CeramTec Holding GmbH

Plochingen/Germany

Consolidated Financial Statements and
Group Management Report
for the financial year from 1 January to
31 December 2017

TRANSLATION
– German version prevails –

CeramTec Holding GmbH

Plochingen

Consolidated Financial Statements
for the year ended
31 December 2017

TRANSLATION – GERMAN VERSION PREVAILS

CeramTec Holding GmbH

Plochingen/Germany

Group Management Report

for Financial Year 2017

1 Basic information about the consolidated group

1.1 Preliminary remarks

CeramTec Holding GmbH (hereinafter referred to as: CT HG or Company) is headquartered in Plochingen/Germany. The financial year corresponds to the calendar year.

CT HG is the direct parent company, and holds all shares of CeramTec Group GmbH, Plochingen/Germany, (CT GG), which, in turn, is the direct parent company of CeramTec Service GmbH, Plochingen/Germany, (CT SG), of which it holds all shares. Since 2015, CT HG has been holding all shares of CeramTec FinCo GmbH (CT FinCo).

CT HG prepares consolidated financial statements for the financial year from 1 January to 31 December 2017. The previous year was the financial year completed between 1 January and 31 December 2016.

In addition to the financial statements of CeramTec Holding GmbH (parent company), the consolidated financial statements include the financial statements of subsidiaries which are directly and indirectly controlled by CeramTec Holding GmbH. Of 20 fully consolidated subsidiaries, 7 are headquartered in Germany, and 13 are headquartered abroad. The notes to the consolidated financial statements include details of shareholdings.

The consolidated financial statements of CeramTec Holding GmbH are prepared by applying Sec. 315e (1) and (3) German Commercial Code (HGB) in conformity with the International Financial Reporting Standards (IFRS / IAS) issued by the International Accounting Standards Board (IASB) and related interpretations (SICs / IFRICs) which must be applied in accordance with Regulation No. 1606/2002 of the European Parliament and of the Council on the application of international accounting standards in the EU, and the supplementary requirements of the German Commercial Code (HGB).

1.2 Business model / targets and strategies

CeramTec is a leading global developer, manufacturer and supplier of high performance ceramics ("HPC") solutions. The HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological/chemical, mechanical, thermal or electric properties compared to competing products made from metal or polymers (plastics). CeramTec has been engaged in the HPC industry for over 100 years, with operational expertise and experience in creating innovative system solutions for longstanding customers at an industrial scale. CeramTec currently offers a wide range of HPC solutions including hip joint prostheses components, actuators in engine valves for fuel injection systems, high speed cutting tools and transparent ceramic components for armor applications. The versatility of HPC products and resulting wide-range of applications provides us with a highly diversified end market and customer base.

The operations can be divided into two businesses Medical Products and Industrial.

- Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses, such as ball heads and cup inserts used in total hip replacement ("THR") procedures. In 2017, we generated 36.2 % of our revenue from our Medical Products business.
- Industrial business develops, manufactures and supplies a broad range of highly specialized, performance critical HPC solutions for customers spanning a wide range of industries including automotive, electronics, industrial machinery and medical equipment. In 2017, 63.8 % of our revenue was generated by our Industrial business.

CeramTec generates more than two thirds of our revenue in Europe (including Germany). However, our customers have a strong export focus as their end-products, such as automotive parts or ceramic hip implant components, are exported world-wide.

CeramTec has a global manufacturing footprint with 20 facilities across Europe (including two sites in the UK that were acquired in 2017 as part of our acquisition of the UK electro-ceramics business of Morgan Advanced Materials plc., Stourport-on-Severn, Great Britain), North- and South-America and Asia. Manufacturing plants in Germany are located at Plochingen (headquarters), Marktredwitz, Lauf, Ebersbach, Wittlich, Lohmar and Wilhermsdorf.

CeramTec s business model is based on a number of key strengths.

- Ability to deliver compelling customer value through high-tech, tailored solutions for mission-critical applications,
- R&D and manufacturing excellence with high degree of customer integration
- Leading market position in a critical and growing segment of the orthopedics market
- Diversified industrial business delivering bespoke solutions to world leading OEMs
- Strong financial track record with high cash generation
- Experienced management team supported by dedicated workforce

The goal is profitable and sustainable business growth. We aim to:

- Maintain leadership in high performance ceramics through commercial, operational and innovation excellence.
- Expand globally in markets with strong underlying fundamentals where CeramTec has developable positions such as North-America and China, by focusing on growth initiatives and delivering customer driven innovations.
- Maintain a disciplined approach in using such cash while preserving attractive margins.
- Pursue a diligent approach to bolt-on M&A, with future acquisitions focused on gaining scale in attractive end markets and technologies as well as accessing new geographies.

1.3 Research and development

As a manufacturer of high-tech solutions we believe that our continued emphasis on research and development is key to our future profitability. The R&D efforts consist mainly of applications development in response to customer requirements and CeramTec is often partner with customers to develop innovative solutions and processes with high commercialization potential. CeramTec has a strong, centralized R&D infrastructure with more than 200 scientists and engineers who work in modern laboratory facilities and collaborate with leading research institutions globally. Revenue from products that were either newly developed and introduced, materially modified existing products or products modified for sale to a new customer represented approximately 25 % to 30 % of the total revenue in the last five years. All R&D cost is expensed and not capitalized on the balance sheet.

While CeramTec cooperates with many leading research institutions and universities, we aim to focus on commercial applications. The R&D efforts are also directed towards the introduction of new products and development of new materials to respond to anticipated customer needs. For example, to address needs of both surgeons and patients, CeramTec has developed a new generation of ring inserts to use in hip replacements that are easier to implant.

In 2017, CeramTec succeeded in completing various R&D innovations including:

- manufacturing transparent and durable ceramics on a series-production scale and transferring the advantages of ceramics to a transparent material;
- developed a new oxide composite material with improved strength and damage tolerance under extreme conditions;
- improved a process used to join high-performance cutting materials; and
- developed and tested different oxide and nitride ceramic feedstocks for ceramic injection molding.

Our R&D innovations have received various awards and most recently, we received the 2017 Industry Prize of the "Hannover Messe" in Germany for most advanced industrial products and solutions (PERLUCOR®).

In the financial year, expenses for the consolidated group's research and development efforts amounted to EUR 20,378k (prior year: EUR 22,798k), and the ratio of research and development expenses to revenues was 3.7 % (prior year: 4.6 %). The number of employees doing research and development work increased from the previous year while costs spent on external services were reduced. At the balance sheet date, 186 people were employed in research and development (31 December 2016: 166 employees).

2 Report on business

2.1 Development of the overall economy and industry-specific environment

Development of the overall economy

According to forecasts produced by the Institute for the World Economy on 13 December 2017, the world economy grows by 3.1 % in the financial year 2017 (2016: 3.1 %). Having passed a cyclical trough in 2016, the world economy gathered strength in the course of 2017. There is an indication that world manufacturing output rose by 3.8 percent throughout 2017, the strongest figure since 2011. Given the level of activity throughout the world economy, almost every major economy gathered upward momentum. The world economy revived on the back of substantially higher global investment growth and substantially stronger international trade in Asia, especially China.

The eurozone’s economic expansion continues to be mainly driven by domestic forces. Growth of 2.6 % was achieved, compared with the previous year. Note that all euro-zone countries‘ economies improved substantially. However, manufacturing output in the United Kingdom is currently increasing at a relatively moderate pace.

There is an indication that gross domestic product, that is a broad measurement of Germany's overall economic activity, increased by 2.3 % in 2017. The pace of economic expansion is substantially faster than the growth rate of production capacity so that capacity utilization, which is already above normal levels, will increase further. Early indicators suggest that the economic dynamism of Germany will continue. Germany's economic performance is expected to again improve significantly by 2.5 % in 2018 and 2.2 % in 2019.

Following an only moderate expansion at the beginning of 2017, in the second and third quarters of 2017 gross domestic product in the United States increased significantly. The gross domestic product of the United States grew by 2.3 % for the full year of 2017.

In emerging economies, economic activity continued to strengthen as the year progressed. This was driven mostly by an increase in production in commodity exporting countries. Overall, the Asian region’s economic expansion remained robust, with the pace of economic expansion in China slowing only slightly.

Development of the industry in which the Company operates

General Macroeconomic and Other Developments in our Key Geographical Target Markets

The sales to our customers are mostly concentrated in Europe and specifically in Germany. However, although the customers are concentrated in Europe, many of them, especially medical and automotive customers, are export oriented, global companies. Consequently, the business is viewed as globally diversified. We believe that our business is more exposed to North America and Asia than indicated by sales to our direct customers.

Development of Hip replacement markets affecting Medical Products

The Medical Product revenues and operating profit are mainly influenced by the development of the market for hip replacements and the market share of ceramic hip implants, and have historically not been particularly sensitive to macroeconomic developments.

According to a leading international consultancy firm, there were an estimated 2.2 million THR procedures performed worldwide in 2016. In addition, an estimated 0.4 million revisions (of existing hip implants) and 0.5 million partial hip replacements ("PHR"), which treat only the femoral side of the joint, were performed, bringing the total number of hip replacement procedures in 2016 to an estimated 3.1 million. The number of THR procedures globally is expected to increase by 4.2 % per annum from 2016 to 2021 with the numbers of revisions expected to increase by 5.4 % per annum and PHR procedures by 4.2 % per annum over the same period.

Globally, the market share of ceramic ball heads as a percentage of THR procedures performed was estimated at 45 % in 2016. As the hip replacement market grows, ceramic components are expected to increase their share of the market by replacing traditional materials for hip joint prosthetic components such as metal which can trigger negative patient reactions, for example due to allergic reactions resulting from metal sensitivity. An increase in ceramic market share is expected particularly in North America and China.

Demand Cycles in Various End Markets Supplied by the Industrial Business

Revenue in the Industrial business is influenced by economic growth in the target markets, particularly in Europe.

In addition to the overall GDP growth rate influencing the results of operations of the Industrial business, each of the industrial markets is also influenced by separate and distinct factors. In particular, the automotive, electronics, construction and other industrial end markets we serve are cyclical. Demand for the products is significantly affected by the business success of the OEM customers as well as end users that purchase products from those OEM customers. For example, overall economic conditions can affect new car sales, impacting the automotive customers and thereby also influencing demand for the ceramic components in automobiles and engines.

By revenue, the automotive market was the largest single end market for the Industrial business, followed by the electronics market and various other industrial niche markets such as textile machinery parts. Particularly for the automotive end market, but also various other industrial end markets such as construction, the economic developments in Germany and Europe have a significant effect on the revenue.

2.2 Development of business

The CeramTec Group has an extensive portfolio of ceramic materials, and our pool of highly trained and experienced product development and manufacturing specialists enable us to provide state-of-the-art solutions and a wide range of the finest quality products for customers operating in the medical technology, automotive, electronics, equipment and mechanical engineering, and energy and environment industries.

Thus, the CeramTec Group operates in a very heterogeneous market and in the financial year achieved revenues totaling EUR 556,325k (prior year: EUR 493,313k).

The management of the CeramTec Group had forecast for year 2017 a slight rise in revenues, a significant increase in EBITDA, and a slight increase in adjusted EBITDA, compared with calendar year 2016. Actually, revenue is with 10.6 %, EBITDA with 17.1 % and adjusted EBITDA with 16.8 % higher, than planned.

In the financial year 2017, order intake amounted to EUR 591,796k (prior year: EUR 506,356k), and as of 31 December 2017 the backlog of orders on hand amounted to EUR 162,607k (31 December 2016: EUR 124,501k).

Net operating result of EUR 102,447k (prior year: EUR 59,698k) adjusted for non-recurring items, depreciation, amortization, write-downs, and valuation allowances (adjusted EBITDA) amounted to EUR 206,681k (prior year: EUR 171,405k). Adjusted EBITDA margin was hence 37.2 % (prior year: 34.7 %). Thus, the development of the CeramTec Group Company's business in 2017 was quite positive.

CeramTec GmbH, Plochingen/Germany, is the largest company with operating activities, and is part of the CeramTec Group. In the financial year, the company had an EBITDA margin of 38.1 % (prior year: 29.8 %).

3 Presentation of the state of affairs of the consolidated group

3.1 Results of operations

In the financial year 2017, the CeramTec Group achieved revenues of EUR 556,325k (prior year: EUR 493,313k). The revenues increased by 12.8 % from calendar year 2016.

Medical Products had revenues of EUR 201,168k (prior year: EUR 185,550k). This increase was mainly due to a volume increase in ball-heads and inserts, partly offset by price reductions. Increasingly, ceramic materials become the leading artificial hip component material chosen by surgeons worldwide. It is expected that demand will continue to increase.

CeramTec Group's Industrial business had revenues of EUR 355,157k, which means an increase of EUR 47,394k or 15.4 % as compared to the revenues of the prior year of EUR 307,763k. This increase was mainly due to overall strong demand across major markets such as automotive and electronic, overall strong U.S. market conditions leading to an organic revenue growth of 25.3 % at CeramTec North America site, and other industrial end markets such as textile machinery products. The increase is supported by organizational streamlining and commercial excellence initiatives as well as the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc contributing additional revenues of EUR 21,625k. The decrease at the Emil Müller Companies was mainly driven by lower volumes at a top customer in automotive.

Europe and Germany continue to be important markets in terms of sales, accounting for 68.7 % (prior year: 69.7 %) of the revenues of the consolidated group. North America and Asia account for 15.4 % (prior year: 14.8 %) and 13.0 % (prior year: 12.4 %) of the revenues respectively.

