non-financial Reporting [1]

To JENOPTIK AG, Jena

We have performed a limited assurance engagement on the Combined Separate Non-financial Report of JENOPTIK AG, Jena, (hereinafter the "Company") for the period from 1 January to 31 December 2022 (hereinafter the "Combined Separate Non-financial Report").

Not subject to our assurance engagement are the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Combined Separate Non-financial Report in accordance with §§ (Articles) 315c in conjunction with 289c to 289e HGB ("Handelsgesetzbuch": "German Commercial Code") and Article 8 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (hereinafter the "EU Taxonomy Regulation") and the Delegated Acts adopted thereunder, as well as for making their own interpretation of the wording and terms contained in the EU Taxonomy Regulation and the Delegated Acts adopted thereunder, as set out in section "Information on the EU Taxonomy Regulation" of the Combined Separate Non-financial Report.

This responsibility includes the selection and application of appropriate non-financial reporting methods and making assumptions and estimates about individual non-financial disclosures of the Company that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal controls as the executive directors consider necessary to enable the preparation of a Combined Separate Non-financial Report that is free from material misstatement whether due to fraud or error.

The EU Taxonomy Regulation and the Delegated Acts issued thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Therefore, the executive directors have disclosed their interpretation of the EU Taxonomy Regulation and the Delegated Acts adopted thereunder in section "Information on the EU Taxonomy Regulation" of the Combined Separate Non-financial Report. They are responsible for the defensibility of this interpretation. Due to the immanent risk that indeterminate legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties.

[1] PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the Combined Separate Non-financial Report and issued an independent practitioner`s report in German language, which is authoritative. The following text is a translation of the independent practitioner`s report.

Independence and Quality Control of the Audit Firm

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis – IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Responsibility of the Assurance Practitioner

Our responsibility is to express a conclusion with limited assurance on the Combined Separate Non-financial Report based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the Company's Combined Separate Non-financial Report, other than the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report, are not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section "Information on the EU Taxonomy Regulation" of the Combined Separate Non-financial Report.

In a limited assurance engagement the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgement of the assurance practitioner.

In the course of our assurance engagement, we have, amongst other things, performed the following assurance procedures and other activities:

- Gaining an understanding of the Company's sustainability organization and stakeholder engagement
- Inquiries of the executive directors and relevant employees involved in the preparation of the Combined Separate Non-financial Report about the preparation process, about the internal control system relating to this process and selected disclosures in the Combined Separate Non-financial Report

- Identification of likely risks of material misstatement in the Combined Separate Non-financial Report
- Analytical procedures on selected disclosures in the Combined Separate Non-financial Report
- Reconciliation of selected disclosures with the corresponding data in the consolidated financial statements and group management report
- Evaluation of the presentation of the Combined Separate Non-financial Report
- Evaluation of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the Combined Separate Non-financial Report

In determining the disclosures in accordance with Article 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties.

Assurance Opinion

Based on the assurance procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Combined Separate Non-financial Report of the Company for the period from 1 January to 31 December 2022 is not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section "Information on the EU Taxonomy Regulation" of the Combined Separate Non-financial Report.

We do not express an assurance opinion on the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

Restriction of Use

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. Consequently, it may not be suitable for any other purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it. Our responsibility is to the Company. We do not accept any responsibility to third parties. Our assurance opinion is not modified in this respect.

Munich, 20 March 2023

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Hendrik Fink Wirtschaftsprüfer [German public auditor]	ppa. Thomas Groth

Consolidated Financial Statements

Consolidated Statement of Comprehensive Income

Consolidated Statement of Income

in thousand euros	Note No.	1/1–31/12/2022	1/1–31/12/2021
Continuing operations			
Revenue	4.1	980,684	750,717
Cost of sales	4.2	634,982	493,814
Gross profit		**345,702**	**256,903**
Research and development expenses	4.3	54,610	38,886
Selling expenses		107,559	89,693
General administrative expenses		65,477	53,462
Other operating income	4.5	21,508	52,950
Other operating expenses	4.6	37,655	19,663
EBIT		**101,909**	**108,148**
Financial income	4.7	11,648	5,564
Financial expenses	4.7	17,604	11,164
Financial result		**−5,956**	**−5,600**
Earnings before tax from continuing operations		**95,954**	**102,548**
Income taxes	4.8	−32,103	−9,689
Earnings after tax from continuing operations		**63,851**	**92,859**
Discontinued operation			
Earnings after tax from discontinued operation	4.9	**−6,817**	**−8,520**
Group			
Earnings after tax		**57,034**	**84,339**
Results from non-controlling interests		1,933	2,341
Earnings attributable to shareholders	4.10	55,100	81,998
Earnings per share in euros (undiluted = diluted)	4.10	**0.96**	**1.43**
Earnings per share from continuing operations in euros (undiluted = diluted)		**1.08**	**1.58**

Consolidated Comprehensive Income

in thousand euros	Note No.	1/1–31/12/2022	1/1–31/12/2021
Earnings after tax		**57,034**	**84,339**
Items that will never be reclassified to profit or loss		**10,159**	**4,974**
Actuarial gains/losses from the valuation of pensions and similar obligations	5.12	10,152	4,977
thereof: income taxes		−2,951	−2,009
Equity instruments measured at fair value through other comprehensive income		7	−3
thereof: income taxes		0	−20
Items that are or may be reclassified to profit or loss		13,084	17,998
Cash flow hedges	8.2	1,229	−1,592
thereof: income taxes		−520	661
Foreign currency exchange differences	2.3	11,854	19,590
thereof: income taxes		−746	−1,424
Total other comprehensive income		**23,243**	**22,972**
Total comprehensive income		**80,276**	**107,311**
Thereof attributable to:			
Non-controlling interests		1,828	2,965
Shareholders		78,448	104,346

Consolidated Statement of Financial Position

Assets in thousand euros	Note no.	31/12/2022	31/12/2021
Non-current assets		**1,128,455**	**1,110,770**
Intangible assets	5.1	730,642	753,247
Property, plant and equipment	5.2/5.3	324,606	266,656
Investment property		3,592	3,638
Investments accounted for using the equity method	5.4	14,310	14,328
Financial investments		2,754	2,987
Other non-current assets	5.5	13,729	6,555
Deferred tax assets	4.8	38,822	63,360
Current assets		**543,309**	**646,271**
Inventories	5.6	255,950	200,213
Current trade receivables	5.7	138,769	120,475
Contract assets	5.8	58,096	81,414
Other current financial assets	5.9	13,423	19,582
Other current non-financial assets	5.10	19,265	11,439
Current financial investments		1,048	1,555
Cash and cash equivalents		56,758	54,817
Assets held for sale	4.9	0	156,777
Total assets		**1,671,765**	**1,757,041**

Equity and liabilities in thousand euros	Note no.	31/12/2022	31/12/2021
Equity	5.11	**843,307**	**780,659**
Share capital		148,819	148,819
Capital reserve		194,286	194,286
Other reserves		488,846	424,705
Non-controlling interests		11,356	12,849
Non-current liabilities		**518,959**	**503,102**
Pension provisions	5.12	4.262	9,379
Other non-current provisions	5.13	17,043	17,886
Non-current financial debt	8.1/8.2	477,729	448,746
Other non-current liabilities		3,863	2,350
Deferred tax liabilities	4.8	16,062	24,741
Current liabilities		**309,499**	**473,279**
Tax provisions		10,921	6,949
Other current provisions	5.13	43,887	39,907
Current financial debt	8.1/8.2	59,052	148,993
Current trade payables		100,600	94,221
Contract liabilities	5.8	64,856	47,323
Other current financial liabilities	5.15	10,306	22,023
Other current non-financial liabilities	5.16	19,876	20,249
Liabilities related to assets held for sale	4.9	0	93,613
Total equity and liabilities		**1,671,765**	**1,757,041**

Consolidated Statement of Cash Flows

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Earnings before tax from continuing operations	95,954	102,548
Earnings before tax from discontinued operation	−5,342	−8,230
Earnings before tax	**90,612**	**94,318**
Financial income and expenses	6,371	6,370
Depreciation and amortization	68,265	54,179
Impairment losses and reversals of impairment losses from non-current assets [1]	13,894	22,357
Profit/loss from disposals of non-current assets, subsidiaries and other business units	4,893	−3,858
Profit/loss from fair value adjustment of conditional purchase price components attributable to business combinations	1,100	−30,509
Other non-cash income/expenses	−613	−2,158
Dividend received from investments accounted for using the equity method	720	0
Change in provisions	−511	1,638
Change in working capital	−20,809	−35,786
Change in other assets and liabilities	−6,453	1,720
Cash flows from operating activities before income tax payments	**157,469**	**108,271**
Income tax payments	−14,761	−10,237
Cash flows from operating activities	**142,707**	**98,034**
Capital expenditure for intangible assets	−14,784	−15,934
Proceeds from sale of property, plant and equipment	1,380	686
Capital expenditure for property, plant and equipment	−64,466	−30,229
Sale of subsidiaries and other business units less cash sold	63,166	7,586
Acquisition of consolidated entities less acquired cash	713	−379,963
Proceeds from sale of financial assets within the framework of short-term disposition	1,547	197
Capital expenditure for financial assets within the framework of short-term disposition	−1,107	−1,564
Proceeds from other financial investments	36	6,036
Capital expenditure for other financial investments and investment properties	−132	−619
Interest received and other income	233	184
Cash flows from investing activities	**−13,415**	**−413,621**
Dividend to shareholders of the parent company	−14,310	−14,310
Dividend to non-controlling interests	−3,298	−1,749
Proceeds from additions of financial liabilities	126,197	548,559
Repayments of loans	−206,783	−208,088
Payments for leases	−14,639	−13,732
Change in group financing	−3,949	945
Interest paid and other expenses	−10,544	−7,420
Cash flows from financing activities	**−127,325**	**304,205**
Cash-effective change in cash and cash equivalents	**1,967**	**−11,383**
Less cash and cash equivalents from discontinued operation	46	−46
Change in cash and cash equivalents from foreign currency effects	36	2,871
Changes in cash and cash equivalents from first-time consolidation and valuation	−108	−30
Cash and cash equivalents at the beginning of the period	54,817	63,405
Cash and cash equivalents at the end of the period	**56,758**	**54,817**

[1] Including impairment loss from remeasurement at fair value less costs to sell in accordance with IFRS 5

Statement of Changes in Equity

in thousand euros	Note no.	Share capital	Capital reserve	Retained earnings	Equity instruments measured through other comprehensive income
Balance at 1/1/2021		**148,819**	**194,286**	**359,196**	**−83**
Net profit for the period	4.10			81,998	
Other comprehensive income after tax	2.3/5.11/5.12/8.2				−3
Total comprehensive income				**81,998**	**−3**
Transactions with owners (dividend)				−14,310	
Transfer of actuarial effects to retained earnings				−257	
Balance at 31/12/2021		**148,819**	**194,286**	**426,627**	**−86**
Balance at 1/1/2022		**148,819**	**194,286**	**426,627**	**−86**
Net profit for the period	4.10			55,100	
Other comprehensive income after tax	2.3/5.11/5.12/8.2				7
Total comprehensive income				**55,100**	**7**
Transactions with owners (dividend)				−14,310	
Transfer of actuarial effects and revaluation surplus for equity instruments to retained earnings				−11,560	79
Balance at 31/12/2022		**148,819**	**194,286**	**455,858**	**0**

Cash flow hedges	Cumulative exchange differences	Actuarial effects	Equity attributable to shareholders of JENOPTIK AG	Non-controlling interests	Total	
897	**−1,918**	**−23,423**	**677,774**	**11,617**	**689,391**	**Balance at 1/1/2021**
			81,998	2,341	84,339	Net profit for the period
−1,557	18,562	5,346	22,348	624	22,972	Other comprehensive income after tax
−1,557	**18,562**	**5,346**	**104,346**	**2,965**	**107,311**	**Total comprehensive income**
			−14,310	−1,733	−16,043	Transactions with owners (dividend)
		257	0		0	Transfer of actuarial effects to retained earnings
−659	**16,644**	**−17,820**	**767,811**	**12,849**	**780,659**	**Balance at 31/12/2021**
−659	**16,644**	**−17,820**	**767,811**	**12,849**	**780,659**	**Balance at 1/1/2022**
			55,100	1,933	57,034	Net profit for the period
1,229	11,961	10,152	23,349	−106	23,243	Other comprehensive income after tax
1,229	**11,961**	**10,152**	**78,449**	**1,828**	**80,277**	**Total comprehensive income**
			−14,310	−3,320	−17,630	Transactions with owners (dividend)
		11,482	0		0	Transfer of actuarial effects and revaluation surplus for equity instruments to retained earnings
570	**28,605**	**3,813**	**831,951**	**11,356**	**843,307**	**Balance at 31/12/2022**

Notes

1 Presentation of the Group Structure

1.1 Parent company

The parent company is JENOPTIK AG, Jena, Germany, and is registered in the Commercial Register of Jena in Department B under the number 200146. JENOPTIK AG is listed on the German Stock Exchange in Frankfurt and traded on the TecDax and since 20th of March 2023 on the MDAX (before: SDax), amongst others.

The list of shareholdings is published in the Federal Gazette in accordance with § 313 (2) Nos. 1 to 4 of the German Commercial Code (Handelsgesetzbuch [HGB]) and is disclosed in the Notes under the heading "List of Shareholdings of the Jenoptik Group". The entities to which the simplification relief regulations were applied as specified in § 264 (3) or § 264b of the HGB, are disclosed in the section "Other Required and Supplementary Disclosures under HGB".

1.2 Accounting principles

Jenoptik is an international technology group. The consolidated financial statements of JENOPTIK AG were prepared for the fiscal year 2022 in accordance with the International Financial Reporting Standards (IFRS) and the binding interpretations of the International Financial Reporting Interpretations Committee (IFRIC) in force at the reporting date for use in the European Union as well as the regulations under commercial law in accordance with § 315e (1) of the HGB which apply on a supplementary basis.

The consolidated financial statements were presented in euros. Unless otherwise specified, all amounts are presented in thousand euros. Please note that there may be rounding differences compared to the mathematically exact amounts (monetary units, percentages, etc.). The consolidated income statement was prepared in accordance with the cost of sales method.

The fiscal year of JENOPTIK AG and of its subsidiaries included in the consolidated financial statements corresponds with the calendar year.

To improve the clarity of the presentation, individual items were aggregated in the consolidated statement of comprehensive income and the statement of financial position. The classifications used for these items are listed in the Notes.

Change in accounting principles

The following IFRS were applied for the first time in the consolidated financial statements in the fiscal year 2022:

Standard/Interpretation		Published by the IASB	Application mandatory	Adopted by the EU	Effects
IFRS 1	Changes in respect of subsidiaries as first-time adopters	14/05/2020	01/01/2022	Yes	No effects
IFRS 3	Updating of references to the conceptual framework	02/07/2021	01/01/2022	Yes	No effects
IFRS 9	Fees in the '10 percent' test for derecognition of financial liabilities	14/05/2020	01/01/2022	Yes	No effects
IAS 16	Proceeds before intended use	14/05/2020	01/01/2022	Yes	No effects
IAS 37	Costs of fulfilling a contract	02/07/2021	01/01/2022	Yes	No effects as clarification already complies with Jenoptik's accounting practice
IAS 41	Taxation in fair value measurements	14/05/2020	01/01/2022	Yes	No effects as not applicable to the Group

Standards which have been published but not yet adopted as mandatory

The application of the following amendments to standards published by the IASB is not yet mandatory and these were not taken into account by Jenoptik in the consolidated financial statements as of December 31, 2022. The Group has no plans to make use of the early adoption of these standards.

Standard/Interpretation		Published by the IASB	Application mandatory	Adopted by the EU	Anticipated effects
IAS 1	Disclosure of accounting methods	12/02/2021	01/01/2023	Yes	Amendment to corresponding disclosures in the notes, in particular dispensing with the replication of statutory provisions
IAS 1	Classification of liabilities as current or non-current with constraints	23/01/2020 / 31/10/2022	01/01/2024	No	Amendment to the classification of liabilities and reclassification
IAS 8	Definition of accounting-related estimates	12/02/2021	01/01/2023	Yes	No significant effects
IAS 12	Deferred taxes relating to assets and liabilities resulting from one single business transaction (leases and decommissioning obligations)	07/05/2021	01/01/2023	Yes	No effects
IFRS 16	Change in lease liabilities in a sale-and-leaseback transaction	22/09/2022	01/01/2024	No	No significant effects
IFRS 17	Insurance contracts including changes to IFRS 17	18/05/2017	01/01/2023	Yes	No effects as not applicable to the Group

1.3 Assumptions and estimates

The preparation of the consolidated financial statements in accordance with IFRS, as are to be applied in the EU, requires that assumptions are made for certain items, affecting their recognition in the consolidated statement of financial position or in the consolidated statement of comprehensive income, as well as the disclosure of contingent receivables and liabilities. All assumptions and estimates are made to the best of the Group's knowledge and belief and aim to provide a true and fair picture of the asset, financial and earnings situation of the Group.

The underlying assumptions and estimates are continually reviewed. This gives the author of the consolidated financial statements a certain amount of discretionary leeway. Against the background of the macroeconomic and geopolitical environment, such as the ongoing Russian war against Ukraine, there are currently increased uncertainties with regard to estimates and forecasts (e.g. concerning the supply and movement of prices of energy and raw materials) and consequently risks in terms of significant adjustments to carrying amounts.

There are no significant climate-related risks to the Group's business activities. The underlying assumptions and estimates take into account the potential effects of climate change where necessary, for example in the forecast of future cash flows in the Non-Photonic Portfolio Companies and for sustainable investments in other divisions.

The assumptions and estimates made for the preparation of these consolidated financial statements relate mainly to:

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- the assumptions and parameters for the valuation of intangible assets identified in the context of purchase price allocations (see section "Acquisitions and sales of entities")
- the valuation of contingent purchase price components arising from business combinations and disposals (see sections "Discontinued operation" and "Financial instruments"),
- the realizability of future tax breaks – in particular arising from losses carried forward – in the valuation of deferred tax assets (see section "Income taxes"),
- the assessment of impairment of goodwill, also taking into account the current uncertainties regarding forecasts (see section "Intangible assets"),
- the assessment of impairment of non-current assets in accordance with IAS 36, in particular with regard to the forecast cash flows in (see section "Impairment of property, plant, and equipment and intangible assets"),
- the actuarial parameters used to measure provisions for pensions and similar obligations (see section "Pension provisions"), and
- the determination of the fair value for the measurement of non-current assets or disposal groups and discontinued operations held for sale in the prior year, as well as the measurement of economically retained risks after closing (see section "Discontinued operation").

2 Consolidation Principles

2.1 The Group of consolidated entities

Along with JENOPTIK AG, all significant subsidiaries have been included fully in the consolidated financial statements. The list of shareholdings is shown in the Notes in the section "List of shareholdings in the Jenoptik Group".

The consolidated financial statements of JENOPTIK AG includes 39 (prior year: 47) fully consolidated subsidiaries. Of which 7 (prior year: 12) have their legal seat in Germany and 32 (prior year: 35) have theirs abroad. In addition to the changes presented in the "Acquisitions and sales of entities" section, the decline results from intra-group mergers and the liquidation or deconsolidation of companies that are no longer operational. 3 entities (prior year: 3) will continue to be included in the consolidated financial statements based on the equity method.

The subsidiaries in the table below have material investments held by non-controlling shareholders: Additional entities have insignificant investments held by non-controlling shareholders. The corresponding minority investments can be seen in the List of shareholdings.

Name	Registered office	Non-controlling Interests
Trioptics Optical Test Instruments (China) Ltd.	China	49.00
Trioptics Hong Kong Limited (via Trioptics China)	Hong Kong	49.00

The following table summarizes the financial information of subsidiaries with significant investments based on their individual financial statements including IFRS adjustments and impacts arising from the purchase price allocation. Impacts of the consolidation were not taken into account.

in thousand euros	Trioptics China	Trioptics Hong Kong
Revenue	15,069 (22,034)	17,617 (15,106)
Earnings after tax	6,074 (4,171)	328 (2,072)
Other comprehensive income	−429 (649)	547 (450)
Total comprehensive income	5.644 (4.821)	874 (2,522)
Non-current assets	1,465 (1,824)	2,252 (2,840)
Current assets	16,819 (11,886)	8,374 (9,225)
Non-current liabilities	632 (813)	372 (470)
Current liabilities	9,699 (5,669)	6,356 (4,544)
Net assets	7,953 (7,228)	3,899 (7,051)
Cash flows from operating activities	8,339 (6,872)	1,477 (3,981)
Cash flows from investing activities	−402 (42)	−39 (0)
Cash flows from financing activities	−2,616 (−2,425)	−4,027 (−1,987)

The figures in brackets relate to the prior year

2.2 Consolidation procedures

The assets and liabilities of the domestic and foreign entities included fully in the consolidated financial statements are recognized in accordance with the uniform accounting policies and valuation methods applicable for the Jenoptik Group.

At the acquisition date, the capital consolidation is based on the acquisition method. In this context, the assets and liabilities of the subsidiaries are recognized at fair values. Furthermore, identifiable intangible assets are capitalized, and specific contingent liabilities classified as liabilities. The remaining difference between the consideration transferred, including the fair value of contingent considerations and the net assets acquired, corresponds to the goodwill. This is subject to an annual impairment test in the subsequent periods in accordance with IAS 36.

Intra-group assets and liabilities, income, and expenses, as well as cash flows from transactions between consolidated companies, are eliminated. Intra-group goods and services are delivered and rendered both based on market prices as well as transfer prices which are determined based on the “dealing-at-arm’s-length” principle. Assets from intra-group deliveries included in the inventories and property, plant, and equipment, are adjusted by interim results. Consolidation procedures recognized as profit or loss are subject to the delimitation of deferred taxes, with deferred tax assets and deferred tax liabilities being netted if there is a legally enforceable right to offset current tax refund claims against current tax liabilities and only if they concern income taxes levied by the same tax authority.

In the event of loss of control of a subsidiary, the assets and liabilities of the subsidiary are derecognized (deconsolidation) and any resulting gain or loss is taken into account in the income statement.

There was no change in the consolidation methods compared to the prior year.

2.3 Foreign currency conversion

Annual financial statements of the consolidated entities prepared in foreign currencies are converted on the basis of the functional currency concept as defined in IAS 21 “The Effects of Changes in Foreign Exchange Rates” by using the modified reporting date exchange rate method. Since the subsidiaries conduct their business activities independently from the financial, economic and organizational aspects, the functional currency of the entities is generally identical to that of their respective national currency.

Assets and liabilities are consequently converted at the exchange rate on the reporting date, whereas income and expenses are converted at the annual average exchange rate which is determined on a monthly basis. The resulting difference arising from the currency conversion is offset outside of profit or loss and shown separately in equity under foreign currency exchange differences.

If a consolidated entity leaves the group of consolidated entities, the corresponding difference arising from the foreign currency conversion is reversed through profit or loss.

Receivables and payables in the individual financial statements of consolidated entities prepared in a local currency which is not the functional currency of the subsidiary, are converted at the exchange rate on the qualifying date in accordance with IAS 21. Differences arising from the foreign currency conversion are shown under other operating income or other operating expenses affecting the results and, if these are derived from financial transactions, are recognized under financial income or financial expenses (see details on the Income Statement). This excludes currency exchange differences arising from loans which constitute a part of the net investment in a foreign operation. These differences from foreign currency conversions are recorded in other comprehensive income outside of profit or loss until the sale of the net investment; it is only at the time of their disposal that the cumulative amount is reclassified into the income statement.

The exchange rates used for the conversion are shown in the table below:

		Annual average exchange rate		Exchange rate on the reporting date	
	1 euro =	1/1-31/12/2022	1/1-31/12/2021	31/12/2022	31/12/2021
Australia	AUD	1.5174	1.5747	1.5693	1.5615
Canada	CAD	1.3703	1.4835	1.4440	1.4393
Swiss	CHF	1.0052	1.0814	0.9847	1.0331
China	CNY	7.0801	7.6340	7.3582	7.1947
Great Britain	GBP	0.8526	0.8600	0.8869	0.8403
Hong Kong	HKD	8.2512	9.1988	8.3163	8.8333
India	INR	82.7145	87.4861	88.1710	84.2292
Japan	JPY	138.0051	129.8575	140.6600	130.3800
Korea	KRW	1,358.0712	1,353.9456	1,344.0900	1,346.3800
Malaysia	MYR	4.6292	4.9026	4.6984	4.7184
Singapore	SGD	1.4520	1.5896	1.4300	1.5279
Taiwan	TWD	31.3227	33.0346	32.7235	31.5030
USA	USD	1.0539	1.1835	1.0666	1.1326

2.4 Acquisitions and sales of entities

Corporate acquisitions in the prior year

Acquisition of BG Medical Applications GmbH and the SwissOptic Group

With the closing on November 30, 2021, JENOPTIK AG, via JENOPTIK Optical Systems GmbH and JENOPTIK Asia-Pacific Pte. Ltd., acquired 100 percent of the shares in the following entities respectively:

- BG Medical Applications GmbH, Berlin, Germany
- SwissOptic AG, Heerbrugg, Switzerland
- SwissOptic (Wuhan) Co., Ltd., Wuhan, China

With the acquisition of SwissOptic (Wuhan) Co., Ltd., Jenoptik also acquired control of its subsidiary Berliner Glas Wuhan Trading Co., Ltd., Wuhan, China.

