Consolidated Financial Statements

6

Consolidated Statement of Comprehensive Income

Consolidated Statement of Income

in thousand euros	Note No.	1/1 – 31/12/2017	1/1 – 31/12/2016
Continuing operations			
Revenue	4.1	747,929	684,769
Cost of Sales	4.2	484,042	446,915
Gross profit		**263,887**	**237,854**
Research and development expenses	4.3	43,078	42,298
Selling expenses	4.4	80,312	73,598
General administrative expenses	4.5	55,817	57,583
Other operating income	4.7	15,744	23,374
Other operating expenses	4.8	22,579	21,540
EBIT		**77,844**	**66,209**
Result from other investments	4.9	6,468	303
Financial income	4.10	1,756	4,403
Financial expenses	4.10	6,186	9,892
Financial result		**2,038**	**−5,185**
Earnings before tax		**79,882**	**61,024**
Income taxes	4.11	−7,429	−7,112
Earnings after tax		**72,453**	**53,911**
Discontinued operations	4.14		
Other operating income		200	2,261
EBIT		**200**	**2,261**
Financial income		0	1,458
Financial result		**0**	**1,458**
Earnings before tax		**200**	**3,719**
Income taxes		0	−174
Earnings after tax		**200**	**3,545**
Group			
Earnings after tax		**72,653**	**57,456**
Results from non-controlling interests	4.12	149	53
Earnings attributable to shareholders	4.13	72,504	57,403
Earnings per share in euros – continuing operations	4.15	**1.27**	**0.94**
Earnings per share in euros – discontinued operations	4.15	0.00	0.06
Earnings per share in euros – Group (diluted = undiluted)	4.15	**1.27**	**1.00**

Comprehensive income

in thousand euros	Note No.	1/1 – 31/12/2017	1/1 – 31/12/2016
Earnings after tax		**72,653**	**57,456**
Items that will never be reclassified to profit or loss	5.16	858	−358
Actuarial gains/losses arising from the valuation of pensions and similar obligations		1,156	−298
Deferred taxes		−298	−60
Items that are or may be reclassified to profit or loss	5.16	−4,704	−2,376
Available-for-sale financial assets		−270	−249
Cash flow hedges		4,456	−1,680
Foreign currency exchange differences		−8,016	−915
Deferred taxes		−874	468
Total other comprehensive income		**−3,846**	**−2,735**
Total comprehensive income		**68,807**	**54,722**
Thereof attributable to:			
Non-controlling interests		209	331
Shareholders		68,598	54,391

Consolidated Statement of Financial Position

Assets in thousand euros	Note No.	31/12/2017	31/12/2016	Change
Non-current assets		**376,225**	**371,891**	**4,333**
Intangible assets	5.1	120,931	111,352	9,579
Property, plant and equipment	5.2	164,730	157,882	6,848
Investment property	5.3	4,350	4,444	−93
Financial investments	5.5	4,408	19,034	−14,626
Non-current trade receivables	5.6	0	1,923	−1,923
Other non-current financial assets	5.7	2,319	1,926	393
Other non-current non-financial assets	5.8	586	1,108	−522
Deferred tax assets	5.9	78,900	74,223	4,678
Current assets		**512,901**	**441,159**	**71,742**
Inventories	5.10	168,625	159,324	9,301
Current trade receivables	5.11	136,017	129,821	6,195
Other current financial assets	5.12	5,307	2,422	2,884
Other current non-financial assets	5.13	6,067	7,091	−1,024
Current financial investments	5.14	64,577	50,540	14,037
Cash and cash equivalents	5.15	132,310	91,961	40,349
Total assets		**889,126**	**813,051**	**76,075**

Equity and liabilities in thousand euros		31/12/2017	31/12/2016	Change
Equity	5.16	**529,932**	**476,379**	**53,553**
Share capital		148,819	148,819	0
Capital reserve		194,286	194,286	0
Other reserves		186,704	133,604	53,099
Non-controlling interests	5.17	123	−330	454
Non-current liabilities		**162,105**	**175,358**	**−13,253**
Pension provisions	5.18	37,066	37,630	−564
Other non-current provisions	5.20	15,909	12,339	3,570
Non-current financial debt	5.22	108,573	120,479	−11,906
Non-current trade payables	5.23	0	680	−680
Other non-current financial liabilities	5.24	420	3,485	−3,065
Other non-current non-financial liabilities	5.25	0	655	−655
Deferred tax liabilities	5.9	137	90	47
Current liabilities		**197,089**	**161,313**	**35,776**
Tax provisions	5.19	8,938	3,380	5,558
Other current provisions	5.20	51,250	46,152	5,097
Current financial debt	5.22	19,337	4,129	15,208
Current trade payables	5.26	61,657	48,402	13,255
Other current financial liabilities	5.27	8,654	5,642	3,012
Other current non-financial liabilities	5.28	47,253	53,609	−6,356
Total equity and liabilities		**889,126**	**813,051**	**76,075**

Consolidated Statement of Cash Flows

in thousand euros	1/1 – 31/12/2017	1/1 – 31/12/2016
Earnings before tax – continuing operations	79,882	61,024
Earnings before tax – discontinued operations	200	3,719
Earnings before tax	**80,082**	**64,743**
Interest income	4,430	4,030
Non-operating income from investments	0	−1,693
Depreciation and amortization	28,678	27,603
Impairment losses and reversals of impairment losses	147	1,982
Profit / loss from asset disposals	−6,359	−591
Other non-cash income / expenses	539	−446
Operating profit before adjusting working capital and further items of the statement of financial position	**107,517**	**95,628**
Change in provisions	7,150	4,539
Change in working capital	−7,776	5,713
Change in other assets and liabilities	−1,817	3,342
Cash flows from operating activities before income tax payments	**105,074**	**109,223**
Income tax payments	−8,727	−9,121
Cash flows from operating activities	**96,347**	**100,102**
thereof discontinued operations	200	101
Proceeds from sale of intangible assets	18	154
Capital expenditure for intangible assets	−4,384	−3,446
Proceeds from sale of property, plant and equipment	1,870	126
Capital expenditure for property, plant and equipment	−30,340	−25,681
Proceeds from sale of financial investments	18,854	1,508
Capital expenditure for financial investments	−351	−356
Proceeds from sale of consolidated entities	0	1,211
Acquisition of consolidated entities	−13,893	−539
Proceeds from sale of investment companies	0	1,126
Proceeds from sale for financial assets within the framework of short-term disposition	34,736	0
Capital expenditure for financial assets within the framework of short-term disposition	−49,196	−49,746
Proceeds from non-operating income from investments	0	1,693
Interest received	521	2,610
Cash flows from investing activities	**−42,164**	**−71,339**
thereof discontinued operations	0	2,669
Dividends paid	−14,310	−12,592
Capital expenditure for shares in consolidated entities	−339	0
Proceeds from issuing bonds and loans	7,272	7,463
Repayments of bonds and loans	−3,562	−11,468
Payments for finance leases	−116	−33
Change in group financing	1,416	−556
Interest paid	−3,271	−3,541
Cash flows from financing activities	**−12,909**	**−20,728**
Change in cash and cash equivalents	**41,274**	**8,035**
thereof discontinued operations	200	2,770
Effects of movements in exchange rates on cash held	−1,014	102
Change in cash and cash equivalents due to changes in the scope of consolidation	89	0
Cash and cash equivalents at the beginning of the period	91,961	83,824
Cash and cash equivalents at the end of the period	**132,310**	**91,961**

Statement of Changes in Equity

in thousand euros	Note No.	Share capital	Capital reserve	Retained earnings	Available-for-sale financial assets
Balance at 1/1/2016		**148,819**	**194,286**	**111,508**	**802**
Acquisition of non-controlling interests				−419	
Dividends				−12,592	
Change in financial instruments	5.5/8.2				−287
Measurement of pension obligations	5.18				
Foreign currency exchange differences	5.16				
Net profit for the period	4.12/4.13			57,403	
Other adjustments				−883	
Balance at 31/12/2016		**148,819**	**194,286**	**155,016**	**515**
Balance at 1/12017		**148,819**	**194,286**	**155,016**	**515**
Acquisition of non-controlling interests	2.4			−245	
Dividends				−14,310	
Change in financial instruments	5.5/8.2				−302
Measurement of pension obligations	5.18				
Foreign currency exchange differences	5.16				
Net profit for the period	4.12/4.13			72,504	
Other adjustments	2.1			−944	
Balance at 31/12/2017		**148,819**	**194,286**	**212,022**	**213**

Cash flow hedges	Cumulative exchange differences	Actuarial effects	Equity attributable to shareholders of JENOPTIK AG	Non-controlling interests	Total	
−399	**9,273**	**−28,076**	**436,213**	**−1,081**	**435,132**	**Balance at 1/1/2016**
			−419	419	0	Acquisition of non-controlling interests
			−12,592		−12,592	Dividends
−1,178			−1,465		−1,465	Change in financial instruments
		−358	−358		−358	Measurement of pension obligations
	−1,165	−23	−1,188	278	−911	Foreign currency exchange differences
			57,403	53	57,456	Net profit for the period
			−883	0	−883	Other adjustments
−1,577	**8,108**	**−28,457**	**476,710**	**−331**	**476,379**	**Balance at 31/12/2016**
−1,577	**8,108**	**−28,457**	**476,710**	**−331**	**476,379**	**Balance at 1/12017**
			−245	245	0	Acquisition of non-controlling interests
			−14,310		−14,310	Dividends
3,131			2,829		2,829	Change in financial instruments
		858	858		858	Measurement of pension obligations
	−7,811	218	−7,593	60	−7,533	Foreign currency exchange differences
			72,504	149	72,653	Net profit for the period
			−944	0	−944	Other adjustments
1,554	**297**	**−27,382**	**529,809**	**123**	**529,932**	**Balance at 31/12/2017**

Notes

1 Presentation of the Group Structure

1.1 Parent Company

The parent company is JENOPTIK AG headquartered in Jena and is registered in the Commercial Register of Jena in Department B under the number 200146. JENOPTIK AG is publicly listed on the German Stock Exchange in Frankfurt and in the TecDAX index.

The list of shareholdings of the Jenoptik Group 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 from page 191 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 "Required and Supplementary Disclosures under HGB".

1.2 Accounting Principles

The consolidated financial statements of JENOPTIK AG were prepared for the 2017 fiscal year 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.

The consolidated financial statements were presented in euros. If not otherwise specified, all amounts are presented in thousand euros. Please note that there may be rounding differences as compared to the mathematically exact amounts (monetary units, percentages, etc.). The statement of total comprehensive income was prepared in accordance with the cost of sales method.

The fiscal year of JENOPTIK AG and those of the subsidiaries included in the consolidated financial statements corresponds with the calendar year.

In order to improve the clarity of the presentation, individual items were aggregated in the statement of total comprehensive income and in the statement of financial position. The classifications used for these items are listed in the Notes.

The following International Financial Reporting Standards were applied for the first time in the fiscal year:

Changes to IAS 7: Disclosure initiative. The amendment to IAS 7 Cash Flow Statements, is part of the IASB's disclosure initiative and obligates entities to provide information that enables addressees of financial statements to keep track of the changes to the debts arising from financing activities. When applying the amendments for the first time, entities do not have to give any comparison information for prior periods. This amendment is to be applied for fiscal years beginning on or after January 1, 2017. The necessary disclosures are shown in the section "Disclosures on the Cash Flow Statement" from page 173 .

Amendment to IAS 12 "Recording of deferred tax claims for non realized losses". The amendment makes it clear that an entity must consider whether tax laws restrict the sources for future taxable income, against which it can use deductions from the reversal of the corresponding, deductible temporary differences. In addition, the amendment contains guidelines on how an entity has to determine future taxable income and explains the circumstances in which future taxable income can include amounts arising from the realization of assets above their carrying amount. The amendment is to be applied for fiscal years beginning on or after January 1, 2017. This amendment will have no material effect on the consolidated financial statements.

IFRS Improvements (2014 – 2016). Amongst other, the Annual Improvements Project has made amendments to IFRS 12 "Disclosures on Investments in Other Companies". These amendments have made it clear that a company must also meet the disclosure obligations for companies held available for sale. This amendment as part of the Improvements Project comes into effect on January 1, 2017. These changes have no material effect on the consolidated financial statements.

The application of the following standards and interpretations published by the IASB and adopted by the EU is not yet mandatory nor have these been applied by Jenoptik in the consolidated financial statements as of December 31, 2017. The Group does not intend to apply these standards early.

The new standards or amendments to standards are to be applied for the fiscal years commencing on or after the date these come into effect.

IFRS 9 "Financial Instruments". This standard replaces all earlier versions of IAS 39 for the classification and valuation of financial assets and liabilities as well as for the accounting treatment for hedging instruments. This new version of the standard contains revised guidelines for the classification and valuation of financial instruments. These include a new model for anticipated credit defaults for calculating the impairment loss to financial assets as well as the new general accounting regulations for hedging transactions. This standard also adopts the IAS 39 guidelines for the recognition and derecognition of financial instruments. IFRS 9 is to be adopted in fiscal years beginning on or after January 1, 2018. Early application is allowed. With the exception of the accounting for hedging transactions, the standard is to be applied retrospectively but there is no requirement for the disclosure of comparison information. Apart from a few exceptions, the regulations for the accounting treatment of hedging transactions must be applied in general prospectively.

Jenoptik has conducted an analysis of the impact of all three aspects of IFRS 9 on the consolidated financial statements. Overall, the Group does not anticipate any significant impact on the balance sheet and equity. This assessment is based on information currently available and may change as a result of additional information in the year 2018.

a) Classification and valuation
The Group will essentially exercise the case-by-case option of applying a valuation at fair values through other comprehensive income for equity instruments which are currently valued as available-for-sale assets. Consequently all future changes in fair value will be recognized directly in other comprehensive income without any effect on profit or loss and without any later possibility of reclassifications through profit or loss. Under IFRS 9, no material change is expected with regard to assets valued at amortized procurement costs. Loans and trade receivables are held in order to collect the contractual cash flows which exclusively represent amortization and interest payments on the outstanding nominal amounts. Jenoptik analyzed the contractual cash flows and came to the conclusion that the cash flow requirement is being met and no reclassification is necessary.
b) Impairment losses
The Group will apply the simplified approach and record the Expected-Credit-Loss over the entire term arising from all trade receivables. Jenoptik has determined that as a result of non-secured loans and receivables, the provision for risks will be increased by 0.6 million euros.
c) Accounting for hedging transactions
The Group has determined that all hedging transactions currently designated as effective hedging relationships also meet the criteria provided for under IFRS 9 for hedge accounting. Since IFRS 9 does not provide for any change in the general principles for the accounting of effective hedging relationships, there are also not expected to be any material changes with regard to the accounting of hedging relationships in the consolidated financial statements.

IFRS 15 "Revenue from Contracts with Customers". IFRS introduces a five-stage model for accounting for revenue from contracts with customers. Under IFRS 15, revenue is recorded in the amount of the consideration in return which an entity can expect for the transfer of goods or services to a customer (the transaction price). The new standard replaces all existing guidelines for recording revenues such as IAS 18 Revenue, IAS 11 Construction Contracts and IFRIC 13 Customer Loyalty Programs. For fiscal years commencing on or after January 1, 2018, the regulation stipulates either the full retrospective application or a modified retrospective application. Early application is allowed.

Clarifications on IFRS 15 "Revenue from Contracts with Customers". The clarifications explain implementation issues which were addressed by the Joint Transition Group for Revenue Recognition. These questions relate to the identification of performance obligations, the application guidelines for principal-agent relationships and licenses for intellectual property, as well as the transitional provisions. In addition, the aim of the amendments is to ensure a more consistent approach in the implementation of IFRS 15 and to reduce the costs and complexity associated with its application. The amendments came into effect on January 1, 2018.

Jenoptik has analyzed the impact on the consolidated financial statements as part of a project. Based on the results of the project phases completed so far, material changes are mainly expected to arise from the following transactions:

a) Customer-specific development projects, followed by volume production: In the past, revenues were recognized after delivery of the product, unless IAS 11 applied (successive contracts to supply). The Group concludes that development services under IFRS 15 are recognized as separate performance obligation over the period of development as revenue and no longer through volume production, which tends to result in revenues being recognized earlier. According to provisional knowledge, in the fiscal year 2018, the changes will lead to a reduction in revenue ranging between approx. 1.5 million euros and 2.5 million euros and a reduction in cost of sales of between approx. 4.5 million euros and 5.5 million euros.

b) Customer-specific volume production: Up to and including the fiscal year 2017, revenue was recognized with the transfer of risk after delivery or acceptance by the customer. Under IFRS 15, Jenoptik concludes that these contracts are to be accounted for in accordance with the requirements of IFRS 15.35 (c) in the specific period, leading to revenue being recognized earlier. An impact on the level of sales in fiscal year 2018 will depend on the continuity of this business, although this is not anticipated based on the current revenue forecast.

The Group will record the conversion effects on January 1, 2018 on a cumulative basis in the equity (modified restrospective method). Based on the current calculations, this will lead to a reduction in equity of a sum of between approx. 3.5 million euros and 4.0 million euros including deferred taxes.

Furthermore, the initial application of IFRS 15 will result in the need for Jenoptik to disclose clearly more information in the Notes concerning the nature, amount, timing and uncertainty of the revenue and cash flows arising from contracts with customers as defined in IFRS 15.

IFRS 16 „Leasing". IFRS 16 includes a comprehensive set of new rules for accounting for leases and supersedes the previous rules of IAS 17 leases and some interpretations. The objective is to disclose the lessee's rights and obligations associated with the leases in the balance sheet. Relief is planned for short-term leases and the leasing of objects of low-value. Lessors will continue having to account for leases by classifying them as either finance or operating leases, applying the criteria defined in IAS 17. Moreover, IFRS 16 contains further regulations on classification and disclosures in the Notes. IFRS 16 is to be applied for the first time in fiscal years beginning on or after January 1, 2019. Early application is permitted insofar as IFRS 15 is also applied.

These changes are expected to have a significant impact on the Group as a lessee, as it has so far largely concluded operating leases on movable assets as well as real estate. As a result of these leases being recorded in the balance sheet in the future and based on current information, the Group expects a significant increase in the mid double-figure million range in fixed assets and financial liabilities respectively and, consequently, an increase in the balance sheet total and a corresponding reduction in the equity ratio. Furthermore, the change in the recognition of leasing payments in the income statement will lead to an improvement in EBITDA in the upper single-digit million euro range. In the cash flow statement, payments for operating leases will in future be reported in the cash flows from financing activities which leads to an improvement in the cash flows from operating activities compared to the provisions in IAS 17.

With regard to the scope of leases arising in future periods and to be recorded in the accounts, we refer to the disclosure in the Notes 5.4 from page 158.

This is not expected to have any material effects for the Group as a lessor.

The new regulation listed below is not applicable to the Group and will therefore have no effect on the consolidated financial statements:

- Amendments to IFRS 4: Application of IFRS 9 "Financial Instruments" together with IFRS 4 "Insurance Contracts"

The following standards and interpretations published by the IASB have not yet been adopted by the European Union.

Amendment to IFRS 10 "Consolidated Financial Statements" and IAS 28 "Investments in Associates and Joint Ventures". The amendments address a well-known inconsistency between the regulations of IFRS 10 and IAS 28 (2011) for cases when assets are to be sold to an associate or to a joint venture or when assets are to be contributed towards an associate or to a joint venture. The intention in the future is for the entire profit or loss from a transaction to only be recognized if the assets, either sold or contributed, constitute a business in accordance with IFRS 3. This applies independently of whether the transaction is designed as a share deal or an asset deal. If, by contrast, the assets do not constitute a business, then the results may only be recognized proportionately. The date on which the amendments come into effect has been deferred by the IASB for an indefinite period. This amendment will have no material impact on the consolidated financial statements.

Amendments to IFRS 2: Classification and valuation of share-based payment agreements. The IASB has published an amendment to IFRS 2 "Share-Based Payment" which addresses three main areas: the effects of vesting conditions on the valuation of share-based payment transactions with cash settlement, the classification of share-based payment transactions with net fulfillment clauses with a legal obligation to the deduction of withholding tax and the accounting of share-based payment transactions with settlement in cash in the event of a modification of their conditions leading to a classification as a share-based payment transaction with equity settlement. The amendment is to be applied for fiscal years beginning on or after January 1, 2018. Early application is allowed. This amendment will have no material impact on the consolidated financial statements.

Amendments to IFRS 9: Prepayment features with negative compensation. The change makes it clear that the cash flow condition is met for financial assets with negative compensation in the event of early repayment. The amendment is to be applied for fiscal years beginning on or after January 1, 2019. Early application is allowed. As this amendment only has a narrow area of application, based on an initial analysis it will have no material impact on the consolidated financial statements.

Amendements to IAS 28: Long-term investments in associates and joint ventures. The amendment specifies that an enterprise first applies IFRS 9 to financial instruments that are not accounted for in accordance with the equity method but represent part of the net investment in the associate or joint venture. It will then apply the subsequent measurements according to IAS 28.38 and IAS 28.40-43. The amendment is to be applied for fiscal years beginning on or after January 1, 2019. Early application is allowed. This amendment will have no material impact on the consolidated financial statements.

Amendments to IAS 40 "Investment Property". The amendment to IAS 40 relates to the classification of property which has not yet been completed and makes it clear in which cases the classification of an investment property begins or ends if the property is still under construction or in development. The amendment is to be applied for fiscal years beginning on or after January 1, 2018. Early application is allowed. This amendment will have no material impact on the consolidated financial statements.