The consolidated group made a gross profit in the financial year of EUR 238,719k (prior year: EUR 198,384k). Gross margin (gross profit in relation to revenue) amounted to 42.9 % (prior year: 40.2 %).

The ratio of selling costs to revenue, expressed as a percentage, decreased from 18.5 % in the previous year to 14.5 % in 2017. In the financial year, the ratio of research and development costs to revenue which stands at 3.7 % (prior year: 4.6 %), and the ratio of general administrative costs to revenue which stands at 4.1 % (prior year: 4.5 %) also decreased from the previous year.

Net operating result amounted to EUR 102,447k (prior year: EUR 59,698k) in the financial year 2017.

Negative net finance result of EUR 57,495k (prior year: EUR 54,862k) results from interest income and similar income of EUR 5,425k (prior year: EUR 18,734k), and interest expense and similar expenses of EUR 62,920k (prior year: EUR 73,596k).

In the financial year, interest income resulted mainly from exchange rate gains of EUR 5,219k (prior year: gains arising from measuring derivative financial instruments of EUR 18,637k). In the financial year, interest expense was due mainly to expenses for interest on a syndicated loan and corporate bond of EUR 52,200k (prior year: EUR 56,464k), interest on a shareholder loan of EUR 6,384k (prior year: EUR 11,895k) and, in the previous year, foreign currency losses of EUR 2,296k.

Profit or loss for the period developed as follows:

(EURk)	2017	2016
Profit before income tax	44,952	4,836
Current income tax expense	-30,543	-17,132
Deferred tax income	10,203	7,122
Net profit for the year	**24,612**	**-5,174**

In the financial year, EBITDA respectively adjusted EBITDA (net operating result, plus depreciation, amortization, write-downs / impairments and special items) was determined as follows:

(EURk)	2017	2016
Net operating result	102,447	59,698
Depreciation, amortization, write-downs / impairments	98,324	85,957
EBITDA	**200,771**	**145,655**
Adjustments	5,910	25,750
Adjusted EBITDA	**206,681**	**171,405**

The adjustments include mainly expenses for consulting fees (EUR 4,929k), and legal fees and litigation charges (EUR 1,150k). In the previous year, the adjustments had included mainly legal fees and litigation charges (EUR 12,674k), consulting fees (EUR 4,320k), and an addition to a provision for solvency requirements (EUR 5,266k).

In the financial year, adjusted EBITDA in relation to revenue was 37.2 % (prior year: 34.7 %).

3.2 Net assets and financial position

Asset and capital structure

The consolidated group's balance sheet total declined, as of 31 December 2017, by EUR 165,331k or 9.5 % to EUR 1,572,610k. The decline reflected mainly lower financial liabilities shown on the equity and liabilities side of the balance sheet. On the asset side of the balance sheet, property, plant and equipment, intangible assets, financial assets and cash were reduced by a similar amount.

In the financial year, goodwill of EUR 22,740k was added that arose on the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc., the former owner, and allocated to the cash-generating unit (CGU) Industrial. By contrast, impairment losses totaling EUR 14,545k had to be recognized on the CGUs Emil Müller and CeramTec-ETEC as of 31 December 2017.

Other intangible assets declined by EUR 19,117k to EUR 538,304k because, on the one hand, scheduled amortization of customer relationships and technology amounted to EUR 45,603k; but on the other hand, intangible assets of EUR 28,222k were taken over as a result of the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc.

Long-term and short-term other financial assets include mainly the positive market value of derivative financial instruments, of which EUR 19,963k (31 December 2016: EUR 24,459k) results from the termination rights associated with the corporate bond issue which are carried in the balance sheet, and must be separated, and of which EUR 21,233k (31 December 2016: EUR 60,119k) results from currency swaps.

A rise of EUR 9,625k in inventory is due to higher raw material and work-in-process inventory levels for which higher inventory valuation allowances partly compensated.

Trade receivables of EUR 52,096k remained almost unchanged from the previous year. Note that in 2017 a factoring agreement was concluded whereby receivables of EUR 12,762k were sold as of the balance sheet date.

Cash and cash equivalents include cash in bank of EUR 14,739k (31 December 2016: EUR 124,557k), and cash on hand of EUR 14k (31 December 2016: EUR 28k). For details see explanations on liquidity.

Equity was increased by a profit made in the financial year for that period of EUR 24,612k (prior year: a loss for the period of EUR 5,174k) and negative other comprehensive income of EUR 7,152k (prior year: EUR 9,829k). Equity of EUR 286,887k (31 December 2016: EUR 269,427k) accounts for 18.2 % (31 December 2016: 15.5 %) of total capital.

Long-term provisions of EUR 103,589k (31 December 2016: EUR 113,046k) include mainly provisions for retirement benefits of EUR 98,447k (31 December 2016: EUR 102,410k). The decline in provisions for retirement benefits is due mainly to a slight rise in an interest rate of 1.7 %, compared with 1.6 % in the previous year, used in calculating the provisions in Germany.

In addition to the above-mentioned long-term provisions and deferred tax assets of EUR 150,721k (31 December 2016: EUR 156,258k), long-term liabilities of the consolidated group include mainly liabilities to banks of EUR 355,697k (31 December 2016: EUR 618,791k), liabilities arising from the issuance of a corporate bond of EUR 300,583k (31 December 2016: EUR 299,214k), from derivative financial instruments of EUR 4,120k (31 December 2016: EUR 7,490k), and from financial liabilities to affiliated companies of EUR 55,355k (31 December 2016: EUR 98,021k).

Equity and long-term liabilities cover 90.7 % of the CeramTec Group's long-term assets.

A subsidiary concluded in 2013 a loan agreement with Deutsche Bank AG that acts as the leader of a syndicate of banks. The liabilities associated with the loan agreement consist of a tranche in EUR and a tranche in USD totaling EUR 581,883k as of the balance sheet date (31 December 2016: EUR 662,735k). The tranches mature on 30 August 2020, and consist of amounts which are planned to be repaid before maturity. The interest rate on the EUR tranche consisted of a fixed spread of 3.00 percentage points p. a., plus three-month EURIBOR. The interest rate on the USD tranche consisted of a fixed spread of 3.25 percentage points, and from 4 April 2017 the spread is 2.75 percentage points p. a., plus three-month USD LIBOR. With respect to the three-month EURIBOR and three-month USD LIBOR, the floor rate is set at 0.75 % and 1.00 % p. a. respectively. In 2014, an interest rate cap was purchased which limits the interest rate to 2.00 % in order to hedge against floating rate risk associated with loan volumes of EUR 441,040k.

In addition, a subsidiary of the consolidated group issued an unsecured corporate bond in 2013 which is quoted on the Luxembourg Stock Exchange. The bond matures on 15 August 2021. The bond issuance volume was EUR 306,700k. The euro is the underlying currency. The Company's contractual right to terminate enables the Company to pay off the bond early. The bond has an 8.25 % p. a. coupon.

Transaction costs of EUR 19,733k and EUR 13,120k associated with the raised loan and issuance of a corporate bond respectively are spread over the term of the loan and corporate bond using the effective interest method.

The negative market value of derivative financial instruments consists of embedded interest-rate floors which must be separated, and an interest-rate cap. In addition, currency swaps were entered into with external parties, whose market value as of 31 December 2017 is positive. The currency swaps with a nominal value totaling

EUR 198,300k (31 December 2016: EUR 226,900k) are designated as cash flow hedges, and used to hedge against the USD/EUR currency risk, together with a part of the USD tranche of which the loan agreement consists.

Financial liabilities to affiliated companies consist of a shareholder loan of EUR 53,845k (31 December 2016: EUR 150,851k), and accrued interest on the loan of EUR 1,510k (31 December 2016: EUR 3,572k). The loan matures on 30 August 2023, and bears interest of 8.255 % p. a.

Short-term financial liabilities to third parties of EUR 245,422k (31 December 2016: EUR 62,529k) include mainly the short-term part of liabilities to banks of EUR 228,077k (31 December 2016: EUR 46,016k), and accrued interest on bonds payable of EUR 9,489k (31 December 2016: EUR 9,489k).

Operating working capital (inventories and trade receivables, less trade payables and provisions recognized for operating activities) amounts to EUR 81,436k as of 31 December 2017 (31 December 2016: EUR 83,412k). Inventory levels increased almost in parallel with a rise in trade payables and in provisions recognized for operating activities.

Capital investment

In the reporting year, EUR 27,480k in total (prior year: EUR 14,516k) was spent on property, plant and equipment, and intangible assets. Capital investment should be considered in relation to depreciation, amortization, and impairments of EUR 98,324k (prior year: EUR 85,956k).

The total capital investment is divided between expansion and replacement investment at a comparable level. Investments are made mainly by CeramTec GmbH in machines of the Medical Products and Industrial businesses, designed to improve productivity. In addition, a great number of different facilities were purchased and put into operation by other subsidiaries in Germany and abroad, mainly in the USA. Investment was designed to undertake replacement and maintenance projects.

Liquidity

In the financial year, the consolidated group received cash inflows of EUR 158,435k (prior year: EUR 137,980k) from its operations. The rise in the cash inflows was due mainly to substantial improvement in company performance, given that other effects largely compensated for one another.

The cash outflows resulting from the consolidated group’s investing activities amounted to EUR 78,245k (prior year: EUR 15,214k). In the reporting period, the cash outflows included the purchase price payment of EUR 55,485k for the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc.

With respect to financing activities, the cash outflows amounted to EUR 189,175k (prior year: EUR 84,213k). The significant cash outflows resulted from the repayment of a shareholder loan of EUR 97,620k (prior year: EUR 0k), interest payments for senior credit facilities and a corporate bond of EUR 55,280k (prior year: EUR 54,145k), and repayments of EUR 36,275k (prior year: EUR 30,068k) on senior credit facilities.

Overall, the consolidated group’s liquid funds went down by EUR 109,832k to EUR 14,753k as of the balance sheet date.

The CeramTec Group has a revolving credit line under which it could borrow up to EUR 100,000k, and on which the consolidated group did not draw as of the balance sheet date.

3.3 General statement on the state of affairs of the consolidated group

Overall, the management of the parent company believes that the economic position of the consolidated group is stable. No factors are known today which could result in significant deviation from the net asset position, financial position and results of operations reported above.

4 Financial and non-financial performance indicators

4.1 Financial performance indicators

EBITDA and adjusted EBITDA are key measures of the performance of the CeramTec Group, and are the basis of performance-related pay. Revenue and working capital are also important as a measure of the financial health of the CeramTec Group.

The CeramTec Group uses an extensive management system which provides information on performance in terms of the mentioned financial data and other financial data. The system comprises monthly financial reporting, a relevant scorecard which helps the consolidated group monitor performance, and monthly meetings of the management of CeramTec GmbH, the heads of CeramTec GmbH's divisions, and the managing directors of German subsidiaries to discuss the individual divisions' business situation. International meetings of the managing directors of foreign subsidiaries, the management of CeramTec GmbH, the heads of CeramTec GmbH's divisions, and the managing directors of German subsidiaries are held once every year to discuss the current business situation, the development of the business situation expected for the remainder of the financial year, strategic alignment, and development of the CeramTec Group.

Earnings and expectations for the next few months are discussed with the management of the parent company of CT HG on a regular basis. In addition, an internal control system has been installed, and last but not least reviews are conducted by third parties on a regular basis.

See our explanations on the state of affairs of the consolidated group for details of further financial performance indicators.

4.2 Non-financial performance indicators

Non-financial key performance indicators used to assess the consolidated group's performance include measures that relate to employees, quality, and environmental protection.

Employees

By the end of the financial year the CeramTec Group employed a workforce of 3,537 (prior year 3,187) people. This is an increase of 11.0 % from the previous year. Our workforce includes 260 former employees of the UK electro-ceramics business acquired from Morgan Advanced Materials plc., which is 8.2 % of our workforce.

The staffing structure is as follows:

	31 December 2017	31 December 2016
Employees by region		
Europe	655	378
Germany	2,042	2,011
North and South America	333	307
Asia	507	491
	3,537	**3,187**
Employees by function		
Manufacturing	2,778	2,491
Sales	325	300
Research and development	186	166
Administration	248	230
	3,537	**3,187**

Details vary, but the management and employees of the CeramTec Group participate in performance-related pay schemes. The performance-related pay schemes generally reward participants for the achievement of company-related objectives (EBITDA or adjusted EBITDA and working capital) and personal targets.

In the reporting year 2017, the recruitment of skilled employees and executive personnel continued to be in the foreground for the CeramTec Group.

On the balance sheet date, 140 apprentices in total were employed by the CeramTec Group who learn the skills needed for engineering jobs and commercial jobs. CeramTec has always set great store by apprenticeships. CeramTec works closely with high schools and colleges, and numerous vocational education and training qualifications can be undertaken which are an opportunity for young people to develop their skills. Given demographic change, CeramTec believes that it is important that young employees have the opportunity to achieve qualifications, which will be a major task over the next few years. Every two years needed trainings are agreed.

Established initiatives to improve workplace health and do staff development were performed and implemented according to plan.

Quality and environmental management

CeramTec is subject to the health, safety and environmental legislation in the jurisdictions where the manufacturing sites are located. Most of the production is located within the European Union and specifically in Germany. As a result, CeramTec is principally subject to the health and safety standards as well as the environmental standards as adopted in the European Union and specifically locally in Germany. CeramTec has also adopted a corporate social responsibility policy aimed at achieving profitable global growth, conserving energy, protecting natural resources while acting in an ethical way with integrity. To this end, CeramTec will continue to focus on customer satisfaction, conserving scarce resources, energy management as well as working conditions for the employees.