With this acquisition, Jenoptik is strengthening its global and fast-growing photonics business and, in addition to the semiconductor equipment business, is significantly expanding its medical technology business in particular.

The inclusion in the consolidated financial statements as of December 31, 2021 was based on preliminary amounts, as the determination of the final purchase price, the valuation of the net assets of the companies and the assets identified as part of the purchase price allocation, had not yet been completed at the time the consolidated financial statements were prepared. The first-time consolidation was finalized as of November 30, 2022.

The payment of the provisional purchase price in the sum of 326,454 thousand euros was made in November 2021. As of December 31, 2021, a purchase price of 322,636 thousand euros was determined on the basis of preliminary closing accounts and a receivable of 3,818 thousand euros was capitalized. With finalizing the closing accounts, agreement was reached in the 1st half-year 2022 on the final purchase price of 324,454 thousand euros, which comprises exclusively a fixed cash component. The resultant refund claim in the sum of 2,000 thousand euros was settled in the 2nd half-year 2022. The determination of the final purchase price as well as the final purchase price allocation resulted in a reduction in goodwill of 2,183 thousand euros. Taking into account the acquired cash and cash equivalents, this resulted in a cash outflow of 310,552 thousand euros.

With regard to the acquisition date, the finalization of the first-time consolidation led to the following overall adjustments:

in thousand euros	provisional	adjustment	final
Non-current assets	**133,286**	**3,497**	**136,784**
Intangible assets	98,520	4,737	103,256
Property, plant, and equipment	34,176	−1,239	32,936
Deferred tax assets	591	0	591
Current assets	**70,037**	**1,542**	**71,579**
Inventories	34,042	−2,947	31,095
Trade receivables	20,662	0	20,662
Contract assets	0	4,488	4,488
Other current assets	1,431	0	1,431
Cash and cash equivalents	13,902	0	13,902
Assets	**203,324**	**5,039**	**208,362**
Non-current liabilities	**26,972**	**1,038**	**28,009**
Pension provisions	4,019	0	4,019
Financial liabilities	4,396	0	4,396
Deferred tax liabilities	17,866	1,038	18,903
Other non-current liabilities	692	0	692
Current liabilities	**31,921**	**0**	**31,921**
Other current provisions	7,039	0	7,039
Financial liabilities	5,463	0	5,463
Trade accounts payable	11,182	0	11,182
Contract liabilities	3,358	0	3,358
Other current liabilities	4,879	0	4,879
Liabilities	**58,893**	**1,038**	**59,930**
Total identifiable net assets as of the acquisition date	**144,431**	**4,001**	**148,432**
Goodwill	178,205	−2,183	176,022
Purchase price	**322,636**	**1,818**	**324,454**

For materiality reasons, no adjustment or revision of the comparative period as of December 31, 2021 was made.

In connection with the acquisition of shares in BG Medical and the SwissOptic Group, in addition to the revaluation of inventories, in particular customer relationships, the order backlog and a brand were identified as intangible assets as part of the purchase price allocation. The intangible assets are amortized over periods of between one month and 15 years. In addition, goodwill in the sum of 176,022 thousand euros was reported in intangible assets reflecting the acquisition of trained personnel and the synergy effects primarily in the areas of purchasing, research & development, and capacity optimization via the Wuhan site. The goodwill is allocated to the group of cash-generating units "Advanced Photonic Solutions" and is partially tax-deductible.

Costs in connection with the acquisition of BG Medical and the SwissOptic Group totaled 6,369 thousand euros in 2021 and were reported under other operating expenses.

The consolidated financial statements 2021 included revenues of 9,619 thousand euros and earnings after tax of minus 1,126 thousand euros from the inclusion of BG Medical and the SwissOptic Group. Earnings after tax included costs from the scheduled amortization on the intangible assets identified within the framework of the allocation of the purchase price. Impacts on profit or loss arising from finalization of the first-time consolidation for the period from the acquisition date to December 31, 2021 were not material, so that no adjustment of the comparative period was made.

Under the assumption that the corporate acquisition would have already taken place as of January 1, 2021, the continuing operations would have shown revenue of 864,848 thousand euros and earnings after tax of 94,554 thousand euros. In order to determine this information, it was assumed that the fair values and useful lives of the intangible assets identified in the context of the allocation of the purchase price as of January 1, 2021, are identical to those as at the first-time consolidation date. These proforma figures were determined solely for comparison purposes. They do not provide either a reliable indication either of the operating results that would have been achieved if the acquisition had been made at the beginning of the period, or of future results.

Disinvestments

On November 25, 2021 Jenoptik signed a contract to sell VINCORION, consisting of the wholly-owned subsidiaries JENOPTIK Advanced Systems GmbH (Germany; now operating as VINCORION Advanced Systems GmbH), JENOPTIK Power Systems GmbH (Germany; now operating as VINCORION Power Systems GmbH), and JENOPTIK Advanced Systems, LLC (USA, now operating as VINCORION LLC).

With the conclusion of the binding purchase agreement, the VINCORION business division was classified as discontinued operation and the assets and liabilities as of December 31, 2021 reported as held for sale.

On the transaction closing date of June 30, 2022, Jenoptik lost control over these subsidiaries and deconsolidated them.

Detailed information on the discontinued operation is provided in the section "Discontinued operation".

Disinvestments in the prior year

At the beginning of July 2021 Jenoptik concluded an agreement for the sale of the crystal growth business to Hellma Materials GmbH. The closing date was August 31, 2021.

In July 2021, Jenoptik reported the sale of its non-optical process metrology business for grinding machines to Marposs. The closing date was July 30, 2021. As part of the sale, all shares in JENOPTIK Industrial Metrology Switzerland SA, Peseux, Switzerland, were also sold.

3 Accounting Policies and Valuation Methods

3.1 Effects on accounting and valuations associated with Covid-19 and the Ukraine war

In view of the ongoing impact of the Covid-19 pandemic and the sanctions associated with the war in Ukraine on the operating activities of the Jenoptik companies, an ongoing analysis was conducted of the potential effects on the statement of financial position and the consequences for the group asset, financial and earnings position.

The Covid-19 pandemic and the war in Ukraine have had an operational impact on Jenoptik's earnings situation, in particular due to restrictions in mobility and global supply chains as well as noticeable effects on purchase prices, in particular energy prices. This is particularly evident in the build-up of inventories to secure business operations, pandemic-related delays in the supply of components and the resulting time shifts in revenue recognition respectively project postponements.

Further explanations of accounting and valuation effects are contained in the respective disclosures in the income statement and statement of financial position.

3.2 Goodwill

Goodwill as stated in IFRS 3 corresponds to the positive difference between the consideration for a corporate merger and the newly acquired, revalued assets and liabilities, including certain contingent liabilities remaining after a purchase price has been allocated. Within the framework of this purchase price allocation, the identifiable assets and liabilities are not recognized at their previous carrying amounts but at their fair values. As part of the gaining of control over the acquired entity, non-controlling interests are valued according to the share of identifiable net assets.

Goodwill is recognized as an asset and subject to an impairment test at least once a year on a defined date or whenever there is an indication that the cash-generating unit could be impaired. An impairment loss to goodwill is recognized immediately through profit or loss and not reversed in later reporting periods.

3.3 Intangible assets

Intangible assets acquired in return for payment, primarily patents, trademarks, software and customer relationships, are capitalized at their acquisition costs. Intangible assets with finite useful lives are subject to scheduled amortization on a straight-line basis over their economic useful lives. This is generally a period of between three and fifteen years. The Group reviews whether its intangible assets with a limited useful life have suffered an impairment loss (see section "Impairment losses on property, plant, and equipment and intangible assets").

Internally generated intangible assets are capitalized if the recognition criteria specified in IAS 38 "Intangible assets" have been fulfilled.

Development costs are capitalized if a newly developed product or process can be clearly identified, is technically realizable and if there are plans for production, own use, or marketing. Furthermore, it is assumed that, if capitalized, there is sufficient probability that the development costs will be covered by future financial cash inflows and can be reliably determined. Finally, there must be adequate resources available to conclude the development and enable the asset to be used or sold.

Internally generated patents are subject to scheduled amortization on a straight-line basis over their anticipated useful lives. This is generally a period of between five and ten years.

Intangible assets not ready for use are subject to impairment tests at least on an annual basis (see section "Impairments of property, plant and equipment and intangible assets"). Capitalized development expenses are subject to scheduled amortization over the anticipated sales period of the products – in principle however no longer than five years. In this context, the acquisition and production costs cover all the costs directly attributable to the development process as well as appropriate portions of the overheads relating to the development. If the requirements for capitalization have not been fulfilled, the expenditures are recognized through profit or loss in the year they occurred.

Amortization of intangible assets is apportioned based on the causer principle to the corresponding function areas in the income statement.

Research expenses are recorded as current expenses in research and development expenses in accordance with IAS 38.

3.4 Property, plant, and equipment

Property, plant, and equipment are valued at acquisition and production cost, less scheduled, straight-line depreciation. The depreciation method reflects the anticipated pattern of consumption of the future economic benefits. If the acquisition cost of individual components of an asset is material (particularly in the case of buildings), the depreciation is applied separately for each part of the property, plant, and equipment. Where necessary, impairment losses reduce the amortized acquisition and production cost. In principle, government grants for non-current assets are deducted from the acquisition and production costs in accordance with IAS 20 "Accounting for and Presentation of government grants" (see section entitled "Government grants"). Production costs are calculated based on directly attributable specific costs as well as proportionate, directly attributable cost of materials and production overheads including depreciation. In accordance with IAS 23 "Borrowing Costs", borrowing costs directly attributable to acquisition or production costs of a qualifying asset are capitalized as a portion of the acquisition or production costs.

Costs incurred for repairing property, plant, and equipment are generally treated as an expense. Subsequent acquisition costs for any components of property, plant, and equipment replaced at regular intervals, can be capitalized insofar as future economic benefits can be reasonably expected and the respective costs can be reliably measured.

Scheduled depreciation, unchanged from the prior year, is essentially based on the following useful lives:

	Useful life
Buildings	12 – 80 years
Machinery and technical systems	5 – 15 years
Other equipment, operating, and office equipment	3 – 15 years

If any items of property, plant, and equipment are decommissioned, sold, or relinquished, the gain or loss arising from the difference between the proceeds of the sale and the residual carrying amount are recorded under other operating income or other operating expenses.

3.5 Impairment of property, plant, and equipment and intangible assets

Property, plant, and equipment and intangible assets with finite useful lives are assessed at each reporting date to see if there are any indications of possible impairment losses for the corresponding assets in accordance with IAS 36 "Impairment of Assets". If any such indications for specific assets or a cash-generating unit are identified, these will be subject to an impairment test.

The cash-generating unit for the impairment test of property, plant, and equipment and intangible assets is generally the reporting unit. Goodwill is tested for impairment at the level of a group of cash-generating units represented by the respective segment.

As part of the impairment test, the recoverable amount of an asset or cash-generating unit is first determined and then compared with the corresponding carrying amount in order to identify whether there is any need for an impairment to be applied.

The recoverable amount is the higher of an asset's fair value less costs to sell and value in use of an asset or a cash-generating unit.

The amount designated as at fair value less costs to sell is that which could be achieved through the sale of an asset in a transaction at arm's length between knowledgeable and willing parties.

Value in use is determined based on discounted anticipated future cash inflows. This is based on a fair market interest rate before tax that reflects the risks of using the assets that are not yet considered in the estimated future cash inflows.

If the recoverable amount of an asset is estimated to be less than the carrying amount, it is then depreciated to the recoverable amount. The impairment losses are immediately shown in other operating expenses, affecting profit or loss.

If an impairment loss is reversed in a subsequent accounting period, the carrying amount of the asset must then be adjusted to the recoverable amount determined. The maximum limit for the reversal of an impairment loss is determined by the amount of the amortized acquisition or production costs that would have been recorded if an impairment loss had not been recognized in prior periods. The impairment loss reversal is immediately shown in other operating income, affecting profit or loss.

3.6 Government grants

IAS 20 distinguishes between grants related to acquiring non-current assets and grants related to income.

In general, IAS 20 states that grants are to be accounted for through profit or loss in the same period as the relevant expenses.

In the Jenoptik Group grants for non-current assets are deducted from the acquisition and production costs. Correspondingly, the amounts to be written off are determined based on the reduced acquisition and production costs.

3.7 Leases

On commencement of contract, the Group assesses whether a contract constitutes or contains a lease. This is the case if the contract provides the entitlement to control the use of an identified asset in return for payment of a remuneration for a specific period. As a lessee, Jenoptik basically accounts for the rights of use of the lease items and the corresponding lease liabilities in accordance with IFRS 16.

Rights of use are valued at acquisition costs less all accumulated depreciation. The acquisition costs include the recognized lease liabilities, the initial direct costs incurred as well as the lease payments made at or before provision. Rights of use are subject to planned, straight-line depreciation over the shorter of the two periods of duration and anticipated useful life and for real estate class assets amount to one to 25 years and for machinery, technical equipment as well as other equipment, operating and office equipment class assets, one to five years. The rights of use are recognized in the statement of financial position item under which the underlying asset would be recognized if it were the property of the Group.

Lease liabilities are recognized at current value. These entail fixed payments, variable lease payments linked to an index or interest rate, payments arising from a contractually guaranteed residual value, payments from the exercising of renewal or purchase options deemed to be sufficiently secure and contractual penalties for the exercising of sufficiently secure termination options.

When calculating the current value of the lease payments, the Group applies its incremental borrowing rate on the date of provision if the interest rate underlying the lease cannot be readily determined. The Group's lease liabilities are shown in the items "Non-current financial debt" and "Current financial debt".

The Group makes use of the practical expedients offered by IFRS 16 and recognizes the lease payments for short-term leases (excluding property) as well as low-value leased assets as expenses on a straight-line basis over the term of the lease.

3.8 Investment property

Investment property comprises plots of land and buildings held for gaining rental income or for the purpose of their value increasing. These properties are not held for the Group's own production, for supplying goods or rendering services, for administration purposes or for any sales in the ordinary course of business activities.

In accordance with the right of choice under IAS 40 "Investment property", such assets are to be accounted for at the amortized acquisition or production costs. The fair values to be stated are determined using the discounted cash flow method.

The straight-line depreciation method is based on a useful life of between 20 to 80 years.

In accordance with IAS 36, depreciation resulting from impairment losses on investment property is applied if the value in use or fair value less costs to sell of the respective asset is less than the carrying amount. If the reasons for an impairment loss resulting from depreciation from a prior period cease to exist, corresponding write ups are recorded. The maximum limit for the reversal of an impairment loss is determined by the amount of the amortized acquisition or production costs that would have been recorded if an impairment loss had not been recognized in prior periods.

3.9 Financial instruments

Financial instruments are contracts giving rise to a financial asset of one entity and to a financial liability or an equity instrument of another entity. As defined in IAS 32, such instruments include on the one side primary financial instruments such as trade receivables and trade payables or financial receivables and financial payables. On the other side, they also include derivative financial instruments which are used for hedging risks arising from fluctuations in interest and foreign currency exchange rates.

Financial assets and financial liabilities are recognized in the consolidated statement of financial position from the date on which the Group becomes a contractual party in a financial instrument.

Depending upon the Group's business model for managing assets and the question as to whether the contractual cash flows of the financial instruments exclusively constitute repayments and interest payments on the outstanding nominal amount, the existing financial instruments are categorized in accordance with IFRS 9 either as "at amortized acquisition costs", "at fair value outside profit or loss in other comprehensive income", or "at fair value recorded through profit or loss" and valued accordingly.

The amortized acquisition costs of a financial asset or a financial liability are defined as the amount at which a financial asset or financial liability was valued when recognized for the first time

- minus any repayments
- minus any impairment losses or potential inability to be recovered, as well as
- plus/minus the cumulative distribution of any difference between the original amount and the amount repayable on maturity (e.g. premium and transaction costs). Under the effective interest method, this difference is spread over the full contractual term of the financial asset or financial liability.

The amortized acquisition costs for current receivables and payables generally reflect the amortized cost or the repayment value.

Fair value generally corresponds to the market or stock market value. If there is no active market, the fair value is determined by using financial mathematical methods such as by discounting estimated future cash flows at market interest rates or by applying standard option price models and by checking confirmations issued by the banks that sold the instruments.

a) Primary financial instruments

Shares in entities

Initial recognition in the statement of financial position is based on the fair value.

In the Jenoptik Group, all long-term shareholdings in companies are classified as "outside profit or loss at fair value in other comprehensive income" based on the exercising of the voting right granted in accordance with IFRS 9 and valued at fair value. In the absence of any identifiable market prices, the fair values of these financial instruments are determined based on discounted cash flows. Changes in value are recorded in other comprehensive income outside of profit or loss.

Investments valued in accordance with the at-equity method

Shares in entities over which Jenoptik exerts key influence, as well as shares in joint ventures, are valued in accordance with the at-equity method under IAS 28. For this purpose, the original investment carrying amount is updated with the shares in the company's consolidated statement of changes in equity to which the shareholders are entitled. The share in the profit or loss of the entities is reported under other operating income or expenses. By contrast, shares in other comprehensive income are recorded outside of profit or loss. The shares in the total comprehensive income recognized in the current year are based on the preliminary annual financial statements of the companies. Deviations between the preliminary and final annual financial statements are taken into account in the following year.

Loans

Loans involve credit granted by the Jenoptik Group and are to be valued at the amortized acquisition costs in accordance with IAS 9.

Non-current, non-interest-bearing loans and low interest-bearing loans are accounted for at current value. If any objective, substantial evidence of impairment can be identified, then unscheduled depreciation is applied.

Trade receivables

Trade receivables are non-interest bearing due to their short-term nature and are recognized at nominal value less impairment losses on the basis of anticipated bad debts (amortized acquisition costs). The anticipated bad debts are determined in accordance with IFRS 9 via the simplified method. In this context, consideration is given to both the individual default risk as well as an anticipated default risk derived from past events for a group of receivables with comparable default risks (portfolio-based impairment) through the recognition of a provision for risk in the amount of the bad debts anticipated over the entire period. When the loss of a trade receivable is finally realized, the receivable is written of by using any impairment previously recognized. Similarly, the receivable is derecognized when the contractual rights relating to the cash flows arising from the receivable expire, or the rights to receive the cash flows are transferred in a transaction in which all the risks and opportunities associated with the ownership of the receivable are transferred. As part of the factoring, the receivables are held for collection or in some cases for resale.

Other financial assets

Other financial assets are recognized at amortized acquisition costs. All identifiable default risks are accounted for by a corresponding impairment.

Non-current, non-interest-bearing or low interest-bearing receivables are discounted.

Current financial investments

Current cash deposits and current financial receivables are classified “at amortized acquisition costs” in accordance with IFRS 9 and valued accordingly.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, checks and bank credit balances available on demand with an original maturity of up to three months. These are recognized at the nominal amount less a provision for the risk of anticipated loan defaults.

Equity instruments

An equity instrument is any contractual agreement containing a residual interest in the assets of the Group after all liabilities have been deducted. Shares which have been issued are classified as equity, whereby the costs (less related income tax benefits) directly attributable to the issue of treasury shares, have been deducted from equity.

Liabilities to banks

Interest-bearing bank loans and overdraft lines of credit are accounted for at the amounts received less any directly attributable disbursement expenses. Financing costs, including premiums payable on repayment or redemption, are recognized in accordance with the accrual’s principle, using the effective interest method. Amortization via the effective interest method is included in the income statement as part of the financial expenses.

Other financial liabilities

In principle, financial liabilities are valued at amortized acquisition costs by applying the effective interest method. This does not apply to financial liabilities which are accounted for at fair value through profit or loss.

b) Derivative financial instruments

The Jenoptik Group uses derivative financial instruments for hedging risks arising from fluctuations in interest and foreign currency exchange rates. They serve to reduce earnings volatility resulting from interest and foreign currency exchange rate risks. Fair value is determined by considering the market conditions – interest rates, foreign currency exchange rates – at the balance sheet date and using generally accepted valuation methods.

Derivative financial instruments are not used for speculation purposes. The use of derivative financial instruments is subject to a group guideline which governs the use of derivative financial instruments. The Group uses cash flow hedges in order to hedge risks from fluctuations in foreign currency exchange and interest rates.

Changes in the fair value of derivative financial instruments which serve to hedge cash flow risks, are documented. If the hedge accounting has been classified as effective, the changes in fair value are recognized outside of profit or loss in other comprehensive income. Reclassifications from equity to profit or loss are carried out in the period during which the hedged underlying transaction affects profit or loss. Fluctuations in value arising from financial instruments which are classified as not effective are recorded directly in profit or loss.

3.10 Inventories

Inventories are recognized at the lower of acquisition or production costs and their net realizable value.

The net realizable value is the estimated proceeds from sale less the estimated production costs and any further costs incurred up to sale. For determining the net realizable value, devaluation routines are applied in addition to case-by-case assessment. The range, market price (based on existing orders) as well as marketability, serve as indicators of lower net sales proceeds. In this context, the specific discount rates are regularly reviewed and, if necessary, adapted.

Acquisition costs also include any other costs incurred to restore the inventories to their current condition. These take into account any reductions such as rebates, bonuses or trade discounts.

Production costs include the full costs relating to production that have been determined based on normal production capacity utilization. In addition to direct costs, these also include the appropriate portion of the necessary material and production overheads as well as production related depreciation which can be directly attributable to the production process. In this context, particular account is taken of the costs that are allocated to specific production cost centers. Administrative costs are also considered insofar as they can be allocated to production. If fair values at the reporting date have decreased owing to lower prices on the sales market, then these are recognized. In principle, the valuation of similar inventory assets is based on the average cost method. If the reasons that led to a write-down of inventories cease to exist and the net realizable value has consequently increased, the reversals of write-downs are recognized as a reduction in material costs in the corresponding periods in which the reversal of the write-downs occurs.

3.11 Contract assets and contract liabilities

A contract asset is the not yet unconditional claim to the receipt of a consideration in return for goods or services transferred to a customer. If the Group meets its contractual obligations by transferring goods or services to a customer before the customer pays the consideration or before the payment is due, a contract asset will be recognized for the conditional claim to consideration in return. This gives rise to contract assets as the difference between the realized revenue from the respective order, less payments received and customer billings. Receivables due from customers arising from invoices issued, are shown under trade receivables.

If the requested payments received and due, as well as the customer billings issued, exceed the realized revenue, a contract liability will be shown. A contract liability therefore constitutes the obligation of the Group to transfer goods or services to a customer for which it, the Group, has received a consideration from the customer or for which a requested payment is due. Contract liabilities are recognized as proceeds as soon as the Group fulfills its contractual obligations.

The contractual liabilities additionally include obligations arising from contractual penalties which have to be taken into account as a variable consideration, reducing turnover.

Contract assets reported in accordance with IFRS 15 are valued at the nominal value, taking into account impairment losses in the default amounts anticipated over the entire useful life.

3.12 Non-current assets or disposal groups held for sale and discontinued operation

Non-current assets or disposal groups held for sale

Non-current assets or disposal groups are classified as held for sale under IFRS 5 if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is highly probable.

A transaction is considered highly probable if, on the reporting date, there are no significant risks to its completion, normally requiring the conclusion of binding contracts or at least agreement on all material terms of the contract.

Assets and liabilities classified as held for sale are reported separately as current items in the statement of financial position and valued at the lower of carrying amount and fair value, less costs to sell.

Any impairment loss of a disposal group is first allocated to goodwill and then to the remaining assets.

Intangible assets and property, plant and equipment classified as held for sale are no longer subject to scheduled depreciation/amortization.

Discontinued operation

A discontinued operation is a part of the entity that has been sold or is classified as held for sale and represents a separate, material line of business or geographic business unit.

The results of the discontinued operation are shown separately in the income statement.

3.13 Deferred taxes

The accounting for and valuation of deferred taxes is made in accordance with IAS 12 "Income taxes". Deferred tax assets and deferred tax liabilities are shown as separate items in the statement of financial position in order to take into account future tax effects resulting from timing differences between the statement of financial position valuations of assets and liabilities and tax losses carried forward.

Deferred tax assets and deferred tax liabilities are calculated in the amount of the anticipated tax burden or tax relief in subsequent fiscal years based on the tax rate applicable on the date of realization. The effects of changes in tax rates on deferred taxes are recognized in the reporting period during which the legislative procedure has been completed on which the change in the tax rate is based.

Deferred tax assets on differences in the statement of financial position and on tax losses carried forward are only recognized if it is probable that these tax advantages can be realized in the foreseeable future.