IFRIC 22 "Foreign Currency Transactions and Prepaid Considerations". The IASB has clarified the date for calculating the exchange rate for the conversion of transactions in a foreign currency which include payments received or paid. The amendment is to be applied for fiscal years beginning on or after January 1, 2018. Early application is allowed. This amendment will have no material impact on the consolidated financial statements.

IFRIC 23 "Uncertainty over income tax treatments". The interpretation is to be applied to the accounting of income taxes if there are any uncertainties regarding the treatment of income for tax purposes. The interpretation is to be applied for fiscal years beginning on or after January 1, 2019. The Group operates in a multinational tax environment so the interpretation could have an impact on the consolidated financial statements. Jenoptik carries out further analyses in order to obtain the necessary information required for applying the interpretation on a timely basis.

IFRS Improvements (2014 – 2016). The Annual Improvements Project has made changes to various standards. This also affects the IFRS 1 and IAS 28 standards. The amendments to IFRS 1 cover the deletion of the remaining, temporary relief regulations for first-time users. The amendments to IAS 28 entail clarifications. This part of the Improvement Project comes into effect on January 1, 2018. These amendments will have no material effects on the consolidated financial statements.

IFRS Improvements (2015 – 2017). The Annual Improvements Project has made changes to various standards. The collective standard contains clarifications on IFRS 3, IFRS 11, IAS 12, and IAS 23. These amendments come into effect on January 1, 2019 and will have no material effects on the consolidated financial statements.

The new regulation listed below is not applicable to the Group and will therefore have no effect on the consolidated financial statements:

- IFRS 17: Insurance contracts

1.3 Estimates

The preparation of the consolidated financial statements in accordance with IFRS, as are to be applied in the EU, requires that assumptions be made for certain items that affect their recognition in the balance sheet or in the statement of comprehensive income of the Group as well as the disclosure of contingent receivables and contingent liabilities. All assumptions and estimates are made to the best of the Group's knowledge and belief in order 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. This essentially relates to:

- the assessment of impairment to goodwill (see note "Intangible assets" from page 154),
- determining the useful lives when valuing intangible assets, property, plant and equipment and investment property (see note "Intangible assets" from page 154, note "Property, plant and equipment" from page 157 and note "Investment property" from page 158),
- the method for valuing inventories, as well as for defining valuation routines and discounts (see note "Inventories" from page 160),
- the actuarial parameters for the valuation of provisions for pensions and similar obligations as well as the determination of the fair value of fiduciary assets (see note "Provisions for Pensions and Similar Obligations" from page 165),
- the assumptions and methods for valuing other provisions – for example, warranty obligations, restructuring and actuarial parameters of personnel provisions (see note "Other provisions" from page 169),
- the estimation of the probability of outflows of resources due to present obligations and their presentation as contingent liabilities (see note "Contingent liabilities" from page 184) and
- the realizability of future tax breaks – in particular arising from losses carried forward – in the valuation of deferred tax assets (see note "Income taxes" from page 151).

2 Consolidation Principles

2.1 The Group of Entities Consolidated

Along with JENOPTIK AG, all significant subsidiaries have been included fully in the consolidated financial statements and one joint operation on a proportional basis. The list of shareholdings is presented in detail in disclosure note 12 from page 191.

The consolidated financial statements of JENOPTIK AG include 35 (prior year 32) fully consolidated subsidiaries. Of which 12 (prior year 12) have their legal seat in Germany and 23 (prior year 20) have theirs abroad. The consolidated entities of the Jenoptik Group include one joint operation (prior year 1).

In fiscal year 2017, 100 percent of the shares were acquired in Domestic and Commercial Security Limited (referred to below as: ESSA Technology), Saltash, Great Britain and 100 percent of the shares in Five Lakes Automation LLC (referred to below as: Five Lakes Automation), Novi (Mi), USA. Detailed disclosures on the acquisitions are provided in Note 2.4 from page 138 .

In fiscal year 2017, the previously non-consolidated JENOPTIK India Private Limited, Bangalore, India, was included in the consolidated financial statements for the first time and JENOPTIK KATASORB GmbH, Jena, merged into the fully consolidated JENOPTIK Automatisierungstechnik GmbH, Jena, Germany.

Hillos GmbH, Jena, is included in the consolidated financial statements as a joint operation with a proportional shareholding of 50 percent in accordance with IFRS 11. This entity is a strategic customer of Jenoptik, operating in the area of construction and construction-related applications of laser technology. The following assets and liabilities are to be allocated to the Group:

in thousand euros	2017	2016
Non-current assets	524	711
Current assets	10,043	9,738
Non-current liabilities	37	30
Current liabilities	2,665	2,853
Income	22,884	24,637
Expenses	22,280	24,037

Further 11 subsidiaries, of which 8 are non-operating entities, are not consolidated as their influence on the net assets, financial and earnings position – both individually and in total – is of minor significance. The total revenue of the non-consolidated entities amounts to about 0.2 percent of group revenue; the EBIT was nearly zero percent of group EBIT. The estimated effect of consolidating all the non-consolidated entities on the group's total assets is approximately 0.2 percent.

The following subsidiaries have material investments held by non-controlling shareholders:

Name	Legal seat of the entity	Non-controlling interests
JENOPTIK Korea Corporation Ltd.	Korea	33.40
JENOPTIK Japan Co. Ltd.	Japan	33.42
Vysionics Group	Great Britain	3.50

The following table summarizes the financial information of the subsidiaries mentioned above, based on the individual financial statements of the entities, including IFRS adjustments as well as adjustments due to the allocation of the purchase price for the Vysionics Group. Effects of the consolidation were not taken into account in this context.

in thousand euros	JENOPTIK Korea	JENOPTIK Japan	Vysionics Group
Revenue	5,213	5,159	21,958
	(4,403)	(5,094)	(19,772)
Earnings after tax	283	26	828
	(–320)	(2)	(2,122)
Earnings after tax from non-controlling interests	95	9	45
	(–107)	(1)	(159)
Total results	283	26	828
	(–320)	(2)	(2,122)
To tal results from non-controlling interests	95	9	45
	(–107)	(1)	(159)
Non-current assets	279	127	8,444
	(175)	(71)	(5,798)
Current assets	2,371	1,771	8,224
	(2,458)	(2,105)	(7,853)
Non-current liabilities	0	549	25,792
	(0)	(633)	(24,412)
Current liabilities	1,188	1,096	5,169
	(1,465)	(1,298)	(4,895)
Net assets	1,461	253	–14,292
	(1,168)	(246)	(–15,657)
Net assets from non-controlling interests	488	84	–500
	(390)	(82)	(–802)
Cash flows from operating activities	9	38	3,016
	(312)	(25)	(3,791)
Cash flows from investing activities	–135	0	–5,421
	(–5)	(0)	(–225)
Cash flows from financing activities	–30	–23	545
	(–398)	(–475)	(–2,974)
Change in cash and cash equivalents	–155	15	–1,859
	(–90)	(–450)	(592)

Prior year figures are in parentheses.

2.2 Consolidation Procedures

The assets and liabilities of domestic and foreign entities included fully or proportionately in the consolidated financial statements are recognized uniformly in accordance with the accounting policies and valuation methods applicable throughout the entire Jenoptik Group.

At the acquisition date, the equity 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 contingent liabilities as defined in IFRS 3.23 are classified as liabilities. The remaining difference between the purchase price and the acquired net assets corresponds to the goodwill. This is subject to an annual impairment test in the subsequent periods accordance with IAS 36.

Receivables and payables as well as income and expenses between the consolidated entities are eliminated. The Group's inter-company goods and services are delivered and rendered both on the basis of market prices as well as transfer prices and are determined on the basis of the "dealing-at-arm's-length" principle. Assets from inter-company 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.

There was no change in the consolidation methods applied in the prior year.

2.3 Foreign Currency Conversion

Annual financial statements prepared by subsidiaries 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 is generally identical to that of the subsidiary's 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 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 reserves.

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 balance sheet 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 shown in financial income or financial expenses (see details on the Income Statement from page 148). This excludes currency conversion differences arising from loans which constitute a part of the net investment in a foreign business operation. These differences arising from foreign currency conversions are shown under other comprehensive income outside of profit or loss.

The exchange rates used for the conversion are shown in the table below:

		Annual average exchange rate		Reporting date exchange rate	
	1 EUR =	2017	2016	2017	2016
Australia	AUD	1.4729	1.4874	1.5346	1.4596
Switzerland	CHF	1.1115	1.0901	1.1702	1.0739
China	CNY	7.6264	7.3482	7.8044	7.3202
Great Britain	GBP	0.8761	0.8166	0.8872	0.8562
Japan	JPY	126.6541	120.0834	135.0100	123.4000
Korea	KRW	1,275.8233	1,283.5105	1,279.6100	1,269.3600
Malaysia	MYR	4.8501	4.5823	4.8536	4.7287
Singapore	SGD	1.5582	1.5275	1.6024	1.5234
USA	USD	1.1293	1.1061	1.1993	1.0541

2.4 Entities Acquired and Sold

Acquisition of ESSA Technology

With the signing of the agreement on January 19, 2017, Jenoptik acquired 100 percent of the shares in Domestic and Commercial Security Limited, Saltash, Great Britain via the British entity JENOPTIK Traffic Solutions UK Ltd. This company, which operates under the name of ESSA Technology, specializes in software for traffic monitoring and the associated back office solutions, in particular for the automatic number plate recognition (ANPR) applications for the police. The acquisition expands the Jenoptik Group’s traffic safety portfolio and continues its ongoing transformation into a supplier of integrated solutions for public safety and smart cities.

Since Jenoptik held 94.64 percent of the shares in the acquiring company JENOPTIK Traffic Solutions UK Ltd. on the acquisition date, 5.36 percent of ESSA Technology’s results are to be apportioned to non-controlling interests from the acquisition date.

The purchase price comprises a fixed cash component of 4,536 thousand pounds sterling (5,268 thousand euros). In return, we acquired the net assets identified below as at the date of the initial consolidation:

in thousand euros	Total
Non-current assets	1,577
Current assets	1,113
Non-current liabilities	273
Current liabilities	503

The acquired assets include receivables with a gross value of 667 thousand euros, corresponding to the fair value. There is no expectation that the acquired receivables will be unrecoverable.

Also included in the acquired assets are cash and cash equivalents amounting to 288 thousand euros.

In connection with the acquisition of shares in ESSA Technology, the main items identified as intangible assets were a customer base, technologies, trademark rights and an order backlog. The intangible assets are amortized over periods of between one and ten years. Goodwill in the sum of 3,356 thousand euros was also recorded for the acquisition of the skilled personnel as well as for synergy effects arising from the expansion of the range of services, which extend all the way to integrated solutions. The goodwill is to be allocated to the cash-generating unit “Traffic Solutions” and is not tax-deductible.

Contingent liabilities were not included in the company acquisition.

Costs for the acquisition of ESSA Technology in the 2017 fiscal year were incurred in the sum of 56 thousand euros (prior year 148 thousand euros). These were shown in other operating expenses.

Acquisition of Five Lakes Automation

With the signing of the agreement on July 27, 2017 and on fulfillment of the conditions precedent on August 21, 2017, Jenoptik acquired a 100 percent stake in Five Lakes Automation LLC, Novi (MI), USA through its U.S. company JENOPTIK Automotive North America LLC. The entity acquired is a young company specializing in production automation for car manufacturers and automotive suppliers. Jenoptik therefore no longer only supplies individual machines for laser processing but, drawing on the expertise of Five Lakes Automation, will in the future be able to plan and implement automated production lines from a single source.

The following information is based on provisional amounts. The provisional nature relates to the determination of the acquired net assets and the valuation of the intangible assets identified as part of the purchase price allocation. The first-time consolidation will be finalized by the end of the valuation period.

The purchase price (13,550 thousand US dollars, 11,450 thousand euros) comprises a cash component in the amount of 10,550 thousand US dollars (8,932 thousand euros) and a conditional component in the amount of 3,000 thousand US dollars (2,518 thousand euros) which is based on the attainment of defined budget targets for existing customer projects. The conditional component was recognized as a liability using the fair value.

In return, we acquired the following net assets as at the date of the initial consolidation:

in thousand euros	Total
Non-current assets	4,714
Current assets	4,446
Non-current liabilities	0
Current liabilities	3,454

The acquired assets include trade receivables with a gross value of 2,899 thousand euros, corresponding to the fair value. There is no expectation that the acquired receivables will be unrecoverable.

Also included in the acquired assets are cash and cash equivalents amounting to 20 thousand euros.

In connection with the acquisition of the shares in Five Lakes Automation, the main items identified as intangible assets were a customer base, order backlog and non-compete agreements. The intangible assets are amortized over periods of between six months and nine years. Goodwill in the sum of 5,744 thousand euros was also recorded for the acquisition of skilled personnel and synergies arising from the expansion of the range of services, which extend all the way to automated production lines. The goodwill is to be allocated to the group of cash-generating units “Automotive” and is fully tax-deductible.

Contingent liabilities were not included in the company acquisition.

In future, the continued employment of a member of the business management that is shown as a separate transaction in distinction to the acquisition, will be recorded over the period of the management services to be rendered.

Costs of 589 thousand euros for the acquisition of Five Lakes Automation arose in the 2017 fiscal year. These were shown in other operating expenses.

The consolidated financial statements include revenue in the sum of 1.561 thousand euros and earnings after tax (EAT) of 332 thousand euros arising from the inclusion of ESSA Technology. The consolidated financial statement includes revenue in the sum of 5,277 thousand euros and earnings after tax (EAT) of minus 2,256 thousand euros arising from the consolidation of Five Lakes Automation. Earnings after tax (EAT) include expenses from the scheduled amortization of the intangible assets identified within the framework of the allocation of the purchase price.

On the premise that all corporate acquisitions had already taken place as at January 1, 2017, the Jenoptik Group would show revenue of 760,312 thousand euros and group earnings after tax (EAT) of 73,086 thousand euros. In order to determine this information, it was assumed that the fair values of the intangible assets identified in the context of the allocation of the purchase price as at January 1, 2017 are identical to those as at the initial consolidation date. These proforma figures were produced solely for comparison purposes. They do not provide a reliable indication either of the operating results that would actually have been achieved if the acquisition had been made at the beginning of the period or of future results.

The entity JENOPTIK India Private Limited, Bangalore, India, was included in the consolidated financial statements for the first time on January 1, 2017. The consolidated financial statement includes revenue in the sum of 652 thousand euros and earnings after tax (EAT) of minus 112 thousand euros arising from the newly consolidated entity Jenoptik India.

In addition, with effect from January 1, 2017 the non-consolidated JENOPTIK KATASORB GmbH, Jena, Germany was merged with the fully-consolidated JENOPTIK Automatisierungstechnik GmbH, Jena, Germany. This merger has no material effect on the consolidated statement of income because the revenue generated by the company was almost exclusively on an intragroup basis and, as a result of being included in the scope of consolidation for income tax purposes, was subject to the transfer of profits to Jenoptik Automatisierungstechnik.

The following additions to assets and liabilities arose as a result of the initial consolidation of Jenoptik India and the merger of Jenoptik Katasorb:

in thousand euros	Total
Non-current assets	88
Current assets	601
Non-current liabilities	0
Current liabilities	490

In the 4th quarter of 2017, non-controlling shareholders of JENOPTIK Holdings UK Ltd. (formerly: Vysionics Ltd.) exercised existing put options. This resulted in Jenoptik's investment quota in JENOPTIK Holdings UK Ltd. and the companies controlled by this entity increasing from 94.64 to 96.50 percent with a corresponding reduction in non-controlling interests. The change is shown as an acquisition of non-controlling interests in the Consolidated Statement of Changes in Equity.

There were no sales of companies in the 2017 fiscal year.

2.5 Notes on Other Entities

Jenoptik holds shares in 8 (prior year 8) entities with a maximum 50 percent investment quota respectively. The investments in these entities are accounted for at fair value in accordance with IAS 39. If no reliable fair value can be determined, then the valuation is applied at the acquisition costs. The investments are of minor importance for the respective asset, financial and earnings situation of Jenoptik. Therefore, based on the principle of cost effectiveness and materiality, the at-equity valuation was not applied.

The general disclosures on the investments are contained in the list of shareholdings of the Jenoptik Group.

2.6 Discontinued Operations

Discontinued activities are significant, definable operations which have either been sold or are planned to be sold. A breakdown of the income and expenses relating to discontinued activities is shown in the income statement – after the result of continuing operations.

Detailed information on the discontinued operations is provided in note 4.14 from page 153.

3 Accounting Policies and Measurements Methods

3.1 Goodwill

Goodwill as stated in IFRS 3 corresponds to the positive difference between the consideration for a business combination and the newly acquired, revalued assets and liabilities, including certain contingent liabilities remaining after a purchase price allocation. 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. During an acquisition of a controlling interest, non-controlling interests are valued according to their proportion of the 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 is recognized immediately through profit or loss and not reversed in later reporting periods.

3.2 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 ten years. The Group reviews whether its intangible assets with finite useful lives have suffered an impairment loss (see note "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.

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.

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, adequate resources must be available to conclude the development and enable the asset to be used or sold.

Capitalized development costs 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 manufacturing 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 on intangible assets is apportioned on the basis of the causer principle to the corresponding function areas in the income statement.

Research costs are recorded as current expenses in research and development expenses in accordance with IAS 38.

3.3 Property, Plant and Equipment

Property, plant and equipment are valued at acquisition and manufacturing cost, less scheduled, straight-line depreciation. The depreciation method reflects the anticipated pattern of consumption of the future economic benefits. Where necessary, impairment losses reduce the amortized acquisition and production costs. In principle, government grants 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 on the basis of 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 is essentially based on the following useful lives:

	Useful life
Building	20 – 80 years
Machinery and technical equipment	4 – 20 years
Other equipment, operating and office equipment	3 – 10 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.

3.4 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 cash-generating units are identified, impairment tests are performed on these assets.

The demarcation between cash-generating units is primarily based on the business units constituting the divisions.

An impairment test is performed by first determining the recoverable amount of an asset or cash-generating unit and then comparing it with the carrying amount in order to identify if there is any need for an impairment test.

The recoverable amount is the higher of an asset’s fair value less costs to sell and its value in use.

The amount designated as 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 on the basis of discounted expected future cash inflows. This is based on a fair market interest rate before tax that reflects the risks of using the asset 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 loss is recognized immediately through 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 of the impairment loss reversal 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 recorded through profit or loss.

3.5 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 a grant for a non-current asset is deducted from the acquisition costs. Correspondingly, the amount to be written off is determined on the basis of the reduced acquisition costs.

3.6 Leases

When using leased items of property, plant and equipment, the conditions for finance leases as defined in IAS 17 “Leases” are fulfilled if all material risks and opportunities incidental to ownership have been transferred to the respective consolidated entity of the Group. All other leases are classified as operating leases.

Finance leases. The Group, as a lessee of the finance lease, capitalizes the assets leased at the inception of the lease at the amount equal to their fair value, or if lower, the current value of the minimum lease payments. The straight-line depreciation method is to be used to write off the asset over the period of its economic useful life or the shorter term of the lease agreement if it is unlikely that an option to purchase the asset will be exercised. Liabilities from finance lease agreements are shown at the current value of the minimum lease payments.

If the Group is a lessor, the amount equal to the net investment in the lease is to be capitalized as a receivable. Financial income is recognized through profit or loss in the respective reporting period, so that there is a constant periodic return on the net investment.

Operating leases. Lease payments from operating leases are recognized through profit or loss on a straight-line basis over the term of the corresponding lease.

Any incentives received or outstanding for entering into an operating lease agreement are also recognized on a straight-line basis over the term of the lease.

3.7 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 amortized acquisition or production costs (see page 158). The basis for determining the fair value to be shown, is the application of the discounted cash flow method or standard ground values.

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 charged 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 from a prior period cease to exist, corresponding write ups are recorded.

3.8 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 balance sheet from the date on which the Group becomes a contractual party in a financial instrument agreement.

The treatment of existing financial instruments depends on their classification: "receivables and loans" are recognized at amortized acquisition costs and "available-for-sale financial assets" are recognized at fair value.

The amortized acquisition costs of a financial asset or a financial liability are defined as the amount at which the financial asset or financial liability was valued at initial recognition:

- minus any repayments
- minus any impairment losses or potential inability to be recovered, as well as
- plus/minus the cumulative amortization 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 nominal amount 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 balance sheet is based on the fair value.

In the Jenoptik Group, all investments in listed stock corporations are classified as "available for sale" and are valued at fair value in subsequent periods without deducting transaction costs. Changes in value are recorded in other comprehensive income outside of profit or loss. In the case of a permanent impairment loss, this is to be recognized through profit or loss.

Shareholdings in subsidiaries not publicly listed and other investments are also classified as "available-for-sale financial assets". However, these are fundamentally shown at their respective acquisition costs since the carrying amounts constitute an appropriate approximate figure for the fair value. As far as there are any indications of lower fair values, these are recognized.

Loans

Loans involve credits granted by the Jenoptik Group and are to be valued at the amortized acquisition costs in accordance with IAS 39.

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.

Securities

Securities belong to the category of "available-for-sale financial assets" and are recognized at fair value. They are valued until sold and reported outside of profit or loss under other comprehensive income, taking deferred taxes into consideration. When securities are sold or if a significant or permanent impairment loss occurs, the cumulative profit or loss that had been accounted for directly in equity is reclassified in the profit or loss of the current reporting period. The initial valuation is recorded at the settlement date at acquisition costs which reflect the fair value.