CeramTec GmbH's environmental management and energy management systems have been certified in accordance with DIN EN ISO 14001 and ISO 50001 respectively. Capital expenditure and expenses related to environmental protection in CeramTec Group in 2017 amounted to EUR 2,059k (prior year: EUR 1,324k).

CeramTec's Industrial business has been certified according to DIN EN ISO 9001 and, specifically with respect to Automotive Engineering, ISO/TS 16949, and CeramTec's Medical Products business has been certified according to ISO 13485. The Medical Products business's manufacturing plants have registered with the Food and Drug Administration (FDA) from which approval has been obtained. Specific products and components implement further norms and requirements, if necessary. Suppliers of CeramTec must still follow a guideline designed to ensure the quality of supplied items.

The quality and environmental management system is regarded as appropriate, effective and suitable. The statutory / regulatory requirements are regularly monitored. The management system is used to determine, implement and monitor changing requirements, including legal developments, which provide a framework within which the entity conducts its business. Action taken to achieve energy goals, the Energy Conservation Program 2017, has been implemented. A deadline extension for all outstanding actions was approved.

5 Report on subsequent events

On 11 October 2017, CeramTec announced that a Consortium led by Funds advised by leading private equity firm BC Partners ("BC Partners") had reached an agreement to acquire CeramTec Group from its current owner Cinven. BC Partners is a leading international private equity firm, and has played an active role in developing the European buy-out market for three decades.

As at 22 February 2018 all requirements for the transfer of ownership were fulfilled, effective as of 8 March 2018.

With transferring ownership, existing financing will be repaid and a new financing will become effective.

No further reportable events occurred.

6 Report on outlook, opportunities and risks

6.1 Report on outlook

For the current financial year, we expect that the revenue of Medical Products will rise moderately. We also anticipate that Industrial will get better in the first quarter of 2018 than it was a year earlier because of the current macroeconomic environment. In sum, we believe that in 2018 revenue will increase moderately from the previous year.

Framework – overall economy and industry in which the Company operates

According to forecasts produced by the Institute for the World Economy on 13 December 2017, the world economy will grow by 3.9 % in the financial year 2018. The Chinese economy and the Asian region are each projected to grow by 6.4 %, the highest rate of growth. Germany's economy is expected to grow by 2.5 %, and the Eurozone (excluding Germany) and United States economies are each anticipated to grow by 2.3 %.

The Hip replacement market is expected to develop in line with historical trends and projections as described in Chapter 2.1. Potential upsides are related to the increased rate of adoption of ceramics, due to increasing awareness of issues related to metallic implants, i.e. such as allergic reactions.

Low to moderate growth in 2018 can be expected for the industries described in Chapter 2.1. Potential upsides are related to the market success of our customer's next generation products mainly in the automotive and electronic industries.

Forecast development of the CeramTec Group's business and income

The sales of EUR 556,325k are expected to increase moderately in financial year 2018 from the previous year, on the basis of the above-mentioned development of the market and industry in which the CeramTec Group operates. Also, we anticipate that EBITDA and EBITDA adjusted for special items will increase moderately from the previous year's figure (EUR 200,771k and respectively EUR 206,681k).

For financial year 2018, we expect that positive cash flow from operating activities will maintain the same level as in the previous year.

With respect to the non-financial performance indicators including measures that relate to employees, quality, and environmental protection, our aim is to maintain the high level of performance also in financial year 2018.

6.2 Report on opportunities and risks

The CeramTec Group has an institutionalized risk management system which includes a relevant financial reporting system. The financial reporting system is comprised of, among other things, monthly financial reporting, reporting through individuals responsible for operations which forms an integral part of monthly scorecard meetings, an internal control system, and reviews carried out by third parties. Thus, a risk of price changes, non-payment, liquidity risk and exposure to variability in cash flows are taken into account. Risk monitoring is aimed at allowing the Company to plan, carry out, and check the success of suitable countermeasures. Activities designed to ensure compliance with the internal control system are complementary to these systems.

Risks involved in the overall economy and industry in which the Company operates

Generally, risks arise from uncertainty over the future of the global economy. Negative developments can hence have a marked impact on business. However, global business operations and the diversification of our customers operating in different industries, e.g. medical technology, automotive industry, electrical and electronics industry, equipment and mechanical engineering, and energy and environmental technology, help to compensate for the weakness of demand experienced in individual markets or regions. Also, the broad portfolio of products, low customer concentration, and a large number of industries which are served, allow to some extent to cushion the effect of the weakness of demand experienced by various industries in which customers operate, or a risk of price changes. Because of accounts receivable insurance which largely protects CeramTec GmbH against loss on receivables, and the consolidated group's customer structure, the risk of non-payment of receivables is considered remote.

Risk of price changes / procurement risk

A risk of price changes arises from both a change in the price of a production input and the price for which products are sold on the market. The latter is due mainly to increasing competition from Asia. Also, risks are associated with the rising price of raw materials and energy. These risks are mitigated by continuously improving processes and productivity, and actively managing costs in particular.

Product risk

Production units use our quality management systems to mitigate product risks. The quality management systems are based on international standards, and ensure that all legal requirements are met. Quality management involves carrying out reviews regularly, and training employees continuously. Ongoing processes do not pose a threat to the continued existence of the Company.

People-related risk

One of the biggest people-related risks is the changing population demographics and recruitment of enough skilled employees and executive personnel. CeramTec is engaged in numerous activities focused on doing staff development, offering qualifications to young employees, exhibiting at various trade shows, and using different kinds of media.

Information technology (IT) risk

IT system failure or substantial data loss could affect the business operations of group companies or the consolidated group. Group companies have data backup policies in place for mitigating risks of data loss, and use modern IT infrastructures. Group-wide security measures ensure that data is protected from unauthorized access and harmful software. Risks associated with all business-critical applications have been analyzed, and emergency management policies are in place. High availability for critical systems is ensured, depending on the systems' risk ratings.

Investment risk

All substantial acquisitions and investments are made after performing a multi-step analysis and approval process. The acquirer's exposure to the complex risks is minimized that can arise when making an acquisition - these will typically be the issues that would have affected management's decision to proceed with the acquisition, and at what price, if they had been known before the conclusion of a contract - by thoroughly investigating the attractiveness of an acquisition, the so-called due diligence procedures, and drafting contracts accordingly.

Financial risk

CeramTec uses currency hedging, which involves entering into derivative financial instruments, to reduce foreign currency risks associated with foreign currency loans (USD) in particular, used to receive financing.

In addition, the CeramTec Group is exposed to variability in cash flows that is attributable to interest payments on variable-rate USD and EUR loans. To hedge its interest rate risks, the consolidated group entered into an interest rate cap agreement. The interest rate floors contained in the syndicated loan agreement represent embedded derivatives which must be separated.

Also, the syndicated loan agreement requires the Company to comply with a financial covenant. The CeramTec Holding Group must comply with the financial covenant when an amount defined in the loan agreement is drawn down from a revolving credit line under which up to EUR 100,000k can be borrowed. Because the Company did not draw on the credit line in the financial year, the Company was not required to test the calculation of the financial covenant. The management expects that the Company will continue to comply with the financial covenant in the following financial year.

The Company's risk management objective in relation to these financial instruments is to continuously monitor risks, and minimize risks by engaging in operating and financing activities. Various policies establish rules regarding the use of financial instruments, and ensure that financial transactions which go beyond a specified limit are not conducted without consulting the management. Generally, derivative financial instruments are used only to hedge risk.

For details see explanations in the notes to the consolidated financial statements under '6.1 Management of financial risk' and '4.15 Financial instruments'.

Opportunities

We aim to expand further globally in markets with strong underlying fundamentals where we have expandable positions such as North-America and China. For example, China is becoming one of the most important markets for HPC solutions. In particular, China is one of the fastest growing markets for hip replacements with an expected THR procedure CAGR of 9 % p.a. until 2021 according to an international consulting firm. With an existing presence in Suzhou, China, we also intend to partner with local players to accelerate growth and achieve scale as well as maximize the existing expertise to focus on key projects and achieve true "local" status.

As part of our growth initiatives, it is intended to grow our customer base and partner with further international corporations that would benefit from the extensive materials and process expertise, scale and global footprint.

In addition, we intend to focus on capturing emerging growth opportunities beyond the core markets as we believe the versatility of ceramics and continued technical advances across different end markets leave room for ceramics to expand into new fields of application. In the Medical Products business, it is intended to maximize the value of existing solutions by exploring additional medical applications such as knee, shoulder and spine components as well as capitalize on our R&D strength and regulatory expertise to produce new innovations such as ceramic foam or ceramic implants for dental applications. In the Industrial business, we are continuously monitoring technology trends such as 3D printing, e-mobility, autonomous vehicles and big data in order to consider how best to apply our materials expertise, manufacturing know-how and regulatory experience to develop relevant HPC solutions that can be successfully commercialized.

General statement on risks and opportunities which the consolidated group faces

We do not believe that at present risks pose a threat to the consolidated group as a whole that go beyond the risks that every entrepreneur must take, because companies which are part of the CeramTec Group operate in many markets. The risk position did not change substantially from the previous year. We use insurance to protect against liability risks, the forces of nature, and further risks to the extent possible.

A subsidiary issued a bond, and further subsidiaries arranged a framework financing agreement whereby sufficient lines of credit are extended to the Company, and the terms under which the lines of credit are extended to the Company are consistent with market conditions, so that no liquidity risks are expected for the future.

Market risks should be considered in relation to substantial opportunities. Generally, our broad and diversified portfolio of products provides opportunities to compensate for weak economic activity in individual industries.

At the time this report is prepared the management is not aware of any claims of third parties which would be expected to significantly impact the net assets, financial position and results of operations of the CeramTec Group. It is believed that there are no risks associated with CeramTec GmbH and other businesses included in the consolidated group posing a threat to the CeramTec Group which go beyond the risks that every entrepreneur must take.

Corporate governance declaration

Insofar as CeramTec Holding GmbH does not have a supervisory board, a gender quota could not be set for a supervisory board. The gender quota targets that were set in 2015 by the supervisory board of CeramTec GmbH, and require that 25 % of supervisory and management board seats should be held by women, 75 % of supervisory and management board seats should be held by men, and that 7 % and 93 % of second-level management executives should be women and men respectively, could not be fully achieved by 30 June 2017. CeramTec GmbH remains committed to achieving the gender quota targets.

Plochingen/Germany, 7 March 2018

CeramTec Holding GmbH

The management

Henri Steinmetz Dominique Janbon Dr. Hadi Saleh

CeramTec Holding GmbH, Plochingen

Consolidated statement of financial position as at 31 December 2017

Assets	Notes	31 December 2017	31 December 2016
		EUR k	EUR k
Goodwill	4.1	561,573	557,961
Other intangible assets	4.1	538,304	557,421
Property, plant and equipment	4.2	266,815	275,532
Other financial assets	4.3	20,017	72,484
Other assets	4.4	678	711
Deferred tax assets		249	851
Non-current assets		**1,387,636**	**1,464,960**
Inventories	4.5	86,529	76,904
Trade receivables	4.6	52,096	53,553
Income tax receivables		3,304	1,281
Other financial assets	4.3	23,208	12,390
Other receivables and assets	4.4	5,084	4,268
Cash and cash equivalents	4.7	14,753	124,585
Current assets		**184,974**	**272,981**
Total Assets		**1,572,610**	**1,737,941**

CeramTec
THE CERAMIC EXPERTS

CeramTec Holding GmbH, Plochingen

Consolidated statement of financial position as at 31 December 2017

Equity and Liabilities	Notes	31 December 2017	31 December 2016
		EUR k	EUR k
Issued capital	4.8	25	25
Capital reserves	4.8	378,148	378,148
Accumulated losses	4.8	-92,365	-119,392
Accumulated other comprehensive income	4.8	1,079	10,646
Equity		**286,887**	**269,427**
Provisions for pension obligations	4.9	98,447	102,410
Other provisions	4.10	5,142	10,636
Financial liabilities to affiliates	4.11	55,355	98,021
Financial liabilities to third parties	4.12	661,705	927,004
Deferred tax liabilities	3.8	150,721	156,258
Non-current liabilities		**971,370**	**1,294,329**
Other provisions	4.10	20,442	16,425
Provision for taxes	4.10	12,578	2,790
Financial liabilities to affiliates	4.11	0	56,402
Financial liabilities to third parties	4.12	245,422	62,529
Trade payables		26,676	22,376
Trade payables to affiliates		135	205
Other liabilities	4.13	9,100	13,458
Current liabilities		**314,353**	**174,185**
Total liabilities		**1,285,723**	**1,468,514**
Total equity and liabilities		**1,572,610**	**1,737,941**