Deferred tax assets and deferred tax liabilities are offset against each other insofar as taxes are levied by the same authority and relate to the same tax period. In accordance with the regulations of IAS 12, there is no discounting of deferred tax assets and liabilities.

3.14 Pension provisions

Pensions and similar obligations comprise the pension obligations of the Jenoptik Group arising from both defined benefit as well as defined contribution retirement schemes.

Defined contribution plans

In defined benefit retirement schemes, pension obligations are valued in accordance with IAS 19 according to the projected unit credit method. In this context, the future obligations are valued based on benefit claims acquired pro rata as of the statement of financial position date, considering trend assumptions for the valuation parameters which affect the level of benefits. An actuarial expert opinion for this procedure is obtained at least once a year.

Assets that meet the requirements for plan assets under IAS 19.8 are recognized at their fair value and offset against the pension obligations.

Service costs of the pension obligations are reported as personnel costs in the corresponding functional costs. The net interest expense is reported in the financial result and determined by multiplying the net liability at the beginning of the period by the interest rate underlying the discounting of the pension obligation at the beginning of the period. Actuarial gains and losses due to adjustments and changes in assumptions in connection with the valuation of pension obligations and plan assets (including the difference between the actual return on plan assets realized and the return typically assumed at the beginning of the period) are recognized in other comprehensive income outside of profit or loss.

Defined contribution plans

For defined contribution schemes, the contributions payable are recognized immediately as an expense.

3.15 Tax provisions

Tax provisions contain obligations arising from current income taxes, including uncertain tax items. Claims for tax refunds are recognized under other current non-financial assets. Deferred taxes are disclosed in separate items in the statement of financial position.

Tax provisions for corporation tax and trade tax or similar income tax expenses are determined based on the taxable income of the consolidated entities and recognized less any prepayments made.

3.16 Other provisions

In accordance with IAS 37 "Provisions, contingent liabilities and contingent assets", provisions are set aside insofar as there is any current liability to a third party resulting from a past event that is likely to lead to an outflow of resources in the future and the amount of which can be reliably estimated. Other provisions are only set aside for legal or de facto liabilities to third parties that are more likely than not at the reporting date.

Provisions are recognized at their settlement value discounted at the reporting date, provided that the interest effect is significant.

The settlement value also includes the anticipated price or cost increases. The discounting is based on non-negative interest rates before taxes that reflect current market expectations regarding the interest effect, and which are dependent upon the corresponding term of the liability. The interest portion arising from the compounding of the provision, as well as any effects of changes in interest rates, are recognized in the financial result.

Provisions are valued based on empirical values, taking the circumstances at the statement of financial position date into consideration.

Provisions for onerous contracts are recognized in the amount of the liability overhang from the difference between the unavoidable costs of fulfilling the contract and the anticipated economic benefits.

Provisions for guarantees and warranties are set aside for individual cases and on a lump-sum basis. The amount of the provision is based on the historical development of guarantees and warranties as well as on a consideration of all future potential guarantee or warranty claims, weighted by the probability of their occurrence.

Claims to the right of recourse are only considered if these claims are virtually certain.

3.17 Share-based remuneration

The members of the Executive Board and some senior management personnel of JENOPTIK AG receive multi-year variable remuneration in the form of long-term incentives (LTI) or performance shares. Both types of virtual shares are accounted for in accordance with IFRS 2 as share-based remuneration with settlement in cash. At the statement of financial position date and depending upon the contractual provisions, a provision is set aside in the amount of the earned fair value of the payment obligation, through profit or loss.

3.18 Contingent liabilities

Contingent liabilities are potential obligations that are based on past events and whose existence is only clarified by the occurrence of one or more uncertain future events, which are, however, outside the control of the Jenoptik Group. Moreover, current obligations can constitute contingent liabilities if there is insufficient certainty regarding the likelihood of outflows of resources to set aside a provision and/or the amount of the obligation cannot be estimated to sufficiently reliable extent.

The valuations of the contingent liabilities correspond to the existing scope of liability at the statement of financial position date. In principle, they are not accounted for in the statement of financial position but are explained in the Notes.

3.19 Revenue

Proceeds from contracts with customers are realized in in accordance with IFRS 15 if the control of the goods or services is transferred to the customer. These are valued in the amount of the consideration in return that the Group is expected to receive in exchange for these goods or services. For sales transactions with multiple performance obligations, revenues are apportioned based on the estimated relative individual selling prices.

Proceeds from the sale of goods are generally realized at the time when control of the asset passes to the customer. The determination of this timing considers, among other things, the transfer of the legal ownership, the physical transfer of possession and any potentially agreed acceptance of the products by the customer.

In certain cases, the goods produced by Jenoptik as part of a specific order process represent assets with no alternative benefit to the Group. Subject to a claim for payment for the service rendered to date, the revenue is recognized over time, whereby the degree of completion is determined according to the input-oriented cost-to-cost method. This applies both to the production of individual assets as well as to development projects with subsequent volume production (customer-specific volume production).

Revenue from the rendering of services which represent separate performance obligations within the meaning of IFRS 15 and from which the customer can benefit at the same time as the service is rendered, are recognized over time according to the degree of completion as at the statement of financial position date, whereby the degree of completion is generally determined according to the input-oriented cost-to-cost method.

The Group is usually subject to statutory warranties for the repair of defects that were present at the time of sale. These so-called assurance-type warranties are recognized under provisions for warranties in accordance with IAS 37. If agreed guarantees and warranty claims significantly exceed the usual framework (so-called service-type warranties), these are assessed and accounted for as a separate service obligation. In this case, the revenue for the applicable portion is realized on a straight-line basis over the agreed period of the service-type warranty.

Rental income received from investment property is realized on a straight-line basis over the term of the corresponding rental contracts and disclosed under revenue.

If a contract contains a number of delimitable components (multi-component contracts), these will be separately recognized in accordance with the above principles.

In determining the consideration in return that Jenoptik receives for fulfilling a customer order, agreed variable components are estimated at the beginning of the contract and then included in the transaction price when it is highly likely that the elimination of the uncertainty associated with the variable components of the consideration in return will not lead to a cancellation of revenue which has already been recognized. At Jenoptik, this applies to both agreed discounts and bonuses as well as to possible contractual penalties.

Since advances received from the customer are generally short-term, the Group takes advantage of the simplification relief offered by IFRS 15 and refrains from taking a financing component into account when determining the consideration in return.

3.20 Cost of sales

Cost of sales show the costs incurred to generate revenue. This item also includes the costs for setting aside provisions for warranties and guarantees. The scheduled depreciation / amortization on intangible assets and property, plant, and equipment is shown in the respective functional costs and in accordance with the principle of cause and included in cost of sales insofar as they are attributed to the production process.

3.21 Research and development expenses

Research and development expenses include non-capitalizable research and development expenses, except for research and development expenses for customer orders which are disclosed under cost of sales.

3.22 Selling expenses and general administrative expenses

Along with personnel expenses and cost of materials, selling expenses include the costs incurred for distribution, advertising, sales promotion, market research, and customer service. In addition, selling expenses also include the costs for contract initiation which are immediately recognized as an expense as a result of the application of the practical remedy under IFRS 15, since the period of depreciation / amortization for the asset that the Group would otherwise have recognized is not more than one year. Amortization of customer relationships and order backlogs acquired as part of corporate mergers are also recorded in the selling expenses.

General administrative expenses include personnel expenses and the cost of materials as well as administration-related depreciation.

3.23 Other operating income and expenses

Impairment losses and gains arising from the reversal of impairment losses on trade receivables and contract assets in accordance with IFRS 9 are included in other operating income and expenses. Income from the reversal of provisions is recognized in the functional costs, insofar as the provision was also set aside via the corresponding functional costs. If the provision was set aside in other operating expenses, the provision reversal will also be shown in other operating expenses. Furthermore, these items include currency exchange gains and losses arising from operational receivables and liabilities as well as net gains and losses arising from hedging instruments for these items. The items also include effects arising from the hedging of net positions. In addition to restructuring expenses, expenses for group projects are also allocated to other operating expenses. Income and expenses from the measurement of the fair value of contingent considerations arising from corporate acquisitions are shown in these items if the contingent considerations are dependent upon financial parameters within the EBIT. Similarly, gains and losses from the sale of consolidated entities (insofar as this does not involve a discontinued operation) as well as the contributions to earnings by investments, accounted for using the at-equity method and other taxes, are recognized in these items.

3.24 Financial income and financial expenses

The financial income and financial expenses of the Group mainly comprise interest income and interest expenses as well as the investment income and investment expenses arising from financial investments. In addition, the financial result includes currency exchange gains and losses arising from financial assets and liabilities as well as net gains and losses arising from hedging instruments for these financial assets and liabilities.

4 Disclosures on the Statement of Income

4.1 Revenue

Detailed disclosures on revenue by division and region are presented in the section "Disclosure on the Segment Report".

A breakdown of revenue, recognized over time and at a point in time, is shown in the table below.

The total revenue recognized over time included revenue from customer-specific volume production in the sum of 216,218 thousand euros (prior year: 127,516 thousand euros). In addition, sales for customer-specific individual production, services provided and arising from the Traffic Service Provision contracts were recorded over time.

Revenue in the Smart Mobility Solutions division also included other revenue from embedded operating lease contracts in the sum of 11,071 thousand euros (prior year: 10,048 thousand euros).

As in the prior year, no significant revenue was recognized for performance obligations that had already been fulfilled in prior years.

4.2 Cost of sales

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Cost of materials and services purchased	356,975	283,294
Personnel expenses	201,453	150,846
Depreciation and amortization	33,150	25,748
Other cost of sales	43,403	33,926
Total	**634,982**	**493,814**

4.3 Research and development expenses

Research and development expenses cover all expenses attributable to research and development activities. This income statement item did not include expenses paid by customers in connection with research and development services in the sum of 27,952 thousand euros (prior year: 20,330 thousand euros). These were allocated to cost of sales.

In the fiscal year just past, expenses in the sum of 4,207 thousand euros (prior year 4,198 thousand euros) were capitalized in intangible assets for internal development projects.

4.4 Expenses according to types of expense

The following main types of expenses are included in revenue, selling and administrative expenses as well as in the research and development expenses:

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Cost of materials and services purchased	382,842	300,597
Personnel expenses	355,829	281,805
Depreciation and amortization	68,254	47,584
Other expenses	55,703	45,870
Total	**862,628**	**675,855**

The increase in all types of expenses is due in particular to the increased revenue volume and the expenses for the corporate acquisitions of the prior year included for the full year 2022. The increase in depreciation and amortization was mainly due to the intangible assets identified as part of the purchase price allocation for acquisitions.

in thousand euros	Advanced Photonic Solutions	Smart Mobility Solutions	Non-Photonic Portfolio Companies	Other	Total
External revenue	**729,617**	**114,307**	**132,265**	**4,493**	**980,684**
	(495,574)	**(110,101)**	**(141,329)**	**(3,714)**	**(750,717)**
of which, recognized over time	267,128	36,760	68,990	4,493	377,372
	(170,473)	(40,283)	(84,937)	(3,714)	(299,407)
of which, recognized at a point in time	462,490	77,547	63,275	0	603,312
	(325,101)	(69,818)	(56,391)	(0)	(451,310)

The figures in brackets relate to the prior year

4.5 Other operating income

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Income from currency gains	12,004	8,554
Reversal of impairments for trade receivables and contract assets	3,128	2,203
Income from benefits in kind	1,874	1,781
Income from services, clearing and rental	1,314	1,143
Income from equity accounting	690	995
Income from compensation/insurance payments	600	859
Income from government grants	545	1,069
Income from the sale of intangible assets, property, plant, and equipment and financial investments	208	219
Income from sales of materials	43	181
Income from fair values adjustments of conditional purchase price components	0	30,509
Income from the disposal of subsidiaries and other business units	0	3,874
Income from reversal of an impairment loss of intangible assets and property, plant, and equipment	0	451
Others	1,102	1,111
Total	**21,508**	**52,950**

Income from services, clearing and rentals which is not derived from the normal business activity of the entities, is shown under other operating income.

The income from the fair value adjustment reported in the prior year related to variable purchase price components arising from the acquisition of TRIOPTICS and INTEROB.

4.6 Other operating expenses

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Currency losses	13,970	8,583
Impairment losses of intangible assets, property, plant, and equipment and investment property	13,894	460
Impairment losses on trade receivables and contract assets	3,533	3,354
Transaction costs	1,796	7,383
Expenses for group projects	1,656	1,744
Expenses from fair values adjustment of conditional purchase price components	1,100	0
Losses from the sale of intangible assets and property, plant, and equipment	716	259
Other taxes	606	658
Expenses from services and rentals	225	360
Others	729	900
Additions/reversals of provisions	−569	−4,038
Total	**37,655**	**19,663**

In 2022, the balance of foreign currency gains and losses in led to a net loss of 1,966 thousand euros (prior year: 29 thousand euros).

Transaction costs include, in particular, consulting costs in connection with acquisitions and the examination of potential further corporate acquisitions.

Impairment losses and reversals of impairment losses for trade accounts receivable and contract assets led to a net loss in the sum of 405 thousand euros (prior year: 1,151 thousand euros).

Information on impairment losses to intangible assets, property, plant and equipment and investment property can be found on the section "Intangible assets".

4.7 Financial income and financial expenses

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Income from foreign currency valuation of financial transactions	9,584	4,746
Other interest and similar income	875	226
Income from the compounding and discounting of other provisions and liabilities	1,081	0
Investment income	108	592
Total financial income	**11,648**	**5,564**
Expenses from foreign currency valuation of financial transactions	8,001	3,296
Financing costs for syndicated loans and debenture bonds	7,042	4,419
Expenses from compounding/discounting of other provisions and liabilities	0	1,664
Interest expenses for leases	976	785
Custody fee on financial assets (negative interest)	2	244
Net interest expenses for pension provisions	84	68
Other interest and other financial expenses	1,498	688
Total financial expenses	**17,604**	**11,164**
Total	**−5,956**	**− 5,600**

Income from foreign currency valuation of financial transactions in the sum of 9,584 thousand euros (prior year: 4,746 thousand euros) and countervailing expenses in the sum of 8,001 thousand euros (prior year: 3,296 thousand euros) led to a net profit of 1,583 thousand euros in fiscal year 2022 (prior year: 1,450 thousand euros). This result is attributable to foreign currency gains and losses from group financing.

4.8 Income taxes

Current income tax expenses (paid or owing), as well as deferred tax assets and deferred tax liabilities in the individual countries, are shown as income taxes. The current income taxes of the Jenoptik Group were calculated by applying the tax rates applicable at the statement of financial position date.

The calculation of the deferred taxes for the domestic entities was based on a tax rate of 30.36 percent (prior year: 30.28 percent). In addition to the corporation tax of 15.0 percent (prior year: 15.0 percent) and the solidarity surcharge of 5.5 percent of the corporation tax charge (prior year 5.5 percent), an effective trade tax rate of 14.54 percent (prior year: 14.46 percent) was considered. The calculation of deferred taxes for foreign entities is based on the tax rates which are currently or imminently applicable in the respective country.

Deferred taxes are recognized as either tax expenses or tax income in the income statement, unless these directly relate to items recognized outside of profit or loss in other comprehensive income. In this event, deferred taxes are also recognized outside of profit or loss in other comprehensive income.

Uncertainties regarding the treatment of income for tax purposes are subject to continuous analysis. Where there is a probability of the tax authorities not accepting uncertainty over income tax treatment, a reasonable sum will be set aside for risk provisioning. The amount of the risk provision shall be equal to the amount which hypothetically represents the most likely value or expected value, considering any tax uncertainties. In this context, uncertain tax issues are not considered separately but together.

Tax expenses were classified according to their origin as follows:

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Current income taxes		
Germany	10,299	8,607
Abroad	9,697	5,354
Total	**19,996**	**13,961**
Deferred taxes		
Germany	18,652	−109
Abroad	−6,546	−4,163
Total	**12,106**	**−4,272**
Total income taxes	**32,103**	**9,689**

The current income taxes included for 2022 a tax income in the amount of 710 thousand euros (prior year: expense of 915 thousand euros) for current taxes from earlier business periods. Deferred tax expense includes an out-of-period expense in the sum of 700 thousand euros (prior year: income 840 thousand euros).

Deferred taxes include a tax expense resulting from the development of temporary differences in the sum of 3,438. thousand euros (prior year: income 6,315 thousand euros).

As at the statement of financial position date, the Jenoptik Group had the following tax losses carried forward at its disposal for offsetting against future profits:

in thousand euros	31/12/2022	31/12/2021
Corporation tax	98,341	139,532
Trade tax	241,773	292,898

The reduction in tax losses carried forward is mainly due to their use in the fiscal year. Considering all currently known positive and negative factors influencing the future tax results of the Jenoptik Group, a utilization of the corporation tax loss carried forward of 70,763 thousand euros (prior year: 114,004 thousand euros) and the use of trade tax losses carried forward of 240,586 thousand euros (prior year: 281,093 thousand euros) is probable. A deferred tax claim of 46,907 thousand euros (prior year: 59,407 thousand euros) was recognized for these utilizable tax losses carried forward. Of which 34,982 thousand euros (prior year: 40,632 thousand euros) was attributable to trade tax losses carried forward.

For the remaining, non-utilizable losses carried forward, no deferred tax assets were recognized for corporation tax purposes in the sum of 27,578 thousand euros (prior year: 25,528 thousand euros) and for trade tax purposes in the sum of 1,187 thousand euros (prior year: 11,805 thousand euros).

A portion of the tax losses with carried forward is subject to a time limit for carry forward purposes:

in thousand euros	31/12/2022	31/12/2021
Up to 1 year	184	0
2 to 5 years	362	770
6 to 9 years	308	4,977
More than 9 years	2,879	1,395
Total losses with carried forward option subject to a time limit	**3,733**	**7,142**

No deferred tax assets were shown for allowable time differences in the sum of 2,978 thousand euros (prior year: 2,033 thousand euros) as these will probably not be realized in the underlying reporting period.

The following recognized deferred tax assets and deferred tax liabilities were attributed to recognition and valuation differences in the individual statement of financial position items and to tax losses carried forward:

	Deferred tax assets		Deferred tax liabilities	
in thousand euros	31/12/2022	31/12/2021	31/12/2022	31/12/2021
Intangible assets	11,126	1,875	35,274	33,488
Property, plant, and equipment	1,493	829	14,740	15,905
Financial investments	233	743	2,593	1,880
Inventories	9,357	8,987	1,225	1,302
Receivables and other assets	1,319	2,240	11,544	6,329
Provisions	6,955	15,430	1,738	1,027
Liabilities	13,469	13,987	1,333	345
Tax losses carried forward, and tax credits	47,255	62,629	0	0
Gross figure	**91,207**	**106,720**	**68,447**	**60,276**
Netting out	−52,385	−35,535	−52,385	−35,535
Recognition in the statement of financial position	**38,822**	**71,185**	**16,062**	**24,741**
Shown in the statement of financial position as follows:				
Continuing operations	38,822	63,360	16,062	24,741
Discontinued operation	0	7,825	0	0

The net inventory of the asset surplus in deferred taxes reduced by 15,859 thousand euros. Taking into consideration deferred taxes recognized outside of profit or loss (minus 2,616 thousand euros), adjustment of first-time consolidations (minus 1.038 thousand euros) as well as the foreign currency exchange conversions (minus 99 thousand euros) in the reporting year, this resulted in a deferred tax expense of 12,106 thousand euros included in the income statement.

Temporary differences in the sum of 226,735 thousand euros (prior year: 219,761 thousand euros) related to shares in subsidiaries for which no deferred tax liabilities had been set aside due to IAS 12.39. Deferred tax liabilities in the sum of 268 thousand euros (prior year: 249 thousand euros) were set aside on outside basis differences in accordance with IAS 12.40.

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Earnings before tax from continuing operations	95,954	102,548
Earnings before tax from discontinued operation	−5,342	−8,230
Earnings before tax	**90,612**	**94,318**
Tax rate on earnings for the Jenoptik Group in %	30.36	30.28
Anticipated tax expense	**27,510**	**28,560**
The tax implications of the following facts led to a deviation in the actual anticipated tax expense:		
Non-deductible expenses, tax-exempt earnings, and permanent deviations	5,405	−8,784
Change in the realizability of deferred tax assets and tax credits	801	−7,953
Effects from differences in tax rates	−400	−573
Implications of changes in tax rates	−54	−1,497
Taxes in prior years	82	75
Other tax effects	235	152
Total adjustments	**6,069**	**−18,580**
Actual income tax expense	**33,579**	**9,979**
The breakdown of the actual income taxes is as follows:		
Income taxes attributable to the continuing operations	32,103	9,689
Income taxes attributable to the discontinued operation	1,476	290

The table above shows the tax reconciliation between the tax expense expected in the respective fiscal year and the actual tax expense recognized. To determine the anticipated tax expense, in the fiscal year 2022 the applicable group tax rate of 30.36 percent (prior year: 30.28 percent) was multiplied by the earnings before tax.

4.9 Discontinued operation

With the signing of the binding agreement for the sale of the VINCORION division on November 25, 2021, the business division was classified as a discontinued operation and both the assets and liabilities were shown as held for sale as of December 31, 2021. The corresponding sale of the shares in the wholly owned subsidiaries JENOPTIK Advanced Systems GmbH, JENOPTIK Power Systems GmbH, and JENOPTIK Advanced Systems, LLC was completed on the closing date of June 30, 2022.

Earnings from discontinued operation

The VINCORION result up to the time of sale is as follows:

in thousand euros	1/1 – 30/6/2022	1/1 -31/12/2021
Revenue	47,855	145,030
Expenses	48,425	130,155
EBIT	**−570**	**14,875**
Financial expenses	−415	−805
Result of current business activities before income taxes	**−985**	**14,070**
Income taxes	−1,007	−3,090
Earnings from operating activities after income taxes	**−1,992**	**10,980**
Loss from the sale of the discontinued operation	−4,826	0
Impairment loss from the revaluation at fair value less selling costs	0	−19,500
Earnings after tax of discontinued operation	**−6,817**	**−8,520**

Intra-group transactions were completely eliminated from the financial results, with intra-group earnings from the performing business unit and the elimination of the related expenses of the receiving business unit being consolidated.

The result from the sale of the discontinued operation is determined as follows:

in thousand euros	
Consideration received or still outstanding	
Cash and cash equivalents	63,241
Fair value of the contingent consideration [1]	0
Other receivables/provisions from indemnity agreements	1,726
Total purchase price	**64,966**
Disposed net assets	−68,774
Loss from the sale of the discontinued operation (before reclassification of the foreign currency reserve)	**−3,808**
Reclassification of the foreign currency reserve	−549
Income taxes	−469
Loss from the sale of the discontinued operation (after taxes)	**−4,827**

[1] after revaluation in the 2nd half-year 2022

The contractually agreed purchase price is based on audited closing accounts, considering net financial debt and a working capital balancing mechanism as of June 30, 2022. Contingent consideration was also agreed and depends on the attainment of certain EBITDA success criteria for VINCORION in the years 2022 and 2023, potentially resulting in additional consideration of up to 5,000 thousand euros. Based on VINCORION's corporate planning, the fair value of the contingent consideration at the time of the sale was estimated at 3,430 thousand euros and recognized as a financial asset valued at fair value through profit or loss. As a result of the development of VINCORION in the 2nd half-year 2022 and the updated corporate planning for 2023, the contingent consideration was released in full during the further course of the past fiscal year. The revaluation of the contingent consideration is included in the loss arising from the sale of the discontinued operation reported above. In addition, there are claims relating to individual assets as well as obligations with limited monetary amounts arising from indemnity agreements vis-à-vis VINCORION, consequently these remain with Jenoptik from the financial aspect and are recognized as an additional purchase price claim in the amount of 4,846 thousand euros or as a provision in the amount of 3,120 thousand euros as of December 31, 2022.

Earnings per share from discontinued operation (undiluted = diluted) amounts to minus 0.12 euros (prior year: minus 0.15 euros).

Effects of the sale on the Group's statement of financial position items

The net assets disposed of at the time of closing on June 30, 2022 are composed as follows:

in thousand euros	30/06/2022
Assets	
Intangible assets	14,448
Property, plant, and equipment	32,973
Deferred taxes	5,670
Inventories	66,304
Trade receivables	26,231
Contract assets	6,834
Other assets	2,882
Cash and cash equivalents	75
Liabilities	
Pension provisions	14,152
Other provisions	19,924
Financial debt	20,058
Deferred tax liabilities	3,291
Trade accounts payable	13,815
Contract liabilities	9,912
Other liabilities	5,490
Net assets disposed	**−68,774**

Net cash flows from discontinued operation

The net cash flows of VINCORION are as follows:

in thousand euros	1/1–30/06/2022	1/1–31/12/2021
Operating activities	1,752	29,753
Investing activities [1]	58,558	−9,995
Financing activities	−2,076	−4,055
Net cash flows	**58,234**	**15,703**

[1] Including receipts from the sale of the discontinued operation

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Assets and liabilities of the disposal group classified as held for sale

As of December 31, 2021, the following assets and liabilities of VINCORION were shown in the category "held for sale":

in thousand euros	31/12/2021
Assets	
Intangible assets	10,773
Property, plant, and equipment	32,128
Deferred taxes	7,824
Inventories	54,421
Trade receivables	39,306
Contract assets	11,395
Other assets	883
Cash and cash equivalents	46
Assets held for sale	**156,777**
Liabilities	
Pension provisions	21,189
Other provisions	21,541
Financial debt	21,745
Trade accounts payable	17,282
Contract liabilities	8,240
Other liabilities	3,616
Liabilities related to assets held for sale	**93,613**
Net assets directly associated with the disposal group	**63,164**

In the prior year, as a result of the classification as "held for sale", an impairment loss after tax of 19,500 thousand euros (impairment loss before tax of 22,300 thousand euros, income taxes 2,800 thousand euros) was recognized in the result of discontinued operation and the carrying amount of VINCORION was therefore reduced to the fair value less selling costs.