Trade Receivables

Trade receivables are non-interest bearing due to their being short term and are recognized at nominal value less impairment losses on the basis of anticipated bad debts. In this context, consideration is given to both the individual default risk as well as a default risk derived from past events for a group of receivables with comparable default risks (portfolio-based impairment) by setting up an impairment loss account. When the loss of a trade receivable is finally realized, the receivable is booked out by using any impairment previously recognized.

Other Receivables and Assets

Other receivables and assets are recognized at amortized acquisition costs. All identifiable default risks are accounted for by a corresponding impairment.

Significant non-current, non-interest-bearing or low interest-bearing receivables are discounted.

Current Financial Investments

Current financial assets are included in the categories "financial investments held to maturity" or "loans and receivables" and are valued at amortized acquisition costs.

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 accounted for at their nominal value.

Financial Liabilities and Equity Instruments

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.

Liabilities from finance lease agreements are shown at the current value of the minimum lease payments.

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 due to be paid on repayments or redemption, are accounted for on an accrual basis by applying the effective interest method, and increase the carrying amount of the instrument insofar as they have not been settled at the date of its inception.

b) Derivative Financial Instruments

Within the Jenoptik Group, derivative financial instruments are used 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 values are determined on the basis of the market conditions – interest rates, foreign currency exchange rates – at the balance sheet date and using the valuation methods shown below.

Derivative financial instruments are not used for speculation purposes. The use of derivative financial instruments is governed by group guidelines which are authorized by the Executive Board and represent a fixed written guideline on the use of derivative financial instruments. In order to hedge risks from fluctuations in interest and foreign currency exchange rates, the Group uses cash flow hedges.

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.

3.9 Inventories

Inventories are recognized at the lower of acquisition or production costs and their net realizable value.

Net realizable value is the estimated proceeds from sale less the estimated production costs and any costs incurred up to sale.

Acquisition costs also include any other costs incurred to restore the inventories to their current condition. Any reductions in purchase prices such as rebates, bonuses or trade discounts are taken into account.

Production costs include the full costs relating to production that have been determined on the basis of 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 expenses are also taken into account insofar as they can be allocated to production. If carrying amounts 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 in turn result in an increase of their net realizable value, reversals of write-downs are recognized as a reduction in material expenses in the corresponding periods in which the change occurs.

3.10 Borrowing Costs

Borrowing costs that can be directly attributed to the construction or production of a qualifying asset are capitalized as a portion of the acquisition or production costs of this asset.

3.11 Advances Received

Advance payments received from customers are recognized as liabilities as far as such payments do not relate to construction contracts.

3.12 Construction Contracts

In accordance with IAS 11 “Construction Contracts”, revenue and profits from construction contracts are recognized according to the “Percentage of Completion Method”. The percentage of completion is derived from the ratio between the actual contract costs incurred up to the end of the fiscal year and the currently estimated total contract costs (“cost-to-cost method”). Losses arising from construction contracts are recognized immediately and in full in the fiscal year in which they are identifiable.

Construction contracts valued according to the “percentage of completion method” are recognized as receivables or payables arising from construction contracts, depending on the amount of the progress payments received or progress billings outstanding. They are valued at production costs plus any proportion of income received corresponding to the percentage of completion. Insofar as the cumulative services rendered (contract costs and contract outcome) exceed the progress payments and advances received in individual cases, construction contracts are shown under receivables from construction contracts. If, after deducting progress payments and advances received, there is a negative balance, this is shown as a payable under liabilities from construction contracts. Any anticipated contract losses are taken into account as write-downs or provisions. They are determined by considering all identifiable risks.

3.13 Deferred Taxes

The accounting for and valuation of deferred taxes is performed in accordance with IAS 12 “Income Taxes”. Deferred tax assets and deferred tax liabilities are shown as separate items in the balance sheet in order to take into account future tax effects resulting from timing differences between the balance sheet valuations of assets and liabilities and tax losses carried forward.

Deferred tax assets and deferred tax liabilities are computed in the amount of the anticipated tax burden or tax relief in subsequent fiscal years on the basis of 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 on which the change in the tax rate is based has been completed.

Deferred tax assets on differences in the balance sheet 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 Provisions for Pensions and Similar Obligations

Pensions and similar obligations comprise both the pension obligations of the Jenoptik Group from defined benefit as well as defined contribution retirement schemes.

In accordance with IAS 19, pension obligations for defined benefit schemes are determined by applying the so-called projected unit credit method. Actuarial expert opinions are annually obtained for this procedure.

The mortality rates are determined in accordance with the Heubeck “Guideline mortality tables 2005 G”. Actuarial gains and losses are recognized outside profit or loss in other comprehensive income. Past-service expenses are shown under personnel expenses and the interest portion of the addition to provisions is recorded in the financial result.

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. Deferred taxes are disclosed in separate items in the balance sheet.

Tax provisions for corporation tax and trade tax or similar income tax expenses are determined on the basis of the taxable income of the consolidated entities, less any prepayments made. Any other taxes to be assessed are considered in the same manner.

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 obligations 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, providing the interest effect is significant. The settlement value also includes the anticipated price or cost increases. Discounting is based on interest rates before taxes that reflect current market expectations with regard to the interest effect and that depend on the corresponding term of the obligation. The interest portion of the compounded interest in a provision is recorded in the financial result.

Provisions are valued on the basis of empirical values, taking the circumstances at the balance sheet date into consideration. 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 taken into account if these claims are virtually certain.

3.17 Share-based Payments

The active members of the Executive Board and some senior management personnel receive share-based payments in the form of long term incentives (LTI) as well as performance shares in accordance with the new Executive Board remuneration system. These payments are accounted for as share-based payments with settlement in cash in accordance with IFRS 2

"Share-based payment". At the balance sheet date and depending upon the contractual provisions, a long-term liability is set aside in the amount either of the pro rata temporis or total fair value of the payment obligation. Virtual shares are granted on the basis of the annual target agreement. Changes in fair value are recognized through profit or loss.

3.18 Contingent Liabilities

Contingent liabilities are potential obligations that are based on past events and whose existence is only confirmed 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 reliably estimated. The valuations of the contingent liabilities correspond to the existing scope of liability at the balance sheet date. In principle, they are not accounted for in the balance sheet but are explained in the Notes in the note "Contingent Liabilities" from page 184.

3.19 Revenue

Revenue generated from the sale of goods is recognized through profit or loss as soon as all material risks and rewards associated with the ownership of the goods have been transferred to the buyer, a price is agreed or can be determined and the payment thereof can be assumed. The payments charged to the customers for the goods and services – less sales deductions and trade discounts – are shown under revenue.

Revenue from services is recorded in accordance with the percentage of completion of the order at the balance sheet date. The percentage of completion of the order is determined on the basis of the services rendered. Income is only recognized if there is sufficient probability that the entity will receive the economic benefit associated with the contract. Otherwise, income is only recognized to the extent that expenses incurred are refundable.

If a contract contains a number of delimitable components (multi-component contracts), these will be recognized separately in accordance with the above principles.

Rental income received from real estate is recognized on a straight-line basis over the term of the corresponding rental contracts and disclosed in revenue.

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 on intangible assets and property, plant, and equipment is shown in accordance with the principle of cause and included in cost of sales insofar as they are attributed to the production process. Research and development expenses which do not qualify for being capitalized, are shown under research and development expenses.

3.21 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.

General administrative expenses include personnel expenses and the cost of materials as well as administration-related depreciation.

3.22 Other Operating Income and Expenses

Income from provision reversals are recorded in functional costs insofar as the underlying provisions were set aside in the functional costs. If the provision was set aside in other operating expenses, the provision reversal will also be shown in other operating expenses. Other taxes are allocated to other operating expenses.

3.23 Financial Income and Financial Expenses

The financial income and financial expenses of the Group mainly comprise interest income and interest expenses. Furthermore, these items include currency exchange gains and losses arising from financial assets and liabilities as well as net gains or losses arising from hedging instruments for these financial assets and liabilities. In addition, the financial income and financial expenses include net gains and losses arising from the measurement of the fair value of contingent considerations that are classified as financial liabilities.

4 Disclosures on the Statement of Income

4.1 Revenue

Compared to 2016, revenue increased overall by 63,160 thousand euros or 9.2 percent to 747,929 thousand euros and mainly resulted from sales of goods:

in thousand euros	2017	2016
Sale of goods	645,910	583,838
Services rendered	100,006	98,969
Rental income	2,013	1,961
Total	**747,929**	**684,769**

The item 'revenue' comprised revenue from construction contracts accounted for in accordance with their percentage of completion at the reporting date in the sum of 28,267 thousand euros (prior year 9,437 thousand euros) for the fiscal year 2017. For these construction contracts, progress billings sent to customers amounted to 13,508 thousand euros (prior year 4,000 thousand euros).

Revenue for construction contracts not yet completed as at the balance sheet date arising from the fiscal year 2017 and from previous years, totaled 46,200 thousand euros (prior year 18,582 thousand euros).

The item 'revenue' also includes revenues arising from the so-called "bill and hold" agreements in the sum of 6,759 thousand euros (prior year 1,037 thousand euros).

Detailed disclosures on revenue according to segment and region are shown in the Segment Report on pages 175 ff.

4.2 Cost of Sales

in thousand euros	2017	2016
Cost of materials	289,651	269,026
Personnel expenses	141,063	134,205
Depreciation and amortization	21,591	21,390
Other cost of sales	31,738	22,295
Total	**484,042**	**446,915**

Compared to 2016 cost of sales increased overall by 37,127 thousand euros or 8.3 percent and totaled 484,042 thousand euros. Cost of sales show the costs incurred to generate revenue. This item records the costs for setting aside provisions for sales-related transactions as well as the costs for development services on behalf of customers.

Cost of sales for construction contracts not yet completed as at the balance sheet date arising from the fiscal year 2017 and from previous years, totaled 47,634 thousand euros (prior year 16,768 thousand euros). The profit generated from these totaled 8,299 thousand euros (prior year 1,962 thousand euros), a loss in the sum of 9,733 thousand euros was reported, (prior year 2,488 thousand euros).

4.3 Research and Development Expenses

Research and development expenses have increased overall by 780 thousand euros or 1.8 percent to 43,078 thousand euros compared to the 2016 fiscal year.

These cover all expenses attributable to research and development activities. The expenses paid by customers in connection with research and development services in the sum of 22,155 thousand euros (prior year 15,013 thousand euros) were not included in this item. Such expenditures are allocated to cost of sales.

In the fiscal year just past, costs in the sum of 549 thousand euros for internal development projects were capitalized in intangible assets (prior year 78 thousand euros).

4.4 Selling Expenses

Compared to 2016, selling expenses in 2017 increased overall by 6,715 thousand euros or 9.1 percent to 80,312 thousand euros.

Selling expenses include personnel expenses and the cost of materials as well as sales-related depreciation. They also include the expenses for sales commissions as well as marketing and communication.

4.5 General Administrative Expenses

Compared to the prior year, general administrative expenses in 2017 reduced by 1,766 thousand euros or 3.1 percent to 55,817 thousand euros.

General administrative expenses include personnel expenses and the cost of materials as well as administration-related depreciation.

4.6 Expenses According to Types of Expense

The following main types of expenses are included in cost of sales, selling and administrative expenses as well as research and development expenses:

in thousand euros	2017	2016
Cost of materials	309,343	284,574
Personnel expenses	258,275	246,127
Depreciation and amortization	28,684	27,151
Other expenses	66,947	62,542
Total	**663,250**	**620,394**

4.7 Other Operating Income

in thousand euros	2017	2016
Foreign currency exchange gains	8,178	8,910
Income from non-cash contributions	1,593	1,079
Income from reversed bad debt allowances for receivables	1,416	6,058
Income from services, offsets and rentals	1,375	1,627
Income from government grants	970	1,783
Income from damage claims/ insurance benefits	414	239
Income from the sale of materials	351	72
Income from the sale of intangible assets and property, plant and equipment	222	153
Income from the sale of investment companies	0	1,070
Income from impairment reversals of real estate	0	439
Others	1,225	1,944
Total	**15,744**	**23,374**

Other operating income in 2017 reduced by 7,629 thousand euros and thus by 32.6 percent to 15,744 thousand euros.

Income from foreign currency exchange gains mainly includes gains arising from fluctuations in exchange rates between the transaction date and the payment date of receivables and payables in foreign currencies, as well as exchange rate gains arising from the valuation at the exchange rate on the reporting date.

The reversal of bad debt allowances for receivables has been recorded through profit or loss on the basis of payments received for overdue receivables.

Income from government grants is generally related to grants for research and development projects that Jenoptik received from the Federal Ministry for Education and Research and other federal institutions.

Income from services, offsets and rentals is not derived from the common business activities of the companies.

The income from the sale of investment companies in the prior year was generated with the sale of a minority investment in the Optics & Life Science segment.

4.8 Other Operating Expenses

in thousand euros	2017	2016
Foreign currency exchange losses	11,836	8,770
Expenses from increase of bad debt allowances for receivables and bad debt losses	3,531	2,476
Expenses for services and rentals	2,404	3,049
Amortization of intangible assets from a first-time consolidation	1,362	441
Acquisition costs	1,158	148
Expenses for group projects	530	1,064
Other taxes	359	285
Losses from disposals of intangible assets and property, plant and equipment	296	1,845
Impairments of intangible assets and property, plant and equipment	248	1,313
Additions/reversals of provisions	−763	−557
Others	1,618	2,705
Total	**22,579**	**21,540**

Other operating expenses increased by 1,039 thousand euros or 4.8 percent compared with the prior year, to 22,579 thousand euros.

The expenses incurred from foreign currency exchange losses primarily include losses from changes in currency exchange rates between the transaction date and the date of payment of receivables or payables, as well as from the valuation at the exchange rate on the reporting date. Exchange rate gains resulting from these items are recognized under other operating income. From the net viewpoint, foreign currency gains and losses led to a net loss of 3,658 thousand euros (prior year net gain of 140 thousand euros).

The expenses arising from the increase of bad debt allowances for receivables and bad debt losses have risen compared to the previous year due to higher overdue receivables.

The increase in amortization of intangible assets from a first-time consolidation relates to some of the intangible assets identified within the framework of the acquisitions of ESSA Technology and Five Lakes Automation.

The acquisition costs include transaction and consultancy costs for corporate acquisitions. In the fiscal year 2017, these primarily relate to the acquisition of ESSA Technology and Five Lakes Automation.

The expenses for group projects relate to the expansion of the ERP system which was implemented in some US group companies in 2017.

The addition to and reversal of provisions include additions in the sum of 683 thousand euros (prior year 2,141 thousand euros) as well as reversals in the sum of 1,446 thousand euros (prior year 2,698 thousand euros) which weren't directly attributable to functional costs. More information on these items can be found in the section "Other provisions" from page 169.

4.9 Investment Income

in thousand euros	2017	2016
Impairments and impairment reversals of financial assets	74	−1,172
Earnings from investments	6,393	1,475
Total	**6,468**	**303**

The investment income in 2017 increased by 6,165 thousand euros to 6,468 thousand euros.

Impairment losses on financial assets in the fiscal year totaled 112 thousand euros (prior year 1,832 thousand euros) and mainly entail impairment losses to the investment carrying amount in a non-consolidated entity. Reversals of impairment losses to financial assets totaled 187 thousand euros (prior year 660 thousand euros) and primarily relate to available-for-sale financial assets.

The earnings from investments in the fiscal year just ended includes in particular income from the sale of a minority holding and the sale of listed securities in the total sum of 6,344 thousand euros. In the prior year, in addition to dividend income from investment companies in the sum of 1,705 thousand euros, the figure included losses from profit transfer agreements with non-consolidated companies in the sum of minus 230 thousand euros.

4.10 Financial Income and Financial Expenses

in thousand euros	2017	2016
Income from measuring financial instruments in foreign currency	776	3,980
Income from fair value measurment of financial instruments	280	0
Income from financial asset securities and loans	19	39
Other interest and similar income	682	384
Total financial income	**1,756**	**4,403**
Expenses for measuring financial instruments in foreign currency	1,797	4,392
Interest expenses for debenture loans	1,867	1,979
Interest expenses for syndicated loan	693	842
Net interest expenses for pension provisions	502	689
Expenses from fair value measurment of financial instruments	0	643
Other interest and similar expenses	1,328	1,346
Total financial expenses	**6,186**	**9,892**
Total	**−4,430**	**−5,488**

The net balance of financial income and financial expenses reduced by 1,058 thousand euros or 19.3 percent to minus 4,430 thousand euros (prior year minus 5,488 thousand euros).

Income from measuring financial instruments in foreign currency in the sum of 776 thousand euros (prior year 3,980 thousand euros) and corresponding expenses in the sum of 1,797 thousand euros (prior year 4,392 thousand euros) led to a net loss in the fiscal year 2017 of 1,021 thousand euros (prior year 412 thousand euros). This result is derived from the foreign currency exchange gains and losses arising from the valuation of financial assets which are issued in foreign currencies, less the valuation of the respective derivatives.

The income from financial instrument reameasurement includes the valuation of the put option agreed as part of the acquisition of the Vysionics Group. In the prior year the valuation led to an expense.

The item other interest and similar income primarily comprises interest income from bank deposits.

The item other interest and similar expenses includes guaranty and bank charges as well as interest expenses from accrued interest of non-current liabilities and other provisions.

4.11 Income Taxes

Income taxes are shown as the current income tax expense (paid or owing) in the respective countries as well as deferred tax assets and deferred tax liabilities. The calculation of the current income tax expense of the Jenoptik Group was performed by using the tax rates applicable at the balance sheet date.

The calculation of the deferred taxes for domestic entities was based on a tax rate of 29.74 percent (prior year 29.9 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 13.92 percent (prior year 14.08 percent) is taken into account. The calculation of deferred taxes for foreign entities is based on the tax rates applicable in the respective country. As a result of the US tax reform, the tax rate applicable for calculating the deferred taxes of the US entities was reduced to 25.74 percent (prior year 38.9 percent).

Deferred taxes are recognized as either tax income or tax expenses in the statement of income, unless these directly relate to items 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.

Tax expenses were classified according to origin as follows:

in thousand euros	2017	2016
Current income taxes		
Domestic	7,952	4,952
Foreign	6,382	4,164
Total	**14,334**	**9,116**
Deferred taxes		
Domestic	−5,199	−4,150
Foreign	−1,706	2,320
Total	**−6,905**	**−1,830**
Total income tax	**7,429**	**7,286**

The item current income taxes includes an expense in the sum of 0 thousand euros (prior year expense of 174 thousand euros) for discontinued operations.

The item current income taxes includes an expense in the sum of 537 thousand euros (prior year income of 367 thousand euros) for current taxes from earlier business periods. Deferred tax income includes income relating to a different period in the sum of 281 thousand euros (prior year income of 867 thousand euros).

Deferred tax income includes an expense in the sum of 390 thousand euros (prior year expense of 1,440 thousand euros) resulting from the development of timing differences.

As at the balance sheet date, the Jenoptik Group had the following unused tax losses carried forward at its disposal for offsetting against future profits:

in thousand euros	31/12/2017	31/12/2016
Corporate income tax	303,570	341,185
Trade tax	462,709	500,829

Of which the following is subject to a time limit on losses carried forward:

in thousand euros	31/12/2017	31/12/2016
1 year or less	676	457
2 years to 5 years	5,790	2,970
6 years to 9 years	1,496	2,900
More than 9 years	477	741
Total losses carried forward subject to a time limit	**8,439**	**7,068**

The reduction in tax losses carried forward mainly resulted from their being used in the reporting period. Taking into consideration all currently known positive and negative factors influencing future tax results of the Jenoptik Group, the use of a corporation tax loss carried forward of 198,555 thousand euros (prior year 168,488 thousand euros) and the use of a trade tax loss carried forward of 194,782 thousand euros (prior year 169,884 thousand euros) is probable.

A deferred tax claim of 59,448 thousand euros (prior year 51,101 thousand euros) is recognized for unused tax losses carried forward. Of which 27,167 thousand euros (prior year 23,911 thousand euros) is attributable to tax losses carried forward for trade tax.

For the remaining losses carried forward, no deferred tax assets are recognized for corporation tax purposes in the sum of 105,015 thousand euros (prior year 172,697 thousand euros) whilst no deferred tax assets are recognized for trade tax purposes in the sum of 267,927 thousand euros (prior year 330,945 thousand euros).

In addition, no deferred tax assets are shown for allowable time differences in the sum of 6,210 thousand euros (prior year 9,396 thousand euros) as these will probably not be realized in the underlying period under review.

The following recognized deferred tax assets and deferred tax liabilities are attributed to recognition and valuation differences in the individual balance sheet items and to tax losses carried forward:

	Deferred tax assets		Deferred tax liabilities	
in thousand euros	31/12/2017	31/12/2016	31/12/2017	31/12/2016
Intangible assets	1,678	1,122	1,562	1,962
Property, plant and equipment	2,011	1,791	1,684	1,776
Financial assets	1,055	687	157	48
Inventories	7,273	9,278	58	28
Receivables and other assets	1,387	1,841	3,115	2,814
Provisions	12,129	12,558	1,274	320
Liabilities	1,881	3,281	249	1,118
Tax losses carried forward and tax refunds	59,448	51,641	0	0
Gross value	**86,862**	**82,199**	**8,099**	**8,066**
(thereof non-current)	(66,303)	(59,860)	(5,624)	(5,141)
Offset	−7,962	−7,976	−7,962	−7,976
Value presented in the statement of financial position	**78,900**	**74,223**	**137**	**90**

The net inventory of the asset surplus in deferred tax assets increased by 4,630 thousand euros. Taking into consideration the deferred taxes (1,696 thousand euros) recognized outside of profit or loss when offset in the reporting year, as well as the foreign currency exchange conversions (327 thousand euros) and the first-time consolidations (252 thousand euros), the result is a deferred tax income of 6,905 thousand euros shown in the statement of income.