CeramTec Holding GmbH, Plochingen

Consolidated statement of comprehensive income

from 1 January to 31 December 2017

	Notes	1 January to 31 December 2017	1 January to 31 December 2016
		EUR k	EUR k
Revenue	3.1	556,325	493,313
Cost of sales	3.2	317,606	294,929
Gross profit		**238,719**	**198,384**
Selling costs	3.3	80,676	91,478
Research and development costs	3.4	20,378	22,798
General administrative costs	3.5	22,735	22,189
Other income and expenses (-), net	3.6	-12,483	-2,221
Operating income		**102,447**	**59,698**
Interest income and other finance income		5,425	18,734
Interest expenses and other finance costs		62,920	73,596
Financial result	3.7	**-57,495**	**-54,862**
Profit before income tax		**44,952**	**4,836**
Income tax expense	3.8	-20,340	-10,010
Net profit / net loss (-) for the period		**24,612**	**-5,174**
Items that will not be reclassified through profit or loss			
Income / expenses (-) from the remeasurement of defined benefit plans		2,971	-15,023
Deferred taxes		-556	3,976
		2,415	**-11,047**
Items that may be reclassified subsequently to profit or loss			
Losses (-) / gains on cash flow hedges		-1,489	237
Deferred taxes		427	-68
		-1,062	**169**
Exchange differences on translation of foreign operations		-8,505	1,049
Other comprehensive income / loss (-), net of income tax		**-7,152**	**-9,829**
Total comprehensive income / loss (-)		**17,460**	**-15,003**

CeramTec Holding GmbH, Plochingen

Consolidated statement of cash flows
from 1 January to 31 December 2017

	1 January to 31 December 2017 EUR k	1 January to 31 December 2016 EUR k
Net profit / net loss (-) for the period	24,612	-5,174
Income tax expense	20,340	10,010
Interest result	61,462	71,200
Amortisation, depreciation and impairment charges of non-current assets	98,324	85,956
Gain (-) / loss on disposal of property, plant and equipment and intangible assets	-3,071	54
Increase / decrease (-) in provisions (excluding deferred taxes)	-4,187	9,416
Income tax payment (-)	-22,719	-16,228
Other non-cash income (-), net	-8,344	-15,089
Increase (-) in inventories	-6,542	-1,767
Increase (-) / decrease in trade receivables	4,571	-375
Increase (-) / decrease in other receivables and (financial) assets	-2,723	1,660
Increase / decrease (-) in trade payables	842	-949
Decrease (-) in other (financial) liabilities	-4,130	-734
Cash flow from operating activities	**158,435**	**137,980**
Cash received from disposals of property, plant and equipment	3,294	305
Cash paid (-) for investments in property, plant and equipment	-25,321	-15,002
Cash received from grants	0	139
Cash paid (-) for investments in intangible assets	-733	-656
Cash paid (-) for the acquisition of production sites	-55,485	0
Cash flow from investing activities	**-78,245**	**-15,214**
Repayment (-) of syndicated loan	-36,275	-30,068
Interest paid (-)	-55,280	-54,145
Repayment of shareholder loan	-97,620	0
Cash flow from financing activities	**-189,175**	**-84,213**
Change in cash and cash equivalents	-108,985	38,553
Net foreign exchange difference	-847	-444
Cash and cash equivalents at the beginning of the period	124,585	86,476
Cash and cash equivalents at the end of the period	**14,753**	**124,585**

CeramTec Holding GmbH, Plochingen

Consolidated statement of changes in equity
for the period ended 31 December 2017

	Issued capital	**Capital reserves**	**Revenue reserves and consolidated net income**	**Accumulated other comprehensive income**		**Equity**
				Cash flow hedge reserve	Difference from currency translation	
Reference to disclosure in notes	(4.8)	(4.8)	(4.8)	(4.8)	(4.8)	(4.8)
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
31 December 2015	**25**	**378,148**	**-103,171**	**1,629**	**7,799**	**284,430**
Net loss for the period	0	0	-5,174	0	0	-5,174
Other comprehensive income / loss (-)	0	0	-11,047	169	1,049	-9,829
Total comprehensive income / loss (-)	*0*	*0*	*-16,221*	*169*	*1,049*	-15,003
31 December 2016	**25**	**378,148**	**-119,392**	**1,798**	**8,848**	**269,427**
31 December 2016	**25**	**378,148**	**-119,392**	**1,798**	**8,848**	**269,427**
Net income for the period	0	0	24,612	0	0	24,612
Other comprehensive income / loss (-)	0	0	2,415	-1,062	-8,505	-7,152
Total comprehensive income / loss (-)	*0*	*0*	*27,027*	*-1,062*	*-8,505*	17,460
31 December 2017	**25**	**378,148**	**-92,365**	**736**	**343**	**286,887**

TRANSLATION GERMAN VERSION PREVAILS

CeramTec Holding GmbH

Plochingen

Notes to the Consolidated Financial Statements for the year ended 31 December 2017

1 General

1.1 Corporate information and purpose of the Company

The purpose of CeramTec Holding GmbH (hereinafter "CeramTec Holding") is to render management services as well as administrative, financial and business services in return for remuneration to entities in which it has a direct or indirect controlling shareholding or to entities that are controlled by the same ultimate controlling shareholder. It establishes branch offices, legal entities and other operations in Germany and abroad, and acquires, invests in and holds these investments and/or manages them as well as enters into and/or issues various financial instruments.

The subsidiaries of CeramTec Holding are leading global developers, manufacturers and suppliers of high performance ceramics ("HPC") solutions. The HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological/chemical, mechanical, thermal or electric properties compared to competing products made from metal or polymers (plastics). The operations can be divided into two businesses Medical Products and Industrial. Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses, such as ball heads and cup inserts used in total hip replacement ("THR") procedures. Industrial business develops, manufactures and supplies a broad range of highly specialized, performance critical HPC solutions for customers spanning a wide range of industries including automotive, electronics, industrial machinery and medical equipment.

CeramTec Holding's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany, and the entity is registered with the Amtsgericht (local court) Stuttgart, Germany, under the number HRB 746625. CeramTec Holding is the parent company of the Group ("CeramTec Holding Group" or "Group") and the ultimate parent, which prepares exempting consolidated financial statements.

Where no prior-year figures are presented in the following, their value is EUR 0k.

The management of CeramTec Holding approved the consolidated financial statements on 7 March 2018 for submission to the shareholder meeting.

1.2 Basis of preparation

The consolidated financial statements are prepared pursuant to Sec. 315e (1) and (3) HGB ["Handelsgesetzbuch": German Commercial Code] in accordance with the International Financial Reporting Standards (IFRS/IAS) as adopted by the EU as well as the interpretations of the IFRS Interpretations Committee (IFRS IC) applicable for the fiscal year and the supplementary requirements of German commercial law.

The requirements of the standards and interpretations adopted were satisfied in full. Furthermore, all applicable requirements of German commercial law were observed during the preparation. The consolidated financial statements give a true and fair view of the results of operations and financial position of the CeramTec Holding Group.

The consolidated financial statements are presented in euro. The amounts are in thousands of euros (EUR k). All amounts are rounded using standard commercial principles. In individual cases, adding individual values to the total value may therefore lead to differences.

For the purpose of clarity, various items in the consolidated statement of financial position and consolidated statement of comprehensive income were combined and explained accordingly in the notes to the consolidated financial statements. Assets and liabilities are broken down into current and non-current items. Assets and liabilities are classified as current if they are expected to be realized within twelve months from the reporting date. The expense recognized in profit or loss is broken down using the cost of sales method. In the statement of cash flows, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method.

1.3 Entities included in the consolidated financial statements

In addition to the financial statements of the parent company, the financial statements of the following subsidiaries in which CeramTec Holding has a direct or indirect shareholding are included in the consolidated financial statements for the fiscal year:

	Share of capital in %		CGU
Name of the entity	31 December 2017	31 December 2016	
CeramTec Group GmbH, Plochingen	100.00	100.00	1
CeramTec FinCo GmbH, Plochingen	100.00	100.00	1
CeramTec Service GmbH, Plochingen	100.00	100.00	1
CeramTec GmbH, Plochingen	100.00	100.00	2
Cerasiv GmbH Innovatives Keramik-Engineering, Plochingen	100.00	100.00	3
CeramTec-ETEC GmbH, Lohmar	100.00	100.00	5
Emil Müller GmbH, Wilhermsdorf	100.00	100.00	4
CeramTec UK Ltd., Southampton/Great Britain	100.00	100.00	3
CeramTec Czech Republic s.r.o., Sumperk/Czech Republic	100.00	100.00	3
CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain	100.00	100.00	3
CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia	100.00	100.00	3
CeramTec Korea Ltd., Suwon-Si/Republic of Korea	100.00	100.00	3
CeramTec Suzhou Ltd., Suzhou/China	100.00	100.00	3
PST Press Sintertécnica Brasil Ltda., Nova Odessa/Brazil	100.00	100.00	4
CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji - Goa/India	99.90	99.90	3
Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico	100.00	100.00	4
CeramTec Acquisition Corporation, Laurens/USA	100.00	100.00	3
CeramTec North America Corporation, Laurens/USA	100.00	100.00	3
DAI Ceramics, Inc., Willoughby/USA	100.00	100.00	3
PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland	100.00	100.00	4

1 Entities perform the functions of a holding company.
2 Entity has been allocated ratably to Medical and Industrial cash-generating units (CGU).
3 Entities have been allocated to the Industrial CGU.
4 Entities have been allocated to the Emil Müller CGU.
5 Entities have been allocated to the CeramTec-ETEC CGU.

CeramTec Holding has a direct shareholding in CeramTec Group GmbH and CeramTec FinCo GmbH, and an indirect shareholding in the other subsidiaries.

CeramTec Group GmbH, CeramTec FinCo GmbH, CeramTec Service GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, Emil Müller GmbH, and CeramTec-ETEC GmbH make use of the exemption from publishing the financial statements and the management report for the fiscal year 2017 pursuant to Sec. 264 (3) HGB.

1.4 Changes to the consolidated group

According to a purchase agreement dated 21 February 2017, the UK electro-ceramics business of Morgan Advanced Materials plc., Stourport-on-Severn, Great Britain, was purchased that has two manufacturing sites in Ruabon und Southampton. The company's assets, net of liabilities, were transferred, effective as of 3 April 2017. The purchase price of EUR 55,485k was paid in April and June 2017.

The UK electro-ceramics business manufactures a wide range of piezo-ceramic and dielectric products for specialist applications in industrial, electronics, medical and defence end markets. With the acquisition of the electro-ceramics business, CeramTec has broadened its range of ceramic products and materials, and achieves further economies of scale in highly specialized markets.

The following table shows a purchase price allocation that categorizes the purchase price into the various assets and liabilities acquired:

	Fair value EUR k
Customer relationships	18,056
Technology	9,431
Other intangible assets	735
Intangible assets	**28,222**
Land and buildings	829
Technical equipment and machinery	5,815
Property, plant and equipment	**6,644**
Inventories	3,084
Trade receivables	3,113
Other current assets	4
Assets	**41,067**
Deferred tax liabilities	5,542
Other provisions and liabilities	854
Trade payables	1,926
Liabilities	**8,322**
Total net assets at fair value	32,745
Total consideration transferred	55,485
Goodwill arising on acquisition	**22,740**

The fair value of the acquired receivables equals the gross amount of the receivables created by contract because it is assumed that the total amount of the receivables will be paid.

Goodwill represents the value of the expected future results. In addition, the transferred consideration was paid for future economic benefits or expected synergistic effects, revenue growth and future market developments. The future economic benefits are embodied in the goodwill because they do not meet the recognition criteria for other intangible assets.

Transaction costs related to the acquisition of the business amount to EUR 1,347k, and are reported under the line item other income / expenses (-), net .

As a result of the acquisition, the revenues and results after taxes before the deduction of transaction costs of the consolidated group increased by EUR 21,625k and EUR 3,000k respectively. If the assets and liabilities had been acquired as of 1 January 2017 already, the revenues would have been EUR 28,034k higher, and the results after taxes before the deduction of transaction costs of the consolidated group would have been EUR 3,676k higher.

2 Accounting principles and policies

2.1 Basis of consolidation

Entities included in the consolidated financial statements are included as of the date on which CeramTec Holding obtains control over them. They are deconsolidated on the date on which CeramTec Holding ceases to have control.

In accordance with IFRS 10, uniform accounting policies are used to prepare the separate financial statements of the companies included in the consolidated financial statements.

All significant intercompany receivables and liabilities, revenue, income and expenses and any intercompany profits and losses are eliminated. Pursuant to IAS 12, deferred tax liabilities are recognized for temporary differences arising from consolidation entries.

If less than 100 % of equity in a subsidiary is allocable to CeramTec Holding, the interests allocated to the other shareholders are generally disclosed separately under equity as non-controlling interests. For reasons of immateriality, this does not apply to the non-controlling interests in CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji - Goa, India.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value. This is determined as the total of the acquisition-date fair values of the transferred assets, the liabilities assumed from the former owners of the acquired entity and the equity instruments issued by the acquirer in exchange for control of the acquiree. Acquisition-related costs are recognized in profit or loss as incurred.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the equity share in the acquiree previously held by the acquirer (if available) over the net of the acquisition-date fair value of the identifiable assets acquired and liabilities assumed. If the fair value of the acquired net assets is higher than the consideration transferred, CeramTec Holding reassesses and examines whether it has correctly identified all acquired assets and all assumed liabilities. In the event of a negative difference, even after reassessment, the resulting gain is recognized directly in profit or loss.

For acquisitions of equity investments with shares in capital below 100 %, IFRS 3 allows for the goodwill attributable to non-controlling interests to also be recognized. Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS.

If a company which is part of the CeramTec Holding Group acquires an entity, it measures the financial assets and liabilities for appropriate classification and designation in accordance with the contractual terms, economic conditions and pertinent conditions as of the acquisition date. This also includes separating embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, previously held equity interests are remeasured at their acquisition-date fair value. Any gain or loss is recognized through profit or loss and is taken into account when determining the goodwill.