The determination of the fair value was based on valuation parameters that are not based on observed market data (level 3). In addition to the contractually agreed purchase price, the net financial debt and an agreed working capital compensation mechanism as of the valuation date, the valuation also considered the anticipated contingent consideration.

4.10 Earnings of shareholders and earnings per share

Earnings of shareholders include the earnings after tax of continuing operations and earnings after tax of the discontinued operation. Earnings per share equate to the earnings attributable to the shareholders, divided by the weighted average number of shares in circulation during the year.

	1/1–31/12/2022	1/1–31/12/2021
Earnings attributable to shareholders – continuing operations in thousand euros	61,918	90,518
Earnings attributable to shareholders – discontinued operation in thousand euros	−6,817	−8,520
Total earnings after tax attributable to shareholders after tax in thousand euros	**55,100**	**81,998**
Weighted average number of outstanding shares	57,238,115	57,238,115
Earnings per share in euros (undiluted = diluted)	**0.96**	**1.43**

The earnings after tax of the discontinued operation are to be allocated to the shareholders of the parent company in full. From the earnings after tax arising from the continuing operations in the sum of 63,851 thousand euros (prior year: 92,859 thousand euros) a sum of 61,918 thousand euros (prior year: 90,518 thousand euros) is to be allocated to the shareholders of the parent company.

The diluted and undiluted earnings per share for the discontinued operation are disclosed in the section "Discontinued operation".

5 Disclosures on the Statement of Financial Position

5.1 Intangible assets

in thousand euros	Development costs from internal development projects	Acquired patents, trademarks, software, customer relationships	Internally generated patents	Goodwill	Other intangible assets	Total
Acquisition/production costs Balance as of 1/1	**22,522**	**239,825**	**2,194**	**577,989**	**10,529**	**853,059**
	(27,971)	**(147,241)**	**(2,176)**	**(400,057)**	**(7,569)**	**(585,013)**
Foreign currency exchange effects	−5	3,863	0	5,324	−8	9,175
	(7)	(4,147)	(0)	(12,587)	(0)	(16,742)
Additions resulting from business combinations[1]	0	4,737	0	−2,183	0	2,554
	(0)	(98,520)	(0)	(178,205)	(0)	(276,725)
Additions	4,207	5,001	291	0	971	10,469
	(9,488)	(1,732)	(201)	(0)	(4,187)	(15,608)
Disposals	211	14,325	121	0	0	14,658
	(1,742)	(7,836)	(183)	(6,737)	(3)	(16,501)
Transfers (+/-)	0	7,963	0	0	−7,777	187
	(0)	(594)	(0)	(0)	(−565)	(29)
Reclassification in accordance with IFRS 5	0	0	0	0	0	0
	(−13.202)	(−4,572)	(0)	(−6,124)	(−659)	(−24,558)
Acquisition/production costs Balance as of 31/12	**26.512**	**247,064**	**2,364**	**581,130**	**3,714**	**860,785**
	(22.522)	**(239,825)**	**(2,194)**	**(577,989)**	**(10,529)**	**(853,059)**
Amortization Balance as of 1/1	**12.569**	**81,272**	**1,005**	**4,966**	**0**	**99,812**
	(13,972)	**(73,132)**	**(940)**	**(9,895)**	**(0)**	**(97,938)**
Foreign currency exchange effects	−5	457	0	0	0	451
	(7)	(1,683)	(0)	(0)	(0)	(1,691)
Additions	696	30,028	184	0	0	30,909
	(420)	(18,328)	(173)	(0)	(0)	(18,920)
Impairment losses	0	4,125	0	9,160	0	13,285
	(0)	(0)	(0)	(0)	(0)	(0)
Disposals	0	14,307	6	0	0	14,313
	(1,742)	(7,776)	(108)	(4,929)	(0)	(14,555)
Reclassification in accordance with IFRS 5	0	0	0	0	0	0
	(−88)	(−4,096)	(0)	(0)	(0)	(−4,183)
Amortization Balance as of 31/12	**13,260**	**101,574**	**1,182**	**14,126**	**0**	**130,143**
	(12,569)	**(81,272)**	**(1,005)**	**(4,966)**	**(0)**	**(99,812)**
Net carrying amount as of 31/12	**13,252**	**145,490**	**1,182**	**567,004**	**3,714**	**730,642**
	(9,953)	**(158,554)**	**(1,190)**	**(573,022)**	**(10,529)**	**(753,247)**

[1] Finalization of first-time consolidation of BG Medical and SwissOptic Group
The figures in brackets relate to the prior year

Development costs from internal development projects in the sum of 10,242 thousand euros (prior year: 8,877 thousand euros) related to development projects that are not yet completed.

Disposals of acquired patents, trademarks, software, and customer relationships primarily relate to intangible assets that were recorded in prior years within the context of acquisitions and are written off in full at the end of their useful life.

Assets acquired in return for payment and still in development are shown as other intangible assets. With the successful go-live of the new SAP S/4HANA system which was launched as part of a program to harmonize processes and data, transfers were reflected in the acquired software item.

The order commitments for intangible assets totaled 299 thousand euros (prior year: 241 thousand euros).

Goodwill and intangible assets with indefinite useful lives

Other than goodwill, there were no intangible assets with an indefinite useful life.

Goodwill was allocated to the cash-generating units Advanced Photonic Solutions, Smart Mobility Solutions and the Non-Photonic Portfolio Companies, which also represent the reportable segments. In connection with the adjustment to the new segment structure (see section "Information on segment reporting"), a partial reallocation of goodwill was carried out between the previous divisions Light & Production and Light & Optics after an impairment test.

in thousand euros	31/12/2022	31/12/2021
Advanced Photonic Solutions (prior year: Light & Optics)	462,123	443,472
Smart Mobility Solutions (prior year: Light & Safety)	40,742	42,819
Non-Photonic Portfolio Companies (prior year: Light & Production)	64,139	86,730
Total	**567,004**	**573,022**

The impairment test for goodwill was made at the level of these cash-generating units. If the carrying amounts of these cash-generating units exceeded their recoverable amounts, the goodwill allocated was correspondingly reduced. The determining factor for the impairment test was the recoverable amount, i.e. the higher of the two amounts derived from the fair value less costs to sell or value in use.

Jenoptik calculated the recoverable amount in the form of the value in use, based on a discounted cash flow method. The basis for this is the five-year corporate plan approved by the management. This took into consideration past experience as well as current operational results and was based on the management's best estimate of future development. The cash flows in the detailed planning phase were planned based on differentiated growth rates. These took account of the development and dynamics of the relevant sectors and target markets.

This was based on the following planning assumptions for the divisions:

Advanced Photonic Solutions

The division benefited from increasing demand in the fiscal year 2022 and was able to increase revenue significantly compared to the prior year. The increasing demand from the semiconductor equipment industry in the semiconductor & advanced manufacturing segment had a positive impact on the development of sales. EBITDA improved as a result of increased revenues. For further revenue growth, the division is focusing primarily on the areas of semiconductor & advanced manufacturing, biophotonics as well as optical testing and measurement. Despite the increasing challenges in the procurement market for both our own and our customers' production, Jenoptik anticipates further growth across all areas of the Advanced Photonic Solutions division. With the takeover of BG Medical and the SwissOptic Group at the end of 2021, Jenoptik intends to use the opportunities and synergies in the medium term to make a significant contribution to the growth of the division.

Smart Mobility Solutions

The division posted an increase in revenue of approx. 3.8 percent in the fiscal year 2022. The focus of development over the coming years will be on the increasing demand for public safety, especially in the regions of the Americas, the Middle East/North Africa, and other European countries. As competition increases, structural and process optimizations that have been introduced will be continued and, with the increase in the generation of local and international value added, are expected to bring about a sustained increase in revenue and profitability over the medium term, primarily due to recurring revenues from the TSP business.

Non-Photonic Portfolio Companies

The Non-Photonic Portfolio Companies recorded a decline in revenue in 2022 and, as a consequence, from the loss in project business as well as positive one-off effects in the prior year, reduced profitability. In addition, the review of the business prospects, in particular of INTEROB, resulted in a reduction in expected future cash flows. In connection with the increase in the cost of capital, the Non-Photonic Portfolio Companies incurred an impairment loss on goodwill of 9,160 thousand euros. As a result of the planned concentration of the Automation & Integration business at the site in Canada, Jenoptik also assessed individual assets to determine impairment requirements and recognized an additional impairment loss of 4,125 thousand euros on customer relationships and of 609 thousand euros on property, plant and equipment. Despite structural changes towards e-mobility, Jenoptik expects significant growth through the expansion of the customer and product portfolio as well as the overall good order situation. An increase in profitability is expected in the medium term as a result of the completed restructuring measures, economies of scale and ongoing optimization of structures and processes.

The earnings of the respective planning year for determining the free cash flow are adjusted for non-cash expenses and income such as depreciation and amortization.

This assumes a perpetuity, the amount of which is individually determined for each cash-generating unit by the management from the fifth year of the planning time frame. The perpetual annuity includes a growth component in the form of a deduction on the capitalization interest rate of 1.0 percentage points (prior year between 0.9 and 1.0 percentage points). Non-recurring effects in the last year of the plan are eliminated prior to calculating the perpetual annuity.

The weighted cost of capital after tax required for impairment tests represents current market estimates with regard to the specific risks attributable to the cash-generating units. These are determined by applying the Capital Asset Pricing Model for the calculation of the cost of equity. The components for calculating the cost of equity are a risk-free interest rate, the market risk premium, a beta factor customary in our industry determined from division-specific peer groups as well as the average country risk of each cash-generating unit. Borrowing costs were determined by including a risk-free interest rate, the spread customary in our industry and the standard average tax rate. The weighted costs of equity and borrowing costs resulted from applying the capital structure customary in our industry.

Impairment testing was conducted assuming a weighted average cost of capital after taxes at a rate between 7.79 and 9.45 percent (prior year 6.42 to 9.21 percent). This corresponded to the weighted average cost of capital before tax of between 9.87 and 12.06 percent (prior year 7.96 to 12.21 percent).

The assumptions used to determine the values in use of the cash-generating unit are shown in the following table:

	Growth components in the perpetual annuity	Weighted cost of capital after tax	Weighted cost of capital before tax
Advanced Photonic Solutions (prior year: Light & Optics)	1.00 (0.90)	8.36 (9.21)	10.82 (12.21)
Smart Mobility Solutions (prior year: Light & Safety)	1.00 (0.90)	7.79 (6.42)	9.87 (7.96)
Non-Photonic Portfolio Companies (prior year: Light & Production)	1.00 (1.00)	9.45 (8.36)	12.06 (10.72)

The figures in brackets relate to the prior year

Sensitivity analyses were made for all cash-generating units to which goodwill was allocated as of December 31, 2022. In the Advanced Photonics Solutions and Smart Mobility Solutions divisions, a reduction in the cash flows or an increase in the weighted cost of capital within the range considered by the management as possible would not result in the recoverable amount being less than the carrying amount of the cash-generating units. An increase in the cost of capital or a decrease of the cash flows of the Non-Photonic Portfolio Companies would lead to a decrease of the recoverable amount (value in use) determined as of December 31, 2022 of 162,773 thousand euros and thus the following additional need for impairment:

	Impairment of thousand euros
Increase of 1.00 percent in weighted cost of capital (after tax)	19,491
Reduction of 10 percent in cash flows	16,277

5.2 Property, plant, and equipment

in thousand euros	Land, buildings	Technical equipment and machinery	Other equipment, operating and business equipment	Equipment under construction	Total
Acquisition / production costs Balance as of 1/1	**238,469**	**187,949**	**95,304**	**18,424**	**540,146**
	(261,175)	**(207,274)**	**(118,150)**	**(10,336)**	**(596,934)**
Foreign currency exchange effects	2,499	5,291	349	371	8,509
	(3,586)	(4,045)	(922)	(189)	(8,741)
Additions through business combinations [1]	−753	−486	0	0	−1,239
	(17,926)	(13,539)	(2,443)	(268)	(34,176)
Additions	27,921	28,160	10,230	29,204	95,514
	(6,041)	(14,753)	(9,067)	(14,160)	(44,020)
Disposals	2,847	18,004	8,854	98	29,802
	(2,997)	(19,134)	(15,765)	(4)	(37,899)
Transfers (+/-)	6,828	4,869	577	−12,044	230
	(767)	(3,953)	(597)	(−5,413)	(−97)
Reclassification according to IFRS 5	0	0	0	0	0
	(−48,028)	(−36,480)	(−20,109)	(−1,112)	(−105,729)
Acquisition / production costs Balance as of 31/12	**272,116**	**207,779**	**97,606**	**35,857**	**613,358**
	(238,469)	**(187,949)**	**(95,304)**	**(18,424)**	**(540,146)**
Depreciation Balance as of 1/1	**82,136**	**122,123**	**69,232**	**0**	**273,491**
	(91,531)	**(152,490)**	**(89,415)**	**(0)**	**(333,436)**
Foreign currency exchange effects	848	4,074	317	0	5,239
	(1,032)	(2,807)	(564)	(0)	(4,403)
Additions	12,500	15,771	8,954	0	37,225
	(13,450)	(12,290)	(9,432)	(0)	(35,172)
Impairment losses	160	156	293	0	609
	(0)	(3)	(6)	(0)	(10)
Impairment reversal	0	0	0	0	0
	(−451)	(0)	(0)	(0)	(−451)
Disposals	2,636	16,939	8,493	0	28,068
	(2,347)	(19,009)	(15,121)	(0)	(36,477)
Transfers (+/-)	−1,832	1,511	64	0	−257
	(−70)	(2)	(0)	(0)	(−68)
Reclassification according to IFRS 5	0	0	0	0	0
	(−21,008)	(−26,460)	(−15,065)	(0)	(−62,533)
Depreciation Balance as of 31/12	**94,839**	**123,675**	**70,238**	**0**	**288,752**
	(82,136)	**(122,123)**	**(69,232)**	**(0)**	**(273,491)**
Net carrying amount as of 31/12	**177,277**	**84,104**	**27,368**	**35,857**	**324,606**
	(156,334)	**(65,826)**	**(26,073)**	**(18,424)**	**(266,656)**

[1] Finalization of first-time consolidation of BG Medical and SwissOptic Group
The figures in brackets relate to the prior year

Land and buildings of the Group with a net carrying amount of 177,277 thousand euros (prior year: 156,334 thousand euros) mainly comprised the Group's own production and administrative buildings in Jena, Wedel, Bayeux (France), Heerbrugg (Switzerland), Huntsville (USA), Shanghai (China) and Rochester Hills (USA) as well as the leased production and administrative buildings in Berlin, Monheim and Camberley (UK).

Order commitments for property, plant, and equipment in the sum of 26,859 thousand euros have reduced slightly compared with the prior year (prior year: 30,049 thousand euros) and, primarily resulted from replacement and new investment in technical equipment and machinery.

As of the balance sheet date, the same as of December 31, 2022, no property, plant and equipment was pledged.

5.3 Leasing

The Group has concluded lease contracts for real estate, technical equipment and machinery and other equipment, motor vehicles and for operating and business equipment.

The rights of use are shown in the statement of financial position within the statement of financial position item property, plant and equipment, in which the underlying assets would be reported as though they were owned by the Group. A separate presentation of the rights of use as of January 1, 2022 and December 31, 2022, as well as additions and depreciation in the fiscal year 2022, can be found in the following table.

in thousand euros	Rights of use to land, buildings,	Rights of use to technical equipment and machinery	Rights of use to other equipment, operating and business equipment	Total rights of use
Acquisition / production costs, balance as of 1/1	**34,304**	**20,529**	**7,066**	**61,900**
	(58,041)	**(10,277)**	**(8,132)**	**(76,450)**
Foreign currency exchange effects	−82	395	−8	304
	(1,395)	(102)	(94)	(1,590)
Additions through business combinations	0	0	0	0
	(293)	(5,508)	(0)	(5,802)
Additions	13,534	12,927	1,892	28,353
	(4,365)	(4,686)	(1,904)	(10,956)
Disposals	1,566	605	2,354	4,525
	(2,330)	(0)	(2,465)	(4,795)
Transfers (+/-)	0	−6,210	0	−6,210
	(0)	(0)	(−20)	(−20)
Reclassification according to IFRS 5	0	0	0	0
	(−27,461)	(−44)	(−579)	(−28,084)
Acquisition / production costs, balance as of 31/12	**46,190**	**27,037**	**6,596**	**79,822**
	(34,304)	**(20,529)**	**(7,066)**	**(61,900)**
Depreciation balance as of 1/1	**13,724**	**3,683**	**3,852**	**21,258**
	(15,271)	**(2,024)**	**(3,828)**	**(21,124)**
Foreign currency exchange effects	−34	206	−16	156
	(460)	(52)	(58)	(570)
Additions	6,025	3,012	1,993	11,031
	(8,255)	(1,625)	(2,476)	(12,355)
Impairment losses	0	18	99	117
	(0)	(0)	(0)	(0)
Disposals	1,459	605	2,177	4,241
	(1,688)	0	(2,198)	(3,886)
Transfers (+/-)	0	−3,704	3	−3,702
	(0)	(0)	(− 17)	(−17)
Reclassification according to IFRS 5	0	0	0	0
	(−8,573)	(−19)	(− 296)	(−8,887)
Depreciation and amortization, balance as of 31/12	**18,256**	**2,609**	**3,755**	**24,619**
	(13,724)	**(3,683)**	**(3,852)**	**(21,258)**
Net carrying amount as of 31/12	**27,934**	**24,428**	**2,841**	**55,203**
	(20,581)	**(16,847)**	**(3,214)**	**(40,642)**

The figures in brackets relate to the prior year

Lease liabilities are shown in the statement of financial position under "Non-current financial debt" or "Current financial debt":

in thousand euros	31/12/2022	31/12/2021
Non-current lease liabilities	42,360	27,528
Current lease liabilities	11,916	11,418

Interest expenses for leases in fiscal year 2022 totaled 976 thousand euros (prior year: 785 thousand euros).

In addition to depreciation and interest expenses, the following expenses were recognized through profit or loss:

Expenses for lease contracts (in thousand euros)	1/1–31/12/2022	1/1–31/12/2021
From short-term lease contracts	1,944	972
From low-value lease contracts	1,597	1,605
From variable lease payments	802	1,033
Total lease expenses	**4,342**	**3,609**

The variable lease payments mainly include payments for non-leasing components of lease contracts that have been accounted for in accordance with IFRS 16.

Payment obligations arising from fixed lease payments are listed according to their maturity in the table below:

Payment obligations for fixed lease payments (in thousand euros)	31/12/2022	31/12/2021
Up to 1 year	12,962	12,373
1 to 5 years	31,498	23,929
More than 5 years	13,013	5,119
Total	**57,474**	**41,421**

Renewal and termination options included in the leases are negotiated by management. The assessment as to whether there is sufficient certainty regarding the exercise of these extension and termination options has been assessed and evaluated accordingly by the management.

The non-discounted, potential future lease payments for periods after the exercise date for renewal and termination options, not included in the term of the lease, are shown in the table below:

Additional details (in thousand euros)	31/12/2022	31/12/2021
Payment obligations for short-term lease contracts	989	394
Potential cash outflows from extension and termination options which were not shown in the statement of financial position	7.204	6,191

In fiscal year 2022, the total cash outflow arising from lease contracts of the continuing operations (including current and low-value lease contracts as well as variable lease payments) with interest portion totaled 18,182 thousand euros (prior year: 14,731 thousand euros).

Income from subletting of legal assets for the use of fixed assets amounted to 182 thousand euros in the fiscal year 2022 (prior year: 181 thousand euros).

5.4 Investments accounted for in accordance with the at-equity method

The following entities were included in the consolidated financial statements as associate companies or as joint ventures, in accordance with the equity method:

- TELSTAR-HOMMEL CORPORATION, Ltd., Pyeongtaek, Korea
- HILLOS GmbH, Jena, Germany
- Trioptics France S.A.R.L., Villeurbanne, France

The following table contains summarized financial information on the entities which are not deemed of material importance on an individual basis.

	Joint Ventures		Associated company	
in thousand euros	2022	2021[1]	2022	2021[1]
Total of investments accounted for in accordance with the equity method	**8,504**	**8,544**	**5,806**	**5,784**
Total of the Group share in:				
Profit/loss from continued activities	682	819	−105	−140
Other comprehensive income	0	0	12	−77
Total comprehensive income	**682**	**819**	**−93**	**−217**

[1] Financial information aligned to Financial Statements of the company

5.5 Other non-current assets

Other non-current assets include both financial as well as non-financial assets.

in thousand euros	31/12/2022	31/12/2021
Derivatives	10,428	2,978
Other non-current financial assets	2,242	1,970
Other non-current non-financial assets	1,058	1,519
Non-current trade receivables	2	2
Reinsurance cover	0	85
Total	**13,729**	**6,555**

As in the prior year, there were no restrictions on disposals of other non-current assets.

The aggregated item derivatives are explained in the section “Financial instruments”.

5.6 Inventories

in thousand euros	31/12/2022	31/12/2021
Raw materials, consumables, and supplies	105,796	80,655
Unfinished products, unfinished services	112,626	86,840
Finished products and goods	35,689	30,285
Deposits paid for inventories	1,838	2,433
Total	**255,950**	**200,213**

At the end of the fiscal year 2022, accumulated impairment losses in the sum of 38,922 thousand euros (prior year: 38,552 thousand euros) were considered in the carrying amount. The net sale value of these inventories was 73,147 thousand euros (prior year: 63,126 thousand euros).

The impairments recognized as an expense in cost of sales amounted to 8,334 thousand euros (prior year: 5,495 thousand euros).

The consumption of inventories affected expenses in the sum of 299,057 thousand euros (prior year: 234,338 thousand euros), with the table below showing the distribution:

in thousand euros	31/12/2022	31/12/2021
Cost of Sales	296,102	231,992
Research and development expenses	2,251	1,783
Selling expenses	299	175
Administrative expenses	406	388
Total	**299,057**	**234,338**

As in the prior year, there were no restrictions on the disposal of inventories at the reporting dates.

5.7 Current trade receivables

Trade receivables

in thousand euros	31/12/2022	31/12/2021
Trade receivables from third parties	134,844	110,766
Receivables from requested advance payments	3,343	9,398
Trade receivables from non-consolidated associates and investments	582	310
Total	**138,769**	**120,475**

The fair values of trade receivables correspond to their carrying amounts as of the reporting date. These are not interest-bearing and generally have a due date of 30 to 60 days.

The table below shows the composition of the trade receivables:

in thousand euros	31/12/2022	31/12/2021
Gross value of trade receivables from third parties	142,038	117,516
Receivables from due requested advance payments	3,343	9,398
Gross value of trade receivables due from non-consolidated associates and investments	582	310
Total gross value of trade receivables	**145,963**	**127,225**
Accumulated impairments	−7,194	−6,750
Carrying amount of trade receivables	**138,769**	**120,475**

Default risks were determined through the assessment of clients' creditworthiness by means of a scorecard, taking into account specific regional and individual company characteristics. In addition to internal company data, this includes credit assessments through external credit agencies. Based on the rating of customers' creditworthiness, lines of credit are granted to ensure the active management of business transactions. This means, amongst other things, that certain payment terms can be agreed with customers according to their creditworthiness. In addition, outstanding claims against customers are regularly monitored and measures taken, the aim of which is to reduce overdue claims.

The default risk is taken into account through individual impairments and generalized individual impairments. The following table shows the changes in impairments to outstanding trade receivables:

in thousand euros	2022	2021
Impairments as of 1/1	**6,750**	**6,031**
Additions	3,503	3,400
Reversal/derecognition	3,089	2,407
Consumption	19	581
Changes in the group of consolidated entities	0	369
Foreign currency exchange effects	49	210
Reclassification according to IFRS 5	0	−272
Impairments as of 31/12	**7,194**	**6,750**

The need for impairment is analyzed at each closing date to determine the anticipated loan losses. If there are any objective indications of impairment losses, an individual impairments is applied. In addition, generalized individual impairments for receivables grouped into categories are recognized in days, based on the overdue period. Finally, a generalized individual impairment is created to take into account the existing default risk for receivables not yet due and for which no impairment has been created.