Temporary differences in the sum of 66,463 thousand euros (prior year 75,577 thousand euros) relate to shares in subsidiaries for which no deferred tax liabilities are created.

The following table 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 2017 the applicable group tax rate of 29.74 percent (prior year 29.9 percent) is multiplied by the earnings before tax.

in thousand euros	2017	2016
Earnings before tax – continuing operations	79,882	61,024
Earnings before tax – discontinued operations	200	3,719
Earnings before tax	**80,082**	**64,743**
Corporate income tax rate for the Jenoptik Group in %	29.74	29.90
Expected tax expense	**23,816**	**19,358**
Following tax effects resulted in the difference between the actual and the expected tax expense:		
Non-deductible expenses, tax-free income and permanent deviations	578	906
Changes in impaired deferred taxes and unrecognized deferred taxes	– 20,590	– 12,772
Effects resulting from tax rate differences	1,080	992
Effects of tax rate changes	1,535	–66
Taxes for prior years	584	– 1,234
Other tax effects	426	102
Total adjustments	**– 16,387**	**– 12,072**
Actual tax expense	7,429	7,286
Actual tax expense – continuing operations	**7,429**	**7,112**
Actual tax expense – discontinued operations	0	174
Actual tax expense	7,429	7,286

4.12 Earnings of Non-controlling Interests

Earnings from non-controlling interests in the group earnings total 149 thousand euros (prior year 53 thousand euros) and relate to the non-controlling interests in JENOPTIK Korea Corporation Ltd., JENOPTIK Japan Co. Ltd. as well as the Vysionics Group.

More information on the entities with non-controlling interests is available in section 2.1 "The Group of Entities Consolidated" from page 136.

4.13 Earnings attributable to Shareholders

in thousand euros	2017	2016
Earnings attributable to shareholders – continuing operations	72,304	53,858
Earnings attributable to shareholders – discontinued operations	200	3,545
Earnings attributable to shareholders – Group	**72,504**	**57,403**

4.14 Earnings from Discontinued Operations

Within the framework of the sale of M+W Zander Holding AG in 2005, individual issues remained with JENOPTIK AG from the economic aspect and these have since been concluded. Final agreement on purchase price-related facts was reached in the fiscal year 2016, leading to an overall claim for payment on the part of Jenoptik. The payments in the sum of 200 thousand euros, received in the fiscal year 2017 on the basis of this agreement, were shown as earnings from discontinued operations. This impacted on the cash flow in the same amount.

4.15 Earnings per Share

Earnings per share correspond to the earnings attributable to shareholders divided by the weighted average of the 57,238,115 outstanding shares (prior year 57,238,115 shares).

	2017	2016
Earnings per share in euros – continuing operations	1.27	0.94
Earnings per share in euros – discontinued operations	0.00	0.06
Earnings per share in euros – Group (undiluted = diluted)	**1.27**	**1.00**

5 Disclosures on the Statement of Financial Position

5.1 Intangible Assets

in thousand euros	Development costs from internal development projects	Acquired patents, rademarks, software licenses, customer relationships	Internally generated patents	Goodwill	Other intangible assets	Total
Acquisition or production costs	**14,194**	**67,408**	**1,688**	**104,197**	**1,800**	**189,288**
Balance at 1/1/2017	**(14,213)**	**(70,333)**	**(1,578)**	**(109,911)**	**(1,268)**	**(197,302)**
Foreign currency exchange effects	– 17	–838	0	– 2,018	– 1	– 2,874
	(– 18)	(– 1,024)	(0)	(– 5,713)	(0)	(– 6,755)
Changes in the group of entities consolidated	0	6,385	0	9,100	0	15,484
	(0)	(0)	(0)	(0)	(0)	(0)
Additions	485	2,270	25	0	1,392	4,171
	(0)	(1,728)	(242)	(0)	(1,025)	(2,994)
Disposals	161	8,127	19	0	169	8,476
	(0)	(4,021)	(150)	(0)	(167)	(4,338)
Reclassifications (+/-)	0	1,060	– 270	0	– 774	15
	(0)	(393)	(18)	(0)	(– 327)	(83)
Acquisition or production costs	**14,501**	**68,158**	**1,424**	**111,279**	**2,247**	**197,609**
Balance at 31/12/2017	**(14,194)**	**(67,408)**	**(1,688)**	**(104,197)**	**(1,800)**	**(189,288)**
Amortization and impairments	**13,462**	**53,801**	**778**	**9,895**	**0**	**77,936**
Balance at 1/1/2017	**(13,058)**	**(50,921)**	**(693)**	**(9,894)**	**(0)**	**(74,566)**
Foreign currency exchange effects	– 17	– 659	0	0	0	– 675
	(– 19)	(– 253)	(0)	(1)	(0)	(– 271)
Changes in the group of entities consolidated	0	331	0	0	0	331
	(0)	(0)	(0)	(0)	(0)	(0)
Additions	464	6,773	131	0	1	7,369
	(423)	(5,979)	(135)	(0)	(0)	(6,537)
Impairments	0	0	0	0	0	0
	(0)	(9)	(0)	(0)	(0)	(9)
Disposals	161	8,127	9	0	0	8,297
	(0)	(2,925)	(50)	(0)	(0)	(2,975)
Reclassification (+/-)	0	16	0	0	0	16
	(0)	(70)	(0)	(0)	(0)	(69)
Amortization and impairments	**13,748**	**52,134**	**900**	**9,895**	**1**	**76,679**
Balance at 31/12/2017	**(13,462)**	**(53,801)**	**(778)**	**(9,895)**	**(0)**	**(77,936)**
Net carrying amount at 31/12/2017	**753**	**16,024**	**524**	**101,384**	**2,246**	**120,931**
	(732)	**(13,608)**	**(909)**	**(94,303)**	**(1,800)**	**(111,352)**

Prior year figures are in parentheses.

The changes in the group of entities consolidated include additions from the acquisitions of ESSA Technology and Five Lakes Automation as well as from the merger of Jenoptik Katasorb.

The disposal of patents, trademarks, software and customer relationships primarily relate to intangible assets that were recorded in prior years within the context of acquisitions and which are written off in full at the end of their useful life.

As in the prior year, intangible assets were not subject to any disposal restrictions. The order commitments for intangible assets total 545 thousand euros (prior year 242 thousand euros).

Additions to other intangible assets include capitalized expenses for internally generated assets in development in the sum of 260 thousand euros (prior year 106 thousand euros), of which 64 thousand euros is attributable to development costs arising from internal development projects and 196 thousand euros to internally generated patents. Once the internal development projects have been completed or the patents granted, a transfer is made to the corresponding groups of intangible assets.

Other than goodwill, there are no intangible assets with an indefinite useful life.

As of December 31, 2017 goodwill amounted to 101,384 thousand euros (prior year 94,303 thousand euros). The additions to goodwill in the sum of 9,100 thousand euros resulted from the acquisitions of ESSA Technology and Five Lakes Automation. The further change in the carrying amounts in the sum of minus 2,017 thousand euros is attributable exclusively to currency effects (prior year 5,714 thousand euros).

As in the prior year, no impairments were required for goodwill in the 2017 fiscal year.

The following table summarizes the goodwill for each cash-generating unit according to segment:

in thousand euros	31/12/2017	31/12/2016
Optics & Life Science	42,661	42,946
Optical Systems	1,460	1,662
Healthcare & Industry	41,201	41,284
Mobility	50,802	43,436
Automotive	10,032	4,597
Traffic Solutions	40,770	38,839
Defense & Civil Systems	7,921	7,921
Total	**101,384**	**94,303**

The following table shows the allocation of goodwill to the segments by percentage:

in percent	31/12/2017	31/12/2016
Optics & Life Science	42	46
Mobility	50	46
Defense & Civil Systems	8	8
Total	**100**	**100**

The impairment test for goodwill is performed at the level of the cash-generating units benefiting from the synergies of the respective business combination and representing the lowest level at which goodwill is monitored for internal company management. If the carrying amounts of these cash-generating units exceed their recoverable amounts, the goodwill allocated is correspondingly impaired. The determining factor for the impairment test is 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 calculates 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 and submitted to the Supervisory Board. This takes past experience into consideration and is based on the management's best estimate of future development. The cash flows in the detailed planning phase are planned on the basis of differentiated growth rates. These take account of the development and dynamics of the relevant sectors and target markets. Healthcare & Industry (HCI), as part of the Optics & Life Science segment, posted a positive performance in the last fiscal year. The restructuring in 2016 was reflected in a significant growth in revenue and profitability for the year 2017. In the future, concentrating on the diagnostic imaging, laser-based therapy and automotive sub-markets will secure the profitable business and contribute to sustainable growth. For Traffic Solutions (TS), as part of the Mobility segment, revenue is forecast to show continuing growth over the medium term. This will be helped by the increasing level of internationalization, particularly in the Americas and Asia region. The on-going continuation of structural and process optimization as well as the increase in local value added will be reflected in long-term profitability. The expansion of the international business is also expected to produce consistent growth in revenue across all segments. This is coupled with the assumption that part of the added value is relocated to the target regions in order to generate sustainable growth in profitability. Differentiated ranges are used to determine the future development of the working capital. At the same time, the result of the respective planning year for determining the free cash flow is adjusted for non-cash expenses and income such as amortization and depreciation.

A perpetual annuity is assumed, the amount of which is individually determined for each cash-generating unit by 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 between 0.9 and 1.1 percentage points (prior year 0.9 and 1.1 percentage points). Non-recurring effects in the last year of the plan are eliminated prior to calculating the perpetual annuity.

The weighted average cost of capital after taxes required for the impairment tests is determined by using the capital asset pricing model for determining 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 industries determined from peer groups and 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 industries and the standard average tax rate. The weighted costs of equity and borrowing costs resulted from applying the capital structure customary in our industries.

Impairment testing was conducted assuming a weighted average cost of capital after taxes at a rate between 6.10 and 8.15 percent (prior year 5.81 to 8.25 percent). This corresponds to the weighted average cost of capital before taxes of between 7.85 and 10.68 percent (prior year 7.54 to 11.21 percent).

The assumptions used to determine the values in use of the cash-generating units are shown in the following table:

	Growth component in perpetual annuity	Weighted average cost of capital after taxes	Weighted average cost of capital before taxes
Optical Systems	1.00	7.30	10.65
	(1.00)	(7.41)	(10.67)
Healthcare & Industry	1.10	8.15	10.68
	(1.10)	(8.25)	(11.21)
Automotive	0.90	7.20	10.16
	(1.00)	(5.82)	(8.12)
Traffic Solutions	0.90	6.10	7.85
	(1.00)	(5.81)	(7.54)
Defense & Civil Systems	0.90	6.10	8.80
	(0.90)	(6.00)	(8.32)

Prior year figures are in parentheses.

Sensitivity analyses were performed for all cash-generating units to which goodwill was allocated as of December 31, 2017. A reduction in the cash flows or an increase in the weighted average cost of capital within the ranges considered by the management as possible, would not result in the recoverable amount being less than the carrying amount of the cash-generating unit.

5.2 Property, Plant and Equipment

in thousand euros	Land and buildings	Technical equipment and machinery	Other equipment, operating and office equipment	Assets under construction	Total
Acquisition or production costs Balance at 1/1/2017	**154,950**	**172,641**	**98,171**	**12,271**	**438,032**
	(151,279)	**(174,859)**	**(99,309)**	**(3,962)**	**(429,408)**
Foreign currency exchange effects	–2,434	–3,777	–825	–1,098	–8,133
	(302)	(–640)	(154)	(328)	(145)
Changes in the group of entities consolidated	13	617	333	0	963
	(0)	(0)	(0)	(0)	(0)
Additions	8,128	4,484	8,248	12,871	33,730
	(3,008)	(4,870)	(5,492)	(11,068)	(24,438)
Disposals	4,648	2,794	4,964	345	12,751
	(474)	(8,177)	(7,534)	(37)	(16,222)
Reclassifications (+/-)	5,382	5,864	2,542	–13,977	–189
	(835)	(1,729)	(751)	(–3,051)	(264)
Acquisition or production costs Balance at 31/12/2017	**161,392**	**177,035**	**103,506**	**9,721**	**451,653**
	(154,950)	**(172,641)**	**(98,171)**	**(12,271)**	**(438,032)**
Depreciation and impairments Balance at 1/1/2017	**70,554**	**132,911**	**76,625**	**61**	**280,151**
	(65,893)	**(131,965)**	**(75,891)**	**(0)**	**(273,749)**
Foreign currency exchange effects	–900	–2,389	–609	0	–3,897
	(216)	(–410)	(134)	(0)	(–60)
Changes in the group of entities consolidated	10	468	237	0	714
	(0)	(0)	(0)	(0)	(0)
Additions	3,980	9,808	7,428	0	21,215
	(4,167)	(9,197)	(7,608)	(0)	(20,972)
Impairment losses	0	149	99	0	248
	(1,145)	(46)	(37)	(61)	(1,289)
Impairment reversals	0	0	0	–26	–26
	(–439)	(0)	(0)	(0)	(–439)
Disposals	4,330	2,272	4,841	0	11,443
	(434)	(7,913)	(7,272)	(0)	(15,619)
Reclassifications (+/-)	–26	–1,545	1,532	0	–39
	(5)	(26)	(228)	(0)	(259)
Depreciation and impairments Balance at 31/12/2017	**69,287**	**137,130**	**80,471**	**35**	**286,923**
	(70,554)	**(132,911)**	**(76,625)**	**(61)**	**(280,151)**
Net carrying amount at 31/12/2017	**92,105**	**39,905**	**23,034**	**9,686**	**164,730**
	(84,396)	**(39,730)**	**(21,546)**	**(12,210)**	**(157,882)**

Prior year figures are in parentheses.

Land and buildings of the Group in the amount of 92,105 thousand euros (prior year 84,396 thousand euros) include in particular the production and administration buildings in Jena, Altenstadt, Huntsville (USA) and Shanghai (China) as well as the land acquired in 2016 in Rochester Hills (USA). A new technology campus for metrology and laser machines at the Rochester Hills site was completed in the second quarter of 2017 after a period of construction of around one year. This led to capitalization of the investments in the prior year in the sum of 5,438 thousand euros and consequently to a reclassification from assets under construction. The investments for this project totaled 6,319 thousand euros in the year of the report.

The disposals include, in particular, the sale of the production site in France due to a planned new building. Disposals of tenants' installations after the move to the new technology campus are also shown.

More detailed explanations on the investments made are contained in the Combined Management Report, under the note "Financial position" from page 90.

Order commitments for property, plant and equipment in the sum of 7,965 thousand euros have increased significantly compared with the prior year (prior year 1,958 thousand euros) and are mainly attributable to replacement and new investments in technical equipment and machinery as a result of the implementation of new technologies and the expansion of production capacities.

In the 2017 fiscal year investment grants in the sum of 35 thousand euros were deducted from the acquisition costs of property, plant and equipment (prior year 43 thousand euros).

As of the balance sheet date no property, plant and equipment was pledged (prior year 111 thousand euros). Loans in the sum of 107 thousand euros were secured through registered charges against real property (prior year 138 thousand euros). There are no further disposal restrictions for property, plant and equipment.

5.3 Investment Property

in thousand euros	Investment Property
Acquisition or production costs Balance at 1/1/2017	**10,397 (10,396)**
Additions	0 (1)
Acquisition or production costs Balance at 31/12/2017	**10,397 (10,397)**
Depreciation Balance at 1/1/2017	**5,953 (5,860)**
Additions	93 (93)
Depreciation Balance at 31/12/2017	**6,047 (5,953)**
Net carrying amount at 31/12/2017	**4,350 (4,444)**

Prior year figures are in parentheses.

The investment property as of December 31, 2017 primarily included property in the Jena-Göschwitz Industrial Park.

The fair values total 5,091 thousand euros (prior year 5,894 thousand euros). These are determined internally within the company on the basis of a discounted cash flow method. In this context, the net rents without utilities as well as the maintenance and other costs are estimated for the entire remaining useful lives of the properties and discounted over the remaining useful lives. Risk-adjusted interest rates are applied as the discount rate. As a result of the use of non-observable parameters such as interest rates, rents without utilities, as well as maintenance and ancillary expenses, the fair value is assigned to level 3 in the hierarchy of fair values.

Rental income from investment property as of the end of the fiscal year amounted to 516 thousand euros for 2017 (prior year 577 thousand euros).

In fiscal year 2017, the direct operating expenses for property and movables accounted for at the end of the year totaled 547 thousand euros for rented space due to extensive maintenance work (prior year 218 thousand euros) and for non-rented space 33 thousand euros (prior year 5 thousand euros).

5.4 Leases

Finance leases

The Group as lessee. In the 2017 fiscal year, a leasing agreement was concluded for a demonstration facility and classified as a finance lease. The technical equipment and machinery associated with this agreement and shown in the accounts include a carrying amount of 441 thousand euros. The original acquisition or production costs total 503 thousand euros.

In addition, there are a number of rental contracts for motor vehicles as well as a contract concluded in 2017 for technical test equipment which was classified as finance leases. The carrying amount of assets from finance leases included in other equipment, operating and office equipment totals 416 thousand euros (prior year 83 thousand euros). The original acquisition or production costs for these assets total 505 thousand euros (prior year 207 thousand euros).

The finance lease contracts in force as of the balance sheet date are based on a weighted average interest rate of 2.9 percent (prior year 4.9 percent).

Of the lease payments in the sum of 87 thousand euros (prior year 39 thousand euros), 7 thousand euros (prior year 5 thousand euros) were recognized through profit or loss in the fiscal year 2017.

The lease payments due in the future are shown in the following table:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Minimum lease payments	193 (44)	705 (47)	0 (0)	898 (91)
Interest portions included in payments	12 (3)	15 (2)	0 (0)	27 (5)
Present value	180 (41)	690 (45)	0 (0)	871 (86)

Prior year figures are in parentheses.

The Group as lessor. One Group entity in the Mobility segment concluded contracts for leasing traffic safety equipment to a client which were qualified as finance leases. The average total lease period for these contracts is 30 months.

Of the agreed minimum lease payments received in the fiscal year 2017 in the sum of 468 thousand euros (prior year 425 thousand euros), 5 thousand euros (prior year 21 thousand euros) were recognized through profit or loss.

The outstanding minimum lease payments as of December 31, 2017 are shown as follows:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Minimum lease payments	340 (510)	0 (340)	0 (0)	340 (850)
Interest portions included in payments	0 (0)	0 (5)	0 (0)	0 (5)
Present value	340 (510)	0 (335)	0 (0)	340 (845)

Prior year figures are in parentheses.

All financial income arising from this lease business was recorded through profit or loss.

Operating Leases

The Group as lessee. Operating leases mainly included lease agreements for commercial space as well as for office and data processing equipment and motor vehicles.

The payments arising from leases are recognized through profit or loss in the sum of 9,767 thousand euros (prior year 8,608 thousand euros). As in the prior year, no contingent lease payments were included.

As of the balance sheet date, there are open obligations arising from non-terminable operating leases with the following maturities:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Minimum lease payments	8,670 (7,818)	23,193 (17,362)	21,607 (16,998)	53,470 (42,179)

Prior year figures are in parentheses.

The Group as lessor. Within the framework of operating leases the Group leases commercial property. Rental income from the leasing of property, plant and equipment and from investment property amounted to 2,013 thousand euros in the reporting period (prior year 1,961 thousand euros).

At the balance sheet date the following minimum lease payments had been contractually agreed with tenants:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Minimum lease payments	1,764 (1,645)	2,233 (2,523)	120 (48)	4,117 (4,216)

Prior year figures are in parentheses.

Lease agreements without a termination date were recorded in rental income only up until the date of the earliest possible termination. The probability of leasing the space further or of granting extensions on the lease agreements was not included in the calculation.

5.5 Financial Investments

in thousand euros	31/12/2017	31/12/2016
Shares in unconsolidated associates	610	2,222
Investment companies	2,202	14,376
Loans to unconsolidated associates and investment companies	730	1,294
Long-term securities	867	1,142
Total	**4,408**	**19,034**

The reduction in shares in unconsolidated associates primarily resulted from the first-time inclusion of Jenoptik India in the consolidated financial statements and the merger of the previously non-consolidated Jenoptik Katasorb as of January 1, 2017. For further details we refer to the note "Group of consolidated entities" from page 136.

In the course of the acquisition of a US company by a third party, a minority holding by Jenoptik in this company acquired in 2011 legally passed to the purchaser in 2017. As a result, investment companies in the fiscal year reduced by 12,285 thousand euros. In addition, shares in a real estate company were revalued and therefore increased by 112 thousand euros outside of profit or loss.

The reduction in loans to unconsolidated associates and investment companies is attributable to the redemption of loans.

The table below reflects the changes in the impairments to financial investments:

in thousand euros	2017	2016
Impairments at 1/1	**14,814**	**22,864**
Additions	763	2,438
Utilization	2,978	9,575
Reversal/derecognition	299	916
Foreign currency exchange effects	0	2
Impairments at 31/12	**12,300**	**14,814**

In addition to the facts already presented above, the development of impairments in 2017 was affected primarily by the deletion of an entity and the impairment losses utilized in this context.