All contingent consideration that must be transferred by the acquirer is recognized at fair value as of the date of acquisition. A contingent consideration classified as an asset or liability, which is recognized as a financial instrument under IAS 39 *Financial Instruments: Recognition and Measurement*, is measured at fair value. Changes in the fair value are recognized either through profit or loss or under other comprehensive income depending on the classification. Should the contingent consideration not fall under IAS 39, it is accounted for under IAS 37 Provisions, Contingent Liabilities and Contingent Assets, as appropriate. If the contingent consideration is classified as equity, it is not remeasured and its subsequent settlement is accounted for within equity.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment at least once a year (in the fourth quarter) and more frequently if there are indications of impairment. For the purpose of impairment testing, goodwill acquired in a business combination must, from the acquisition date, be allocated to each of the cash-generating units of CeramTec Holding, which is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquirer are assigned to those units or groups.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. If the internal management reporting structure is reorganized, any goodwill allocated to a cash-generating unit is reallocated based on the new reporting structure. Any goodwill reallocated under these circumstances is measured based on the relative values of the newly established operation and the portion of the cash-generating unit.

Foreign currency translation

The consolidated financial statements are prepared in euros, the functional currency of the CeramTec Holding Group. The financial statements prepared by entities that use a different functional currency are translated into euros in accordance with IAS 21. The equity of the foreign entities included in the consolidated financial statements is translated at the historical rate. The remaining items of the statement of financial position are translated at the respective closing rates. Income and expenses are translated at average annual rates. These are calculated as the mean value from the individual average monthly rates of the past twelve months.

Differences from the currency translation of assets and liabilities compared to the translation of the prior year as well as exchange differences between the income statement and the statement of financial position are recognized under other comprehensive income and retained in equity under accumulated other comprehensive income. These amounts recognized under other comprehensive income are reclassified to the income statement upon the partial or complete disposal of a subsidiary included in the consolidated financial statements.

Foreign currency transactions in the local financial statements are translated at the spot rate at the date of the transaction.

The exchange rates of significant currencies used for the currency translation to the euro are as follows:

		31 December 2017		31 December 2016	
		Closing rate	Average rate	Closing rate	Average rate
USD	USA	1.1993	1.1293	1.0541	1.1066
CNY	China	7.8044	7.6267	7.3202	7.3496
GBP	Great Britain	0.8872	0.8762	0.8562	0.8189
PLN	Poland	4.1770	4.2564	4.4103	4.3636
CZK	Czech Republic	25.5350	26.3276	27.0210	27.0343

The individual items in the consolidated statement of cash flows are translated at average rates, while cash and cash equivalents are measured at the spot rate at the balance sheet date.

2.2 Accounting policies

Revenue recognition

Revenue is recognized to the extent that it is probable that the economic benefits from the transaction will flow to the CeramTec Holding Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable less any trade discounts and volume rebates granted. Revenue and other income are recognized as follows:

Revenue from the sale of goods

Revenue from the sale of goods is recognized upon delivery of goods and transfer of ownership if the following criteria is satisfied:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods and merchandise sold
- The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods and merchandise sold
- The amount of revenue can be measured reliably
- It is probable that the economic benefits associated with the transaction will flow to the consolidated group and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Services

Revenue from services is recognized using the percentage of completion method if

- The amount of revenue can be determined reliably
- It is probable that the economic benefits associated with the transaction will flow to the consolidated group
- The stage of completion of the transaction at the end of the reporting period can be determined reliably and
- The costs incurred for the transaction and the costs to complete the transaction can be determined reliably.

Interest income, royalties, dividend income

Interest income is recognized pro rata temporis using the effective interest method. Income from royalties is recognized in accordance with the terms of the underlying contracts on an accrual and pro rata basis. Dividend income is recognized when the right to receive payment is established.

Research and development costs

Research costs are expensed as incurred. If the requirements for capitalization are not satisfied, development costs are recognized in profit or loss in the period in which they are incurred.

Intangible assets

Intangible assets are recognized if a future economic benefit is probable and can be measured reliably.

Individually acquired intangible assets are stated at cost. The cost of intangible assets acquired in a business combination is their acquisition-date fair value. Internally generated intangible assets are stated at the cost that arises during the development phase if all of the following criteria are met:

- Technical feasibility of completing the intangible asset
- Intention to complete development of the intangible asset and use or sell it
- Ability to use or sell the intangible asset
- Existence of a market or demonstration of the usefulness of the intangible asset if it is to be used internally
- Availability of technical and financial resources to complete the development
- Ability to measure reliably the expenditure attributable to the intangible asset during its development

Following initial recognition, intangible assets are carried at cost less accumulated amortization and any accumulated impairment losses.

Intangible assets with finite useful lives are amortized on a straight-line basis over their useful life. Intangible assets acquired during the year are amortized pro rata temporis. The useful life and amortization method are reviewed at least annually at the end of each fiscal year. Changes are treated as changes in accounting estimates. Amortization is recognized in the cost of sales, research and development, general administrative and selling costs. The useful life for technology amounts to 10 to 18 years and for customer relationships 5 to 18 years. Intangible assets with finite useful lives are tested for impairment if there is an indication that the asset may be impaired.

Intangible assets with an indefinite useful life are tested annually for impairment. If the carrying amount of the asset is no longer recoverable, an impairment loss is recognized. Trademarks are assigned an indefinite useful life based on expectations of future use, except for one trademark purchased in 2015 with a useful life of 10 years.

Impairment is assessed by comparing the carrying amount of the intangible assets with its recoverable amount at the level of the cash-generating unit. Intangible assets are grouped at the lowest level for which the cash flows can be separately identified. The recoverable amount of a cash-generating unit is defined as the higher of the fair value less the cost to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is reversed, the amortized cost is written up.

Property, plant and equipment

Property, plant and equipment are recognized at cost if a future economic benefit is probable and can be measured reliably. The cost of internally generated property, plant and equipment comprises direct material and labor costs as well as the directly attributable material and labor overheads. If the requirements of a qualifying asset are met, the cost also includes borrowing costs incurred during production pursuant to IAS 23. A qualifying asset is an asset that takes a substantial period of time to get ready for its intended use or sale.

Following initial recognition, property, plant and equipment are carried at cost less accumulated depreciation and any accumulated impairment losses.

Property, plant and equipment are generally depreciated using the straight-line method. Property, plant and equipment acquired during the year are depreciated pro rata temporis. The useful lives of property, plant and equipment amount to 10 to 40 years for buildings and building components, 3 to 25 years for plant and machinery and 3 to 12 years for other equipment, furniture and fixtures. Low-value assets with an acquisition cost not exceeding EUR 150 are expensed immediately. Low-value assets with a cost of between EUR 150 and EUR 1,000 are recognized in a catch-all item and depreciated collectively over five years using the straight-line method.

Property, plant and equipment are tested for impairment if there is an indication that the asset may be impaired. Impairment is assessed by comparing the carrying amount of the item of property, plant and equipment with its recoverable amount at the level of the cash-generating unit. Property, plant and equipment are grouped at the lowest level for which the cash flows can be separately identified. The recoverable amount of a cash-generating unit is defined as the higher of the fair value less the cost to sell or the value in use of a cash-generating unit. An impairment loss is charged if the carrying amount exceeds the recoverable amount. In the event that the impairment loss is reversed, the amortized cost is written up.

Leases

The determination of whether an arrangement contains a lease is based on the substance of the arrangement at inception date and requires an assessment of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and whether the arrangement conveys a right to use the asset. A reassessment after the inception of the lease is only performed under the conditions set forth in IFRIC 4.

A lease is classified as a finance lease if substantially all risks and rewards incidental to ownership are transferred to the lessee. Each leased asset is recognized under property, plant and equipment at its fair value or, if lower, at the present value of the minimum lease payments. The corresponding liability is disclosed as a finance lease obligation under financial liabilities to third parties. The leased asset is depreciated in subsequent periods over the contractual term or, if shorter, the useful life. Payment to the lessor is divided into interest and repayment components, with the interest component recognized as a constant rate of interest of the remaining lease liability through profit or loss over the term of the lease.

All other leases are classified as operating leases. Rental payments under such lease arrangements are recognized as an expense on a straight-line basis.

Government grants

Government grants are recognized if there is reasonable assurance that they will be received and the Company will comply with the required conditions. Government grants are recognized in profit or loss in the period in which the corresponding expenses are recognized. Government grants for acquisition projects directly reduce the cost of the corresponding items of property, plant and equipment upon initial recognition. Government grants related to income are offset against the corresponding expenses.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments comprise primary and derivative financial instruments.

Primary financial instruments are generally measured at fair value upon initial recognition. This includes current and non-current investments as well as granted loans and receivables and financial liabilities.

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which case resulting gain or loss is recognized in other comprehensive income and reclassified to profit or loss based on the nature of the hedge relationship.

Financial assets

Financial assets are allocated to the following categories:

- Financial assets at fair value through profit or loss
- Loans and receivables
- Held-to-maturity investments
- Available-for-sale financial assets

Classification depends on the nature and purpose of the financial asset and is designated upon acquisition. Items are reclassified on the reporting date where permitted and necessary.

Financial assets are initially recognized at fair value. Transaction costs directly attributable to the acquisition of financial assets that are not measured at fair value through profit or loss increase the carrying amount of the financial asset initially recognized. Transaction costs directly allocated to financial assets that are recognized at fair value through profit or loss are recognized directly in the income statement.

Purchases or sales of financial instruments that require delivery of assets within a time frame established by regulations or conventions in the marketplace (securities spot transactions) are recognized on the trade date, i.e. the date that the group companies commit to purchase or sell the asset.

The subsequent measurement of the financial assets depends on their designation according to the below mentioned categories.

Financial assets at fair value through profit or loss encompass financial assets held for trading and financial assets designated upon initial recognition as measured at fair value through profit or loss. Financial assets are classified as held for trading if they were acquired for the purpose of selling or repurchasing in the near term. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. As of the reporting date, the CeramTec Holding Group has not made use of the option to designate primary financial instruments upon initial recognition as financial assets at fair value through profit or loss. Changes in the fair value of financial assets measured at fair value through profit or loss are presented as finance income or finance costs in the income statement. Within the CeramTec Holding Group, the termination rights agreed in the bond represent embedded derivatives to be separated which are allocated to the "held-for-trading" category.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. In the case of the CeramTec Holding Group, this relates to cash and cash equivalents, trade receivables and other financial receivables. After initial recognition, financial assets categorised under loans and receivables are accounted for at amortised cost using the effective interest rate method, less any impairment losses. When calculating amortised cost using the effective interest method, premiums or discounts are taken into account as well as fees or costs associated with acquiring the financial assets. The effective interest expense is recognised in the financial result. If there is any objective evidence of impairment of loans and receivables (e.g., with regard to considerable financial difficulties or significant changes in the environment of the debtor), impairment losses are charged and recognised under „other income / expenses (-), net" through profit or loss. For trade receivables, impairment losses are charged using an allowance account. Trade receivables are written-off if collection is not expected. The impairment loss/write off is reversed if the reasons for charging recognition no longer apply.

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity which the CeramTec Holding Group intends to hold to maturity and has the ability to do so. After initial recognition, financial assets under this category are accounted for at amortized cost using the effective interest rate method, less any impairment losses. The CeramTec Holding Group does not have any held-to-maturity investments.

Available-for-sale financial assets relate to acquired equity and debt instruments. Equity instruments classified as available for sale are those that are not held for trading or measured at fair value through profit or loss. Debt instruments allocated to this category which are held for an indefinite period of time may be sold in response to changes in market conditions or when liquidity is required. After initial recognition, available-for-sale financial assets are subsequently measured at fair value. Changes in fair value are recognized as unrealized gains and losses under other comprehensive income until the available-for-sale financial assets are derecognized or an impairment loss is charged. At this point in time the gains or losses are reclassified from other comprehensive income to profit or loss. The CeramTec Holding Group does not hold any available-for-sale financial assets.

A financial asset is derecognized if the contractual rights to receive cash flows from the financial asset expires, if the Group has transferred to a third party its contractual rights to receive the cash flows from the financial asset, or has assumed a contractual obligation to pass those cash flows on without delay to a third party when the risks and rewards of ownership of the asset, or control of the asset, have been transferred.

Financial liabilities

Financial liabilities are categorized upon initial recognition either as financial liabilities at fair value through profit or loss or as other financial liabilities. Financial liabilities are initially recognized at fair value. Transaction costs directly attributable to the issue of financial liabilities that are not measured at fair value through profit or loss decrease the amount of the financial liability initially recognized. Transaction costs directly attributable to financial liabilities that are recognized at fair value through profit or loss are recognized directly in the income statement. The financial liabilities of the CeramTec Holding Group relate to trade payables, bonds and loans as well as liabilities to banks, finance lease liabilities, derivative financial instruments and other financial liabilities.

The subsequent measurement of financial liabilities depends on their designation according to the below mentioned categories:

Financial liabilities at fair value through profit or loss include financial liabilities held for trading as well as financial liabilities categorized upon initial recognition as financial liabilities at fair value through profit or loss. Financial liabilities are classified as held for trading if they are held for the purpose of selling in the near future. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39.

Changes in the fair value of financial liabilities recognized through profit or loss are presented as finance income or finance costs in the income statement. Within the CeramTec Holding Group, the interest rate floors contained in the syndicated loan agreement represent separated embedded derivatives which are allocated to the held-for-trading category.

Other financial liabilities are other liabilities that are not measured at fair value through profit or loss. They are measured at amortized cost using the effective interest method. The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts through the expected life of the financial liability, or (where appropriate) a shorter period) to the net carrying amount on initial recognition. The effective interest rate is recognized in the financial result. Other financial liabilities of the CeramTec Holding Group include trade payables, bonds, liabilities to banks, finance lease liabilities and other financial liabilities.