In addition to system-side valuation routines for determining the anticipated default risk, additional individualized valuation adjustments are made. The valuation considers in particular geographic location, industry, support measures from public institutions as well as individual agreements with the respective customers.

As in the prior year, as of December 31, 2022 there were no sureties for not impaired receivables in the form of bank guarantees.

The table below shows the default risk position for trade receivables due from third parties using an impairment matrix:

in thousand euros	Expected credit loss rate	Expected total gross carrying amount at default	Expected credit loss
not due	0.58%	106,995	616
	(0.58%)	(88,325)	(510)
overdue < 30 days	0.97%	15,912	154
	(1.84%)	(12,989)	(239)
overdue 30-60 days	6.56%	5,823	382
	(6.95%)	(5,741)	(399)
overdue 61-120 days	19.69%	6,147	1,210
	(29.15%)	(4,281)	(1,248)
overdue 121-240 days	46.27%	3,059	1,415
	(26.96%)	(1,954)	(527)
overdue 241-360 days	65.25%	1,275	832
	(76.36%)	(1,039)	(793)
overdue > 360 days	91.42%	2,826	2,584
	(95.21%)	(3,187)	(3,035)
Total	**5.06%**	**142,038**	**7,194**
	(5.74%)	**(117,516)**	**(6,750)**

The figures in brackets relate to the prior year

In the fiscal year 2022 the factual individual impairments to receivables totaled 2,028 thousand euros (prior year: 1,480 thousand euros). These primarily related to receivables with an overdue date of more than 360 days.

Factoring

As a result of extended payment deadlines for customers, inputs for customer-specific projects and changes in billing modalities, Jenoptik utilizes factoring. Within the framework of a genuine and confidential factoring program, existing receivables are sold to a factoring company (hereafter referred to as the "Factor") – together with the transfer of the default or del credere risk – in return for a consideration. The payments from the original customer to the Group (due to their confidential nature) are classified as "other current financial liabilities" and then forwarded to the Factor.

In the statement of financial position, trade receivables which have been sold are derecognized on transfer of the economic ownership to the Factor in accordance with IFRS 9 and, until receipt of payment, are recognized as receivables due from the Factor under "Other current financial assets". The asset is finally derecognized on payment by the Factor.

Factoring charges are shown in the consolidated income statement, under administrative expenses.

In the cash flow statement, the Factor's payments to the Group are shown under cash flows from operating activities. The payment received from the original customer and the subsequent payment as a result of the transfer to the Factor, are recognized net under cash flows from financing activities.

AS of December 31, 2022, receivables of 25,000 thousand euros (prior year: 20,796 thousand euros) were sold within the framework of the confidential factoring. After allowing for a surety retention by the Factor of 5 percent, payment receipts totaled to 23,750 thousand euros (prior year: 19,756 thousand euros). The surety retention is shown under other current financial assets.

5.8 Contract assets and contract liabilities

The statement of financial position item "Contract assets" includes conditional claims of the Group against customers for the receipt of a consideration in return, in exchange for goods or services that have already been transferred. These are grouped as follows:

in thousand euros	31/12/2022	31/12/2021
Contract assets	**58,096**	**81,414**
Realization within one year	57,310	78,398
Realization within more than one year	786	3,016

The default risk of contract assets is basically taken into account through corresponding impairments. As of December 31, 2022, there were no indicators for an individual impairment identified. The general default risk was accounted for through an impairment loss in the amount of the anticipated loss. The impairment loss was of 85 thousand euros (prior year: 123 thousand euros).

Under IFRS 15, the item "Contract liabilities" in the statement of financial position shows the Group's obligations to transfer goods or services to a customer for which it, the Group, has received a consideration in return from the customer or for which a requested payment in advance is due.

The status of the contract liabilities as of the statement of financial position date of December 31, 2022, is shown in the table below:

in thousand euros	31/12/2022	31/12/2021
Contract liabilities	**64,856**	**47,323**
Realization within one year	62,223	44,684
Realization within more than one year	2,633	2,639

Of the contract liabilities recognized at the beginning of the year, 36,915 thousand euros were realized as revenue in the year under review.

The transaction price for all customer orders that have not yet been completed in full is shown as the order backlog. This shows the following due dates:

in thousand euros	31/12/2022	31/12/2021
Transaction price of performance obligations not yet completely fulfilled	**733,656**	**543,491**
Realization within the next fiscal year	611,980	467,020
Realization within the next but one fiscal year	88,145	28,105
Realization in subsequent fiscal years	33,531	48,365

5.9 Other current financial assets

in thousand euros	31/12/2022	31/12/2021
Receivables from contingent considerations	3,652	13,347
Receivables from acquisitions	0	3,818
Receivables from disposals of companies	4,846	0
Receivable from surety retention for factoring	1,248	1,032
Other receivables due from non-consolidated associates and investments	1,006	115
Derivatives	1,385	68
Other current financial assets	1,287	1,201
Total	**13,423**	**19,582**

Receivables from contingent considerations are derived from a revenue-related malus scheme agreed in connection with the acquisition of TRIOPTICS which was valued at fair value (see section "Financial instruments").

Receivables from disposals of companies are derived from the sale of VINCORION (see section "Discontinued operation").

Default risks are taken into account through impairments. The composition of the carrying amount of other current financial assets is as follows:

in thousand euros	31/12/2022	31/12/2021
Gross value of other financial assets	14,712	20,335
Accumulated impairment loss	−1,290	−753
Carrying amount of other financial assets as of 31/12	**13,423**	**19,582**

5.10 Other current financial assets

in thousand euros	31/12/2022	31/12/2021
Accruals	8,730	5,711
Receivables due from other taxes	8,506	4,313
Receivables due from income taxes	1,393	605
Other current financial assets	636	810
Total	**19,265**	**11,439**

5.11 Equity

The development of the equity of Jenoptik is shown in the consolidated statement of changes in equity.

Share capital

Share capital amounts to 148,819 thousand euros and is divided into 57,238,115 no-par value registered shares.

Voting right notifications in accordance with § 160 (1) (No. 8) AktG are contained in chapter "Equity" of the financial statements of JENOPTIK AG. All voting right notifications of the last five years are also published on our website under www.jenoptik.com in the section Investors/Shares/Voting Rights Notifications.

Authorized capital

An "Authorized Capital 2019" was created with the resolution passed by the Annual General Meeting on June 12, 2019 as follows: The Executive Board is authorized through June 11, 2024, with the consent of the Supervisory Board, to increase the nominal capital of the company by up to 44,000 thousand euros through one or multiple issues of new, no-par value registered shares against cash and/or contribution in kind ("Authorized Capital 2019"). The new shares can be taken up by one or more banks with the obligation to offer these to shareholders (indirect subscription rights). With the consent of the Supervisory Board, the Executive Board is authorized to exclude the subscription rights of shareholders:

a) for fractional amounts;
b) for capital increases in return for contributions in kind, in particular also within the framework of business combinations or the acquisition of companies, parts of companies or investments in companies (including increasing existing shareholdings) or other contributable assets in conjunction with such an intended acquisition, as well as claims against the entity;
c) for capital increases in return for cash contributions, under the condition that the percentage of any new shares of the share capital does not in total exceed 10 percent of the share capital at the time the authorized capital is registered or in total 10 percent of the share capital at the time the new shares are issued, taking into consideration resolutions of the AGM or the use of other authorizations to preclude subscription rights in a direct or corresponding application of Section 186 (3) (4) AktG since the effective date of this authorization and the issue price of the new shares is not substantially lower than the stock market price;
d) for the issue of new shares to employees of the entity and to associates in which the entity holds a majority interest.

All aforementioned authorizations to exclude subscription rights are limited to a total of 10 percent of the share capital available at the time this authorization became effective – or, if this value is lower – to 10 percent of the share capital at the time this authorization is exercised. This limit of 10 percent includes shares that (i) could be issued for the purpose of servicing warrants and/or convertibles that were or could still be issued during the period of validity of authorized capital to the exclusion of subscription rights or (ii) are sold by the entity as treasury shares during the period of validity of authorized capital to the exclusion of subscription rights.

Decisions on the details of the issuance of new shares, in particular their conditions and the content of rights of the new shares, are taken by the Executive Board, with the consent of the Supervisory Board. The Authorized Capital 2019 has not yet been utilized.

Conditional capital

The shareholder resolution passed by the Annual General Meeting held on June 9, 2021, to contingently raise the share capital of the entity by up to 14,950 thousand euros through the issue of up to 5,750,000 new no-par value shares ("Conditional Capital 2021"). The conditional capital increase will be implemented only to the extent that

- creditors or holders of option and/or conversion rights arising from option and/or convertible bonds issued by the entity, or by a domestic and/or foreign corporation in which the entity either directly or indirectly holds a majority interest, make use of their option or conversion rights by June 8, 2026, as resolved by the shareholders in their Annual General Meeting resolution dated June 9, 2021, and/or
- the creditors of the issued convertible bonds obliged to exercise their conversion rights issued by the company or a domestic or foreign company in which the company has a

direct or indirect majority stake, on the basis of the resolution of the Annual General Meeting on June 9, 2021, fulfill their conversion rights by June 8, 2026, and/or the shares are repatriated

and neither treasury shares are used nor payment made in cash. The new shares participate in profits from the start of the fiscal year for which, on the date of their issue, no resolution has yet been passed by the Annual General Meeting in respect of the appropriation of the accumulated profit. To the extent legally permissible, the Executive Board may, with the consent of the Supervisory Board, determine the profit participation in deviation from this and also from Section 60 (2) AktG, including for a fiscal year that has already passed.

The Executive Board is authorized, with the consent of the Supervisory Board, to exclude the subscription rights of shareholders to the bonds under certain circumstances. Authorization to exclude subscription rights is limited in the sense that the pro rata amount of share capital corresponding to those shares that must be issued after exercising warrant and/or conversion rights/obligations may not account for more than 10 percent of the share capital existing at the time this authorization takes effect or – if the figure is lower – at the time use is made of the authorization. This 10 percent limit also applies to the sale of treasury shares that are excluded from subscription rights during the period of this authorization, and to shares issued during the period of this authorization under authorized capital and for which subscription rights are excluded.

The Executive Board is authorized to set out the further details relating to the increase in conditional capital (e.g. terms of the bonds, interest rate, form of interest, specific period, denomination, issue price, option/conversion price, option/conversion period) in the bond terms and conditions. The Conditional Capital 2021 has not yet been utilized.

Reserves

Capital reserve. The capital reserve contains the adjustments recognized within the framework of the first-time adoption of IFRS as well as the differences resulting from the capital consolidation being offset against reserves up to December 31, 2002.

Other reserves. A component of other reserves is retained earnings realized in the past by companies included in the consolidated financial statements less dividends paid.

Other reserves also contain value adjustments to be accounted for outside of profit or loss for

- equity instruments that are designated outside profit or loss at fair value in other comprehensive income,
- cash flow hedges,
- accumulated foreign currency exchange differences, and
- actuarial gains/losses arising from the valuation of pensions and similar obligations.

In addition to the effective portion of gains and losses arising from hedging cash flows, the reserve for cash flow hedges also includes changes in the fair value of the interest rate cap and elements of the USD interest rate and currency swap, insofar as this has been excluded from the designation as a hedging instrument (see section „Financial instruments“).

In particular, as a result of the sale of VINCORION, losses arising from currency conversion previously so far recognized in equity, in the sum of 593 thousand euros (prior year: gains in the sum of 16 thousand euros) were reclassified to the income statement.

Treasury shares

On the basis of a resolution passed by the Annual General Meeting on June 5, 2018, the Executive Board is authorized up to June 4, 2023 to purchase own no-par value shares not exceeding a proportion of ten percent of the nominal capital existing at the time the resolution is adopted or – if this amount is lower – of the nominal capital existing at the time of exercising the resolution for purposes other than trading in treasury shares. The purchased treasury shares together with treasury shares that the entity had already purchased and still holds (including the attributable shares in accordance with §§ 71a ff. AktG) may not exceed 10 percent of the share capital of the entity. The authorization may be exercised in whole or in part, on a one-off or repeat basis and for one or more authorized purposes. The purchase and sales of treasury shares may be exercised by the entity or, for specific authorized purposes, also by dependent companies, by companies in which the entity holds a majority interest, or by third parties for its or their account. At the decision of the Executive Board, acquisition is by purchase, subject to compliance with the principle of equal treatment (§ 53a of the Stock Corporation Act), on the stock exchange or by means of a public offering or a public invitation to the shareholders to submit an offer for sale.

For the purpose of protecting shareholders against a dilution of their shares, the proposed resolution expressly provides for a restriction of the use of acquired treasury shares in such a way that the total of the acquired shares together with shares issued or sold by the Company during the term of this authorization under another authorization to the exclusion of shareholders' subscription rights or which enable or oblige the subscription of shares is limited to a notional interest in the nominal capital of no more than a total of 20 percent of the nominal capital at the time the authorization becomes effective or – if the following value is lower – at the time this authorization is exercised.

Further details regarding the buyback of treasury shares are described in agenda item 9 in the invitation to the 2018 Annual General Meeting, accessible to the general pubic on our website at www.jenoptik.com under the heading Investors/Annual General Meeting. As of December 31, 2022, the company had no treasury shares.

5.12 Pension provisions

Provisions for pension obligations are set aside based on pension plans for retirement, disability and survivor benefit commitments and exist in Germany and Switzerland. There are additional commitments in France to make one-off payments upon retirement.

As a result of the acquisition of SwissOptic AG, additional obligations under the Swiss pension system were assumed in 2021, these are classified as a defined benefit plan due to a potential obligation to make additional contributions in the event of a shortfall. The plan is financed in accordance with the statutory requirements and provides for a risk sharing by beneficiaries up to retirement. In this context, the pension plan is financed by contributions from both the employer and the employee. The corresponding assets are offset as plan assets against the assumed obligation.

As a result of the classification of the VINCORION division as a discontinued operation in accordance with IFRS 5, the provisions for pensions and similar obligations were reclassified in the prior year under "Liabilities in connection with assets held for sale" and eliminated at the closing on June 30, 2022.

The benefits provided by the Group vary according to the legal, tax, and economic circumstances of the respective country and, as a rule, depend on the duration of employment and on the remuneration of the employees on commencement of retirement.

Within the Group, the occupational pension provision is provided both on the basis of defined contribution as well as defined benefit plans. In the case of defined contribution plans, the company pays contributions in accordance with statutory or contractual provisions, or voluntarily makes contributions to public or private pension insurers. Upon payment of the contributions, the company has no further benefit obligations.

Defined benefit plans

The company is exposed to various risks in conjunction with defined benefit plans. Along with general actuarial risks such as longevity risks and the risk of changes in interest rates, the company is exposed to foreign currency exchange as well as investment risks.

Pension plans in the form of a reinsured group provident fund have been categorized and accounted for accordingly as defined benefit plans since the low interest rate phase due the associated claim risk arising from the subsidiary liability.

The existing pension plans in Germany are closed, with the exception of the reinsured group provident fund.

The benefit obligations cover 904 entitled beneficiaries, including 583 active employees, 108 former employees as well as 213 retirees and survivors.

In particular, the obligations via the group provident fund, plans under the Swiss pension scheme as well as the obligations of the discontinued operation up to the deconsolidation, are partially covered by plan assets and netted in accordance with IAS 19. These plan assets are primarily managed by the Leica Pensionskasse [pension fund] (Switzerland) and AXA Lebensversicherung AG.

The change in the defined benefit obligations (DBO) is shown as follows:

in thousand euros	2022	2021
DBO on 1/1	**111,567**	**83,209**
Foreign currency exchange effects	4,066	637
Current service expenses	3,648	719
Contributions to the pension plans	2,862	490
Thereof by employees	2,862	490
Interest expenses	510	481
Actuarial gains (-) and losses (+)	−21,799	−6,419
Empirical actuarial gains and losses	−223	−145
Changes in demographic assumptions	−41	−566
Changes in financial assumptions	−21,535	−5,707
Changes in the scope of consolidation	0	83,129
Pension payments	−694	−2,336
Reclassification according to IFRS 5	0	−48,342
DBO on 31/12	**100,160**	**111,567**
of which Switzerland	85,827	90,890
of which Germany	13,711	20,050
of which other countries	622	627

The changes in the plan assets are shown as follows:

in thousand euros	2022	2021
Plan assets as of 1/1	**102,188**	**48,031**
Foreign currency exchange effects	4,266	628
Interest income from plan assets	426	266
Return on plan assets less interest income (revaluations)	−9,468	568
Contribution	5,737	744
Employer	2,875	254
Employee	2,862	490
Changes in the group of consolidated entities	0	81,156
Administrative expenses	−115	−14
Pension payments	−405	−2,036
Reclassification according to IFRS 5	0	−27,154
Plan assets as of 31/12	**102,629**	**102,188**
of which Switzerland	92,557	88,136
of which Germany	10,071	14,053

The effects of the expense of the continuing operations, recognized in the income statement, are summarized as follows:

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Current service expenses	3,648	358
Net interest expenses	84	68
Total expenses	**3,732**	**426**

The current service expenses are included in the personnel expenses of the functional areas. The interest charged on the obligation as well as the interest received on plan assets are recorded in the interest result.

The net pension obligation as of the statement of financial position date is as follows:

in thousand euros	31/12/2022	31/12/2021
Present value of the obligation covered by the plans	96,425	105,741
Plan assets	−102,629	−102,188
Net liability/asset value of the obligation covered by plan assets	−6,203	3,552
Net liability of the obligation not covered by plan assets	3,735	5,827
Net liability/asset from defined benefit plan assets	**−2,468**	**9,379**
Adjustment as a result of asset cap	6,730	0
Total	**4,262**	**9,379**
of which Switzerland	0	2,754
of which Germany	3,639	5,998
of which other countries	622	627

The effects of the asset caps as of December 31, 2022 relate to obligations under the Swiss pension system.

The portfolio structure of the plan assets is as follows:

in thousand euros	31/12/2022	31/12/2021
Insurance contracts	9,697	13,636
Stocks, bonds and other securities	37,720	42,425
Real estate	37,076	31,205
Cash and cash equivalents	5,930	3,385
Investments	0	135
Other assets and liabilities	12,204	11,403
Total	**102,628**	**102,188**

The insurance contracts in the sum of 9,544 thousand euros relate to pension insurance policies with AXA Lebensversicherung AG. The insurance company's investments were mainly in equities and investment assets, bearer bonds and fixed interest-bearing securities, as well as other loan receivables.

The key weighted average actuarial assumptions are shown in the following table. Where applicable, anticipated inflation is taken into account in the above-mentioned assumptions.

in percent	2022	2021
Discount rate		
Germany	3.76	1.05
Switzerland	2.15	0.30
France	3.72	1.04
Future increases in salary[1]		
Switzerland	2.00	1.50
France	3.50	2.00
Future increases in pension		
Germany	2.00	1.75
Germany (Group provident fund)	1.00	1.00
Switzerland	0.25	0

[1] Not relevant in Germany

In Germany, the mortality rates are determined in accordance with the Klaus Heubeck guideline mortality tables 2018 G. The LPP 2020 mortality tables apply in Switzerland, whilst in France it's the current tables of the INSEE.

Actuarial gains or losses are the result of changes in pension beneficiaries and deviations from actual trends (e.g. increases in income or pensions) vis-á-vis calculation assumptions. In accordance with the regulations stated in IAS 19, this amount is offset against other comprehensive income in equity.

A change in the key actuarial assumptions as of the statement of financial position date would affect the DBO as follows:

	Change in the DBO	
in thousand euros	Increase	Reduction
Discounting rate – change of 1.0 percentage points	−8,626 (−14,864)	9,280 (15,254)
Future increases in salary – change of 1.0 percentage points	1,485 (1,625)	−1,333 (−1,579)
Future increases in pension – change of 1.0 percentage points	7,111 (9,557)	−1,584 (-558)
Mortality rates – change by 1 year	2,284 (3,730)	−2,336 (−3,734)

The figures in brackets relate to the prior year

The sensitivity analysis shows the change in a DBO in the event of a change in an assumption. Since the changes do not have a straight-line effect on the calculation of DBO due to actuarial effects, the cumulative change in the DBO resulting from changes in a number of assumptions cannot be directly determined.

The reduction in the pension increase was limited to a maximum of 0 percent and was applied in particular to the pension obligation of SwissOptic AG.

As of December 31, 2022, the weighted average remaining service period was 9 years and the weighted average remaining maturity of the obligation was 13 years.

The anticipated pension payments arising from the pension plans as of December 31, 2022, are in the sum of 5,090 thousand euros for the following fiscal year (prior year: 4,386 thousand euros) and for the subsequent four fiscal years a total of 22,239 thousand euros (prior year: 19,219 thousand euros).

Defined contribution plans

Within the framework of the defined contribution plans, expenses of the continuing operations totaled 19,351 thousand euros in 2022 (prior year: 17,929 thousand euros), this figure including contributions to statutory pension insurance providers in the sum of 14,455 thousand euros (prior year: 13,562 thousand euros).

5.13 Other provisions

The development of other provisions is shown in the table below.

Key items in the personnel provisions relate to performance bonuses, profit sharing, and similar obligations, as well as to the share-based payments for the Executive Board and some senior management personnel. Personnel provisions also include anniversary of service payments in the sum of 4,500 thousand euros (prior year: 5,217 thousand euros) and partial retirement obligations in the sum of 2,035 thousand euros (prior year: 1,628 thousand euros). Actuarial expert opinions were obtained for the anniversary and partial retirement obligations with the assumption of income increasing in Germany at 2.71 percent (prior year: 2.44 percent).

The provision for guarantee and warranty obligations included expenses for individual guaranty cases as well as for flat-rate warranty risks. The calculation of the provision for flat-rate warranty risks is based on empirical values which were determined as a guarantee cost ratio of revenue on a company or product group-specific basis and applied to revenues which are liable to guarantees. The amounts that were reversed in the fiscal year 2022 chiefly comprise guarantee and warranty provisions for specific individual cases for which the underlying obligations no longer existed as a result of agreements with customers for remedial action.

The provisions for pending losses were set aside for individual customer orders and relate in particular to a larger customer order in the Advanced Photonic Solutions division.

Other provisions include, amongst others, decommissioning obligations. Other provisions also included numerous identifiable specific risks as well as contingent liabilities which were accounted for in the amount of the best possible estimate of the settlement sum. Additions in the fiscal year 2022 relate in particular to provisions for exemption agreements with limited amounts, arising from the sale of VINCORION in the sum of 3,120 thousand euros (see section "Discontinued operation").

The anticipated claims are shown below by maturity:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	2022
Human resources	26,573	5,634	1,882	34,089
Guarantee and warranty obligations	6,392	1,999	0	8,391
Impending losses	4,631	3,959	0	8,590
Others	6,292	2,230	1,339	9,860
Total	**43,887**	**13,822**	**3,221**	**60,930**

5.14 Share-based payments

As of December 31, 2022, the Jenoptik Group had at its disposal share-based remuneration instruments in the form of virtual shares for both Executive Board members and some senior management personnel. In this context, a distinction must be made between Long Term Incentives of the Executive Board remuneration system that was applicable for Hans-Dieter Schumacher up to the end of 2017 (payment of the last tranche 2022) and the remuneration system for some senior management personnel ("LTI") as well as the Performance Shares in accordance with the currently applicable Executive Board remuneration system.

in thousand euros	Balance as of 1/1/2022	Foreign currency exchange effects	Additions	Compounding and discounting	Utilization	Reversals	Balance as of 31/12/2022
Personnel	30,687	122	25,168	−622	−19,884	−1,383	34,089
Guarantee and warranty obligations	10,322	10	4,073	−81	−2,108	−3,826	8,391
Impending losses	8,800	48	3,011	−362	−1,875	−1,032	8,590
Others	7,984	−12	5,502	−225	−1,652	−1,737	9,860
Total	**57,794**	**168**	**37,754**	**−1,290**	**−25,519**	**−7,978**	**60,930**

The effects associated with the share-based payment with settlement in cash for the continuing operations were as follows:

	Income statement		Statement of financial position	
in thousand euros	2022	2021	2022	2021
Virtual shares for the current year	−461	−730	461	730
Virtual shares for prior years	222	−717	1.872	2,176
Total	**−240**	**−1,447**	**2,333**	**2,906**

The valuation basis used for determining the fair value of the LTI is the daily and volume-weighted, average share price of JENOPTIK AG over the last twelve months. The fair value of the performance shares is determined based on an arbitrage-free valuation according to the Black/Scholes option pricing model.

Payment for the virtual shares granted to the Executive Board is generally made at the end of their four-year, contractually defined term. However, this only applies to the performance shares if multi-annual targets have been achieved on completion of the term. In the event of a departure, performance shares will also only be valued, finally allocated and then paid out at the end of the respective performance period, depending on whether the targets have been achieved. The virtual shares provisionally allocated on behalf of the members of the Executive Board for fiscal years 2019 to 2022 were valued at the fair value as of the 2022 statement of financial position date and shown in other provisions.