5.6 Non-current Trade Receivables

As of the end of the fiscal year 2017 there were no non-current receivables from contracts with clients (prior year 1,923 thousand euros).

5.7 Other Non-current Financial Assets

Other non-current financial assets include the following:

in thousand euros	31/12/2017	31/12/2016
Derivatives	1,957	1,591
Receivables from lease agreements	0	335
Other non-current financial assets	363	0
Total	**2,319**	**1,926**

Other non-current financial assets are subject to disposal restrictions in the sum of 86 thousand euros (prior year 0 thousand euros).

The aggregated item derivative financial instruments is explained in greater detail in section 8.2 from page 177.

For details on receivables arising from lease contracts please see note 5.4 from page 158.

5.8 Other Non-current Non-financial Assets

Other non-current non-financial assets in the sum of 586 thousand euros (prior year 1,108 thousand euros) essentially comprise the deferred charges for the syndicated loan in the amount of 360 thousand euros (prior year 649 thousand euros).

5.9 Deferred Taxes

The development of the balance sheet item deferred taxes is shown in note 4.11 from page 151.

5.10 Inventories

in thousand euros	31/12/2017	31/12/2016
Raw materials, consumables and supplies	69,675	56,186
Unfinished goods and work in progress	80,706	84,400
Finished goods and merchandise	18,244	18,738
Total	**168,625**	**159,324**

As of the end of the fiscal year 2017, accumulated impairment losses in the sum of 44,078 thousand euros (prior year 45,508 thousand euros) were taken into account on the net realizable value. The carrying amount of the inventories which were recognized at the net realizable value was 87,812 thousand euros (prior year 97,437 thousand euros).

In the fiscal year, impairment losses were recorded in the sum of 1,580 thousand euros (prior year 5,295 thousand euros). Impairment losses were reversed in the sum of 2,662 thousand euros (prior year 3,951 thousand euros) as the reason for the impairment loss applied in prior years no longer existed.

The consumption of inventories affected expenses in the fiscal year in the sum of 233,579 thousand euros (prior year 218,510 thousand euros), the table below shows the distribution.

in thousand euros	31/12/2017	31/12/2016
Cost of Sales	230,911	215,992
Research and development expenses	2,055	1,735
Selling expenses	356	479
Administrative expenses	257	304
Total	**233,579**	**218,510**

At the reporting dates there were no restrictions on the disposal of inventories.

5.11 Current Trade Receivables

in thousand euros	31/12/2017	31/12/2016
Trade receivables from third parties	120,978	124,608
Receivables from construction contracts	14,859	4,419
Trade receivables from unconsoli-dated associates and joint operations	94	562
Trade receivables from investment companies	86	232
Total	**136,017**	**129,821**

The fair values of trade receivables correspond to their carrying amounts as of the reporting date.

With regard to receivables from construction contracts less progress payments, customer-specific construction contracts are recognized as assets if the production costs incurred, including shares in profits, exceed the amount received from advance payments and partial billings. As of the balance sheet date, progress payments in the total sum of 7,700 thousand euros (prior year 2,486 thousand euros) were offset against receivables arising from construction contracts.

Trade receivables comprise the following:

in thousand euros	31/12/2017	31/12/2016
Gross amount of trade receivables from third parties	128,406	130,243
Gross amount of receivables from construction contracts	14,859	4,419
Gross amount of trade receivables from unconsolidated associates and joint operations	1,475	1,942
Gross amount of trade receivables from investment companies	155	302
Gross amount of trade receivables (total)	**144,895**	**136,906**
Cumulative impairments	–8,879	–7,084
Carrying amount of trade receivables	**136,017**	**129,821**

Default risks are taken into account through impairments. The following table shows the changes in impairment losses on outstanding trade receivables:

in thousand euros	2017	2016
Impairments at 1/1	**7,084**	**11,973**
Additions	3,308	2,289
Consumption	88	445
Reversal/derecognition	1,363	6,785
Foreign currency exchange effects	–62	53
Impairments at 31/12	**8,879**	**7,084**

The gross amount of trade receivables from third parties totaled 128,406 thousand euros (prior year 130,243 thousand euros). Thereof receivables amounting to 6,988 thousand euros (prior year 2,609 thousand euros) were subject to individual impair-ments. The age structure of unimpaired trade receivables from third parties is as follows:

in thousand euros	2017	2016
Not due	86,369	101,395
Overdue	36,680	26,238
Less than 30 days	16,367	15,427
Between 30 and 60 days	6,288	2,894
Between 60 and 120 days	4,296	2,021
Between 120 and 240 days	4,897	1,270
Between 240 and 360 days	2,066	695
More than 360 days	2,766	3,931
Total	**123,049**	**127,634**

Overdue but unimpaired receivables were owed primarily by public sector contractors, companies in the automobile industry as well as their suppliers. The default risk as of the balance sheet date for receivables not subject to individual impairment were taken into account through portfolio-based impairments in the sum of 5,147 thousand euros (prior year 3.491 thousand euros).

Non-impaired receivables are covered by collateral in the form of bank guarantees in the sum of 660 thousand euros (prior year 4,251 thousand euros).

The measures begun in the prior year to reduce the overdue non-impaired receivables from third parties were intensified.

5.12 Other Current Financial Assets

in thousand euros	31/12/2017	31/12/2016
Derivatives	3,008	51
Receivables from Mitarbeiter-treuhand e.V.	1,728	1,752
Receivables from lease agreements	340	510
Other receivables from unconsoli-dated associates	0	102
Miscellaneous current financial assets	230	8
Total	**5,307**	2,422

As in the prior year, there were no restrictions on disposals of other current financial assets.

For details on receivables arising from lease contracts please refer to note 5.4 from page 158.

The aggregated item derivative financial instruments is explained in greater detail in note 8.2 from page 177.

Default risks are taken into account through impairments. The breakdown of the carrying amount of other current financial assets is as follows:

in thousand euros	31/12/2017	31/12/2016
Gross amount of other current financial assets	6,596	3,927
Cumulative impairments	–1,289	–1,504
Carrying amount of other current financial assets	**5,307**	**2,422**

The following table shows the changes in impairment losses on outstanding other current financial assets:

in thousand euros	2017	2016
Impairments at 1/1	**1,504**	**4,549**
Additions	7	0
Consumption	40	2,801
Reversal/derecognition	183	243
Impairments at 31/12	**1,289**	**1,504**

5.13 Other Current Non-financial Assets

in thousand euros	31/12/2017	31/12/2016
Accruals	3,266	3,348
Receivables from other taxes	1,640	1,527
Receivables from income taxes	340	513
Receivables from subsidies and grants	176	301
Miscellaneous current non-financial assets	644	1,402
Total	**6,067**	**7,091**

As in the prior year, there were no restrictions on disposals of other current non-financial assets.

5.14 Current Financial Investments

in thousand euros	31/12/2017	31/12/2016
Fair value	64,577	50,540

The current financial investments primarily entail cash deposits made in the sum of 64,169 thousand euros.

For financial investments valued at amortized aquisition costs, it is assumed that the fair values correspond to the carrying amounts.

For further details on the financial instruments we refer to note 4.2 from page 177.

5.15 Cash and Cash Equivalents

in thousand euros	31/12/2017	31/12/2016
Checks, cash on hand, bank balances and demand deposits with a maturity of less than 3 months	132,310	91,961

For further information we refer to the section entitled Disclosures on the Cash Flows from page 173.

5.16 Equity

The development of the equity of Jenoptik is shown in the consolidated statement of changes in equity.

Share Capital

The share capital amounts to 148,819 thousand euros and is divided into 57,238,115 no-par value shares.

At the beginning of July 2011 Thüringer Industriebeteiligungs GmbH & Co. KG, Erfurt, Thüringer Industriebeteiligungsgeschäftsführungs GmbH, Erfurt, bm-t beteiligungsmanagement thüringen GmbH, Erfurt, Stiftung für Unternehmensbeteiligungen und -förderungen in der gewerblichen Wirtschaft Thüringens (StUWT), Erfurt, Thüringer Aufbaubank, Erfurt and the Free State of Thuringia, Erfurt, disclosed that they had exceeded the thresholds of 3, 5, and 10 percent of the voting rights in JENOPTIK AG on June 30, 2011 and that they had held 11.00 percent of the voting rights (6,296,193 voting rights) on that day. Thüringer Industriebeteiligungs GmbH & Co. KG acquired the voting rights from ECE Industriebeteiligungen GmbH.

On August 21, 2014, Deutsche Asset & Wealth Management Investment GmbH, Frankfurt, Germany, notified us that it had exceeded the threshold of 5 percent of the voting rights in JENOPTIK AG on August 19, 2014. Accordingly, Deutsche Asset & Wealth Management Investment GmbH directly held 5.20 percent of the voting rights (2,978,179 voting rights) in JENOPTIK AG on that day. Thereof 5.06 percent of the voting rights (2,898,579 voting rights) were held directly by Deutsche Asset & Wealth Management Investment GmbH on that day and 0.14 percent of the voting rights (79,600 voting rights) were attributed to them on that day in accordance with § 22 (1) (1) No. 6 of the WpHG.

Templeton Investment Counsel, LLC, Wilmington, Delaware, USA, notified us on February 17, 2016 that it had exceeded the threshold of 5 percent of the voting rights in JENOPTIK AG on February 12, 2016. Accordingly, Templeton Investment Counsel, LLC held 4.69 percent of the voting rights (2,682,522 voting rights) as indirectly attributed to it on that day in accordance with § 22 of the WpHG.

The Ministry of Finance, Oslo, Norway, notified us on November 4, 2016 on behalf of the Norwegian state that it had exceeded the threshold of 3 percent of the voting rights in JENOPTIK AG on November 2, 2016. Accordingly, on that day the Ministry of Finance held 3.06 percent of the voting rights (1,752,411 voting rights) as indirectly attributed to it on that day in accordance with § 22 of the WpHG. The voting rights are held directly by the Norges Bank, Oslo, Norway.

The Oppenheimer International Small-Mid Company Fund, Wilmington, Delaware, USA, notified us on January 30, 2018 that it had exceeded the threshold of 3 percent of the voting rights in JENOPTIK AG on January 25, 2018. Accordingly, the Oppenheimer International Small-Mid Company Fund held 3.16 percent of the voting rights (1,808,844 voting rights) on that day. Oppenheimer Funds, Inc., Denver, Colorado, USA has an indirect investment via the Oppenheimer International Small-Mid Company Fund.

On September 28, 2017, Dimensional Holdings Inc., Austin, Texas, USA, notified us that it fell below the threshold of 3 percent of the voting rights in JENOPTIK AG on September 25, 2017. Accordingly, Dimensional Holdings Inc., held 2.99 percent of the voting rights (1,713,730 voting rights) on that day. Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., DFA Canada LLC, Dimensional Fund Advisors Canada ULC as well as DFA Australia Limited have an indirect investment via Dimensional Holdings Inc.

The voting right notifications of recent years and the notifications of shareholders that had closed out their investments have been published on our Internet site www.jenoptik.com under Investors / Share / Voting rights announcements.

Authorized Capital

An "Authorized Capital 2015" was created with the resolution passed by the Annual General Meeting on June 3, 2015 as follows: The Executive Board is authorized through June 2, 2020, 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 bearer shares against cash and/or contribution in-kind ("Authorized Capital 2015"). The new shares can be taken on by one bank or multiple banks with the obligation to offer these to shareholders (indirect subscription rights). The Executive Board is authorized, with the approval of the Supervisory Board, to exclude the subscription rights of shareholders (a) for fractional amounts; (b) in the event of capital increases against contribution in-kind, in particular also as part of corporate mergers or for the acquisition of companies, parts of companies or investments in companies (including an increase in existing investment holdings) or other depositable assets related to such an acquisition project, including receivables from the company; (c) in the event of capital increases in return for cash contributions, to the extent that the portion of the nominal capital attributable to the new shares, taking into account resolutions at the Annual General Meeting and/or the utilization of other authorizations to exclude the subscription right in direct or corresponding application of § 186 (3) (4) of the Stock Corporation Act since the date on which such authorization becomes effective, neither exceeds a total of ten percent of the nominal capital as of the date of registration for such authorized capital, nor exceeds a total of ten percent of the nominal capital in existence as of the date of issuance of the new shares and the issue price of new shares is not significantly below the stock exchange price; (d) for the issuance to employees of the company and companies in which Jenoptik has a majority participation.

All aforementioned authorizations to exclude subscription rights are limited to a total of 20 percent of the nominal capital available at the time this authorization became effective – or, if this value is lower, to 20 percent of the nominal capital at the time this authorization is exercised. This limit of 20 percent includes shares that (i) are sold for the purpose of servicing option and / or convertible bonds 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 company 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.

Conditional Capital

With the shareholder resolution passed at the Annual General Meeting (AGM) held on June 7, 2017 the share capital of the entity is contingently raised by up to 28,600 thousand euros through the issue of up to 11,000,000 new no-par value shares ("Conditional Capital 2017"). The conditional capital increase will only be executed to the extent that the creditors / owners of option and / or conversion rights arising from option and / or convertible bonds issued up to June 6, 2022 by the company or a domestic or foreign incorporated company in which the company has a direct or indirect majority stake, pursuant to the resolution of the Annual General Meeting dated June 7, 2017, exercise their option or conversion rights and / or – the creditors of the issued convertible bonds obliged to exercise their conversion rights which were issued by the company or a domestic or foreign incorporated 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 7, 2017, fulfill their conversion rights by June 6, 2022 and neither own shares are used nor is 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 to the appropriation of profits. The Executive Board is authorized, with the consent of the Supervisory Board, to specify additional details on the issuance of the conditional capital increase.

If the authorization to issue option and / or convertible bonds to the exclusion of subscription rights is exercised, this authorization is limited in the sense that the pro rata amount of nominal capital corresponding to those shares that must be issued after exercising conversion and / or option rights / obligations may not account for more than 20 percent of existing nominal capital at the time this authorization takes effect or – if the figure is lower – at the time use is made of the authorization. This 20 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.

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

- available-for-sale financial assets
- cash flow hedges,
- accumulated foreign currency exchange differences and
- actuarial gains/losses arising from the valuation of pensions and similar obligations.

In the 2017 fiscal year value adjustments to securities available for sale amounted to minus 270 thousand euros (prior year minus 249 thousand euros). The resultant deferred taxes totaled minus 32 thousand euros (prior year minus 38 thousand euros). The effective portions of the change in the value of derivatives to be recognized outside of profit or loss within the framework of the cash flow hedges amounted to 4,456 thousand euros (prior year minus 1,680 thousand euros) less applicable deferred taxes in the sum of minus 1,325 thousand euros (prior year 502 thousand euros). The accumulated foreign currency exchange differences encompass the effects arising from foreign currency conversions of the separate financial statements of subsidiaries whose functional currency deviates from that of the Group, as well as effects arising from foreign currency conversions of assets and liabilities held in foreign currencies in the total sum of minus 8,016 thousand euros (prior year minus 915 thousand euros). The change in applicable deferred taxes totaled 483 thousand euros (prior year 4 thousand euros).

The actuarial gains (prior year losses) arising from the valuation of pensions are recognized in the sum of 1,156 thousand euros (prior year minus 298 thousand euros). The resultant deferred taxes totaled minus 298 thousand euros (prior year minus 60 thousand euros).

In the 2017 fiscal year the change in deferred taxes recognized outside of profit or loss led to a reduction in the reserves of 1,173 thousand euros (prior year increase of 408 thousand euros). The amount of deferred tax assets in equity totaled 4,788 thousand euros (prior year 5,961 thousand euros).

Treasury Shares

In accordance with the shareholder resolution passed by the Annual General Meeting held on June 12, 2014, the Executive Board was authorized to purchase up to a maximum of ten percent of the no-par value shares of the existing share capital as treasury shares for purposes other than trade in treasury shares by no later than June 11, 2019. 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 et seq. of the Stock Corporation Act) 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 or 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. Further details regarding the buyback of treasury shares are described in the invitation to the Annual General Meeting 2014, accessible to the general public, on our website at www.jenoptik.de under the heading Annual General Meeting.

5.17 Non-controlling Interests

This balance sheet item contains reconciliation items for shares of non-controlling shareholders in the capital to be consolidated, arising from the capital consolidation, as well as the profits and losses allocated to them.

As a result of the acquisition of shares of non-controlling shareholders, the amounts attributable to the acquired shares were reclassified as retained earnings in the fiscal year 2017.

5.18 Provisions for Pensions and Similar Obligations

Provisions for pension obligations are set aside on the basis of pension plans for retirement, disability and survivor benefit commitments and exist in Germany and Switzerland. 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 employee on commencement of retirement. The pension schemes in Germany have been closed with the exemption of the reinsured group provident fund. Within the Group, company pension plans are 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

Most retirement schemes are based on defined benefit plans, wherein a distinction is made between pension schemes financed through provisions or externally financed pension schemes.

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.

Up to and including 2016, defined benefit plans in the form of a reinsured group provident fund were treated as defined contribution plans as the risk of a claim arising from the existing subsidiary liability was considered unlikely. As a result of the increased likelihood of a claim due to the on-going period of low interest rates, these commitments were treated as defined benefit plans for the first time in 2017. The undercoverage amounting to 275 thousand euros was recorded as actuarial effect within other comprehensive income.

In accordance with IAS 19, pension provisions for the benefit commitments are determined in accordance with the projected unit credit method. In this context, the future obligations are valued on the basis of benefit claims acquired pro rata as of the balance sheet date, taking into account trend assumptions for the valuation parameters which affect the level of benefits. All benefit schemes require actuarial calculations.

Jenoptik determines the net interest expense (net interest income) by multiplying the net liability (net asset) at the commencement of the period by the underlying interest rate on commencement of the period used for discounting the benefit-oriented gross pension obligation.

The actuarial effects cover, on the one side, the actuarial profits and losses arising from the valuation of the benefit-oriented gross pension obligation and on the other, the difference between the actual yield realized on plan assets and the typical yield assumed on commencement of the period.

The benefit commitment of the Group cover 1,194 entitled persons, including 514 active employees, 159 former employees as well as 521 retirees and survivors.

In compliance with IAS 19, the assets held by the Mitarbeitertreuhand e.V., Jena, are offset as plan assets against pension obligations. The pension obligations of JENOPTIK Industrial Metrology Switzerland SA, JENOPTIK Advanced Systems GmbH and the commitments via the group provident fund are also covered by means of plan assets and are accordingly booked as a net amount. These plan assets are primarily managed by AXA Lebensversicherung AG and AXA Winterthur, Switzerland.

The change in the defined benefit obligations (DBO) is shown as follows:

in thousand euros	2017	2016
DBO at 1/1	68,762	67,432
Foreign currency exchange effects	−1,029	108
Past-service cost	956	977
Contributions to the pension plans	133	247
Thereof by employees	133	247
Interest expenses	860	1,148
Actuarial gains (-) and losses (+)	−74	1,519
Experience-based gains and losses	−410	−2,038
Changes from financial assumptions	336	3,557
Transfers	256	0
Other changes	15,792	0
Pension benefits	−2,533	−2,669
DBO at 31/12	**83,122**	**68,762**

The other changes relate to the first-time recording of pension commitments through the reinsured group provident fund route.

The effects of the expense recognized in the statement of income are summarized as follows:

in thousand euros	2017	2016
Current service costs	956	977
Net interest expenses	502	699
Total expenses	**1,458**	**1,676**

The amounts shown above are generally included in the personnel expenses of the functional areas. The interest charged on the obligation as well as the interest received on plan assets is recorded in the interest result.

Changes in plan assets are shown as follows:

in thousand euros	2017	2016
Plan assets at 1/1	31,134	31,339
Foreign currency exchange effects	−700	69
Interest income from plan assets	358	232
Return on plan assets less interest income	1,354	1,189
Contributions	266	682
Employers	133	227
Employees	133	454
Transfers	256	0
Other changes	15,517	0
Pension payments	−2,130	−2,376
Plan assets at 31/12	**46,055**	**31,133**

The initial recording of plan assets of the reinsured group provident fund is shown as other changes.

The net obligation as of the balance sheet date is as follows:

in thousand euros	2017	2016
Present value of the obligation covered by plan assets	77,600	63,022
Plan assets	−46,055	−31,133
Net liability of the obligation covered by plan assets	31,545	31,889
Net liability of the obligation not covered by plan assets	5,521	5,741
Total	**37,066**	**37,630**

The portfolio structure of the plan assets is shown as follows:

in thousand euros	2017	2016
Loans rendered (loans and receivables)	4,407	4,985
Insurance policies	24,536	9,528
Stocks and other securities	5,472	5,627
Investments	6,426	5,456
Cash equivalents	6,943	7,288
Other assets and liabilities	−1,728	−1,752
Total	**46,055**	**31,133**

There is an active market for the stocks and other securities held in plan assets.

Of the insurance policies an amount of 15,517 thousand euros is related to pension insurances with AXA Lebensversicherung AG. The capital was mainly invested in stocks and investment funds as well as debenture loans and fixed interest-bearing securities. Furthermore insurance policies amounting to 7,996 thousand euros persist due to the benefit plan of AXA Fondation LLP (Switzerland).

The actuarial assumptions are shown in the following table. Where applicable, inflation expectations are taken into account in the above-mentioned assumptions.