A financial liability is derecognized when the obligations named in the agreement are settled, canceled or expired.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

Hedges

Hedge accounting denotes a special form of accounting that modifies the accounting treatment of the hedged item and hedging instrument in a hedging relationship such that the results of measuring the hedged item or hedging instrument are recognized in the same period directly in equity or in profit or loss. Accordingly, hedge accounting recognizes the offsetting effects of changes in the values of the hedging instrument and the hedged item. IAS 39 provides for three types of hedging relationship where the strict requirements for hedge accounting in individual cases are met:

- Fair value hedge, when the risk of changes in the fair value of a recognized receivable or liability or an unrecognized contractual obligation is hedged
- Cash flow hedge, when the risk of changes in cash flows is hedged, associated with a recognized receivable or liability or a highly probable forecast transaction, or with a currency risk of an unrecognized contractual obligation
- Hedge of a net investment in a foreign operation.

The CeramTec Holding Group uses currency swaps in order to hedge most of the foreign currency risks resulting from the USD loans. These hedges are recognized as cash flow hedges, with the effective part of the change in fair value of derivatives designated as hedging instruments recorded under other comprehensive income, while the ineffective part of the change in value is immediately recognized in profit or loss. Changes in value recognized in other comprehensive income are reclassified to the profit or loss in the period in which the hedged item affects the profit or loss for the period.

Measurement at fair value

On the reporting date, the CeramTec Holding Group measures derivative financial instruments at fair value. The fair value is also stated in the notes to the financial statements for all other financial instruments.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This applies regardless of whether the price is directly observable or has been determined by applying a valuation method. Measurement at fair value is based on the assumption that the transaction, in order to sell or transfer the asset or liability, is performed in one of the following places:

- On the principal market for the asset or the liability or,
- if there is no principal market, on the most advantageous market for the asset or the liability.

The principal market or the most advantageous market must be accessible for the CeramTec Holding Group as of the reporting date.

When calculating the fair value of an asset or a liability, the Group takes into account certain characteristics of the asset or the liability (such as condition and location of the asset or limitations of sale and use) if market participants also took these characteristics into account when determining the price for the acquisition of the respective asset or transferring the liability as of the reporting date.

Fair value measurement of a non-financial asset takes into account the ability of a market participant to generate economic benefits through the best use of the asset or by selling it to another market participant that would find the best use for the asset.

Inventories

Inventories are measured at the lower of cost or net realizable value.

Costs of purchase comprise the purchase price as well as all other ancillary costs directly attributable to the acquisition. Costs of purchase are determined using the moving weighted average cost method.

In addition to direct material and labor costs, costs of conversion comprise a share of production-related material and labor overheads, including depreciation insofar as it is a consequence of the production process, as well as production-related administrative costs. Production costs do not contain any borrowing costs incurred during production as inventories held at the CeramTec Holding Group are not qualifying assets pursuant to IAS 23.

Inventories are written down to reflect risks from reduced salability. The net realizable value is the selling price during the ordinary course of business less the estimated costs of completion and selling costs. Previously recognized write-downs are reversed if the reasons for the write-downs cease to apply. In this case, the reversal is limited to the amount of the original write-down.

Cash and cash equivalents

Cash and cash equivalents generally comprise cash in hand and bank deposits as well as cash and short-term deposits with an original term of up to three months. The cash and cash equivalents reported in the statement of cash flows correspond to the amounts recognized in the statement of financial position.

Provisions for pension obligations

Defined benefit obligations are measured using the projected unit credit method. These take into account the benefits vested in the current period and previous periods in exchange for the work performed by employees. When calculating the amount of total obligations, adjustment to salaries and pensions expected in the future as well as the probability of employee turnover and employee age and gender are also factored into calculations. Pension obligations in Germany are determined on the basis of the 2005G standard tables of Prof. Dr. Klaus Heubeck. Pension obligations outside of Germany are determined taking into account country-specific parameters.

The obligations are discounted using discount rates derived from high-quality, fixed-interest corporate bonds with the same currency and term. If no high-quality, fixed-interest corporate bonds are available, yields on government bonds are used instead. Net interest on the net liability is determined by multiplying the net liability with the discount rate.

Remeasurements comprise actuarial gains and losses, the return on plan assets and changes in the effect of the asset ceiling while excluding net interest on the net liability. These are recognized in other comprehensive income. Remeasurements are not reclassified to the income statement in later periods.

Past service cost results from the change in the present value of the defined benefit obligation arising from a plan amendment or curtailment and is recognized as an expense.

The fair value of the plan assets is deducted from the present value of the pension obligations. Plan assets are assets that are held by a long-term employee benefit fund. This fund must be legally separate from the reporting entity and exist solely to pay or fund employee benefits.

Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the provision. Information on estimation uncertainties can be found in note 2.3.

The amount of the provision recognized is the best estimate of the expenditure required to settle the present obligation as of the reporting date. The best estimate must take account of inherent risks and uncertainties. If a provision is measured on the basis of the estimated cash flow required to settle the obligation, these cash flows are discounted in cases where the effect of the time value of money is significant.

If it can be assumed that portions of or the entire economic benefits required to settle the provision are reimbursable by an external third party, this claim is recognized as an asset if the reimbursement is virtually certain and the amount can be reliably determined. The amount recognized for the reimbursement should not exceed the amount of the provision.

Contingent liabilities and contingent assets

Contingent liabilities are not recognized in the consolidated statement of financial position. A contingent liability is disclosed, unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are also not recognized in the statement of financial position. They are described in the notes to the financial statements provided an inflow of economic benefits is probable.

Taxes

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities based on the tax rates that have been enacted or substantively enacted as of the reporting date.

Deferred tax assets and liabilities are recorded for all deductible and taxable temporary differences between the carrying amounts in the tax accounts and the IFRS consolidated statement of financial position. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that effects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differenes can be utilised. Deferred tax assets also include tax refund claims that result from the expected utilization of existing unused tax losses or interest carryforwards in subsequent years if it is probable that there will be future taxable profit against which the deferred tax assets can be utilised.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply when the temporary differences are likely to reverse, based on tax rates and tax laws that have been enacted or substantively enacted as of the reporting date of the relevant company.

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which event the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred tax assets relate to the same taxable entity and the same taxation authority.

There is a consolidated tax group for income tax purposes between CeramTec Holding (as the parent), CeramTec Group GmbH, CeramTec FinCo GmbH, CeramTec Service GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. There is also a consolidated tax group for VAT purposes between CeramTec Service GmbH as the parent company and CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH.

2.3 Estimation uncertainties and exercise of judgment

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of income, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the reporting date. These estimates and assumptions are made to obtain an appropriate overview of the results of operations and financial position of the CeramTec Holding Group. The underlying assumptions are revised regularly. However, the actual results may vary from those anticipated.

In the process of applying the accounting policies of the CeramTec Holding Group, management performed the following measurements, which have a significant impact on the consolidated financial statements.

Business combinations

Business combinations are accounted for using the acquisition method. The acquired assets and liabilities are measured at their acquisition-date fair value.

Using the acquisition method requires certain estimates and judgments, particularly with regard to determining the fair value and expected useful lives of the acquired intangible assets and property, plant and equipment as well as the fair value of liabilities assumed.

This measurement is largely based on estimated future cash flows. Deviations between the actual cash flows and those determined when calculating the fair value can have a significant effect on the future net income of the CeramTec Holding Group.

Goodwill of EUR 561,573k (31 December 2016: EUR 557,961k) and other intangible assets of EUR 538,304k (31 December 2016: EUR 557,421k) was recognized as of the reporting date.

Impairment of non-financial assets

Assumptions were made to calculate the recoverable amount to determine whether impairment losses had to be recognized on intangible assets and property, plant and equipment. In this regard, future cash flows were derived from the budget planning and medium-term forecast for each of the cash-generating units. Management assumes that the assumptions and estimates, on which the discounted cash flows are based, are accurate. Nevertheless, changes in the economic environment and growth assumptions can affect impairment testing resulting in the need to recognize impairment losses or to reverse impairment losses in the future.

Impairment losses recognized on non-financial assets for the fiscal year and comparative period can be found in notes 4.1 Goodwill and Intangible Assets and 4.2 Property, Plant and Equipment.

Valuation allowances on receivables

The recoverability of trade receivables was assessed based on the estimated likelihood of default. Accordingly, receivables are reduced by appropriate allowances for amounts estimated to be irrecoverable (for example receivables from customers on whose assets insolvency proceedings have been initiated are written off in full to the extent that any collateral provided is not recoverable). As of the reporting date, an impairment loss of EUR 472k (31 December 2016: EUR 535k) was identified as necessary.

Provisions for pension obligations

Defined benefit plans are measured using actuarial valuations. These contain assumptions of discount rates, future salary trends, mortality rates and future pension increases.

Provisions for pension obligations of EUR 98,447k (31 December 2016: EUR 102,410k) were recorded as of the end of the reporting period.

Provisions

Provisions for the expected expenses from warranty obligations in accordance with national sales contract law are recognized as of the date on which the relevant products are sold according to the management's best estimate regarding the expenses required to settle the Group's obligation.

A provision is set up for the obligation to eliminate environmental damage if it is likely to occur and the costs can be estimated reliably. With ongoing examination and over the course of performing renovation measures, the provisions are adjusted in line with the knowledge gained. The amount of the individual provisions is influenced by factors such as the extent of the contamination, the renovation measures called for and additional demands from authorities, companies or private persons.

In the aggregate provisions (other provisions and provision for taxes) of EUR 38,162k (31 December 2016: EUR 29,851k) were recorded as of the end of the reporting period.

Deferred tax assets

The calculation of deferred tax assets requires assumptions to be made relating to the future taxable income and historical use of deferred tax assets. These assumptions take into account the anticipated development and effect on earnings from the reversal of taxable temporary differences. As future business developments cannot be foreseen with certainty and are not entirely within the CeramTec Holding Group's sphere of influence, the measurement of deferred tax assets involves a level of uncertainty.

As of the reporting date, deferred tax assets of EUR 249k (31 December 2016: EUR 851k) were recognized.

2.4 Adoption of amended and new standards and interpretations: Changes in accounting policies due to first-time adoption of revised and newly issued IFRSs and IFRICs

The following revised IFRSs and IFRICs were adopted for the first time:

Standards and interpretations	Date of first-time adoption
Amendments to IAS 7: "Disclosure of Changes in Liabilities Arising from Financing Activities	1 January 2017
Amendments to IAS 12: "Recognition of Deferred Tax Assets for Unrealised Losses	1 January 2017
Annual Improvements Project (2014 - 2016) for IFRS 12	1 January 2017

These changes had no effect on the consolidated financial statements of CeramTec Holding.

Revised and newly issued IFRSs and IFRICs not yet compulsory

Adoption of the following revised and newly issued IFRSs and IFRICs was not yet compulsory in the fiscal year and/or they had not yet been endorsed by the European Commission for adoption in the European Union. In the fiscal year, these new or amended standards and interpretations were not adopted earlier.

Standards and interpretations	Date of first-time adoption
IFRS 14: "Accounting for Regulatory Deferral Accounts"	1 January 2016
Amendments to IFRS 10 and IAS 28: "Sales or Contributions of Assets Between an Investor and its Associate/Joint Venture"	deferred indefinitely
IFRS 9: "Financial Instruments"	1 January 2018
IFRS 15: "Revenue from Contracts with Customers"	1 January 2018
Clarifications to IFRS 15	1 January 2018
Amendments to IFRS 2: "Accounting for Cash-settled Share-based Payment Transactions	1 January 2018
Amendments to IFRS 4: "Effects of the Different Initial Application Dates of IFRS 9 and the Standard Superseding IFRS 4"	1 January 2018
Annual Improvements Project (2014 - 2016) for IFRS 1 and IAS 28	1 January 2018
Amendments to IAS 40: "Transfers to or from Investment Property Classification	1 January 2018

Standards and interpretations	Date of first-time adoption
IFRS 16: "Accounting for Leases"	1 January 2019
IFRIC 23 Uncertainty over Income Tax Treatments	1 January 2019
Amendments to IAS 28: Long-term Interests in Associates and Joint Ventures	1 January 2019
Amendments to IFRS 9: Prepayment Features with Negative Compensation	1 January 2019
Annual Improvements Project (2015 2017) for IFRS 3, IFRS 11, IAS 12 and IAS 23	1 January 2019
IFRS 17: "Insurance Contracts "	1 January 2021

IFRS 9

IFRS 9 Financial Instruments includes requirements for recognition, measurement, derecognition and general hedge accounting. The essential requirements incorporated by the final version of IFRS 9 may be summarized as follows:

The requirements for scope of application, recognition and derecognition in IFRS 9 are carried over mostly unchanged from IAS 39 Financial Instruments: Recognition and Measurement.

IFRS 9 amends IAS 39 to incorporate a new classification model for financial assets.

Subsequent to initial recognition, financial assets will be divided in the future into three classifications depending on various measurement criteria and various policies on the recognition of value changes. The criteria for classifying financial assets are based on the instrument's contractual cash flows and business model within which the instrument is held. If the criteria are met, financial assets are measured at amortised cost (AC) using the effective interest method; fair value through other comprehensive income (FVTOCI); or fair value through profit or loss (FVTPL). In general, classifications are mandatory. However, entities have a small number of options to choose from.