The development of the Executive Board members' virtual shares is shown in the following table:

in units	Number for 2022	Number for 2021
Executive Board		
1/1	125,026	124,701
Granted for the period	21,530	30,273
Granted for protection of existing shares in case of dividend payment[1]	n. a.	161
Expired[2]	−18,218	−8,102
Paid out	−22,018	−22,007
31/12	106,319	125,026

[1] LTI in accordance with the Executive Board remuneration system in force up to 2017
[2] Adjustment of provisional allocation to target achievement during the performance period

Virtual shares have also been granted to some members of top management. The number of virtual shares to be allocated is determined based on target achievement as well as on the volume-weighted average closing price of the Jenoptik share over the last twelve months of the reference year. Payment is made at the end of the fourth subsequent year after allocation, based on the volume-weighted average closing price of the Jenoptik share in the full fourth subsequent year. In the event of an exit before the end of the term, the virtual shares may be forfeit, depending on the reasons for the departure.

The development of these virtual shares is shown in the following table:

in units	Number for 2022	Number for 2021
Members of the top management		
1/1	28,491	25,496
Granted for the period	8,249	8,526
Granted in adjustment to level of target attainment prior year	683	− 2,242
Paid out	−5,629	−3,289
31/12	31,794	28,491

The virtual shares granted to the top management are valued at the pro rata fair value already earned and shown under other provisions.

5.15 Other current financial liabilities

in thousand euros	31/12/2022	31/12/2021
Liabilities from acquisitions	320	10,692
Other liabilities to investments	0	3,022
Liabilities from interest payments	3,762	2,897
Derivatives	1,963	1,818
Liabilities from remuneration for the Supervisory Board	796	791
Other current financial liabilities	3,465	2,803
Total	**10,306**	**22,023**

Liabilities arising from corporate acquisitions and derivatives are described in more detail in the Notes under "Financial instruments".

Other liabilities to investments in the prior year include the cash pool liabilities to HILLOS GmbH accounted for in the consolidated financial statements using the equity method

5.16 Other current non-financial liabilities

in thousand euros	31/12/2022	31/12/2021
Liabilities to personnel	9,056	9,392
Liabilities from other taxes	7,560	7,171
Liabilities from social security payments	1,969	1,708
Liabilities to trade association	1,081	998
Other current non-financial liabilities	210	980
Total	**19,876**	**20,249**

Liabilities to employees included, amongst others, vacation entitlements and flextime credits.

Liabilities from other taxes essentially comprise liabilities arising from sales tax.

6 Disclosures on Cash Flows

Liquid funds are defined as the sum of cash on hand and demand deposits at banks with an initial maturity of less than three months.

The statement of cash flows explains the flow of payments, divided between the inflows and outflows of cash from operating, investing and financing activities. There was no adjustment to the cash flow statement due to the discontinued operation; the net cash flows are presented in the section “Discontinued operation”. Changes in the statement of financial position items used for preparing the statement of cash flows cannot be directly derived from the statement of financial position because the effects arising from the foreign currency conversion and changes in the scope of consolidation are non-cash transactions and are therefore eliminated. Cash flows from operating activities are indirectly derived from earnings before tax of the continuing as well as the discontinued operations. Earnings before tax are adjusted for non-cash expenses and income. In the prior year, these related in particular to income from fair value adjustments to conditional purchase price components arising from the acquisitions of TRIOPTICS and INTEROB. The cash flows from operating activities are determined by taking into account the changes in working capital, provisions and other operating items in the statement of financial position.

Despite a significant increase in investments in property, plant and equipment, cash flow from investing activities improved from minus 413,621 thousand euros to minus 13,415 thousand euros, as the prior year included payments for the acquisition of BG Medical and the SwissOptic Group, which are offset by proceeds from the disposal of VINCORION in the current year (see sections „Acquisitions and sales of entities“ and „Discontinued operation“).

Cash outflows for dividends paid to shareholders of the parent company within the cash flows from financing activities, at 14,310 thousand euros (prior year: 14,310 thousand euros) and 0.25 euros per shares (prior year: 0.25 euros per share), were at the same level as the prior year. In addition, dividends were paid to minority shareholders in the sum of 3,298 thousand euros (prior year: 1,749 thousand euros). Information on receipts and payments derived from loans is provided in the chapter „Financial instruments“.

The changes in financial debt that will lead to cash flows from financing activities in the future, are shown in the following table:

			Non cash-effective change						
in thousand euros	Balance as of 1/1/2022	Cash-effective change	Foreign currency exchange effects	Changes in the group of consolidated entities	Addition/ disposal	Change in the fair value	Change in maturity	Reclassification in accordance with IFRS 5 [1]	Balance as of 12/31/2022
Non-current financial debts	448,746 (138,410)	15,000 (399,906)	3,355 (3,131)	0 (4,353)	24,828 (8,504)	119 (−641)	−14,319 (−86,699)	0 (−18,220)	477,729 (448,746)
Non-current debt to banks	421,218 (90,685)	15,000 (399,906)	3,388 (2,220)	0 (2,882)	0 (0)	120 (−641)	−4,356 (−73,834)	0 (0)	435,369 (421,218)
Non-current debt from leases	27,528 (47,726)	0 (0)	−33 (911)	0 (1,470)	24,828 (8,504)	0 (0)	−9,963 (−12,864)	0 (−18,220)	42,360 (27,528)
Current financial debts	148,993 (130,871)	−107,838 (−72,496)	192 (283)	0 (5,061)	3,318 (2,070)	67 (32)	14,319 (86,699)	0 (−3,525)	59,052 (148,993)
Current debt to banks	137,575 (118,565)	−94,974 (−58,764)	112 (65)	0 (3,843)	0 (0)	67 (32)	4,356 (73,834)	0 (0)	47,135 (137,575)
Current debt from leases	11,418 (12,306)	−12,864 (−13,731)	81 (217)	0 (1,218)	3,318 (2,070)	0 (0)	9,963 (12,864)	0 (−3,525)	11,916 (11,418)
Total	**597,739** **(269,281)**	**−92,838** **(327,410)**	**3,547** **(3,414)**	**0** **(9,414)**	**28,146** **(10,574)**	**186** **(−609)**	**0** **(0)**	**0** **(−21,745)**	**536,781** **(597,739)**

The values in brackets refer to the prior year
[1] Financial liabilities of the discontinued VINCORION division as of December 31, 2021

The reconciliation shown above exclusively takes into account financial debt, so payments collected from the original customer and forwarded to the Factor in the context of the factoring (see section "Current trade receivables") are not taken into account. In the statement of cash flows these are included in the item Proceeds from or repayments for the redemption of loans in the sum of 611 thousand euros (prior year: 670 thousand euros).

For information regarding the allocation of the free cash flow to the segments, we refer to the Segment Report

In the prior year the sale of the crystal growth business and the non-optical process metrology business for grinding machines took place. In this context, net assets in the amount of 4,628 thousand euros were disposed of. Taking into account the payment received of 8,485 thousand euros and the cash sold of 900 thousand euros, the net inflow was 7,585 thousand euros.

7 Disclosure on the Segment Report

"Business segments" in accordance with IFRS 8 form the basis for the segment reporting. IFRS 8 follows the management approach. Accordingly, the external reporting is carried out for the attention of the chief operating decision makers on the basis of the internal group organizational and management structures as well as the internal reporting structure. The Executive Board analyzes the financial information using the key performance indicators which serve as a basis for decisions on allocating resources and assessing performance. The accounting policies and principles for the segments are the same as those described for the Group in the basic accounting principles.

Jenoptik has the following reportable segments: the Advanced Photonics Solutions and Smart Mobility Solutions divisions and the Non-Photonic Portfolio Companies.

As part of the restructuring of the Jenoptik Group, the former Light & Optics division and parts of the Light & Production division were combined within the new Advanced Photonic Solutions division during the course of Q1 2022. The Advanced Photonic Solutions division serves industrial customers and is a global provider of solutions and systems based on photonic technologies. In this respect, Jenoptik has a wide range of such technologies at its disposal, especially in the fields of optics, micro-optics, sensor technology and optical test and measurement systems.

The former Light & Safety division became the Smart Mobility Solutions division which focuses primarily on traffic monitoring, public safety, road user charging, emissions control and traffic management areas of business. In this division, Jenoptik develops, produces and sells photonics-based components, systems and services for public sector customers.

The Advanced Photonic Solutions and Smart Mobility Solutions divisions together form the core business of photonics.

Non-photonic activities, in particular for the automotive market, have been managed under the Non-Photonic Portfolio Companies since 2022. In the field of industrial metrology, optical inspection and highly flexible robot-based automation, the Non-Photonic Portfolio Companies develop manufacturing solutions for customers in the automotive and aerospace sectors as well as other manufacturing industries.

The Corporate Center (Holding, Shared Services, Real Estate) is reported under Other.

The "Consolidation" column comprises the business relationships to be consolidated between the segments and Other, as well as the necessary reconciliations.

The business relationships between the entities of the Jenoptik Group segments are fundamentally based on prices that are agreed with third parties.

Revenue more than 10 percent of the total revenue of the Jenoptik Group was generated with one customer of the Advanced Photonic Solutions division (166,126 thousand euros; prior year: 118,130 thousand euros). There were no other customer relationships with individual customers who accounted for a significant share of total revenue.

The analysis of revenue by region is conducted according to the country in which the customer has its registered office.

Prior-year information by segment was adjusted to take account of the new structure of the Jenoptik Group.

7.1 Segment report

in thousand euros	Advanced Photonic Solutions	Smart Mobility Solutions	Non-Photonic Portfolio Companies	Other	Consolidation	Total
Revenue	731,013	114,307	133,010	56,199	−53,846	980,684
	(501,432)	(110,101)	(142,229)	(44,763)	(−47,807)	(750,717)
of which intra-group revenue	1,395	0	745	51,706	−53,846	0
	(5,858)	(0)	(900)	(41,049)	(−47,807)	(0)
of which external revenue	729,617	114,307	132,265	4,493	0	980,684
	(495,574)	(110,101)	(141,329)	(3,714)	(0)	(750,717)
Europe	396,839	68,104	35,287	4,493	0	504,722
	(227,376)	(62,164)	(54,554)	(3,714)	(0)	(347,807)
of which Germany	166,139	37,346	21,002	4,492	0	228,979
	(71,193)	(30,856)	(33,624)	(3,712)	(0)	(139,384)
of which the Netherlands	141,824	3,452	18	0	0	145,293
	(111,083)	(3,760)	(98)	(0)	(0)	(114,941)
Americas	137,272	27,375	79,431	0	0	244,077
	(104,873)	(31,620)	(69,160)	(0)	(0)	(205,653)
of which the USA	131,458	17,085	56,148	0	0	204,690
	(100,418)	(22,213)	(44,838)	(0)	(0)	(167,469)
Middle East and Africa	29,739	5,528	385	0	0	35,652
	(21,724)	(2,490)	(129)	(0)	(0)	(24,343)
Asia/Pacific	165,768	13,301	17,163	0	0	196,232
	(141,601)	(13,827)	(17,486)	(0)	(0)	(172,914)
EBITDA	170,019	19,346	2,696	−6,976	−1,017	184,068
	(143,373)	(19,191)	(5,369)	(−13,221)	(1,023)	(155,735)
Impairment losses	0	0	−13,894	0	0	−13,894
	(0)	(0)	(0)	(−460)	(0)	(−460)
Free cash flow (before income taxes)	100,079	4,249	14,042	−35,729	37	82,678
	(79,013)	(−4,383)	(−13,496)	(−16,531)	(−1,411)	(43,192)
Working capital	204,158	34,141	58,689	−9,725	97	287,359
	(179,061)	(25,585)	(68,969)	(−13,476)	(418)	(260,556)
Order intake (external)	891,776	125,761	163,409	4,493	0	1,185,440
	(674,870)	(116,504)	(141,584)	(3,714)	(0)	(936,672)
Capital expenditure in intangible assets, property, plant and equipment and investment property	79,555	7,831	3,801	14,810	0	105,998
	(30,650)	(8,108)	(1,653)	(9,530)	(0)	(49,941)
Number of employees on average excluding trainees (head count)	2,782	476	654	286	0	4,196
	(2,154)	(484)	(714)	(280)	(0)	(3,631)

The free cash flow (before income taxes) = cash flows from operating activities before payment of income taxes, less the inflows and outflows of funds for intangible assets and property, plant, and equipment
The figures in brackets relate to the prior year

Reconciliation of segment result

EBITDA means earnings before interest, taxes, depreciation, and amortization (including impairment losses and reversals on impairment losses). The reconciliation of the EBITDA with the EBIT reported in the consolidated income statement is as follows:

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
EBITDA	184,068	155,735
Scheduled depreciation and amortization	−68,265	−47,578
Impairment losses	−13,894	−460
Reversals on impairment losses	0	451
EBIT	**101,909**	**108,148**

7.2 Non-current assets by regions

in thousand euros	31/12/2022	31/12/2021
Europe	919,734	876,548
Americas	120,168	125,699
Asia/Pacific	19,996	22,812
Group	**1,059,898**	**1,025,060**
of which Germany	584,796	538,282
of which outside Germany	475,102	486,778
including Switzerland	269,275	260,343

The non-current assets recognized here include comprise intangible assets, property, plant, and equipment, investment property, as well as non-current non-financial assets. The assets are allocated to the individual regions according to the countries in which the consolidated companies have their registered office.

8 Other Disclosures

8.1 Capital management

The aim of Jenoptik's capital management is to maintain a strong capital base to retain the trust of the shareholders, creditors and capital markets, as well as to ensure the sustained, successful development of the company. The Executive Board monitors in particular the equity ratio, the development of cash flows as well as the net debt as part of the regular management reporting. In the event of significant deteriorations in the key parameters, alternative courses of action are worked out and the corresponding measures implemented.

As of the statement of financial position date December 31, 2022, the key financing of the Jenoptik Group is a syndicated credit line in the sum of 400,000 thousand euros, utilized with 51,478 thousand euros, as well ten debenture bonds in the total sum of 350,000 thousand euros and one debenture bond in the sum of 59,000 thousand US dollars. Further details on these are shown in the section "Liquidity risk". No agreements have been concluded on compliance with certain key financial figures for the existing debenture bonds or for the syndicated credit line.

In addition to the syndicated credit line and debenture bonds, the Jenoptik Group utilizes to a lesser extent other sources of financing, consisting of bilateral credit lines, development loans, lease and rental financing as well as factoring. These instruments are used to actively manage the development of the cash flows. Detailed information on the factoring is shown in the Notes in the section "Current trade receivables ". The financial debt as of December 31, 2022, is as follows:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Liabilities to banks	47,135 (137,575)	203,116 (201,899)	232,253 (219,319)	482,505 (558,793)
Liabilities from leases	11,916 (11,418)	27,783 (25,365)	14,577 (2,163)	54,276 (38,946)
Total	**59,052** **(148,993)**	**230,899** **(227,264)**	**246,830** **(221,482)**	**536,781** **(597,739)**

The figures in brackets relate to the prior year

8.2 Financial instruments

General

Within the framework of its operating activities, the Jenoptik Group is exposed to credit, default, liquidity, and market risks. The market risks include in particular risks of fluctuations in interest rates and foreign currency exchange rates.

The risks described above impact on the financial assets and liabilities which are shown below.

Financial assets

in thousand euros	Valuation category in accordance with IFRS 9[1]	Carrying amounts 31/12/2022	Valuation in the statement of financial position in accordance with IFRS 9 Amortized acquisition costs	Fair value – outside of profit or loss	Fair value – through profit or loss
Financial investments					
Current financial investments (cash deposits)	AC	1,048 (1,555)	1,048 (1,555)		
Shares in non-consolidated, associates and investments	FVTOCI	807 (1,001)		807 (1,001)	
Loans and other financial investments	AC	1,947 (1,985)	1,947 (1,985)		
Trade receivables	AC	138,771 (120,477)	138,771 (120,477)		
Other financial assets					
Receivables from contingent considerations	FVTPL	3,652 (13,347)			3,652 (13,347)
Derivatives with hedge relationships					
Interest and currency swap	–	6,242 (2,957)		6,242 (2,957)	
Foreign exchange forward transactions/ foreign exchange swaps	–	826 (20)		826 (20)	
Interest cap	–	4,088 (0)		4,088 (0)	
Derivatives without hedge relationships					
Interest and currency swap	FVTPL	28 (0)			28 (0)
Foreign exchange forward transactions/ foreign exchange swaps	FVTPL	630 (69)			630 (69)
Other financial assets	AC	10,628 (8,223)	10,628 (8,223)		
Cash and cash equivalents	AC	56,758 (54,817)	56,758 (54,817)		
Total		**225,424 (204,451)**	**209,152 (187,057)**	**11,963 (3,978)**	**4,309 (13,416)**

The figures in brackets relate to the prior year
[1] AC = Amortized costs
FVTPL = Fair value through Profit & Loss
FVTOCI = Fair value through other comprehensive income

Financial liabilities

in thousand euros	Valuation category in accordance with IFRS 9[1]	Carrying amounts 31/12/2022	Valuation in the statement of financial position in accordance with IFRS 9: Amortized acquisition costs	Fair value – outside of profit or loss	Fair value – through profit or loss	Balance sheet valuation in accordance with IFRS 16
Financial debts						
Liabilities to banks	AC	482,505 (558,793)	482,505 (558,793)			
Liabilities from leases	–[2]	54,276 (38,946)				54,276 (38,946)
Trade payables	AC	100,860 (94,764)	100,860 (94,764)			
Other financial liabilities						
Liabilities from contingent considerations	FVTPL	320 (0)			320 (0)	
Derivatives with hedge relationships						
Foreign exchange forward transactions/ foreign exchange swaps	–	1,782 (1,661)		1,782 (1,661)		
Derivatives without hedge relationships						
Interest and currency swap	FVTPL	0 (66)			0 (66)	
Foreign exchange forward transactions/ foreign exchange swaps	FVTPL	596 (805)			596 (805)	
Other financial liabilities	AC	11,211 (21,300)	11,211 (21,300)			
Total		**651,550** **(716,335)**	**594,576** **(674,857)**	**1,782** **(1,661)**	**916** **(870)**	**54,276** **(38,946)**

The figures in brackets relate to the prior year
[1] AC = Amortised costs
FVTPL = Fair value through Profit & Loss
FVTOCI = Fair value through other comprehensive income
[2] Valuation in accordance with IFRS 16

The classification of the fair values for the financial assets and liabilities is taken from the following overview:

in thousand euros	Carrying amounts 31/12/2022	Level 1	Level 2	Level 3
Shares in non-consolidated, associates and investments	807 (1,001)	0 (0)	0 (0)	807 (1,001)
Receivables from contingent considerations	3,652 (13,347)	0 (0)	0 (0)	3,652 (13,347)
Derivatives with hedge relationships (assets)	11,155 (2,977)	0 (0)	11,155 (2,977)	0 (0)
Derivatives without hedge relationships (assets)	657 (69)	0 (0)	657 (69)	0 (0)
Liabilities from contingent considerations	320 (0)	0 (0)	0 (0)	320 (0)
Derivatives with hedge relationships (liabilities)	1,782 (1,661)	0 (0)	1,782 (1,661)	0 (0)
Derivatives without hedge relationships (liabilities)	596 (870)	0 (0)	596 (870)	0 (0)

The figures in brackets relate to the prior year

Fair values available as quoted market prices at all times are allocated to level 1. Fair values determined on the basis of direct or indirect observable parameters are allocated to level 2. Level 3 is based on measurement parameters that are not based upon observable market data.

The fair values of all derivatives are determined using the generally recognized cash value method. In this context, the future cash flows determined via the agreed forward rate or interest rate are discounted using current market data. The market data used in this context is taken from leading financial information systems, such as for example Refinitiv. If an interpolation of market data is applied, this is done on a straight-line basis.

The fair values of contingent liabilities are valued at the anticipated payment outflows, taking into consideration the period and risk-dependent interest rate discounted as at the reporting date.

The development of the financial assets and liabilities which are valued at fair value and assigned to Level 3, can be found in the table below:

in thousand euros	Shares in non-consolidated associates and investments	Receivables from contingent considerations	Liabilities from contingent considerations
Balance as of 1/1/2022	**1,001**	**13,347**	**0**
Additions	0	3,430	0
Disposals	−14	−9,450	0
Profits (+)/losses (-) recorded in the operating result	0	−781	−320
Profits (+)/losses (-) recorded in the financial result	0	535	0
Gains (+) / losses (-) recognized in earnings from discontinued operation	0	−3,430	0
Valuation outside profit/loss	7	0	0
Transfers	−187	0	0
Balance as of 31/12/2022	**807**	**3,652**	**−320**

Contingent considerations

Receivables and liabilities from contingent considerations as of December 31, 2022 resulted from the acquisition of TRIOPTICS in 2020.

These include a revenue-based bonus/malus scheme linked to the revenue of the Trioptics Group under commercial law, resulting in a bonus or malus of up to 15 million euros in the event of deviations from the original business plan by up to 15 percent. In addition, an earn-out component was agreed which would have led to a further contingent, additional purchase price payment by Jenoptik of up to 15 million euros if the defined EBITDA target had been exceeded.

The relevant parameters for the valuation of the purchase price liabilities – consisting of revenue and earnings figures in accordance with the German Commercial Code (HGB) – were recognized in the prior year based on the preliminary revenue and earnings figures expected under commercial law as of December 31, 2021. In fiscal year 2022, a final adjustment was made to the audited and unqualified audit opinion under commercial law of the consolidated financial statements of the Trioptics Group as of December 31, 2021.

On this basis, a malus of approx. 13 percent is calculated, leading to a corresponding malus claim. Due to the lower revenues under commercial law in the fiscal year 2021, the anticipated EBITDA under commercial law was not achieved, consequently no earn-out payment was incurred.

With regard to the amount of the malus, Jenoptik is currently engaged in arbitration proceedings as the sellers are only accepting a malus of approx. 1 percent in deviation from the fully audited, consolidated financial statements under commercial law. Jenoptik assumes that the accounting under commercial law in the consolidated financial statements of Trioptics GmbH is correct and consequently so is the Jenoptik Group's malus claim.

In accordance with the contractual provisions, the capitalized receivable was partially offset in 2022 with a retention on the purchase price for the remaining 25 percent of TRIOPTICS acquired in 2021. The remaining claim is to be paid out from an escrow account once the definitive malus claim has been finally determined.

Fair value adjustments to contingent receivables and liabilities recorded through profit or loss are recognized in other operating income or other operating expenses. Accumulated interest is recognized in the financial result.

Additions to receivables from contingent considerations, as well as the expenses recognized in the earnings of the discontinued operation arose from the sale of VINCORION (see section "Discontinued operation").

Credit and default risks

The credit or default risk is the risk of a customer or a contract partner of the Jenoptik Group failing to fulfill his contractual obligations. This results in both the risk of creditworthiness-related impairment losses to financial instruments as well as the risk of a partial or a complete default on contractually agreed payments.

Credit and default risks primarily exist for trade receivables. These risks are countered by active receivables management and, if required, accounted for by recognizing impairments. In addition, the Jenoptik Group is exposed to credit and default risks for cash and cash equivalents as well as current cash deposits. These risks are taken into account through constant monitoring of the creditworthiness of our business partners. To this end, business partner credit ratings and Credit Default Swaps (CDS) are subject to regular evaluation. For risk management purposes, liquid funds, amongst other things, are distributed between a number of banks within fixed limits. In accordance with IFRS 9, impairments were also applied to cash and cash equivalents as well as to current cash deposits.

The maximum default risk corresponds to the carrying amount of the financial assets and as at the reporting date totaled 225,424 thousand euros (prior year: 204,451 thousand euros).

The following impairments were recorded for financial assets in the fiscal year:

in thousand euros	2022	2021
Trade accounts receivable and contract assets	3,533	3,354
Financial investments	5	107
Cash and cash equivalents	97	92
Total	**3,635**	**3,553**

These impairments are offset against the following reversals of impairment losses for financial assets:

in thousand euros	2022	2021
Trade accounts receivable and contract assets	3,128	2,203
Cash and cash equivalents	16	62
Total	**3,144**	**2,265**

The impairments to or reversals of impairment losses on financial investments as well as cash or cash equivalents, are included in the financial result; for trade receivables and contract assets, in other operating income or expenses.

Liquidity risk

The liquidity risk entails the possibility of the Group being unable to meet its financial obligations. In order to ensure our ability to pay and financial flexibility at all times, the net cash and cash equivalents, as well as the credit lines and the level of their utilization, are planned yearly by means of a five-year financial plan as well as via a quarterly forecast of the statement of financial position, earnings and cash flow. The liquidity risk is also limited by effective cash and working capital management.

As of the statement of financial position date the liquidity reserves were divided into cash and cash equivalents in the sum of 56,758 thousand euros (prior year: 54,817 thousand euros) and current financial investments in the sum of 1,048 thousand euros (prior year: 1.555 thousand euros).