125 192 Consolidated Financial Statements

in percent	2017	2016
Discount rate		
Germany	1.68	1.52
Switzerland	0.66	0.18
Expected salary increases		
Germany	2.67	2.79
Switzerland	0.35	0.35
Expected pension increases		
Germany	1.59	1.81
Switzerland	1.00	0.00

In the fiscal year 2017, a yield on plan assets of 1.52 percent, i.e. 358 thousand euros, was assumed on the basis of the discounting factor used for calculating the DBO for the prior year (prior year 232 thousand euros). The actual yield from the plan assets was 1,712 thousand euros (prior year 1,420 thousand euros).

A change in the key actuarial assumptions of one percentage point respectively as of the balance sheet would influence the DBO as follows:

	Change in the DBO	
in thousand euros	Increase	Reduction
Discount rate	−11,316	14,264
	(−9,194)	(9,589)
Expected salary increases	162	−69
	(244)	(−63)
Expected pension increases	8,642	−7,217
	(8,854)	(−5,986)

Prior year figures are in parentheses.

The sensitivity analysis shows the change in a DBO when an assumption is changed. 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.

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.

As of December 31, 2017, the weighted average remaining service period was 5 years and the weighted average remaining maturity of the obligation was 20 years.

The financing of the pension plans of JENOPTIK Advanced Systems GmbH, Wedel and JENOPTIK SSC GmbH, Jena, is performed by using a CTA model. The pension plan of JENOPTIK Industrial Metrology Switzerland SA provides for risk participation by the beneficiaries. In this context, the pension plan is financed by contributions from both the employer and the employees.

The anticipated pension payments arising from the pension plans as of December 31, 2017 for the following fiscal year are in the sum of 2,579 thousand euros (prior year 2,620 thousand euros) and for the subsequent four fiscal years of 12,818 thousand euros (prior year 11,610 thousand euros).

Defined Contribution Plans

Within the framework of the defined contribution plans, expenses for 2017 totaled 18,075 thousand euros (prior year 13,987 thousand euros), this figure including contributions to pension insurance providers in the sum of 13,893 thousand euros (prior year 13,447 thousand euros).

5.19 Tax Provisions

in thousand euros	31/12/2017	31/12/2016
Provisions for income taxes	8,870	3,290
Provisions for other taxes	67	90
Total	**8,938**	**3,380**

Details on income tax expenses are provided in Note 4.11 from page 151.

5.20 Other Provisions

The development of other provisions is as follows:

in thousand euros	Balance at 1/1/2017	Foreign currency exchange effects	Changes in the group of entities consolidated	Additions	Compound interest	Utilization	Reversals	Balance at 31/12/2017
Personnel	24,352	–140	47	23,614	42	–17,565	–2,129	28,221
Guarantee and warranty obligations	13,369	–71	5	15,357	20	–5,873	–1,886	20,922
Trademark and license fees	2,931	0	0	491	0	–9	–153	3,261
Onerous contracts	1,341	0	60	1,361	0	–377	–786	1,599
Price adjustments	1,727	0	0	512	0	–5	–810	1,423
Restructuring	2,261	0	0	0	0	–1,375	–749	137
Others	12,510	–330	0	5,982	6	–3,744	–2,829	11,595
Total	**58,491**	**–541**	**112**	**47,318**	**69**	**–28,949**	**–9,341**	**67,159**

Key items in the personnel provisions relate to performance premiums, profit sharing and similar commitments, 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 2,627 thousand euros (prior year 2,584 thousand euros) and partial retirement obligations in the sum of 1,286 thousand euros (prior year 502 thousand euros). Expert opinions were obtained for the partial retirement obligations with the assumption of income increasing at 2.7 percent (prior year 2.8 percent). The amount of the liability for top-up payments already earned was 609 thousand euros as of December 31, 2017 (prior year 155 thousand euros).

The provision for guarantee and warranty obligations include expenses for individual guaranty cases as well as for general guarantees. The calculation of the provision for general guarantee risks is based on empirical values which are 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 2017 fiscal year chiefly comprise guarantee and warranty provisions for specific individual cases for which the underlying obligations no longer exist.

The provision for trademark and license fees relates to risks in connection with potential patent violations as well as license cost risks.

The provision for onerous contracts mainly includes the liability overhang for individual customer projects.

Provisions for price adjustments exist for customer contracts that are subject to the risk of subsequent changes in selling prices. Additions and reversals are made to revenue.

The use and reversal of the provision for restructuring covers the payment of severance pay to employees in connection with the restructuring of the laser business of Jenoptik Laser GmbH in Jena.

Other provisions included, amongst others, provisions for potential contractual penalties and claims for damages. In addition, they relate to numerous identifiable specific risks as well as uncertain liabilities that were accounted for in the amount of the best possible estimate of settlement sum. The additions in the fiscal year 2017 include, amongst other things, the Supervisory Board remuneration, the recognition of expenses for risks arising from the utilization of a guarantee claim as well as for removal obligations.

The anticipated claims by maturity are shown below:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Personnel	22,146	4,017	2,057	28,221
Guarantee and warranty obligations	17,446	3,476	0	20,922
Trademark and license fees	1,293	1,969	0	3,261
Onerous contracts	959	640	0	1,599
Price adjustments	200	1,223	0	1,423
Restructuring	137	0	0	137
Others	9,069	1,433	1,093	11,595
Total	**51,250**	**12,759**	**3,150**	**67,159**

5.21 Share-based Payments

As of December 31, 2017, the Jenoptik Group had at its disposal share-based payment instruments in the form of virtual shares for both active Executive Board members and some senior management personnel. In this context, a distinction is drawn between the long-term incentives from the previous Executive Board remuneration system and the remuneration system for some senior management personnel ("LTI") as well as performance shares under the new Executive Board remuneration system.

The effect of the share-based payment with cash settlement on the statement of income as well as the statement of financial position in the 2017 fiscal year was as follows:

	Profit or loss		Statement of financial position	
in thousand euros	2017	2016	2017	2016
Virtual shares for the current year	–646	–262	646	262
Virtual shares for prior years	–902	–1,541	1,972	5,676
Total	**–1,547**	**–1,803**	**2,617**	**5,938**

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 on the basis of an arbitrage-free valuation according to the Black/Scholes option pricing model.

Payment for the virtual shares 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 departure before the end of the term, the LTI is paid out early in cash. In the event of departure, performance shares will also only be valued, allocated and then paid out at the end of the respective performance period, depending on whether the targets have been achieved. Following preparation by the Personnel Committee but subject to the approval of the Supervisory Board, the members of the Executive Board are to be granted a total of 26,103 virtual shares for the 2017 fiscal year. The virtual shares allocated for the fiscal years 2012 to 2017 were valued at the fair value as of the 2017 balance sheet date and recognized in provisions.

The development of the Executive Board's virtual shares is shown in the following table:

in units	Number for 2017	Number for 2016
Dr. Stefan Traeger (Chairman of the Executive Board since May 1, 2017)		
1/1	0	0
Granted for period	11,284	0
31/12	11,284	0
Hans-Dieter Schumacher		
1/1	39,794	21,329
Granted for period	14,819	18,134
Granted for protection of existing shares in case of dividend payment	425	331
31/12	55,038	39,794
Dr. Michael Mertin (Chairman of the Executive Board up to April 30, 2017)		
1/1	283,154	328,066
Granted for protection of existing shares in case of dividend payment	0	4,326
Paid out	283,154	49,238
31/12	0	283,154

Of the total expenses of fiscal year 2017 related to share-based payment an amount of 292 thousand euros (prior year 0 thousand euros) was attributable to Dr. Stefan Traeger, 738 thousand euros (prior year 311 thousand euros) were attributable to Hans-Dieter Schumacher and expenses of 12 thousand euros (prior year 1,149 thousand euros) were related to Dr. Michael Mertin.

For all further disclosures, we refer to the Remuneration Report in the section Corporate Governance which forms part of the combined Management Report.

Virtual shares are also granted to some members of the top management. The system for allocation and payment of the virtual shares is essentially the one described in Section II. a of the Remuneration Report for the Executive Board, pages 45 ff. ("Performance-Related Payment in the Previous Remuneration System"), the only difference being that in the event of departure before expiry of the period, the virtual shares can be forfeited depending upon the reasons for the departure.

The development of these virtual shares is shown in the following table:

in units	Number for 2017	Number for 2016
Members of the Executive Management Board		
1/1	109,726	114,346
Granted for period	15,967	20,113
Granted for adjusted achievement of prior year's goals	−644	473
Forfeited rights	−7,953	−12,575
Paid out	−34,023	−12,631
31/12	83,073	109,726

5.22 Financial Liabilities

The maturity periods for the financial liabilities are shown in the table below:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Liabilities to banks	19,157 (4,088)	107,883 (44,845)	0 (75,589)	127,040 (124,521)
Liabilities from finance leases	180 (41)	690 (45)	0 (0)	871 (86)
Total	**19,337** **(4,129)**	**108,573** **(44,890)**	**0** **(75,589)**	**127,910** **(124,608)**

Prior year figures are in parentheses.

Liabilities to banks with a term of up to one year primarily comprise a tranche of the debenture loan in the sum of 11.000 thousand euros due in 2018, the repayments due in 2018 for the loan to finance investments at the site in Michigan, USA in the sum of 1,668 thousand euros as well as the utilization of revolving lines of financing by the Chinese subsidiary in the sum of 6,423 thousand euros.

Liabilities to banks with a term of one to five years comprise further tranches of the debenture loans with a nominal value of 103,000 thousand euros.

As of the balance sheet date, the syndicated loan was purely utilized for guarantees in the sum of 8,670 thousand euros. Taking into account the other lines of financing not fully utilized, 232,220 thousand euros of guaranteed, existing lines of credit were unused as of the balance sheet date.

5.23 Non-current Trade Payables

As of the balance sheet date there were no non-current trade payables. Liabilities in the prior year arising from the purchase of intangible investment assets totaled 680 thousand euros.

5.24 Other Non-current Financial Liabilities

in thousand euros	31/12/2017	31/12/2016
Liabilities from acquiring associates	417	702
Derivatives	3	1,983
Miscellaneous non-current financial liabilities	0	800
Total	**420**	**3,485**

The liabilities from acquiring associates include the long-term share of the conditional purchase price payment agreed within the framework of the acquisition of Five Lakes Automation.

Further disclosures on derivatives are provided in Note 8.2 from page 177.

5.25 Other Non-current Non-financial Liabilities

There were no other non-current non-financial liabilities as of the balance sheet date (prior year 655 thousand euros).

5.26 Current Trade Payables

This item includes:

in thousand euros	31/12/2017	31/12/2016
Trade payables towards third parties	61,523	48,020
Trade payables towards unconsolidated associates and joint operations	116	293
Trade payables towards investment companies	18	89
Total	**61,657**	**48,402**

5.27 Other Current Financial Liabilities

This item includes:

in thousand euros	31/12/2017	31/12/2016
Other liabilities towards unconsolidated associates and joint operations	2,854	1,784
Liabilities from acquiring associates	2,711	582
Interest payables	785	762
Derivatives	676	1,354
Miscellaneous current financial liabilities	1,628	1,160
Total	**8,654**	**5,642**

Liabilities to unconsolidated associates and joint operations primarily include liabilities to a joint operation in the sum of the non-consolidated part of liabilities of 2,845 thousand euros (prior year 1,552 thousand euros). Standard market interest rates were agreed for liabilities.

The liabilities from acquiring associates relate to the put option agreed within the framework of the acquisition of the Vysionics Group for the purchase of the remaining shares as well as the short-term share of the conditional purchase price payment for the acquisition of Five Lakes Automation.

The item derivative financial instruments is explained in greater detail under Note 8.2 from page 177.

5.28 Other Current Non-financial Liabilities

in thousand euros	31/12/2017	31/12/2016
Liabilities from advance payments received	28,169	29,461
Liabilities to employees	8,287	12,816
Liabilities from other taxes	5,387	4,183
Accruals	2,816	3,295
Liabilities from social security	1,307	1,199
Liabilities to employer's insurance association	1,065	1,180
Liabilities from construction contracts	0	952
Miscellaneous current non-financial liabilities	222	523
Total	**47,253**	**53,609**

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 comprise the cash and cash equivalents recognized in the balance sheet in the sum of 132,310 thousand euros (prior year 91,961 thousand euros). Liquid funds are defined as the sum of cash on hand and demand deposits at banks with a 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 the current business, from investing and financing activities. Changes in the balance sheet items used for preparing the statement of cash flows cannot be directly derived from the balance sheet because the effects arising from the foreign currency conversion and changes in the group of entities consolidated are non-cash transactions and are therefore eliminated. Cash flows from operating activities are indirectly derived from earnings before tax. Earnings before tax are adjusted for non-cash income and expenses. The cash flows from operating activities are determined by taking into account the changes in working capital, provisions and other operating balance sheet items.

The cash flows from operating activities in the fiscal year just past totaled 96,347 thousand euros (prior year 100,102 thousand euros). The changes compared to the previous year were mainly attributable to increased payments for the build-up of working capital which were not fully offset by the improved operating result.

The cash flows from investing activities were minus 42,164 thousand euros (prior year minus 71,339 thousand euros) and were characterized in particular by payments for investments in property, plant and equipment in the sum of 30,340 thousand euros (prior year 25,681 thousand euros) of which, 7,348 thousand euros (prior year 7,735 thousand euros) were attributable to the construction of the new Technology Campus at the US site in Rochester Hills, Michigan. Further information on the investments is provided in the section Earnings, Financial and Asset Position in the Management Report from page 85.

In addition, the cash flows for investing activities included net payments for current cash deposits in the sum of 14,460 thousand euros (prior year 49,746 thousand euros). Corporate acquisitions in this fiscal year led to payments in the sum of 8,912 thousand euros for Five Lakes Automation and 4,981 thousand euros for ESSA Technology. Receipts arising from the transfer of a minority stake held by Jenoptik to a buyer, had a positive effect on the cash flows from investing activities in the sum of 16,685 thousand euros. For details related to the acquisition see section Entities acquired and sold from page 138. Further information on the disposal of the minority investment are included in section Investment income from page 150.

Cash flows from financing activities amounted to minus 12.909 thousand euros (prior year minus 20,728 thousand euros). The cash outflows arising from the dividends paid increased compared with 2016 as a result of the increased dividend payment of 0.25 euros per share (prior year 0.22 euros per share). The proceeds from issuing bonds and loans and the take-up of credit in the reporting year mainly included the cash inflows arising from the financing taken up for the construction of the new Technology Campus at the US site in Rochester Hills, Michigan. In addition, payments in the sum of 339 thousand euros for the acquisition of additional shares in JENOPTIK Holdings UK Ltd. when exercising some of the existing put options, had a minimal effect on the cash flows from financing activities. The change in the group financing included payments from or to affiliated non-consolidated companies and investments.

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 at 1/1/2017	Cash-effective change	Foreign currency exchange effects	Addition	Change in the fair value	Change in maturity	Balance at 31/12
Non-current financial debt	120,479 (113,243)	413 (6,615)	−966 (437)	723 (0)	222 (211)	−12,298 (−25)	108,573 (120,479)
Non-current liabilities to banks	120,434 (113,173)	475 (6,615)	−961 (436)	0 (0)	222 (211)	−12,287 (0)	107,883 (120,434)
Non-current liabilities arising from finance leases	45 (70)	−62 (0)	−5 (1)	723 (0)	0 (0)	−11 (−25)	690 (45)
Current financial debt	4,129 (14,850)	3,181 (−10,654)	−454 (−104)	182 (0)	0 (11)	12,298 (25)	19,337 (4,129)
Current liabilities to banks	4,088 (14,802)	3,236 (−10,620)	−454 (−105)	0 (0)	0 (11)	12,287 (0)	19,157 (4,088)
Current liabilities arising from finance leases	41 (48)	−54 (−34)	0 (1)	182 (0)	0 (0)	11 (25)	180 (41)
Total	**124,608 (128,093)**	**3,595 (−4,039)**	**−1,420 (332)**	**905 (0)**	**222 (222)**	**0 (0)**	**127,910 (124,608)**

Prior year figures are in parentheses.

Information regarding the allocation of free cash flows to the segments is provided in the Segment Report from page 175.

The total amounts for cash flows from operating, investing and financing activities of the proportionately consolidated joint operation are of minor significance for Jenoptik.

Additional information on the consolidated statement of cash flows is provided in the Group Management Report in the section Financial Position.

7 Disclosures on Segment Reporting

The segments are shown in accordance with the regulations laid down in IFRS 8 "Operating Segments".

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.

Since 2016, Jenoptik has been reporting on the Optics & Life Science, Mobility as well as Defense & Civil Systems segments. More information on the organizational structure of the Jenoptik Group is provided in the Combined Management Report in the section General Group Information from page 66.

The Optics & Life Science segment pools the activities in the Healthcare & Industry and Optical Systems businesses. In this field Jenoptik is one the few development and production partners worldwide for optical and micro-optic systems and precision components used in the semiconductor equipment industry, in information and communication technologies and for security and defense technology. In addition, the segment develops and manufactures specific system and application solutions for customers worldwide in the medical technology and life sciences sectors. It also offers industry high-performance opto-electronic components and modules as well as integrated solutions for laser, automotive and lighting applications.

The Mobility segment pools the activities in the automotive and traffic safety markets. Mobility and infrastructure are closely interlinked key issues of the future. The components and system solutions of this segment increase the efficiency of products and production processes in the automotive market. In addition, the traffic flows in the global economic centers are daily becoming more complex. The solutions provided by the segment ensure that traffic infrastructure in the future will not only remain manageable but also become safer.

The Defense & Civil Systems segment develops, manufactures and distributes mechatronic and sensor products for civil and military markets. Its portfolio ranges from individual assemblies for customers to integrate in their systems through to turnkey solutions and final products.

The activities of the holding company, the Shared Service Center and real estate management are shown together under Other.

The "Consolidation" column comprises the business relationships to be consolidated between the segments as well as the required reconciliations.

The business relationships between the entities of the Jenoptik Group segments are fundamentally based on prices that are also agreed with third parties.

Revenue in excess of 10% of the total revenue of the Jenoptik Group was generated with one customer of the Optics & Life Science segment (80,685 thousand euros). There were no other customer relationships with individual customers whose share of revenue is significant when measured against group revenue.

The analysis of revenue by region is conducted according to the country in which the customer has its legal seat.

7.1 Segment Report

in thousand euros	Optics & Life Science	Mobility	Defense & Civil Systems	Other	Consolidation	Group
Revenue	259,379 (221,546)	270,072 (247,661)	219,319 (218,307)	36,454 (36,572)	−37,296 (−39,318)	747,929 (684,769)
thereof intragroup revenue	4,298 (6,572)	48 (87)	164 (415)	32,787 (32,244)	−37,296 (−39,318)	0 (0)
thereof external revenue	255,082 (214,974)	270,024 (247,574)	219,155 (217,892)	3,667 (4,329)	0 (0)	747,929 (684,769)
Germany	50,109 (41,094)	75,406 (65,056)	93,700 (116,157)	3,414 (4,188)	0 (0)	222,629 (226,495)
Europe	97,093 (72,552)	67,822 (69,378)	47,337 (55,828)	0 (1)	0 (0)	212,252 (197,760)
thereof Great Britain	3,013 (3,789)	24,605 (22,219)	8,373 (11,408)	0 (0)	0 (0)	35,991 (37,416)
thereof Netherlands	81,173 (56,649)	3,355 (3,527)	2,847 (2,439)	0 (0)	0 (0)	87,375 (62,615)
America	48,161 (46,036)	65,535 (56,795)	59,927 (32,361)	2 (56)	0 (0)	173,625 (135,248)
thereof USA	46,815 (43,431)	49,728 (39,712)	58,558 (31,688)	0 (53)	0 (0)	155,100 (114,884)
Middle East/Africa	12,048 (13,085)	6,257 (9,022)	9,812 (2,991)	0 (0)	0 (0)	28,117 (25,098)
Asia/Pacific	47,671 (42,207)	55,004 (47,323)	8,379 (10,556)	251 (83)	0 (0)	111,304 (100,169)
thereof China	9,507 (10,791)	28,414 (24,619)	808 (935)	0 (1)	0 (0)	38,729 (36,345)
thereof Singapore	21,217 (22,674)	548 (160)	478 (301)	104 (0)	0 (0)	22,347 (23,135)
EBITDA from continuing operations	58,704 (41,728)	27,875 (32,313)	23,849 (23,761)	−3,686 (−3,012)	2 (−120)	106,744 (94,671)
EBITDA from discontinued operations	0 (0)	0 (0)	0 (0)	200 (2,261)	0 (0)	200 (2,261)
EBIT from continuing operations	50,486 (33,404)	18,537 (24,448)	19,162 (19,109)	−10,349 (−10,635)	9 (−117)	77,844 (66,209)
EBIT from discontinued operations	0 (0)	0 (0)	0 (0)	200 (2,261)	0 (0)	200 (2,261)
Investment income	160 (−186)	−91 (710)	0 (0)	31,624 (−220)	−25,225 (0)	6,468 (303)
Research and development expenses	−13,449 (−14,345)	−16,391 (−20,260)	−12,577 (−7,359)	−713 (−546)	51 (212)	−43,078 (−42,298)
Free cash flow (before income taxes)	47,471 (34,585)	10,125 (14,528)	22,281 (33,546)	17,834 (−2,284)	−25,473 (1)	72,238 (80,376)
Working capital	55,808 (56,563)	68,915 (64,668)	96,179 (93,514)	−6,035 (−4,717)	−98 (−111)	214,769 (209,917)
Order intake	295,460 (236,615)	303,655 (267,371)	206,175 (231,566)	36,350 (36,463)	−38,738 (−38,256)	802,902 (733,759)
Frame contracts	11,128 (14,480)	30,150 (79,054)	46,334 (67,408)	0 (0)	0 (0)	87,612 (160,942)
Total assets	181,248 (190,624)	241,019 (225,286)	179,056 (176,851)	779,719 (718,487)	−491,916 (−498,198)	889,126 (813,051)
Total liabilities	53,913 (48,058)	183,062 (146,245)	125,838 (129,538)	174,647 (193,311)	−178,265 (180,479)	359,194 (−336,672)

in thousand euros	Optics & Life Science	Mobility	Defense & Civil Systems	Other	Consolidation	Group
Additions to intangible assets, property, plant and equipment and investment property	11,276 (5,947)	17,480 (13,850)	4,488 (4,129)	4,658 (3,545)	0 (–37)	37,902 (27,433)
Scheduled depreciation and amortization	–7,996 (–8,171)	–9,338 (–7,866)	–4,688 (–4,652)	–6,664 (–6,917)	7 (3)	–28,678 (–27,603)
Impairment losses	–248 (–153)	0 (0)	0 (0)	0 (–1,145)	0 (0)	–248 (–1,298)
Impairment reversals	26 (0)	0 (0)	0 (0)	0 (439)	0 (0)	26 (439)
Number of employees on average (without trainees)	1,097 (1,108)	1,259 (1,188)	837 (822)	307 (286)	0 (0)	3,500 (3,404)

EBITDA = Earnings before interest, taxes, depreciation and amortization
EBIT = Earnings before interest and taxes
Prior year figures are in parentheses.