The IFRS 9 accounting model for financial liabilities is broadly the same as that in IAS 39. The only key difference relates to financial liabilities designated under the fair value option. IFRS 9 requires the amount of the change in the liabilities' fair value attributable to changes in the credit risk to be recognized in OCI.

Under IFRS 9, which introduces a new impairment model, the accounting for expected losses and interest revenue in the future can be viewed as a three-step process. Thus, credit losses expected at the date of initial recognition are required to be measured at the present value of 12-month expected credit losses (step 1). A loss allowance for lifetime expected credit losses is required for a financial instrument if the credit risk on that financial instrument has increased significantly since initial recognition (step 2). If objective evidence of impairment is identified, interest revenue is calculated using the net carrying amount of the asset (i.e. its carrying amount excluding the loss allowance) (step 3).

The general hedge accounting requirements of IFRS 9 retain the three types of hedge accounting mechanisms in IAS 39. However, greater flexibility has been introduced to the types of transactions eligible for hedge accounting under IFRS 9, and IFRS 9 allows an entity to more appropriately reflect its risk management activities in the financial statements. Significant differences arise from the types of hedged items and hedging instruments eligible for hedge accounting that have been broadened, and new hedge effectiveness criteria, particularly hedge effectiveness criteria that do not require that the level of offset must be between 80 and 125 %.

In addition to extensive transitional provisions, IFRS 9 sets out extensive requirements for public disclosure when an entity transitions to IFRS 9 or continues to apply IFRS 9. Some of the requirements of IFRS 7 Financial Instruments: Disclosures are amended, particularly requirements relating to impairment.

Based on an analysis of the Group's financial assets and financial liabilities as at 31 December 2017 on the basis of the facts and circumstances that exist at that date, the directors of the Company have assessed the impact of IFRS 9 to the Group's consolidated financial statements as follows:

The reclassification of financial assets depending on the business model within which they are held, and their contractual cash flows, will not have a substantial effect on measurement policies. The same is true for trade receivables sold under a factoring agreement. Last year, for the first time certain receivables were sold resulting in derecognition of the receivables.

The CeramTec Group will presumably use a simplified impairment approach for trade receivables and finance lease receivables under which a loss allowance at an amount equal to lifetime expected credit losses on all instruments is recognized irrespective of the credit risk of the instrument.

Because the new hedge accounting requirements should allow the CeramTec Group to more appropriately reflect its risk management activities in the financial statements, and the types of hedged items and hedging instruments have been broadened that are eligible for hedge accounting, the management expects that under IFRS 9 existing hedging relationships continue to qualify for hedge accounting, on the basis of an assessment of the hedging relationships which has been performed.

IFRS 15

IFRS 15 supersedes the current revenue recognition guidance, and provides a single, principles based five-step model to be applied to all contracts with customers. This core principle is delivered in a five-step model framework: The contract with a customer is identified (step 1). The performance obligations in the contract are identified (step 2). The transaction price is determined (step 3), given that detailed guidance is provided on how to account for variable consideration, financing components, payments made to a customer, and exchanges of goods or services. After determining the transaction price, the transaction price is allocated to the performance obligations in the contract (step 4) by reference to their relative standalone selling prices. Finally, revenue is recognized when (or as) the entity satisfies a performance obligation (step 5). Revenue is recognized as control of the goods or services has transferred to the customer.

Under IFRS 15, an entity will determine upon conclusion of a contract whether revenue should be recognized at a point in time or over time. The entity determines whether control is transferred (i.e., the performance obligation is satisfied) over time if certain criteria are met. If not, revenue is recognized when control is passed to the customer.

The CeramTec Group generates revenue mainly through the sale of goods and merchandise. Revenue from the majority of contracts with customers is, in consequence, recognized when control is transferred to a customer (when the customer has legal title to the asset, has the significant risks and rewards related to the ownership of the asset, or has accepted the asset). Thus, the new guidance does not materially affect the revenue recognition policies applied so far.

The management does not expect that the application of IFRS 15 will have a significant impact on the consolidated statement of financial position and/or consolidated statement of comprehensive income, with the exception of a requirement to provide more detailed information about revenue generated by the consolidated group from contracts with customers.

IFRS 16

Assessment of the impact of IFRS 16 is not yet finalized.

3 Notes to the consolidated statement of comprehensive income

3.1 Revenue

Revenue results primarily from the sale of goods and merchandise. Revenue breaks down into regions and businesses as follows:

	2017 EUR k	2016 EUR k
Regions		
Europe (w/o Germany)	243,940	210,773
Germany	138,395	133,068
North America	85,474	72,979
Asia	72,092	61,393
Rest of world	16,424	15,100
Total	**556,325**	**493,313**
Businesses		
Industrial	355,157	307,763
Medical products	201,168	185,550
Total	**556,325**	**493,313**

3.2 Cost of sales

The cost of sales breaks down as follows:

	2017 EUR k	2016 EUR k
Material and packaging costs	106,817	88,687
Amortization and depreciation	49,656	49,890
Personnel expenses	115,867	113,504
Other costs of sales	45,266	42,848
Total	**317,606**	**294,929**

Other costs of sales primarily contain energy costs, freight costs and maintenance expenses.

3.3 Selling costs

Selling costs primarily contain amortization, depreciation and personnel expenses.

3.4 Research and development costs

Research and development costs mainly contain personnel expenses.

3.5 General administrative costs

General administrative costs primarily contain personnel expenses.

3.6 Other income / expenses (-), net

Other income / expenses (-), net, breaks down as follows:

	2017 EUR k	2016 EUR k
Write-downs and impairment	-14,545	-2,498
Gains on disposal of non-current assets held for sale	3,164	0
Transaction costs	-1,347	-8
Foreign currency results	239	3
Losses on disposal of property, plant and equipment	-93	-64
Addition to allowance for bad debts	-63	-118
Income from reversal of allowances for bad debts	54	58
Income from reversal of provisions	0	79
Sundry other income	432	611
Sundry other expenses	-324	-284
Total	**-12,483**	**-2,221**

Write-downs and impairment related to the write-off of the goodwill of two businesses. In the previous year, write-downs and impairment mainly related to the write-off of two capitalized technologies reported as other intangible assets.

Land of CeramTec UK Ltd. in Colyton was reclassified at the beginning of 2017 to non-current assets held for sale, and sold in June 2017 at a book profit of EUR 3,164k.

Transaction costs of EUR 1,347k were incurred in connection with the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc., Stourport-on-Severn, Great Britain, the former owner (see 1.4).

3.7 Financial result

The financial result breaks down as follows:

	2017 EUR k	2016 EUR k
Exchange rate gains	5,219	1
Interest income from derivatives	0	18,637
Other interest income	206	96
Interest income and other finance income	**5,425**	**18,734**
Interest expense from bond	25,303	25,303
Interest expense from syndicated loan	21,047	25,430
Interest expense from shareholder loan	6,384	11,895
Expense from unwinding the discount on financial liabilities	5,850	5,731
Interest expense from derivatives	1,154	0
Interest expense from provision and use of revolving line of credit	864	508
Exchange rate losses	0	2,296
Other interest expenses	2,318	2,433
Interest expenses and other finance costs	**62,920**	**73,596**
Total financial result	**-57,495**	**-54,862**

The exchange rate gains and losses result from loans not designated in the functional currency of the group companies. More information on interest income and interest expenses from derivatives can be found in note 4.15.

The other interest expenses includes an amount of EUR 1,699k (previous year: EUR 2,102k), which are due to unwinding the discount on provisions.

3.8 Income tax

There is a consolidated tax group for income tax purposes between CeramTec Holding and its German subsidiaries. This means that German corporate income tax and trade tax is only levied at the level of the parent company, CeramTec Holding. CeramTec Holding also has indirect shareholdings in foreign corporations. The current income taxes of the CeramTec Holding Group therefore include, in addition to German corporate income tax and trade tax, the tax expense of the foreign corporations, which was calculated based on taxable income according to local tax law and the tax rate applicable in each case.

A profit before income tax of EUR 44,952k (previous year: EUR 4,836k) is allocable to Germany and abroad as follows:

	2017	2016
	EUR k	EUR k
Germany	28,680	-5,874
Abroad	16,272	10,710
Total	**44,952**	**4,836**

Tax expense of EUR 20,340k (previous year: EUR 10,010k) breaks down as follows:

	2017	2016
	EUR k	EUR k
Current income tax expense	-30,543	-17,132
Deferred tax income	10,203	7,122
Income tax expense	**-20,340**	**-10,010**

Overall, the Company's weighted tax rate (based to the allocation of profit before tax and mainly driven by the German entities) is 28.5 % (previous year: 28.5 %), which will be used for the 2017 and 2016 reconciliation in the following table. The effective tax rate (i.e., tax expense in relation to profit before income tax) factors in both the current and the deferred tax expense and takes into account all factors, such as non-deductible operating expenses or a change in the assessment base.

	2017		2016	
	EUR k	%	EUR k	%
Profit before income tax	**44,952**		**4,836**	
Expected income tax expense	-12,811	28.5%	-1,378	28.5%
Permanent differences	-2,680	6.0%	-2,142	44.3%
Non tax-deductible impairment of goodwill	-4,145	9.2%	0	0.0%
Non-recognition of deferred tax assets on inter-est carryforwards	-1,161	2.6%	-6,606	136.6%
Tax expense for previous years	-715	1.6%	191	-3.9%
Effects of changed income tax rates	485	-1.1%	0	0.0%
Unrecognized deferred tax assets	690	-1.5%	-119	2.5%
Other adjustments	-3	0.0%	44	-0.9%
Income tax expense (-) and effective tax rate	**-20,340**	**45.2%**	**-10,010**	**207.0%**

The effects of permanent differences result mainly from add-backs of expenses of EUR 1,842k (EUR 2,106k) to operating profit which are subject to German trade tax, other non-deductible operating expenses of EUR 908k (previous year: EUR 215k), and tax-free income of EUR -70k (previous year: EUR -179k).

Deferred taxes

Deferred income taxes were calculated using the expected tax rate of the relevant company. The deferred taxes are offset where there is an enforceable legal right to offset current taxes and they are levied by the same tax authority.

The following table shows the deferred taxes disclosed in the consolidated statement of financial position:

	31 December 2017	31 December 2016
	EUR k	EUR k
Deferred tax assets	249	851
Deferred tax liabilities	150,721	156,258
Net amount of deferred tax liabilities	**150,472**	**155,407**

The deferred tax assets and liabilities stem from the following:

	31 December 2017		31 December 2016	
	Assets	Liabilities	Assets	Liabilities
	EUR k	EUR k	EUR k	EUR k
Tax loss carryforwards	65	0	89	0
Property, plant and equipment	208	22,027	196	23,092
Goodwill and other intangible assets	5,978	148,384	9,622	156,040
Inventories, receivables and other assets	2,440	13,455	1,487	24,861
Non-current provisions	19,011	1,897	31,945	2,152
Current provisions and other liabilities	7,924	335	7,795	396
Total deferred taxes	**35,626**	**186,098**	**51,134**	**206,541**
Offsetting	-35,377	-35,377	-50,283	-50,283
Deferred taxes	**249**	**150,721**	**851**	**156,258**

The following table shows the development of the net amount of deferred tax liabilities:

	2017	2016
	EUR k	EUR k
Net amount of deferred tax liabilities as of 1 January	**155,407**	**166,261**
Deferred tax income shown in the income statement	-10,203	-7,122
Changes in deferred taxes recognized in other comprehensive income	165	-3,908
Changes arising from acquisitions and disposals	5,280	0
Other changes (e.g. changes arising from foreign currency translation)	-177	176
Net amount of deferred tax liabilities as of 31 December	**150,472**	**155,407**

Other comprehensive income contains deferred tax expense on the remeasurement of defined benefit plans of EUR 555k (2016: deferred tax income of EUR 3,976k) and deferred tax income on gains from cash flow hedges of EUR 427k (2016: deferred tax expenses of EUR 68k). In addition, other comprehensive income contained deferred tax expense of EUR 37k (2016: EUR 0k) on the foreign currency translation of a loan.

Unused tax losses and interest carryforwards

Unused tax losses and interest carryforwards break down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Interest carryforwards	100,696	97,905
on which no deferred tax assets are recognized	*100,696*	*97,905*
Foreign unused tax losses	2,930	3,385
on which no deferred tax assets are recognized	*2,672*	*3,052*
Total unused tax losses	2,930	3,385
on which no deferred tax assets are recognized	*2,672*	*3,052*

Deferred tax assets were recognized on unused tax losses of EUR 258k (31 December 2016: EUR 333k).

Foreign unused tax losses, for which deferred tax assets have been capitalized, mainly result from unused tax losses made by group companies in Spain of EUR 258k (31 December 2016: EUR 252k), and in India of EUR 0k (31 December 2016: EUR 81k). The tax loss carryforwards in Spain do not expire; however the tax loss carryforwards in India will expire after 8 years.

Temporary differences in connection with shares in subsidiaries in the amount of EUR 2,087k are not subject to deferred tax liabilities, because CeramTec is able to control the timing of the reversal of the temporary difference and it is probable that the temporary differences will not reverse in the foreseeable future.

3.9 Additional information on the type of expenses

Cost of materials

In fiscal year 2017, cost of materials amounted to EUR 124,195k (previous year: EUR 104,868k). Cost of materials are mainly contained in cost of sales and research and development.

Personnel expenses

Personnel expenses break down as follows:

	2017 EUR k	2016 EUR k
Wages and salaries	145,465	137,488
Social security contributions incl. pension expenses	35,076	38,811
Total	**180,541**	**176,299**

Personnel expenses are contained in cost of sales, selling, research and development, as well as general administration costs.