In addition, the Group has a secured and unused credit line available in the sum of 381,594 thousand euros (prior year: 324,978 thousand euros). This is primarily the result of the syndicated loan of 400,000 thousand euros concluded in December 2021. As at the statement of financial position date of December 31, 2022, the syndicated loan was utilized in the form of money market loans in the sum 15,000 thousand euros as well as in the form of guarantees in the sum of 5,850 thousand euros and in the form of overdraft facilities in the sum of 30,628 thousand euros. On conclusion, the term of the syndicated loan agreement was set for a fixed period up to December 2026. As a result of the utilization of the first of two extension options in fiscal year 2022, the term of the agreement was extended by one further year up to December 2027.

In April 2022 the outstanding tranche of the debenture bond from the year 2015 was repaid in the sum of 55,000 thousand euros.

The eleven tranches of the debenture bond issued in March or September 2021 in the total sum of 350,000 thousand euros and 59,000 thousand US dollars respectively, have original maturities of between four and a half and nine and a half years.

Financial covenants were not agreed for either the syndicated loan or the debenture bonds. However, the terms of the financing are geared towards the Group's ESG targets of increasing diversity, reducing CO_2 emissions and increasing transparency in the supply chain. Since Jenoptik has achieved all the targets agreed for 2022, it will benefit from a small advantage in interest rates in the future.

Thanks to the syndicated loan and the debenture bonds, the Jenoptik Group has a very sound, long-term financing base and the financial foundation for continued organic and non-organic growth. This can also be seen from the structure of the maturity dates shown below.

Cash outflows up to one year primarily comprise the repayment of overdraft facilities and money market loans in the sum of 15,000 thousand euros plus interest, drawn under the syndicated loan, as well as interest payments on the debenture bonds. This item also includes interest and redemption payments for real estate financing in Germany, as well as liabilities from leases.

The cash outflows in the time frame of between one to five years mainly comprise the repayments of the debenture bonds with original terms of four-and-a-half and five years. In addition, the item includes interest and principal payments for real estate financing in Germany with an original ten-year term, as well as liabilities from leases.

Cash outflows over five years mainly comprise repayments for debenture bond tranches with original maturities of six-and-a-half, seven and nine-and-a-half years, as well as interest and principal payments for real estate financing in Germany and leases.

	Interest rates	Carrying amounts	Cash outflows			
in thousand euros	(Bandwidth in %)	31/12/2022	Total	Up to 1 year	1 to 5 years	More than 5 years
Variable, interest-bearing liabilities to banks	2.80 – 3.20	287,675	304,970	48,297	97,315	159,358
	(0.90 – 1.30)	(244,577)	(261,928)	(2,628)	(98,117)	(161,183)
Fixed interest bearing liabilities to banks	0.60 – 2.95	194,830	201,181	10,127	133,975	57,079
	(0.60 – 2.02)	(314,216)	(333,966)	(140,006)	(130,183)	(63,777)
Liabilities from leases	0.75 – 6.77	54,276	57,474	12,962	31,498	13,013
	(0.75 – 5.73)	(38,946)	(41,421)	(12,373)	(23,929)	(5,119)
		536,781	**563,624**	**71,386**	**262,787**	**229,451**
Total		**(597,739)**	**(637,315)**	**(155,007)**	**(252,228)**	**(230,080)**

The figures in brackets relate to the prior year

Risk of changes in interest rates

The Jenoptik Group is fundamentally exposed to the risks of fluctuations in market interest rates for all interest-bearing for all interest-bearing financial assets and liabilities. In the fiscal year 2022, this mainly affected the debenture bonds raised in the sum of 350,000 thousand euros (prior year: 405,000 thousand euros) and 59,000 thousand US dollars (prior year: 59,000 thousand US dollars) as well as the utilization of the syndicated loan contract through money market loans in the sum of 15,000 thousand euros (prior year: 75,000 thousand euros) at the respective statement of financial position date.

	Carrying amounts	
in thousand euros	31/12/2022	31/12/2021
Interest bearing financial assets	39,419	21,456
Variable interest rates	8,078	9,226
Fixed-interest	31,341	12,230
Interest bearing financial liabilities	540,229	599,377
Variable interest rates	294,227	245,670
Fixed-interest	246,002	353,707

The calculated gains and losses arising from a change in the market interest rate as of December 31, 2022, within a bandwidth of 100 basis points, are shown in the following table:

in thousand euros	31/12/2022	31/12/2021
Increase by 100 base points		
Interest-bearing financial assets	81	92
Interest-bearing financial liabilities	−2,942	−2,457
Impact on earnings before tax	**−2,861**	**−2,364**
Reduction by 100 base points		
Interest-bearing financial assets	−81	−92
Interest-bearing financial liabilities	2,942	2,457
Impact on earnings before tax	**2,861**	**2,364**

As part of the management of interest rate risks, Jenoptik relies on a mix of fixed and variable interest-bearing assets and liabilities, as well as on various interest rate hedging transactions. These include, for example, interest swaps, interest caps and floors, as well as combined interest and currency swaps. As of the statement of financial position date of December 31, 2022, there were two combined interest rate and currency swap and one interest cap instruments in place, with the following structure:

Interest and currency swap CNY	
Nominal volume	17,980 thousand CNY
Term	March 12, 2015 to March 12, 2025
Fixed interest rate to be paid in CNY	5.10 percent p.a.
Variable interest rate to be received in EUR	6-month Euribor plus 0.2 percent p.a.
Interest and currency swap USD	
Nominal volume	59,000 thousand US dollars
Term	March 31, 2021, to March 31, 2026
Fixed interest rate to be received in USD	2.024 percent p.a.
Fixed interest rate to be paid in EUR	0.645 percent p.a.
Interest cap euro	
Nominal volume	107,000 thousand euros
Term	September 30, 2022, to March 31, 2028
Interest rate cap	3.00 percent p.a.
Reference interest rate	6-month Euribor

The interest and currency swap in CNY is used as a hedge for an intra-group loan for real estate financing in Shanghai (China). The increase of 93 thousand euros in its market value was recorded through profit or loss in the statement of income.

The interest and currency swap in US dollars is used as a hedge for the risk of foreign currency exchange differences for the debenture bond tranche issued in 2021, in the sum of 59,000 thousand US dollars. The future cash flows to be expected were fixed for the entire term upon conclusion of the contract. The market value is sub-divided into an interest rate and a currency component. As of December 31, 2022, the interest component had a positive market value of 374 thousand euros which was recognized in equity outside profit or loss. Explanations of the foreign currency component follow in the next section “Foreign currency exchange risk”.

The interest cap serves as a hedge against the risk of a change in the interest rate of a variable, interest-bearing tranche of a debenture bond issued in 2021 in the sum of 107,000 thousand euros. It is linked to the variable 6-month Euribor money market rate. The hedging effect of the cap comes into force as soon as the 6-month Euribor exceeds the 3.0 percent p.a. mark. In this event, the counterparty pays JENOPTIK AG the difference between the applicable money market rate at that time and 3.0 percent. As of December 31, 2022, the 6-month Euribor was below the strike of 3.0 percent, consequently no offsetting payments have been made to date. The original fair value of the interest rate cap when the contract was signed is amortized over the 7-year term. Changes in fair value are recognized in other equity outside profit or loss. The option premium due for concluding the interest cap is recognized in equity and amortized over the 7-year term. In addition, the intrinsic value of this financial instrument is determined based on recognized valuation methods and is also reported directly in equity until the beginning of the respective interest period. As at the reporting date of December 31, 2022 the intrinsic value was 975 thousand euros.

The aforementioned hedging instruments are expected to give rise to the following deposits and payments:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Interest and currency swap CNY				
Anticipated payments to bank	128 (138)	215 (350)	0 (0)	343 (488)
Interest and currency swap USD				
Anticipated payments to bank	322 (322)	966 (1,288)	0 (0)	1,288 (1,610)
Anticipated payments Received from bank	1,010 (1,010)	3,030 (4,040)	0 (0)	4,040 (5,051)
Interest cap euro				
Anticipated payments received from bank	224 (0)	728 (0)	23 (0)	975 (0)

The figures in brackets relate to the prior year

Foreign currency exchange risk

Foreign currency exchange risks include two types: conversion risk and transaction risk.

The conversion risk arises from fluctuations in value caused by changes in exchange rates arising from the conversion of financial assets and liabilities in foreign currencies into the currency of the statement of financial position. Since this is not normally associated with any cash flows, in most cases hedging is not required.

The transaction risk arises from the fluctuation in value of cash flows in foreign currencies caused by changes in currency exchange rates. Derivative financial instruments are used to hedge this risk. These are mainly currency forward transactions and currency swaps and, to a lesser extent, currency options.

Hedging is provided for significant cash flows in foreign currencies arising from the operational business (revenue). Contractually agreed cash flows are hedged 1:1 via so-called micro-hedges. Planned cash flows are hedged on a pro rata basis in the context of anticipatory hedging, securing both groups of similar transactions (revenues) as well as net positions of individual entities.

JENOPTIK AG also hedges the anticipated cash flows from intra-group loans in foreign currencies which have not been declared as a “Net investment in a foreign operation”, using derivative financial instruments. As of December 31, 2022, intra-group loans in foreign currencies were hedged as follows:

Borrowers of intra-group loans	Outstanding amount of intra-group loans (excluding “Net investment in a foreign operation” portion)	Hedging volume
JENOPTIK Automotive North America, LLC, USA	47,200 TUSD	14,000 TUSD
Prodomax Automation Ltd., Canada	7,641 TCAD	11,500 TCAD
JENOPTIK JAPAN Co. Ltd., Japan	100,000 TJPY	100,000 TJPY

Foreign exchange forward transactions, foreign exchange swaps and foreign currency options existed as at the statement of financial position date. A so-called cash flow hedge relationship with the respective underlying transaction was documented for the vast majority of these transactions. Where this is proven effective, its changes in value do not have to be recorded through profit or loss but in equity outside profit or loss. In order to measure the effectiveness, a prospective, quality-related effectiveness test was conducted, on the designation date as well as on a continuous basis, normally as of the statement of financial position dates, on the basis of the IFRS 9 “Financial instruments” accounting standard.

The interest rate and currency swap in USD, already mentioned in the previous section “Risk of changes in interest rates”, serves to hedge the foreign exchange currency risk for the tranche of a debenture bond in the sum of 59,000 thousand US dollars. The positive market value of its currency components totaled 5,409 thousand euros as of the qualifying date December 31, 2022. The change in the market value of the currency component is reflected in the income statement through profit or loss. This creates the targeted balancing effect with the countervailing change in the value of the underlying transaction (valuation of the foreign currency liability in euro).

The breakdown of foreign exchange forward transactions, foreign exchange swaps and foreign exchange options, as well as the USD interest rate and currency swap according to currency sales and purchases, is as follows:

in thousand euros	31/12/2022	31/12/2021
USD – sale for EUR	61,914	40,698
USD – purchase for EUR	53,097	49,907
GBP – sale for EUR	0	2,717
USD – sale for CHF	3,002	4,435
USD – sale for CAD	1,897	1,348
USD – purchase for CAD	4,121	924
CNY – sale for EUR	7,108	1,021
CNY – purchase for EUR	687	2,188
JPY – sale for EUR	786	0
CAD – sale for EUR	8,277	0
Total foreign currency sales	**82,984**	**53,331**
Total foreign currency purchases	**57,905**	**49,907**

The foreign exchange forward transactions, foreign exchange swaps and foreign exchange options, as well as the interest and currency swaps in USD, gave rise to the following market values:

in thousand euros	31/12/2022	31/12/2021
Positive market values		
Derivatives with hedging relationship		
Non-current	10,384	2,957
Current	771	20
Derivatives without hedging relationship		
Non-current	44	21
Current	614	48
Total positive market values	**11,813**	**3,046**
Negative market values		
Derivatives with hedging relationship		
Non-current	415	492
Current	1,367	1,169
Derivatives without hedging relationship		
Non-current	0	155
Current	596	649
Total negative market values	**2,378**	**2,465**
Balance	**9,436**	**581**

The market values for hedging transactions for intra-group loans are included in the derivatives without hedging relationships as the underlying transaction comprising intra-group receivables and liabilities is eliminated. The positive market values of these derivatives as of the statement of financial position date totaled 582 thousand euros (prior year: 27 thousand euros), whist the negative market values totaled 577 thousand euros (prior year: 281 thousand euros). The change led to an overall gain in the sum of 259 thousand euros (prior year: loss of 281 thousand euros) which was recognized in the financial result through profit or loss.

Cumulative gains in hedged derivatives in the sum of 793 thousand euros (prior year: cumulative losses of 957 thousand euros) were recognized in equity outside profit or loss as at December 31, 2022. Of the losses recognized directly in equity outside profit or loss as of December 31, 2021, 465 thousand euros (prior year: gains of 769 thousand euros) were reclassified from equity to profit or loss in 2022. This type of reclassification is normally associated with the recognition of the underlying transaction (for example, recognition of revenue and booking of the corresponding receivable on billing) through profit or loss so the targeted balancing effect of concluding the hedge transaction is reflected in the income statement.

The foreign currency hedging transactions hedge against foreign exchange currency risks in the sum of 61,559 thousand euros with a time frame up to the end of 2023. Foreign currency risks with a time frame up to the end of 2026 were hedged in the sum of 21,385 thousand euros.

The main foreign currency risks of the Jenoptik Group involve the US dollar. The table below shows a list of the financial assets and liabilities in US dollars and the resultant net risk item for the statement of financial position:

in thousand euros	31/12/2022	31/12/2021
Financial assets	32,915	50,646
Financial debts	59,426	55,497
Net risk item for the statement of financial position:	**−26,511**	**−4,851**

As of the statement of financial position date there was a US dollar-based net risk item in the statement of financial position in the sum of minus 26,511 thousand euros (prior year: minus 4,851 thousand euros). A change in the US dollar exchange rate would have the following consequences:

	EUR/USD rate	Change in the net risk item (in thousand euros)
Reporting date 31/12/2022	1.0666	
	(1.1326)	
Increase by 5 percent	1.1199	−1,262
	(1.1892)	(−231)
Reduction by 5 percent	1.0133	1,395
	(1.0760)	(255)
Increase by 10 percent	1.1733	−2,410
	(1.2459)	(−441)
Reduction by 10 percent	0.9599	2,946
	(1.0193)	(539)

The figures in brackets relate to the prior year

In addition to the risks to the statement of financial position, the US dollar entails other risks arising from anticipated cash flows. These are estimated and hedged on a proportional basis as part of the annual medium-term planning. As of December 31, 2022 cash flows in US dollars, hedged through derivatives, totaled the equivalent of 59,502 thousand euros (prior year: 46,481 thousand euros).

8.3 Contingent liabilities and contingent payables

Up to June 30, 2022, VINCORION was part of the Jenoptik Group's scope of consolidation. Consequently, intra-group guarantees, letters of comfort and warranties (referred to in summary below as guarantees) of JENOPTIK AG were not shown as external guarantee relationships. With the completed sale of VINCORION, the existing guarantees as of December 31, 2022 totaling 19,519 thousand euros will be classified as non-group.

The external contract performance guarantees to VINCORION customers remaining with JENOPTIK AG for a certain period totaled 10,000 thousand euros as at December 31, 2022. Counter-guarantees from banks for other existing guarantees amounting to 9,519 thousand euros were issued for the period until an exempting assumption of debt by VINCORION. The risk of a future claim is currently considered to be low.

In addition, a financing commitment was given to a non-consolidated company in liquidation with a view to an orderly process of liquidation.

8.4 Legal disputes

JENOPTIK AG and its group entities are involved in few court or arbitration proceedings. Provisions for litigation risks, respectively litigation expenses, were set aside in the appropriate amount in order to meet any potential financial burdens resulting from current court or arbitration proceedings (see Section "Other provisions").

8.5 Related party disclosures in accordance with IAS 24

Related parties are defined in IAS 24 "Related party disclosures" as being entities or persons that have control over or are controlled by the Jenoptik Group to the extent that they have not already been included in the consolidated financial statements as consolidated entities as well as entities or persons that, on the basis of the Articles of Association or by contractual agreements, are able to significantly influence the financial and corporate policies of the management of JENOPTIK AG or participate in the joint management of JENOPTIK AG. Control applies if a shareholder holds more than half of the voting rights in JENOPTIK AG. The largest single shareholder in JENOPTIK AG is Thüringer Industriebeteiligungs GmbH & Co. KG, Erfurt, which directly holds a total of 11 percent of the voting rights.

The following table shows the composition of the business relationships with non-consolidated entities, associate entities and joint ventures.

		of which	
in thousand euros	Total	Non-consolidated associates	Associated entities and investments
Revenue	819 (1,024)	0 (12)	819 (1,012)
Purchased services	1,570 (1,959)	48 (361)	1,522 (1,598)
Receivables from operating activities	582 (310)	42 (36)	539 (274)
Liabilities from operating activities	162 (0)	0 (0)	162 (0)
Financial liabilities	0 (3,022)	0 (0)	0 (3,022)
Financial assets, loans granted	1,016 (125)	0 (0)	1,016 (125)

The figures in brackets relate to the prior year

Remuneration of the Executive Board and Supervisory Board

Members of the Executive Board and of the Supervisory Board of JENOPTIK AG also qualify as related parties.

The breakdown of the total remuneration of the members of the management in key positions (Executive Board and Supervisory Board), recorded in 2022 through profit or loss, is shown in the following table.

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Executive Board remuneration		
Current due payments[1]	1,849	1,865
Payments after termination of the employment relationship	360	360
Share-based payment	−3	1,121
Executive Board remuneration	**2,207**	**3,346**
Supervisory Board remuneration[2]	**885**	**782**
Total	**3,092**	**4,128**

[1] Fixed remuneration, one-year variable remuneration and fringe benefits (contributions to accident insurance and the provision of company cars)
[2] Fixed remuneration and committee remuneration including attendance fees, net

Individualized details on the remuneration of the Executive Board and Supervisory Board of JENOPTIK AG are shown in the Remuneration Report.

The expenses shown in the table for the share-based remuneration of the Executive Board are derived from the continuous valuation of all performance shares provisionally granted as at the statement of financial position date, each at the respective fair value at the statement of financial position date.

The fair value of the 21,530 performance shares provisionally allocated in the fiscal year (prior year: 30,273 plus 161 dividend protection of old shares) on the date of granting is 435 thousand euros (prior year: 556 thousand euros). The total remuneration paid to the members of the Executive Board in accordance with Section 314 (6) of the German Commercial Code (HGB) therefore totaled 2,645 thousand euros in the fiscal year 2022 (prior year: 2,781 thousand euros).

As at the statement of financial position date, there were outstanding commitments to members of management in key positions in the total sum of 3.375 thousand euros (prior year: 4,047 thousand euros) consisting of one and multi-year variable remuneration components of the Executive Board and the remuneration of the Supervisory Board.

Retirement benefits paid to former Executive Board members, or their survivors amounted to 139 thousand euros (prior year: 185 thousand euros). As of the statement of financial position date, the pension provisions for former Executive Board members totaled 1,552 thousand euros (prior year: 3,108 thousand euros). The expenses recorded for these existing provisions in the fiscal year 2022 totaled 31 thousand euros (prior year: 20 thousand euros).

As in the prior year, in fiscal year 2022 there was no exchange of goods or services between the entity and members of these two bodies.

In the fiscal year 2022 – as in the preceding years – no loans or advances were granted to the members of either the Executive Board or the Supervisory Board. Consequently, there were no loan redemption payments.

9 Events after the Balance Sheet Date

The JENOPTIK AG Executive Board approved the submission of the present Consolidated Financial Statements to the Supervisory Board on March 20, 2023. The Supervisory Board is responsible for reviewing and approving the Consolidated Financial Statements at its, March 27, 2022, meeting.

Dividend. According to the Stock Corporation Act, the amount available for a dividend payment to the shareholders is based on the accumulated profit of the parent company JENOPTIK AG, as determined by the regulations of the HGB. For the fiscal year 2022, JENOPTIK AG's accumulated profit totaled 75,383,014.03 euros, comprising the net profit for the fiscal year 2022 in the amount of 55,383,014.03 euros plus retained profits of 20,000,000.00 euros.

The Executive Board recommends to the Supervisory Board that for the fiscal year 2022 past a dividend of 0.30. euros per qualifying no-par value share be proposed at the 2023 Annual General Meeting, representing an increase over the level for the prior year (prior year: 0.25 euros). This would mean that a sum of 17,171,434.50 euros from JENOPTIK AG's accumulated profits in the fiscal year 2022 is to be distributed. Of the remaining accumulated profits of JENOPTIK AG, an amount of 38,211,579.53 euros allocated to other profit reserves and an amount of 20,000,000.00 euros will be carried forward to the new account.

No further events of significance occurred after December 31, 2022.

10 Other Required Disclosures and Supplementary Information under HGB

10.1 Required disclosures in accordance with § 315e and § 264 (3) or § 264b of the HGB

The consolidated financial statements of JENOPTIK AG were prepared in accordance with § 315e of the HGB, exempting an entity from preparing consolidated financial statements under HGB in accordance with the guidelines of the IASB. At the same time, the consolidated financial statements and Combined Management Report are in conformity with the European Union Consolidated Accounts Directive (2013/34/EU). In order to achieve comparability with consolidated financial statements prepared in accordance with the commercial regulations of the HGB, all of the required disclosures and explanations under the HGB as well as any required disclosures above and beyond those needed to be in compliance with IFRS are to be published.

Through having been included in the consolidated financial statements of JENOPTIK AG, the following fully consolidated German associates have made use of the simplification relief measures defined in § 264 (3) or § 264b of the HGB:

- JENOPTIK Automatisierungstechnik GmbH, Jena
- JENOPTIK Industrial Metrology Germany GmbH, Villingen-Schwenningen
- JENOPTIK Optical Systems GmbH, Jena
- JENOPTIK Robot GmbH, Monheim am Rhein
- Trioptics GmbH, Wedel

10.2 Number of employees and personnel expenses

The breakdown of the average number of employees is as follows:

Employees	2022	2021
Advanced Photonic Solutions	2,782	2,154
Smart Mobility Solutions	476	484
Non-Photonic Portfolio Companies	654	714
Other[1]	613	971
Total	**4,524**	**4,322**
of which continuing operations	4,196	3,631

[1] Including discontinued operation: VINCORION

In addition, in the fiscal year 2022 an average of 178 trainees (prior year: 167) were employed.

The average was determined in accordance with the requirements of § 267 (5) HGB [German Commercial Code] for the description of the size categories.

The breakdown of the continuing and discontinued operations is as follows:

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Wages and salaries	322,071	282,951
Social security contributions and costs for assistance	49,842	47,813
Expenses for pensions	5,294	2,644
Total	**377,208**	**333,408**
of which continuing operations	347,217	274,448

10.3 Financial statement auditor fees

The fees for the services received rendered by our auditor, as well as by its affiliates and network companies, amounted to:

in thousand euros	1/1–31/12/2022	1/1–31/12/2021
Financial statement audit services	1,770	1,565
Other services	108	21
Tax consulting services	4	23
Total	**1,881**	**1,609**

The fees for the financial statement audit services relate to expenses for the audit of the annual and consolidated financial statements of JENOPTIK AG as well as the statutory and voluntary audits of the financial statements of the subsidiaries included in the consolidated financial statements.

Other attestation services of the auditor were rendered as part of the certifications issued under the Renewable Energies Act and the European Market Infrastructure Regulation (EMIR). It also includes attestation services in connection with the sale of VINCORION and the audit of the Remuneration Report in accordance with Section 162 AktG [German Stock Corporation Act]. Advice on taxation relates to support services in connection with the tax return of a foreign subsidiary.

Of the total expenses, financial statement audit services of 1,095 thousand euros (prior year: 1,040 thousand euros), other attestation services of 108 thousand euros (prior year: 21 thousand euros), and tax consulting services of 0 thousand euros (prior year: 18 thousand euros) were rendered by the auditors of the consolidate financial statements Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Germany.

10.4 German Corporate Governance Code

In December 2022, the Executive Board and Supervisory Board of JENOPTIK AG submitted a declaration of conformity in accordance with § 161 of the German Stock Corporation Act as required by the recommendations of the Government Commission's German Corporate Governance Code in the version dated April 28, 2022. The declaration of conformity was made permanently available to shareholders on the JENOPTIK AG website at www.jenoptik.com in the section Investors/Corporate Governance. The declaration can also be viewed in the offices of JENOPTIK AG (Carl-Zeiss-Strasse 1, 07743 Jena, Germany).