7.2 Non-current Assets by Regions

in thousand euros	31/12/2017	31/12/2016
Group	290,597	273,678
Germany	194,752	197,389
Europe	45,520	43,894
thereof Great Britain	42,425	41,013
Americas	43,202	24,656
thereof USA	43,202	24,656
Asia / Pacific	7,123	7,739

Non-current assets 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 entities have their legal seat.

8 Other Disclosures

8.1 Financial Management

The aim of the Jenoptik's capital management is to maintain a strong capital base in order to retain the trust of the shareholders, creditors and markets as well as to ensure the sustained, successful development of the company. The Executive Board monitors in particular the equity ratio and the net debt as part of the regular management reporting. In the event of significant deteriorations in these parameters, alternative courses of action are worked out and the corresponding measures implemented.

8.2 Financial Instruments

General

Within the framework of its operating activities, the Jenoptik Group is exposed to credit, default, liquidity and market risks in the financial area. The market risks relate in particular to risks of fluctuations in interest rates and foreign currency exchange rates.

Detailed information on the risk management and control of risks is shown in the Management Report in section Risk and Opportunity Report (see page 108). Additional information on capital management disclosures is provided in the Economic Report in the chapter Financial Position (see page 91).

The risks described above impact on the financial assets and liabilities which are shown below.

Financial assets:

in thousand euros	Valuation category according to IAS 39 [1]	Carrying amounts 31/12/2017	Valuation in statement of financial position according to IAS 39 – Amortized acquisition costs	Valuation in statement of financial position according to IAS 39 – Fair value through other comprehensive income	Valuation in statement of financial position according to IAS 39 – Fair value through profit & loss	Valuation according to IAS 17
Financial investments						
Securities	LAR	64,169 (49,746)	64,169 (49,746)			
Shares in unconsolidated associates and investments	AFS	2,812 (16,598)		2,812 (16,598)		
Available-for-sale financial assets	AFS	867 (1,656)		867 (1,656)		
Loans granted	LAR	730 (1,294)	730 (1,294)			
Financial assets held to maturity	HTM	408 (280)	408 (280)			
Trade receivables	LAR	136,017 (131,745)	136,017 (131,745)			
Other financial assets						
Receivables from lease agreements	–	340 (845)				340 (845)
Derivatives with hedging relations						
Forward exchange transactions	–	2,962 (43)		2,962 (43)		
Derivatives without hedging relations						
Interest & currency swap	FVTPL	225 (210)			225 (210)	
Forward exchange transactions	FVTPL	1,778 (1,389)			1,778 (1,389)	
Miscellaneous financial assets	LAR	2,322 (1,862)	2,322 (1,862)			
Cash and cash equivalents	LAR	132,310 (91,961)	132,310 (91,961)			
Total		**344,937** **(297,628)**	**335,954** **(276,888)**	**6,640** **(18,297)**	**2,003** **(1,599)**	**340** **(845)**

Prior year figures are in parentheses.
[1] LAR = Loans and receivables
HTM = Held to maturity
AFS = Available for sale
FVTPL = Fair value through profit & loss

Financial liabilities:

in thousand euros	Valuation category according to IAS 39 [1]	Carrying amounts 31/12/2017	Valuation in statement of financial position according to IAS 39 – Amortized acquisition costs	Valuation in statement of financial position according to IAS 39 – Fair value through other comprehensive income	Valuation in statement of financial position according to IAS 39 – Fair value through profit & loss	Valuation according to IAS 17
Financial debt						
Liabilities to banks	FLAC	127,040 (124,521)	127,040 (124,521)			
Liabilities from finance lease agreements	–	871 (86)				871 (86)

in thousand euros	Valuation category according to IAS 39 [1]	Carrying amounts 31/12/2017	Valuation in statement of financial position according to IAS 39: Amortized acquisition costs	Fair value through other comprehensive income	Fair value through profit & loss	Valuation according to IAS 17
Trade payables	FLAC	61,657 (49,082)	61,657 (49,082)			
Other financial liabilities						
Contingent liabilities	FVTPL	3,128 (1,284)			3,128 (1,284)	
Derivatives with hedging relations						
Forward exchange transactions	–	486 (2,770)		486 (2,770)		
Derivatives without hedging relations						
Interest swap	FVTPL	182 (350)			182 (350)	
Forward exchange transactions	FVTPL	11 (217)			11 (217)	
Miscellaneous financial liabilities	FLAC	5,266 (4,506)	5,266 (4,506)			
Total		**198,642 (182,816)**	**193,963 (178,109)**	**486 (2,770)**	**3,322 (1,851)**	**871 (86)**

Prior year figures are in parentheses.
[1] FLAC = Financial liabilities at cost
FVTPL = Fair value through profit & loss

The classification of the fair values for the financial assets and liabilities is taken from the following overview:

in thousand euros	Carrying amounts 31/12/2017	Level 1	Level 2	Level 3
Available-for-sale financial assets	867 (1,656)	0 (1,295)	0 (0)	867 (361)
Derivatives with hedging relations (assets)	2,962 (43)	0 (0)	2,962 (43)	0 (0)
Derivatives without hedging relations (assets)	2,003 (1,599)	0 (0)	2,003 (1,599)	0 (0)
Contingent liabilities	3,128 (1,284)	0 (0)	0 (0)	3,128 (1,284)
Derivatives with hedging relations (liabilities)	486 (2,770)	0 (0)	2,486 (2,770)	0 (0)
Derivatives without hedging relations (liabilities)	194 (567)	0 (0)	194 (567)	0 (0)

Prior year figures are in parentheses.

Fair values which are 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.

Fair values of available-for-sale financial assets are determined on the basis of stock exchange prices (level 1), respectively, discounted cash flows (level 3).

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, Reuters. If an interpolation of market data is applied, this is done on a straight-line basis.

The fair values of contingent liabilities are determined by taking into account the anticipated payment outflows discounted as of the balance sheet date. The addition is the result of the conditional components of the purchase price agreed within the framework of the acquisition of Five Lakes Automation which were recognized as a liability at the fair value in the sum of 2,517 thousand euros. On grounds of materiality, the long-term amount in this figure was not discounted. The contingent liabilities also include the put option agreed with the vendors for the transfer of the remaining non-controlling interests within the framework of the acquisition of JENOPTIK Holdings UK (formerly: Vysionics Ltd.). The anticipated exercise price is 627 thousand euros. As of the balance sheet date, the anticipated cash outflows were revalued on the basis of the currently available information and the resulting adjustment of the liability recognized through profit or loss. As a result of the anticipated short-term maturity, the amount was not discounted.

Gains and losses from the level 1 available-for-sale financial assets were not recognized in equity during the reporting period (prior year 352 thousand euros). In the fiscal year 2017 reclassification was carried out from equity to profit or loss in the sum of 382 thousand euros (prior year minus 601 thousand euros).

The development of assets and liabilities allocated to level 3 is shown in the following table:

in thousand euros	Available-for-sale financial assets	Contingent liabilities
Balance at 1/1/2017	**361**	**1,284**
Additions	351	2,517
Disposals	0	−339
Gains and losses recognized in operating result	0	−45
Gains and losses recognized in financial result	155	−273
Balance at 31/12/2017	**867**	**3,128**

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 its 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, taken into account by creating bad debt allowances. In addition, the Jenoptik Group is exposed to credit and default risks to cash and cash equivalents as well as securities. Account is taken of these risks through constant monitoring of the creditworthiness of our business partners based on the analysis of credit ratings, as well as through spreading the cash deposits between several banks within defined limits.

The maximum default risk corresponds to the carrying amount of the financial assets as of the reporting date in the sum of 344,937 thousand euros (prior year 297,628 thousand euros). For further explanations we refer to Note 8.2 from page 177.

Impairment losses were recorded in the fiscal year for the following financial assets:

in thousand euros	2017	2016
Financial investments	763	2,438
Trade Receivables	3,308	2,289
Other financial assets	7	0
Total	**4,077**	**4,727**

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 as well as our financial flexibility at all times, the lines of credit and level of utilization as well as the net cash and cash equivalents are planned by means of a five-year financial plan as well as a monthly, rolling 12 week liquidity forecast. The liquidity risk is mitigated by effective cash and working capital management as well as through an unused guaranteed framework line of credit in the sum of 232,220 thousand euros (prior year 231,488 thousand euros).

As of the balance sheet date, the Group has stable long-term financing and solid liquidity reserves. These comprise a syndicated loan in the sum of 230,000 thousand euros, debenture loans in the sum of 114,000 thousand euros as well as net cash and cash equivalents in the sum of 132,310 TEUR (prior year 91,961 thousand euros) and securities in the sum of 64,169 thousand euros (prior year 49,746 thousand euros). The second and final contractually fixed extension option of the syndicated loan was exercised in 2017 and the term extended by one year to March 2022. A tranche of the debenture loans is due for repayment in October 2018 in the sum of 11,000 thousand euros. Further repayments are to be made in 2020 resp. 2022.

	Interest rates	Carrying amounts	Cash outflows			
in thousand euros	(range in %)	31/12/2017	Total	Up to 1 year	1 to 5 years	More than 5 years
Variable interest-bearing liabilities to banks	0.8 – 6.12 (0.8 – 4.71)	33,002 (26,457)	34,049 (30,536)	6,860 (3,145)	27,189 (13,320)	0 (14,071)
Fixed interest-bearing liabilities to banks	1.0 – 4.4 (1.0 – 4.4)	94,038 (98,064)	100,416 (101,636)	14,795 (2,379)	85,621 (43,193)	0 (56,064)
Fixed interest-bearing liabilities from lease agreements	0.9 – 7.6 (0.9 – 7.6)	871 (86)	871 (86)	180 (41)	690 (45)	0 (0)
Total		**127,910** **(124,608)**	**135,336** **(132,258)**	**21,836** **(5,565)**	**113,500** **(56,558)**	**0** **(70,135)**

Prior year figures are in parentheses.

The cash outflows for a period of up to one year essentially include the interest payments and repayments on existing debenture loans, interest payments and repayments arising from the real estate financing newly concluded in the USA in 2016 as well as planned outflows arising from the use of short-term lines of credit for the operational business in China.

The cash outflows in the time frame of between one to five years include the repayment of the five and seven-year debenture loans.

Further details are provided under Note 5.22 on page 171.

Interest Rate Fluctuation Risk

The Jenoptik Group is fundamentally exposed to the risks of changes in interest rates due to fluctuations in market interest rates for all interest-bearing financial assets and liabilities. In the fiscal year 2017 this mainly affected debenture loans issued in the sum of 114,000 thousand euros (prior year 114,000 thousand euros) as well as securities in the sum of 64,169 thousand euros (prior year 49,746 thousand euros) and the major part of the cash and cash equivalents in the sum of 132,310 thousand euros (prior year 91,961 thousand euros) at the respective balance sheet date.

	Carrying amounts	
in thousand euros	31/12/2017	31/12/2016
Interest-bearing financial assets	87,368	82,805
Variable interest	3,946	5,109
Fixed interest	83,421	77,695
Interest-bearing financial liabilities	127,910	124,608
Variable interest	33,002	26,457
Fixed interest	94,909	98,151

The mathematically determined gains and losses arising from a change in the market interest rate as of December 31, 2017 within a bandwidth of 100 basis points are shown in the following table:

in thousand euros	31/12/2017	31/12/2016
Increase by 100 basis points		
Interest-bearing financial assets	873	828
Interest-bearing financial liabilities	– 1,279	– 1,247
Effect on earnings before tax	**– 406**	**– 419**
Reduction by 100 basis points		
Interest-bearing financial assets	– 873	– 828
Interest-bearing financial liabilities	1,279	1,247
Effect on earnings before tax	**406**	**419**

Within the context of the interest rate risk control, Jenoptik deploys various interest rate hedging instruments, e.g. interest rate swaps, caps and floors as well as combined interest and currency swaps. The structure of the derivatives concluded for hedging against the risk of changing interest rates is shown below:

Interest swap	
Nominal amount	EUR 8,000 thousand
Term	April 28, 2012 to October 28, 2018
Fixed interest rate	1.985 percent p. a.
Variable interest rate	6-month Euribor

Interest and currency swap	
Nominal amount	CNY 17,980 thousand
Term	March 12, 2015 to March 12, 2025
Fixed interest rate	5.10 percent p. a.
Variable interest rate	6-month Euribor

As of the balance sheet date, there was one interest rate swap with a nominal volume of 8,000 thousand euros remaining from the hedging of debenture loans redeemed in 2015. As a result of the replacement of the underlying financing, there is no longer any direct reference to an underlying transaction for this interest rate derivative. The market value of this swap in the sum of plus 168 thousand euros was recorded through profit or loss in the statement of income.

In March 2015 a combined interest and currency swap in the amount of CNY 17,980 thousand with a term of ten years was concluded to hedge an internal group loan to finance real estate in Shanghai (China). The change in its market value of plus 15 thousand euros was recorded through profit or loss in the statement of income.

The interest rate hedging instruments are expected to give rise to the following outgoing payments:

in thousand euros	Up to 1 year	1 to 5 years	More than 5 years	Total
Interest swaps	183 (174)	0 (86)	0 (0)	183 (260)
Interest and currency swap	121 (139)	448 (556)	259 (525)	827 (1,220)

Prior year figures are in parentheses.

Foreign Currency Exchange Risk

Foreign currency risks are divided into two types: Conversion risk and transaction risk.

The conversion risk arises from the fluctuation in financial assets and liabilities denominated in foreign currencies caused by changes in foreign currency exchange rates used for the translation in the reporting currency. Since this is not associated with any cash flows that can be hedged, no hedging is currently carried out.

The transaction risk is the result of the fluctuation of cash flows in foreign currencies caused by changes in currency exchange rates. Derivative financial instruments, primarily currency forward transactions and currency swaps, are used to hedge this risk.

Hedging is provided for significant cash flows in foreign currencies arising from its operational business (in particular revenue and material purchases). Contractually agreed cash flows are hedged 1:1 via so-called micro-hedges. Planned future cash flows from pending transactions and transactions with a high probability of being realized are hedged within the framework of the anticipatory hedging.

JENOPTIK AG also hedges the anticipated cash flows from intra-group loans in foreign currencies, mainly JPY and GBP, using derivative financial instruments.

As of the balance sheet date there were exclusively forward exchange transactions and currency swaps with a nominal value of 118,621 thousand euros (prior year 81,536 thousand euros). A so-called cash flow hedge relationship with the respective underlying transaction was documented for the vast majority of these transactions. Where these are proven effective, their changes do not have to be recorded through profit or loss. The critical terms match method is used to measure the prospective effectiveness and the dollar offset method for the retrospective effectiveness.

Foreign exchange forward transactions and currency swaps are grouped according to sales and purchases in foreign currencies (against the euro respectively) as follows:

in thousand euros	31/12/2017	31/12/2016
USD sale	87,893	59,556
USD purchase	5,776	122
GBP sale	22,498	21,010
GBP purchase	0	37
CNY sale	103	338
JPY sale	983	473
JPY purchase	466	0
AUD sale	902	0
Total foreign currency sales	**112,379**	**81,377**
Total foreign currency purchases	**6,242**	**159**

These currency forward transactions give rise to the following market values:

in thousand euros	31/12/2017	31/12/2016
Positive market values		
Derivatives with hedging relations		
non-current	50	2
current	2,912	41
Derivatives without hedging relations		
non-current	1,907	1,374
current	97	16
Total positive market values	**4,965**	**1,432**
Negative market values		
Derivatives with hedging relations		
non-current	0	1,570
current	486	1,201
Derivatives without hedging relations		
non-current	3	67
current	191	150
Total negative market values	**680**	**2,987**

The market values for hedging transactions for intra-group loans are included in the derivatives without hedges as the underlying transaction comprising intra-group receivables and liabilities is consolidated. The positive market values of these derivatives as of the balance sheet date amount to 1,778 thousand euros (prior year 1,383 thousand euros), whilst the negative market values total 11 thousand euros (prior year 169 thousand euros). The overall change led to earnings of 553 thousand euros (prior year 1,214 thousand euros) which were recognized in the financial result through profit or loss.

Gains and losses from cash flow hedges amounting to 2,204 thousand euros (prior year minus 2,252 thousand euros) were recognized in equity outside of profit or loss – a reclassification in the sum of minus 711 thousand euros (prior year minus 570 thousand euros) was carried out from equity to profit or loss. This type of reclassification is normally associated with the recognition of the underlying transaction (e.g. recognition of revenue and booking of the corresponding receivable on billing) through profit or loss so that the targeted balancing effect of concluding the hedge transaction is achieved in the statement of income.

The foreign currency hedging transactions hedge against foreign currency risks in the sum of 88,797 thousand euros with a time frame up to the end of 2018. Foreign currency risks in the sum of 28,907 thousand euros are hedged with a time frame up to the end of 2020.

The main foreign exchange transactions of the Jenoptik Group involve US dollars. The table shows the net risk item based on US dollars:

in thousand euros	31/12/2017	31/12/2016
Financial assets	20,071	29,068
Financial liabilities	2,005	2,755
Foreign currency exchange rate risks resulting from items of the statement of financial position	**18,066**	**26,313**
Foreign currency exchange rate risks resulting from pending transactions	68,594	44,097
Transactions related to foreign currency item	**86,660**	**70,410**
Items effectively hedged by derivatives	82,117	59,434
Net risk item	**4,543**	**10,976**

As of the balance sheet date there was a net risk item based on US dollars in the sum of 4,543 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 exchange rate 31/12/2017	1.1993 (1.0541)	
Increase by 5 percent	1.2593 (1.1068)	216 (523)
Decrease by 5 percent	1.1393 (1.0014)	−239 (−578)
Increase by 10 percent	1.3192 (1.1595)	413 (998)
Decrease by 10 percent	1.0794 (0.9487)	−505 (−1,220)

Prior year figures are in parentheses.

8.3 Contingent Liabilities

Guarantees as of December 31, 2017 total 4,750 thousand euros (prior year 5,556 thousand euros). This results from a warranty bond for a non-consolidated associate in connection with a construction project. Insofar as a claim from the bond issued is anticipated, corresponding provisions were set aside.

There are no further guarantee obligations to third parties.

8.4 Other Financial Obligations

The financial obligations resulting from rental contracts or lease agreements are shown in Note 5.4 from page 158.

In addition to order commitments for intangible assets and property, plant and equipment in the sum of 8,510 thousand euros (prior year 2,201 thousand euros) there are other financial liabilities in the sum of 102,149 thousand euros (prior year 73,552 thousand euros), in particular for order commitments for inventories in the sum of 65,996 thousand euros (prior year 61,603 thousand euros).

Loan commitments to unconsolidated associates had not been used in the sum of 1,147 thousand euros (prior year 118 thousand euros).

8.5 Legal Disputes

JENOPTIK AG and its group entities are involved in court or arbitration proceedings. Provisions for litigation risks, respectively litigation expenses, were set aside in the appropriate amounts in order to meet any possible financial burdens resulting from any court decisions or arbitration proceedings.

8.6 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 of JENOPTIK AG is Thüringer Industriebeteiligungs GmbH & Co. KG, Erfurt, which directly holds in total 11 percent of the voting rights and thus does not have control over JENOPTIK AG.

Members of the Executive Board and of the Supervisory Board of JENOPTIK AG also qualify as related parties. In the 2017 fiscal year no exchange of goods or of services was transacted between the entity and members of these two bodies.

The breakdown of the total remuneration of the members of the management in key positions (Executive Board and Supervisory Board) is shown in the following table.

in thousand euros	2017	2016
Short-term benefits	3,126	3,404
Post-employment benefits	397	400
Termination benefits	0	1,762
Share-based payments	1,042	1,460
Total	**4,565**	**7,026**

Detailed information on the disclosure of the remuneration of the members of the Executive Board and the Supervisory Board as required by IAS 24.9 have been published in the Remuneration Report as part of the Combined Management Report in the section Corporate Governance on pages 45 ff. as well as in the section Required and Supplementary Disclosures under HGB in the Notes on pages 187 and 190.

The following table shows the composition of the business relationships with non-consolidated entities and with the joint operation considered to be other related parties.