11 List of Shareholdings in the Jenoptik Group as at December 31, 2022 in accordance with § 313 2 HGB

No.	Name and registered office of the entity	Share of Jenoptik or the direct shareholder as %	Equity 31/12/2022 thousand euros [1]	Result 2022 thousand euros [1]
	1.1 Consolidated associates – indirect investments			
1	JENOPTIK Asia-Pacific Pte. Ltd., Singapore, Singapore	100		
2	JENOPTIK Automatisierungstechnik GmbH, Jena, Germany	100		
3	JENOPTIK Industrial Metrology Germany GmbH, Villingen-Schwenningen, Germany	100		
4	JENOPTIK North America, Inc., Jupiter (FL), USA	100		
5	JENOPTIK Optical Systems GmbH, Jena, Germany	100		
6	JENOPTIK Robot GmbH, Monheim am Rhein, Germany	100		
	– direct investments			
7	Asam Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG, Mainz, Germany	94		
8	Berliner Glas Wuhan Trading Co., Ltd., Wuhan, China	100		
9	BROXBURN, S.L., Madrid, Spain	100		
10	INTEROB RESEARCH & SUPPLY, S.L., Valladolid, Spain	100		
11	INTEROB, S.L., Valladolid, Spain	100		
12	JENOPTIK (Shanghai) International Trading Co., Ltd., Shanghai, China	100		
13	JENOPTIK (Shanghai) Precision Instrument and Equipment Co., Ltd., Shanghai, China	100		
14	JENOPTIK Australia Pty Ltd, Sydney, Australia	100		
15	JENOPTIK Automotive North America, LLC, Rochester Hills (MI), USA	100		
16	JENOPTIK Benelux B.V., Drunen, The Netherlands	100		
17	JENOPTIK India Private Limited, Bangalore, India	100		
18	JENOPTIK INDUSTRIAL METROLOGY DE MEXICO, S. DE R.L. DE C.V., Saltillo, Mexico	98		
19	JENOPTIK Industrial Metrology France SAS, Bayeux Cedex, France	100		
20	JENOPTIK JAPAN Co. Ltd., Yokohama, Japan	100		
21	JENOPTIK Korea Corporation, Ltd., Pyeongtaek, Korea	66.66		
22	JENOPTIK Optical Systems, LLC, Jupiter (FL), USA	100		
23	JENOPTIK Traffic Solutions Switzerland AG, Uster, Switzerland	100		
24	JENOPTIK Traffic Solutions UK Ltd., Camberley, Great Britain	100		
25	JENOPTIK UK Ltd., Milton Keynes, Great Britain	100		
26	Prodomax Automation Ltd., Barrie, Canada	100		
27	SwissOptic (Wuhan) Co., Ltd., Wuhan, China	100		
28	SwissOptic AG, Heerbrugg, Switzerland	100		
29	Traffipax, LLC, Jupiter (FL), USA	100		
30	TRIOPTICS Berlin GmbH, Berlin, Germany	100		
31	Trioptics GmbH, Wedel, Germany	100		
32	Trioptics Hong Kong Limited, Hong Kong	100 [10]		
33	Trioptics Japan Co., Ltd., Shizuoka, Japan	61.25		
34	Trioptics Korea Co., Ltd, Suwon, Korea	60		
35	Trioptics Optical Test Instruments (China) Ltd., Beijing, China	51		
36	TRIOPTICS Scandinavia OY, Tampere; Finland	100		
37	TRIOPTICS SINGAPORE PTE. LTD., Singapore	100		
38	TRIOPTICS TAIWAN LTD., Taoyuan, Taiwan	51		
39	Trioptics, Inc., Rancho Cucamonga, California, USA	100		

No.	Name and registered office of the entity	Share of Jenoptik or the direct shareholder as %	Equity 31/12/2022 thousand euros[1]	Result 2022 thousand euros[1]
	1.2. Non-consolidated associates			
	– indirect investments			
40	FIRMICUS Verwaltungsgesellschaft mbH, Jena, Germany, in liq.[2]	100[8]	35	−2
41	SAALEAUE Immobilien Verwaltungsgesellschaft mbH, Jena, Germany, in liq.[2]	100[9]	36	2
42	KORBEN Verwaltungsgesellschaft mbH, Grünwald, Germany, in liq.[2]	100	32[4]	1[4]
	– direct investments			
43	JENOPTIK do Brasil Instrumentos de Precisão e Equipamentos Ltda., Sao Paulo, Brazil	100	−813[4]	−9[4]
44	JENOPTIK Saudi Arabia, LLC, Jeddah, Saudi-Arabia, in liq.[2]	100	9[5]	−37[5]
45	Hörsel GmbH (ehemals PHOTONIC SENSE GmbH), Eisenach, Germany, in liq.[2]	100	−541	330
	Investments valued at equity			
46	HILLOS GmbH, Jena, Germany	50	15,944	1,156
47	TELSTAR-HOMMEL CORPORATION, Ltd., Pyeongtaek, Korea	33.33	17,697[4]	−417[4]
48	Trioptics France S.A.R.L., Villeurbanne, France	50	256[4]	34[4]
	3. investments			
	– indirect investments			
49	JENAER BILDUNGSZENTRUM gGmbH SCHOTT CARL ZEISS JENOPTIK, Jena, Germany	33.33	1,538[4]	−33[4]
	– direct investments			
50	HOMMEL CS s.r.o., Teplice, Czech Republic	40	1,161[4]	106[4]
51	JENOPTIK Robot Algérie SARL, Algier, Algeria	49	184[4]	0[4]
52	JT Optical Engine GmbH + Co. KG, Jena, Germany, in liq.[2]	50[7]	506	−1
53	JT Optical Engine Verwaltungs GmbH, Jena, v, in liq.[2]	50[7]	23	0
54	ZENTERIS GMBH, JENA, GERMANY, in liq.[3]	24.9[7]	[6]	[6]

[1] Details from annual financial statements in foreign currency converted at the rate on the qualifying date or at the average rate of the respective year
[2] in. liq. = in liquidation
[3] i.I. = in insolvency
[4] Details for 2021 financial statements
[5] Details as at March 31, 2018
[6] Details not available
[7] Deviating fiscal year as of June 30
[8] Deviating fiscal year as of September 30
[9] Short fiscal year from January 1 to September 30, 2021
[10] indirect investment through Trioptics Optical Test Instruments (China) Ltd.

Jena, March 20, 2023
JENOPTIK AG

Dr. Stefan Traeger
President & CEO

Hans-Dieter Schumacher
Chief Financial Officer

Dr. Prisca Havranek-Kosicek
Member of the Executive Board

Dr. Ralf Kuschnereit
Member of the Executive Board

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Assurance from the Legal Representatives

We give our assurance that, to the best of our knowledge and in accordance with the applicable accounting principles, the Consolidated Financial Statements give a true and fair view of the net assets, financial position and results of operations of the Group and that the course of business, including the business result and the position of the Group, are portrayed in such a way in the Combined Management Report that a true and accurate picture is conveyed and that the significant opportunities and risks of the Group's future development are fairly described.

Jena, March 20, 2023

Dr. Stefan Traeger
President & CEO

Hans-Dieter Schumacher
Chief Financial Officer

Dr. Prisca Havranek-Kosicek
Member of the Executive Board

Dr. Ralf Kuschnereit
Member of the Executive Board

Independent auditor's report

An die JENOPTIK AG

Report on the audit of the consolidated financial statements and of the combined management report

Opinions

We have audited the consolidated financial statements of JENOPTIK AG, Jena, and its subsidiaries (the Group), which comprise the consolidated statement of comprehensive income for the fiscal year from 1 January to 31 December 2022, the consolidated statement of financial position as at 31 December 2022, the consolidated statement of cash flows and the consolidated statement of changes in equity for the fiscal year from 1 January to 31 December 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of JENOPTIK AG, which was combined with the management report of the Company, for the fiscal year from 1 January to 31 December 2022. In accordance with the German legal requirements, we have not audited the content of the combined corporate governance statement pursuant to Sec. 289f and Sec. 315d HGB ["Handelsgesetzbuch": German Commercial Code], which is part of the group management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2022 and of its financial performance for the fiscal year from 1 January to 31 December 2022, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. We do not express an opinion on the content of the statement on corporate governance referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance

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with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from 1 January to 31 December 2022. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

1. Recoverability of goodwill

Reasons why the matter was determined to be a key audit matter

Goodwill recognized in the consolidated financial statements of JENOPTIK AG is subject to an annual impairment test pursuant to IAS 36.

The result of the valuations mainly depends on the future cash inflows estimated by the executive directors as well as the discount rate used. The impairment test is therefore associated with a large degree of judgment and uncertainty, which is why it was determined to be a key audit matter.

Auditor’s response

We discussed the method used to perform the impairment test with the Company’s executive directors and assessed its compliance with the requirements of IAS 36. We verified the individual components used to determine the discount rate with the support of our internal valuation experts, in particular by analyzing the peer group, comparing market data with external evidence and examining the calculation. We examined the clerical accuracy of the valuation model on a sample basis.

We checked on a test basis that the planning assumptions used in the detailed forecasts of each of the cash-generating units are in line with the business plan of the Company prepared by the Executive Board and assessed them critically taking into account our knowledge and insight from the audit. In addition, we verified the growth rates for income and expenses used to roll forward the budget by comparing internal and external data. We also analyzed the forecasts with regard to adherence to the budget in the past, compared it with the prior-year forecast, discussed it with the Company’s executive directors and obtained evidence substantiating the individual assumptions of the forecasts. In this regard, we involved our valuation experts in the Non-Photonic Portfolio Companies (NPC) division.

We verified the significant assumptions used in the sensitivity calculations prepared by the executive directors of the Company in order to estimate any potential impairment risk associated with a change in one of the significant assumptions used in the valuation.

There was a need to recognize an impairment loss in the amount of EUR 9,160k for the goodwill in the NPC division, which was recorded under other operating expenses.

In respect of the impairment loss recognized in the NPC division, we do not have any reservations regarding the impairment testing of goodwill recognized in the consolidated financial statements.

Reference to related disclosures

Additional disclosures on the impairment of goodwill as well as the associated judgments are contained in section 5.1 "Intangible assets" of the Company's notes to the consolidated financial statements.

2. Measurement of deferred tax assets on tax loss carryforwards

Reasons why the matter was determined to be a key audit matter

The deferred tax assets recognized in the consolidated financial statements of JENOPTIK AG primarily relate to tax loss carryforwards in Germany. The measurement of deferred tax assets on tax loss carryforwards mainly depends on the estimation of the projected future taxable income, also taking into account changes in the tax group. The measurement is therefore associated with a large degree of judgment and uncertainty, which is why it was determined to be a key audit matter.

Auditor's response

We discussed the method used to measure deferred tax assets on tax loss carryforwards with the executive directors and assessed its compliance with the rules of IAS 12.

We discussed the assumptions used in the forecast of the expected future taxable income with the executive directors, checked on a test basis with the internal forecasts prepared by the Executive Board and assessed them critically taking into account our knowledge and insight from the audit. We also engaged our internal tax specialists to assist us with assessing the reconciliation of planned earnings to the expected taxable income. In addition, we verified the growth rates for income and expenses used to roll forward the budget by comparing internal and external data. We also analyzed the forecasts with regard to adherence to the budget in the past, compared them with the prior-year forecasts and obtained evidence substantiating the individual assumptions of the forecasts.

Furthermore, we confirmed the assumptions of the tax planning based on the taxable income generated in the past.

We do not have any reservations regarding the recoverability of the deferred tax assets on tax loss carryforwards recognized in the consolidated financial statements.

Reference to related disclosures

Additional disclosures on the recoverability of deferred tax assets on loss carryforwards are contained in section 4.8 "Income taxes" of the notes to the consolidated financial statements.

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Other information

The Supervisory Board is responsible for the Report of the Supervisory Board in section "1 Management" of the Annual Report. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG ["Aktiengesetz": German Stock Corporation Act] on the German Corporate Governance Code, which is part of the corporate governance statement, and for the remuneration report pursuant to Art. 162 AktG. In all other respects, the executive directors are responsible for the other information. The other information comprises the corporate governance statement in the combined management report, the separate Combined Non-financial Report (section 4) as well as other parts of the Annual Report, in particular sections

- 1 Management,
- 3 Remuneration report,
- 6 Further information (including the Assurance from the Legal Representatives),

but not the consolidated financial statements, not the group management report disclosures whose content is audited and not our auditor's report thereon. We received a copy of this other information prior to issuing this auditor's report.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the executive directors and the Supervisory Board for the consolidated financial statements and the group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

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- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Report on the assurance on the electronic rendering of the consolidated financial statements and the group management report prepared for publication purposes in accordance with Sec. 317 (3a) HGB

Opinion

We have performed assurance work in accordance with Sec. 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in "Jenoptik_AG_KA+KLB_ESEF-2022-12-31.zip" and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained within these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the file identified above and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinions on the accompanying consolidated financial statements and the accompanying group management report for the fiscal year from 1 January to 31 December 2022 contained in the "Report on the audit of the consolidated financial statements and of the group management report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

Basis for the opinion

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the file identified above in accordance with Sec. 317 (3a) HGB and the IDW Assurance Standard: Assurance on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Sec. 317 (3a) HGB (IDW AsS 410) (06.2022) and the International Standard on Assurance Engagements 3000 (Revised). Our responsibility in accordance therewith is further described in the "Group auditor's responsibilities for the assurance work on the ESEF documents" section. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the executive directors and the Supervisory Board for the ESEF documents

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the group management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328 (1) Sentence 4 No. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have determined necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB for the electronic reporting format.

The Supervisory Board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

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Group auditor's responsibilities for the assurance work on the ESEF documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e., whether the file containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, on the technical specification for this file.
- Evaluate whether the ESEF documents enable an XHTML rendering with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Arts. 4 and 6 of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the Annual General Meeting on 15 June 2022 and were engaged by the Supervisory Board on 5 September 2022. We have been the group auditor of JENOPTIK AG without interruption since fiscal year 2016.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Art. 11 of the EU Audit Regulation (long-form audit report).

Other matter – use of the auditor's report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited group management report as well as the assured ESEF documents. The consolidated financial statements and the group management report converted to the ESEF format – including the versions to be published in the Unternehmensregister [German Company Register] – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Mr. Steffen Maurer.

Stuttgart, 20 March 2023

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Murrmann	Maurer
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Executive Board

as at December 2022

Dr. Stefan Traeger

President and CEO

Dr. Stefan Traeger has been the Chairman of the Executive Board of JENOPTIK AG since May 1, 2017. He is responsible for the divisions (operational business) and the regions as well as for the areas of Corporate Development (Strategy, Mergers & Acquisitions, Innovation), Corporate Communications and Marketing, Investor Relations and Sustainability, Legal and IP, Compliance & Risk and, as Human Resources Director, for HR.

Hans-Dieter Schumacher

Chief Financial Officer

Hans-Dieter Schumacher has been Chief Financial Officer (CFO) of JENOPTIK AG since April 1, 2015. He is responsible for the areas of Finance & Controlling (Corporate & Divisional), General Procurement, Treasury, Tax, IT & Data Security as well as Corporate Real Estate Management and Internal Audit.

Executive Management Committee

as at December 2022

Dr. Stefan Traeger

President & CEO

Hans-Dieter Schumacher

Chief Financial Officer

Kevin Chevis

Executive Vice President
Division Smart Mobility Solutions

Maria Koller

Executive Vice President
Head of Global Human Resources

Dr. Ralf Kuschnereit

Executive Vice President
Division Advanced Photonic Solutions

Jay Kumler

President Jenoptik North America

Jonathan Qu

President Jenoptik Asia

Markus Weber

Executive Vice President
Corporate Controlling & Accounting

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Historical Summary of Financial Data

		Group				Continuing operations		
		2016	2017	2018	2019	2020	2021	2022
Statement of Income								
Revenue	million euros	684.8	747.9	834.6	855.2	615.5	750.7	980.7
Foreign revenue	million euros	458.3	525.3	594.1	621.3	473.4	611.3	751.7
Share of foreign revenue	%	66.9	70.2	71.2	72.6	76.9	81.4	76.7
Cost of sales	million euros	446.9	484.0	541.5	563.4	390.7	493.8	635.0
Gross profit	million euros	237.9	263.9	293.1	291.8	224.7	256.9	345.7
Gross margin	%	34.7	35.3	35.1	34.1	36.5	34.2	35.3
R+D expenses	million euros	42.3	43.1	47.4	44.1	39.4	38.9	54.6
Selling expenses	million euros	73.6	80.3	87.0	89.3	77.1	89.7	107.6
Administrative expenses	million euros	57.6	55.8	56.1	60.5	53.9	53.5	65.5
EBITDA	million euros	96.9	106.9	127.5	134.0	92.8	155.7	184.1
EBITDA margin	%	14.2	14.3	15.3	15.7	15.1	20.7	18.8
EBIT	million euros	68.5	78.0	94.9	88.9	47.4	108.1	101.9
EBIT margin	%	10.0	10.4	11.4	10.4	7.7	14.4	10.4
EBT	million euros	64.7	80.1	91.4	85.2	42.3	102.5	96.0
EBT margin	%	9.5	10.8	11.0	10.0	6.9	13.7	9.8
Earnings after tax	million euros	57.5	72.7	87.4	67.6	34.0	92.9	63.9
EPS (Group)	euros	1.00	1.27	1.53	1.18	0.73 [2]	1.43 [2]	0.96 [2]
Cost of materials (incl. external services)	million euros	284.6	309.3	356.1	344.8	242.0	300.6	395.7
Material intensity	%	40.2	40.2	41.6	39.5	38.2	37.4	39.5
R+D output	million euros	57.4	66.6	69.1	68.4	56.9	63.6	87.1
R+D ratio	%	8.4	8.9	8.3	8.0	9.2	8.5	8.9
Financial result	million euros	−3.7	2.0	−3.5	−3.7	−5.1	−5.6	−6.0
Cash Flows and Capital Expenditure								
Free cash flow (before income tax)	million euros	80.4	72.2	108.3	77.2	52.5	43.2	82.7
Capital expenditures	million euros	27.5	37.9	42.5	55.6	38.1	49.9	106.0
Personnel								
Employees on average	Head count	3,404	3,500	3,714	3,961	4,049 [2]	3,631	4,196
Personnel expenses	million euros	252.4	265.4	289.3	310.7	238.5	281.8	355.8
Personnel intensity	%	36.9	35.5	34.7	36.3	38.7	37.5	36.3
Statement of Financial Position								
Non-current assets	million euros	371.9	376.2	491.8	555.2	848.9	1,110.8	1,128.5
Intangible assets and property, plant and equipment	million euros	269.2	285.7	391.5	463.9	750.6	1,019.9	1,055.2
Investment property	million euros	4.4	4.4	4.4	4.3	4.2	3.6	3.6
Financial investments	million euros	19.0	4.4	6.8	8.3	16.3	17.3	17.1
Other non-current assets	million euros	5.0	2.9	2.9	1.1	3.3	6.6	13.7
Deferred tax assets	million euros	74.2	78.9	86.3	77.7	74.6	63.4	38.8
Current assets	million euros	441.2	512.9	494.1	528.1	489.9	646.3	543.3
Inventories	million euros	159.3	168.6	175.6	153.7	191.4	200.2	256.0
Trade and other receivables	million euros	139.3	147.4	169.8	205.8	230.2	232.9	229.6
Current financial assets and cash	million euros	142.5	196.9	148.7	168.7	68.3	56.4	57.8
Assets held for sale	million euros	0	0	0	0	0	156.8	0

		Group				Continuing operations		
		2016	2017	2018	2019	2020	2021	2022
Equity	million euros	476.4	529.9	598.0	655.4	689.4	780.7	843.3
Share capital	million euros	148.8	148.8	148.8	148.8	148.8	148.8	148.8
Non-current liabilities	million euros	175.4	162.1	170.3	176.0	233.0	503.1	519.0
Pension provisions	million euros	37.6	37.1	37.3	31.6	35.2	9.4	4.3
Other non-current provisions	million euros	12.3	15.9	16.3	17.9	17.0	17.9	17.0
Non-current financial debt	million euros	120.5	108.6	111.4	122.6	138.4	448.7	477.7
Other non-current liabilities	million euros	4.8	0.4	2.8	2.3	29.5	2.4	3.9
Deferred tax liabilities	million euros	0.1	0.1	2.5	1.7	12.9	24.7	16.1
Current liabilities	million euros	161.3	197.1	217.7	251.9	416.4	473.3	309.5
Tax provisions	million euros	3.4	8.9	9.0	6.4	2.6	6.9	10.9
Other current provisions	million euros	46.2	51.2	58.7	51.9	52.5	39.9	43.9
Current financial debt	million euros	4.1	19.3	10.1	37.0	130.9	149.0	59.1
Trade payables and other liabilities	million euros	107.7	117.6	139.9	156.6	230.4	183.8	195,6
Liabilities related to assets held for sale	million euros	0	0	0	0	0	93.6	0
Total equity and liabilities	million euros	813.1	889.1	985.9	1,083.3	1,338.8	1,757.0	1,671.8
Balance sheet ratios								
Equity ratio	%	58.6	59.6	60.6	60.5	51.5	44.4	50.4
Asset coverage		301.7	321.7	321.6	261.0	261.6	292.8	259.8
Gross debt	million euros	124.6	127.9	121.5	159.6	269.3	597.7	536.8
Net debt	million euros	−17.9	−69.0	−27.2	−9.1	201.0	541.4	479.0
Working capital	million euros	209.9	214.8	216.8	217.8	268.1	260.6	287.4
Working capital ratio	%	30.7	28.7	26.0	25.5	34.9	34,7	29.3
Debt to equity ratio		0.7	0.7	0.6	0.7	0.9	1.3	1.0
Total return on investment based on EBT	%	8.0	9.0	9.3	7.9	3.2[1]	5.8[1]	5.7[1]
Return on equity based on EBT	%	13.6	15.1	15.3	13.0	6.1[1]	13.1[1]	11.4[1]
ROCE	%	15.6	18.2	20.2	14.7	8.2[1]	13.4[1]	7.9[1]
Dividend key figures								
Dividend per share	euros	0.25	0.30	0.35	0.13	0.25	0.25	0.30[3]
Pay out ratio on earnings attributable to shareholders	%	24.9	23.7	22,9	11.0	34.2	17.5	31,3[3]
Dividend yield based on year-end stock exchange price	%	1.5	1.1	1.5	0.5	1.0	0.7	1.2[3]

[1] Continuing operations
[2] Continuing and discontinued operations
[3] Subject to approval by the annual general meeting

Summary by Quarter 2022

		1st quarter 1/1 – 31/3	2nd quarter 1/4 – 30/6	3rd quarter 1/7 – 30/9	4th quarter 1/10 – 31/12
Revenue	**million euros**	**208.5**	**238.7**	**250.7**	**282.7**
Advanced Photonic Solutions [1]	million euros	157.1	185.0	187.0	200.5
Smart Mobility Solutions [1]	million euros	21.2	23.5	31.1	38.5
Non-Photonic Portfolio Companies [1]	million euros	29.7	29.6	31.7	41.2
Other [1, 2]	million euros	0.6	0.6	0.8	2.5
EBITDA	**million euros**	**21.0**	**48.6**	**48.2**	**66.3**
Advanced Photonic Solutions	million euros	28.3	50.6	44.7	46.5
Smart Mobility Solutions	million euros	0.7	0.7	7.1	10.9
Non-Photonic Portfolio Companies	million euros	−3.3	1.5	−1.0	5.5
Other [2]	million euros	−4.7	−4.1	−2.5	3.4
EBITDA margin	**%**	**10.1**	**20.4**	**19.2**	**23.4**
Advanced Photonic Solutions [3]	%	18.0	27.3	23.8	23.1
Smart Mobility Solutions [3]	%	3.2	2.9	22.7	28.3
Non-Photonic Portfolio Companies [3]	%	−11.0	4.9	−3.1	13.2
EBIT	**million euros**	**4.7**	**32.2**	**31.5**	**33.5**
Advanced Photonic Solutions	million euros	17.0	39.3	33.5	33.2
Smart Mobility Solutions	million euros	−0.6	−0.7	5.7	9.5
Non-Photonic Portfolio Companies	million euros	−5.6	−0.9	−3.4	−10.6
Other [2]	million euros	−6.1	−5.6	−4.3	1.4
EBIT margin	**%**	**2.3**	**13.5**	**12.6**	**11.8**
Advanced Photonic Solutions [3]	%	10.8	21.2	17.9	16.5
Smart Mobility Solutions [3]	%	−2.8	−2.8	18.2	24.6
Non-Photonic Portfolio Companies [3]	%	−18.9	−2.9	−10.5	−25.5
Order intake	**million euros**	**310.3**	**298.3**	**275.9**	**301.0**
Advanced Photonic Solutions [1]	million euros	232.6	225.2	212.6	221.3
Smart Mobility Solutions [1]	million euros	38.9	36.6	27.2	23.1
Non-Photonic Portfolio Companies [1]	million euros	37.9	36.0	35.4	54.1
Other [1, 2]	million euros	0.8	0.5	0.8	2.4

[1] External figures
[2] Including consolidation
[3] Based on the sum of external and internal revenue

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The contents of this publication adress all genders equally. For better readability, the masculine forms are used normally.

Dates

March 29, 2023
Publication of Financial Statements 2022

May 11, 2023
Publication of Quarterly Statement January – March 2023

June 7, 2023
Annual General Meeting of JENOPTIK AG 2023

August 9, 2023
Publication of Interim Report January – June 2023

November 9, 2023
Publication of Quarterly Statement January – September 2023

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