		Thereof with	
in thousand euros	Total	Unconsolidated entities	Joint operation
Revenue	3,500 (2,727)	3,121 (2,330)	379 (397)
Purchased services	1,473 (3,608)	1,064 (3,039)	410 (569)
Receivables from operations	179 (896)	175 (852)	4 (44)
Liabilities from operations	2,987 (2,166)	107 (600)	2,881 (1,566)
Loans	730 (1,294)	730 (1,294)	0 (0)

Prior year figures are in parentheses.

In the fiscal year, impairment losses were recorded in the sum of 2 thousand euros (prior year 226 thousand euros) on receivables due from non-consolidated entities. This was offset by reversals of impairment losses in the sum of 26 thousand euros (prior year 896 thousand euros).

In addition, there are group guarantees to related parties in the sum of 4,750 thousand euros (prior year 5,556 thousand euros). For more detailed explanations we refer to the section "Contingent Liabilities" from page 184.

9 Events after the Balance Sheet Date

The Executive Board of JENOPTIK AG approved the forwarding of these consolidated financial statements to the Supervisory Board on March 8, 2018. The Supervisory Board has the task of examining and approving the consolidated financial statements at its meeting on March 21, 2018.

Dividends. 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 2017 fiscal year, the accumulated profit of JENOPTIK AG totaled 129,901,622.70 euros, comprising net profit for the 2017 fiscal year in the amount of 70,403,527.32 euros plus retained profits of 59,498,095.38 euros.

On the basis of the good annual result, the Executive Board recommends that the Supervisory Board proposes to the 2018 Annual General Meeting a 20 percent higher dividend of 0.30 euros per qualifying no-par value share (prior year: 0.25 euros). This means that an amount of 17,171,434.50 euros will be distributed. From the remaining accumulated profit of JENOPTIK AG for fiscal year 2017 an amount of 72,730,188.20 euros is to be allocated to revenue reserves, and an amount of 40,000,000.00 euros to be carried forward.

No further events of significance occurred after December 31, 2017.

10 Required Disclosures 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 Group Management Report are in conformity with the Directive on Consolidated Accounts (2013/34/EU). In order to achieve comparability with a set of consolidated financial statements prepared in accordance with the commercial regulations of the HGB, all disclosures and explanations are published, that are required under the HGB and are above and beyond those under IFRS.

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 Advanced Systems GmbH, Wedel
- JENOPTIK Automatisierungstechnik GmbH, Jena
- JENOPTIK Diode Lab GmbH, Berlin
- JENOPTIK Industrial Metrology Germany GmbH, Villingen-Schwenningen

- JENOPTIK Laser GmbH, Jena
- JENOPTIK Optical Systems GmbH, Jena
- JENOPTIK Power Systems GmbH, Altenstadt
- JENOPTIK Polymer Systems GmbH, Triptis
- JENOPTIK Robot GmbH, Monheim am Rhein
- JENOPTIK SSC GmbH, Jena
- SAALEAUE Immobilien Verwaltungsgesellschaft mbH & Co. Vermietungs KG, in liquidation, Pullach im Isartal.

10.2 Number of Employees

The breakdown of the average number of employees is presented in the following table:

	2017	2016
Employees	3,500	3,404
Trainees	108	116
Total	**3,608**	**3,520**

Of whom in the fiscal year 2017 an average of 35 (prior year 32) employees were employed in the proportionately consolidated entity.

10.3 Cost of Materials and Personnel Expenses

in thousand euros	2017	2016
Cost of materials		
Expenditures for raw materials, consumables and merchandise	234,158	220,775
Expenditures for services purchased	75,185	63,798
Total	**309,343**	**284,574**
Personnel expenses		
Wages and salaries	228,722	217,721
Social security, pension contributions and retirement benefits	29,554	28,406
Total	**258,275**	**246,127**

10.4 Financial Statement Auditor Fees

The fees for the services received rendered by our auditor, as well as by those affiliates and network companies, amount to:

in thousand euros	2017	2015
Financial statement audit services	958	732
Fees for other services	37	46
Other attestation services	23	0
Tax consulting services	7	3
Total	**1,025**	**780**

The fees for financial statement audit services mainly relate to expenses for the audit of the consolidated financial statements of the Jenoptik Group as well as the statutory annual financial statements of the subsidiaries and joint operations included in the consolidated financial statements. Furthermore, performed services in connection with enforcement procedures are included.

Other services performed by the auditor concern permissible advisory services related to issues of accounting according IFRS 15. Other attestation services were conducted within the framework of written confirmations of financial covenants, certifications according to the Renewable Energy Act as well as according to the European Market Infrastructure Regulation (EMIR).

Of the total expenses,financial statement services in the sum of 821 thousand euros (prior year 629 thousand euros), other services in the sum of 37 thousand euros (prior year 46 thousand euros) and other confirmation services in the sum of 23 thousand euros (prior year 0 thousand euros) were attributable to the auditors of the consolidated financial statements Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Germany.

11 Corporate Governance

11.1 German Corporate Governance Code

In December 2017, 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 February 7, 2017. The declaration is reproduced in the Corporate Governance Report from page 36 and has been made permanently available to shareholders on the JENOPTIK AG website under 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).

11.2 Executive Board

The following persons were appointed members of the Executive Board in the 2017 fiscal year:

	Other mandates with:
Dr. Stefan Traeger (since 1/5/2017) President & CEO of JENOPTIK AG	JENOPTIK Asia-Pacific Pte. Ltd. (GI; CCB member) JENOPTIK North America, Inc. (GI; CCB member)
Dr. Michael Mertin (up to 30/4/2017) President & CEO of JENOPTIK AG	JENOPTIK Asia-Pacific Pte. Ltd. (GI; CCB member)
Hans-Dieter Schumacher, Member of the Executive Board of JENOPTIK AG	None

Abbreviations: CCB – comparable controlling body, GI – group internal appointment

The following overview shows the remuneration of the Executive Board for the 2017 fiscal year. Along with direct and indirect remuneration components earned, this overview includes the fair value of share-based remuneration instruments (LTI or performance shares). The system of performance-related remuneration for Executive Board was revised with Dr. Stefan Traeger taking up his post with effect from May 1, 2017 and for Hans-Dieter Schumacher with effect from January 1, 2018 by the Supervisory Board with the involvement of an independent external remuneration consultant, with an identical structure for both members of the Executive Board. A detailed description of the new remuneration system can be found in the Remuneration Report on pages 45 of the Combined Management Report in the chapter “Corporate Governance”.

Fringe benefits consist of contributions to disability and accident insurances (only for Dr. Mertin) as well as to accident insurance and the provision of company cars.

Provisions in the sum of 892 thousand euros set to aside for the benefits expected to be paid in 2018 due the end of Dr. Mertin’s term of office on the Executive Board (consisting of bridging payments and the continuation of payment of pension contributions).

Retirement benefits were paid to former Executive Board members in the sum of 181 thousand euros (prior year 210 thousand euros). The pension provisions for former Executive Board members totaled 3,423 thousand euros as of the balance sheet date (prior year 3,691 thousand euros). The expenses recorded for these existing provisions in the 2017 fiscal year comprised interest costs in the sum of 51 thousand euros (prior year 80 thousand euros).

In the 2017 fiscal year – 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.

	Dr. Stefan Traeger (President & CEO since May 1, 2017)		Hans-Dieter Schumacher (Member of Executive Board)		Dr. Michael Mertin (President & CEO up to April 30, 2017)	
in thousand euros	2017	2016	2017	2016	2017	2016
Fixed remuneration	400.0	0	400.0	400.0	300.0	600.0
Variable remuneration	200.0	0	235.3	256.0	648.2	1,330.2
LTI/performance shares of fiscal year – measured at issue price	266.7	0	235.3	256.0	0	0
Granted for protection of existing shares	n.a.	0	9.9	4.7	11.8	61.3
Retirement benefits	116.7	0	160.0	160.0	120.0	240.0
Fringe benefits	9.8	0	13.8	13.8	23.4	46.7
Termination benefits	n.a.	n.a.	n.a.	n.a.	891.8	0
Total remuneration	**993.1**	**0**	**1,054.4**	**1,090.6**	**1,995.1**	**2,278.3**

11.3 Supervisory Board

The following persons were appointed members of the Supervisory Board in the 2017 fiscal year:

	Member of:	Additional positions at
Matthias Wierlacher (Chair) Chair of the Board of the Thüringer Aufbaubank Appointed in 2012, Chair since July 2015	• Personnel Committee (Chair) • Nomination Committee (Chair) • Mediation Committee (Chair)	• Mittelständische Beteiligungsgesellschaft Thüringen mbH (SB member) • bm-t beteiligungsmanagement thüringen GmbH (GI, SB Chair) • ThüringenForst – Public Body (SB member)
Michael Ebenau[1] (Deputy Chair) Secretary of the IG Metall Union, District Management Mitte Appointed in 2007	• Personnel Committee • Mediation Committee	• Samag Saalfelder Werkzeugmaschinen GmbH (CCB member)
Astrid Biesterfeldt[1] Head of Product Management and Deputy Business Unit Director at JENOPTIK Advanced Systems GmbH, Business Unit Energy & Drive Appointed in 2014	• Audit Committee (since June 7, 2017)	None
Evert Dudok Executive Vice President CIS Airbus Defence & Space Appointed in 2015		• Dornier Consulting International GmbH (GI, SB Chair, up to January 2018) • EURASSPACE Gesellschaft für Raumfahrttechnik mbH (GI, SB member)
Elke Eckstein (since June 7, 2017) Executive Board member of Weidmüller Gruppe AG Appointed in 2017		• Karl Mayer Textilmaschinenfabrik GmbH (CCB member) • Enics AG, Switzerland (CCB member, since May 1, 2017) • Weidmüller S.A., Spain (GI, CCB) • Weidmüller & IZ, proizvodnja prenapetostnih zascit, d.o.o., Slovenia (GI, CCB member) • Weidmüller Interface (Shanghai) Co., Ltd., China (GI, CCB member) • Weidmüller Interface (Suzhou) Co., Ltd., China (GI, CCB Chair) • Weidmüller Interconnections, Inc., USA (GI, CCB member)
Brigitte Ederer (up to June 7, 2017) Chair of the Supervisory Board of the Österreichische Bundesbahnen-Holding Aktiengesellschaft [Austrian Railways Holding Company] Appointed in 2012		• Boehringer Ingelheim RCV GmbH, Austria (SB member) • Infineon Technologies Austria AG, Austria (SB member) • Österreichische Bundesbahnen-Holding Aktiengesellschaft (SB Chair) • Österreichische Bundesbahn Personenverkehr AG, Austria (SB member) • ÖBB Infrastruktur AG, Austria (SB Chair) • Rail Cargo Austria AG, Austria (SB member) • Schoeller –Bleckmann Oilfield Equipment AG, Austria (SB member) • Wien Holding GmbH, Austria (CCB Chair, up to May 2017)
Thomas Klippstein[1] Chair of the Group works council of Jenoptik Appointed in 1996	• Personnel Committee • Audit Committee	None

	Member of:	Additional positions at
Dörthe Knips[1)] (since June 7, 2017) Work scheduler at JENOPTIK Laser GmbH Appointed in 2017		None
Dieter Kröhn[1)] Production planner at JENOPTIK Advanced Systems GmbH Appointed October 1999 to June 2007, reappointed since December 2010	• Audit Committee (up to June 7, 2017) • Mediation Committee (since June 7, 2017)	None
Sabine Lötzsch[1)] (by June 7, 2017) Master's in Mathematics, Team Leader IT Service Desk of JENOPTIK SSC GmbH Appointed in 2012		None
Doreen Nowotne Independent corporate management consultant Appointed in 2015	• Audit Committee (Deputy Chair)	• Brenntag AG (SB member) • Lufthansa Technik AG (SB member since October 1, 2017)
Heinrich Reimitz Member of the Management of HPS Holding GmbH, Austria Appointed in 2008	• Audit Committee (Chair) • Personnel Committee, • Nomination Committee	• Ühinenud Farmid AS, Estonia (CCB member)
Stefan Schaumburg[1)] Head of the Functional Department and Secretary of the Management Board of the IG Metall Union, Frankfurt Appointed in 2012	• Personnel Committee • Mediation Committee (up to June 7, 2017)	• GKN Driveline International GmbH (Dep. SB Chair)
Prof. Dr. rer. nat. habil., Dipl.-Physiker Andreas Tünnermann Director of the Institute for Applied Physics and University Lecturer in Applied Physics at the Friedrich-Schiller University and Head of the Institute for Applied Optics and Precision Mechanics of the Fraunhofer Institute, Jena Appointed in 2007	• Personnel Committee • Mediation Committee • Nomination Committee	• Docter Optics SE (CCB member)

[1)] Employee representative

Abbreviations: SB – Supervisory Board, CCB – Comparable controlling body, GI – Group internal appointment, Dep. – Deputy

Supervisory Board Remuneration

For the 2017 fiscal year the members of the Supervisory Board received the following remuneration in total:

		Thereof			
in thousand euros	Total remuneration	Fixed annual remuneration 2017	Variable remuneration 2017	Meeting fees (plus reimbursement of expenses)	Value added tax [1)]
Matthias Wierlacher (Chair)	131.7	98.4	20.6	12.7	21.0
Michael Ebenau (Deputy Chair)	85.1	61.9	15.5	7.7	13.6
Astrid Biesterfeldt	64.9	44.0	10.3	10.6	10.4
Evert Dudok	54.7	37.3	10.3	7.1	8.7
Elke Eckstein (since June 7, 2017)	31.9	27.0	0	4.9	5.1
Brigitte Ederer (up to June 7, 2017)	19.4	8.7	8.7	2.0	–
Thomas Klippstein	82.1	55.1	10.3	16.7	13.1
Dörthe Knips (since June 7, 2017)	31.8	27.0	0	4.8	5.1
Dieter Kröhn	63.5	42.4	10.3	10.8	10.1
Sabine Lötzsch (up to June 7, 2017)	23.6	10.3	10.3	3.0	3.8
Doreen Nowotne	82.6	55.1	10.3	17.2	13.2
Heinrich Reimitz	88.7	61.3	8.7	18.7	–
Stefan Schaumburg	64.7	43.2	10.3	11.2	10.3
Prof. Dr. rer. nat. habil. Andreas Tünnermann	71.0	49.2	10.3	11.5	11.3
Total	**895.7**	**620.9**	**135.9**	**138.9**	**125.7**

[1)] Included in fixed remuneration, variable remuneration and meeting allowances; Mrs. Brigitte Ederer and Mr. Mag. Heinrich Reimitz have a limited tax liability in Germany due to their place of residence being abroad; since their remuneration is subject to a withholding tax in accordance with § 50 a (1) No. 4 of the German Income Tax Act, no value added tax was incurred.

For a more detailed explanation of the Supervisory Board remuneration system we refer to the chapter on Corporate Governance in the Remuneration Report which forms part of the Combined Management Report.

12 List of Shareholdings of the Jenoptik Group as at December 31, 2017 in accordance with § 313 (2) of the German Commercial Code (HGB)

No.	Name and legal seat of the company	Shareholding of Jenoptik or shareholder directly in percent	Equity 31/12/2017 in thousand euros	Earnings for 2017 in thousand euros
	1.1. Consolidated associates – direct shareholdings			
1	JENOPTIK Robot GmbH, Monheim am Rhein, Germany	100		
2	JENOPTIK Industrial Metrology Germany GmbH, Villingen-Schwenningen, Germany	100		
3	JENOPTIK Automatisierungstechnik GmbH, Jena, Germany	100		
4	JENOPTIK Advanced Systems GmbH, Wedel, Germany	100		
5	JENOPTIK Optical Systems GmbH, Jena, Germany	100		
6	JENOPTIK Laser GmbH, Jena, Germany	100		
7	JENOPTIK Polymer Systems GmbH, Triptis, Germany	100		
8	SAALEAUE Immobilien Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Pullach im Isartal, Germany, i.l. [7)]	100		
9	JENOPTIK SSC GmbH, Jena, Germany	100		
10	JENOPTIK North America, Inc., Jupiter (FL), USA	100		
11	JENOPTIK Asia-Pacific Pte. Ltd., Singapore, Singapore	100		
	– indirect shareholdings			
12	JENOPTIK Traffic Solutions Switzerland AG, Uster, Switzerland	100		
13	JENOPTIK ROBOT MALAYSIA SDN BHD, Kuala Lumpur, Malaysia	100		
14	ROBOT Nederland B.V., Riel, Netherlands	100		
15	JENOPTIK Holdings UK Ltd., Milton Keynes, Great Britain	96.5		
16	Vysionics ITS Holdings Ltd., Milton Keynes, Great Britain	100 [1)]		
17	JENOPTIK Traffic Solutions UK Ltd., Camberley, Great Britain	100 [1)]		
18	Computer Recognition Systems Ltd., Milton Keynes, Great Britain	100 [1)]		
19	Domestic and Commercial Systems Ltd., Saltash, Great Britain	100 [1)]		
20	JENOPTIK Industrial Metrology Switzerland SA, Peseux, Switzerland	100		
21	JENOPTIK Industrial Metrology France S.A., Bayeux, France	100		
22	JENOPTIK Power Systems GmbH, Altenstadt, Germany	100		
23	PHOTONIC SENSE GmbH, Eisenach, Germany	100		
24	JENOPTIK Diode Lab GmbH, Berlin, Germany	100		
25	Traffipax, LLC, Jupiter (FL), USA	100		
26	JENOPTIK Automotive North America, LLC, Rochester Hills (MI), USA	100		
27	JENOPTIK INDUSTRIAL METROLOGY DE MEXICO, S. DE R.L. DE C.V., Saltillo, Mexico	100		
28	Five Lakes Automation, LLC, Novi (Mi), USA	100		
29	JENOPTIK Optical Systems, LLC, Jupiter (FL), USA	100		
30	JENOPTIK Advanced Systems, LLC, El Paso (TX), USA	100		
31	JENOPTIK (Shanghai) Precision Instrument and Equipment Co., Ltd., Shanghai, China	100		
32	JENOPTIK Australia Pty Ltd, Sydney, Australia	100		
33	JENOPTIK Korea Corporation, Ltd., Pyeongtaek, Korea	66.6		
34	JENOPTIK JAPAN CO. Ltd., Yokohama, Japan	66.58		
35	JENOPTIK India Private Limited, Bangalore, India	100		

No.	Name and legal seat of the company	Shareholding of Jenoptik or shareholder directly in percent	Equity 31/12/2017 in thousand euros	Earnings for 2017 in thousand euros
	1.2. Unconsolidated associates – direct shareholdings			
36	JENOPTIK Einundsiebzigste Verwaltungsgesellschaft mbH, Jena, Germany	100	23	3)
37	JENOPTIK MedProjekt GmbH, Jena, Germany, i.l. 7)	100	–4,040 9)	–1 9)
38	FIRMICUS Verwaltungsgesellschaft mbH Jena, Germany	100	47 9)	3 9)
39	SAALEAUE Immobilien Verwaltungsgesellschaft mbH, Pullach im Isartal, Germany, i.l. 7)	100	29 9)	–1 9)
40	LEUTRA SAALE Gewerbegrundstücksverwaltungsgesellschaft mbH, Grünwald, Germany , i.l. 7)	100	25 9)	0 9)
	– indirect shareholdings			
41	AD-Beteiligungs GmbH, Monheim am Rhein, Germany	100	227 9)	–2 9)
42	RADARLUX Radar Systems GmbH, Leverkusen, Germany	100	–365	51
43	Traffipax do Brasil Ltda., Sao Paulo, Brazil	100	–1,130 9)	–277 9)
44	PHOTONIC SENSE, INC., Nashua (NH), USA	100	1	–3
45	JENOPTIK do Brasil Instrumentos de Precisão e Equipamentos Ltda., Sao Paulo, Brazil	100	337 9)	185 9)
46	JENOPTIK Saudi Arabia, LLC, Jeddah, Saudi-Arabia	90	101 9)	–26 9)
	2. Joint operations			
47	HILLOS GmbH, Jena, Germany	50		
	3. Investments – direct shareholdings			
48	JENAER BILDUNGSZENTRUM gGMBH SCHOTT CARL ZEISS JENOPTIK, Jena, Germany	33.33	738 9)	33 9)
	– indirect shareholdings			
49	JT Optical Engine Verwaltungs GmbH, Jena, Germany, i.l. 7)	50 5)	24 9)	0 9)
50	JT Optical Engine GmbH + Co. KG, Jena, Germany, i.l. 7)	50 5)	511 9)	–2 9)
51	JENOPTIK Robot Algérie SARL, Algiers, Algeria	49	125 9)	–23 9)
52	HOMMEL CS s.r.o., Teplice, Czech Republic	40	735 9)	118 9)
53	TELSTAR-HOMMEL CORPORATION, Ltd., Pyeongtaek, Korea	33.4	12,915 9)	1,190 9)
54	Dr. Teschauer AG, Chemnitz, Germany, i.i. 8)	24.99 6)		2)
55	Zenteris GmbH, Jena, Germany, i.i. 8)	24.9 5)		2)

1) Included in the financial statements of JENOPTIK Holdings UK Ltd.
2) No data is available.
3) Profit and loss transfer agreement (HGB) with the parent company
4) Deviating fiscal year as of March 31
5) Deviating fiscal year as of June 30
6) Deviating fiscal year as of October 31
7) i.l. = in liquidation
8) i.i. = in insolvency
9) Disclosures for the financial statements 2016

Jena, March 8, 2018
JENOPTIK AG

The Executive Board