Employees

On average, the Group employed 3,397 (previous year: 3,229) people in the fiscal year. These break down as follows:

	31 December 2017 average Headcount	31 December 2016 average Headcount
Salaried employees	1,280	1,170
Wage earners	2,117	2,059
Total	**3,397**	**3,229**

Amortization and depreciation

Amortization and depreciation break down as follows:

	2017 EUR k	2016 EUR k
Amortization of intangible assets	45,657	44,901
Depreciation of property, plant and equipment	38,122	38,558
Impairment of goodwill and intangible assets	14.545	2,471
Impairment of property, plant and equipment	0	26
Total	**98,324**	**85,956**

4 Notes to the consolidated statement of financial position

4.1 Goodwill and intangible assets

Goodwill and intangible assets break down as follows:

	Goodwill	Other intangible assets				Total
		Trademarks	Technology	Customer relation-ships	Other	
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Cost						
1 January 2016	**557,567**	**52,226**	**236,177**	**413,516**	**6,845**	**1,266,331**
Additions	0	0	0	0	656	656
Disposals	0	0	0	0	-1	-1
Exchange differences	394	31	0	315	46	786
31 December 2016	**557,961**	**52,257**	**236,177**	**413,831**	**7,546**	**1,267,772**
Additions from business combinations	22,740	0	9,431	18,056	735	50,962
Additions	0	0	0	0	733	733
Disposals	0	0	0	0	-110	-110
Reclassifications	0	0	0	0	80	80
Exchange differences	-4,583	-118	-450	-2,452	-210	-7,813
31 December 2017	**576,118**	**52,139**	**245,158**	**429,435**	**8,774**	**1,311,624**
Amortization/impairment						
1 January 2016	**0**	**55**	**33,105**	**67,726**	**3,956**	**104,842**
Additions to amortization	0	92	13,902	29,428	1,479	44,901
Additions to impairment	0	0	2,471	0	0	2,471
Disposals	0	0	0	0	-1	-1
Exchange differences	0	6	0	131	39	177
31 December 2016	**0**	**153**	**49,478**	**97,285**	**5,473**	**152,390**
Additions to amortization	0	89	13,906	30,124	1,538	45,657
Additions to impairment	14,545	0	0	0	0	14,545
Disposals	0	0	0	0	-110	-110
Exchange differences	0	-22	0	-569	-144	-735
31 December 2017	**14,545**	**220**	**63,385**	**126,840**	**6,757**	**211,747**
Net carrying amounts						
31 December 2017	561,573	51,919	181,773	302,595	2,017	1,099,877
31 December 2016	557,961	52,104	186,699	316,546	2,073	1,115,382

Goodwill results from the acquisition of the high-performance ceramics division in 2013 and from the acquisition of DAI Ceramics, Inc in 2015 and of the UK electro-ceramics business in the current fiscal year (see note 1.4). It was allocated to the cash-generating units (CGUs) Medical (EUR 312,721k), Industrial (EUR 204,194k), Emil Müller (EUR 36,596k) and CeramTec-ETEC (EUR 8,062k).

The CGU Medical includes the business activities designed to develop, manufacture and sell technical high-performance ceramics products used for medical technology, and the CGU Industrial includes the business activities designed to develop, manufacture and sell technical high-performance ceramics products used in the electronics and automotive industries, and for mechanical engineering.

The CGU Emil Müller is predominantly engaged in developing, manufacturing and selling salt cores, which are used in foundry technology to manufacture casting components in the automotive industry.

The CGU CeramTec-ETEC continues to include mainly business activities concerned with ceramic products which are used in ballistic applications, and protect against wear and corrosion.

As of 1 September 2013, the trademarks CeramTec, BIOLOX and SPK were identified and recognized. As of 29 May 2015, the trademark DAI Ceramics were also identified and recognized. The recorded carrying amount of these intangible assets amounted toEUR 51,919k as of 31 December 2017 (31 December 2016: EUR 52,104k). As the recognized trademarks CeramTec, BIOLOX and SPK do not represent a product-specific trademark and do not have a finite life, the useful life for the recognized trademarks was classified as indefinite. The trademark DAI has a remaining useful life of 7.4 years as of the reporting date (31 December 2016: 8.4 years). The trademarks were allocated to the cash-generating units Medical and Industrial.

Technology has a carrying amount of EUR 181,773k (31 December 2016: EUR 186,699k) and primarily contains the basic technology underlying high-performance ceramics. This has an average weighted remaining useful life of 13.4 years (31 December 2016: 14.1 years).

Customer relationships have a carrying amount of EUR 302,595k (31 December 2016: EUR 316,546k) and primarily contain customer relationships from medical applications. This has an average weighted remaining useful life of 12.6 years (31 December 2016: 13.0 years).

Amortization of other intangible assets is recognized under cost of sales, selling, research and development and general administration costs, and impairment losses are recognised under other operating income and expenses.

For the cash-generating units, the annual impairment test was performed as of 30 November 2017. The recoverable amount was calculated based on an asset's value in use. Value in use is calculated by discounting the future cash flows. The measurement is therefore allocable to level 3 pursuant to IFRS 13. The projected future cash inflows are based on the approved financial budgets, which are undertaken by the CeramTec Group and, as a rule, has a three-year planning horizon. For this purpose, assumptions are made mainly about future selling prices, quantities and costs. The planning period for the CeramTec-ETEC cash-generating unit is different, and covers the time until 2022.

The financial budgets are prepared on the basis of historical experience, and reflects the management's expectations for the next three or five years, respectively.

A long-term growth rate of 1 % was determined for the years beginning in 2021 or 2023. The weighted average cost of capital results from equity costs ranging between 8.64 % - 8.68 %, borrowing costs (before taxes) of 2.70 %, and a tax rate between 26.0 % and 32.8 %. Equity costs were calculated using a base interest rate of 1.25 % and a market risk premium of 6.75 %.

The weighted average cost of capital for the CGUs Medical and Industrial amounts to 8.17 %, and the weighted average cost of capital for the CGUs Emil Müller and CeramTec-ETEC amounts to 8.18 % and 8.13 %, respectively.

We believe that reasonably possible changes in significant basic assumptions (weighted average cost of capital, EBITDA margin, long-term growth rate) underlying the determination of value in use would not result in an excess of the carrying amount of the cash-generating units Medical and Industrial over their value in use.

Impairment losses totaling EUR 14,545k had to be recognized on the CGUs Emil Müller and CeramTec-ETEC as of 31 December 2017 as each carrying amount exceeded the value in use of the cash-generating units' assets. Value in use of the CGUs Emil Müller and CeramTec-ETEC decreased because of the decline in demand for salt cores used in the manufacturing of diesel engines and more conservative projections of revenue from transparent ceramics (PERLUCOR®) respectively.

4.2 Property, plant and equipment

Property, plant and equipment breaks down as follows:

	Land and buildings	Plant and machinery	Other equipment	Assets under construc-tion	Total
	EUR k	EUR k	EUR k	EUR k	EUR k
Cost					
1 January 2016	**128,894**	**246,107**	**12,726**	**7,526**	**395,253**
Additions from business combinations	0	0	0	0	0
Additions	302	3,795	2,200	7,563	13,860
Government grants	70	3	0	0	73
Disposals	-177	-1,910	-1,005	-1	-3,093
Reclassifications	1,373	7,867	830	-10,070	0
Exchange differences	243	3,667	178	-66	4,022
31 December 2016	**130,705**	**259,529**	**14,929**	**4,952**	**410,115**
Additions from business combinations	829	5,815	0	0	6,644
Additions	1,004	10,483	2,808	12,451	26,747
Disposals	-466	-1,780	-834	-20	-3,100
Reclassifications	447	4,436	284	-5,246	-80
Exchange differences	-1,332	-4,511	-265	-178	-6,286
31 December 2017	**131,187**	**273,972**	**16,922**	**11,959**	**434,040**
Amortization/impairment					
1 January 2016	**15,715**	**73,198**	**6,142**	**0**	**95,054**
Additions to amortization	7,520	27,977	3,061	0	38,558
Additions to impairment	0	26	0	0	26
Disposals	-175	-1,620	-938	0	-2,733
Reclassifications	0	0	0	0	0
Exchange differences	209	3,275	194	0	3,678
31 December 2016	**23,269**	**102,856**	**8,459**	**0**	**134,583**
Additions to amortization	7,571	27,485	3,066	0	38,122
Disposals	-208	-1,613	-797	0	-2,618
Reclassifications	0	0	0	0	0
Exchange differences	-435	-2,286	-141	0	-2,862
31 December 2017	**30,197**	**126,442**	**10,587**	**0**	**167,225**
Net carrying amounts					
31 December 2017	100,990	147,530	6,335	11,959	266,815
31 December 2016	107,436	156,673	6,470	4,952	275,532

Depreciation of property, plant and equipment is recognized under cost of sales, selling, research and development and general administration costs, and impairment losses are reported as other income and expense.

No borrowing costs were capitalized in property, plant and equipment in the fiscal year, as in the previous year.

There were contractual commitments to acquire property, plant and equipment of EUR 12,739k as of the reporting date (31 December 2016: EUR 2,702k).

Property, plant and equipment under finance leases contains rented buildings with a net carrying amount of EUR 1,313k (31 December 2016: EUR 1,412k), and contained in the previous year furniture and fixtures with a net carrying amount of EUR 16k in addition to rented buildings. The corresponding lease liabilities are explained under finance liabilities to third parties (note 4.12).

4.3 Other financial assets

The following table breaks down other financial assets as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Other non-current financial assets		
Separated termination rights	19,963	24,459
Derivative financial instruments	0	47,907
Insurance claims	54	118
Total	**20,017**	**72,484**
Other current financial assets		
Derivative financial instruments	21,233	12,212
Receivables arising from amounts retained by a factor as a security	1,768	0
Other financial assets	207	178
Total	**23,208**	**12,390**

The CeramTec Holding Group has a termination option for the issued bond. This termination option represents an embedded derivative, which is accounted for separately from the underlying transaction. Further explanations can be found in note 4.15.

4.4 Other assets

The following table breaks down other assets as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Other non-current assets		
Deferred finance costs for the revolving credit line	0	312
Sundry assets	678	399
Total	**678**	**711**
Other current assets		
Receivables from energy tax refunds	1,541	866
VAT receivables	1,412	1,355
Deferred finance costs for the revolving credit line	312	471
Sundry assets	1,819	1,576
Total	**5,084**	**4,268**

Sundry current assets primarily contain prepayments, e.g. for insurances and for trade fairs.

4.5 Inventories

Inventories break down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Raw materials	30,060	25,652
Work in progress	29,604	25,989
Finished goods	22,963	21,992
Merchandise	2,537	1,810
Other	1,365	1,461
Total	**86,529**	**76,904**

Other inventories include packaging materials and spare parts for machinery.

At the reporting date the allowance for write-downs on inventories amount to EUR 11,071k (31 December 2016: EUR 10,117k). The expense resulting from increasing the write-downs by EUR 954k is reported under cost of sales.

4.6 Trade receivables

At the end of the reporting period, trade receivables amounted to EUR 52,096k (31 December 2016: EUR 53,553k) after taking into account valuation allowance of EUR 472k (31 December 2016: EUR 535k).

A factoring agreement was concluded in 2017 whereby receivables of EUR 12,762k (31 December 2016: EUR 0k) were sold as of the balance sheet date. Under the terms of the agreement, EUR 1,768k (31 December 2016: EUR 0k) was retained by the factor as of the balance sheet date as a security, and recognized in other short-term financial assets (see note 4.3).

The value and maturity structure of trade receivables before impairment breaks down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Carrying amount before impairment	**52,568**	**54,088**
thereof not yet due on the reporting date	41,757	43,878
thereof past due on the reporting date	10,811	10,210
past due up to 30 days	8,748	8,062
past due up to 60 days	1,092	1,313
past due up to 90 days	331	126
past due more than 90 days	640	709

The age structure of the impairment losses recognized through profit or loss as of the reporting date breaks down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
not yet due	0	20
past due up to 30 days	0	49
past due up to 60 days	97	44
past due up to 90 days	36	45
past due more than 90 days	339	377
Total	**472**	**535**

The impairment losses are based on the estimated likelihood of default. They primarily relate to specific bad debt allowances on receivables from customers on whose assets insolvency proceedings were initiated or who are experiencing significant financial difficulty.

The age structure of receivables past due which are not impaired breaks down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
past due up to 30 days	8,748	7,991
past due up to 60 days	958	1,250
past due up to 90 days	282	61
past due more than 90 days	174	163
Total	**10,162**	**9,465**

There was no indication as of the reporting date that the debtors of receivables that were not impaired and not past due would not meet their payment obligations.

The following table shows the development of allowances on trade receivables during the past reporting period.

	2017 EUR k	2016 EUR k
Allowance on 1 January	**535**	**644**
Addition	63	118
Reversed	-54	-58
Utilization	-49	-176
Foreign currency translation and other	-23	7
Allowance on 31 December	**472**	**535**

4.7 Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 14,739k (31 December 2016: EUR 124,557k) and cash in hand of EUR 14k (31 December 2016: EUR 28k).

4.8 Equity

Issued capital

The fully paid in capital stock of the parent company CeramTec Holding amounts to EUR 25k (31 December 2016: EUR 25k).

Capital reserves

Effective as of 31 August 2013/1 September 2013, Faenza Luxembourg S.à.r.l, Luxembourg (parent company of CeramTec Holding GmbH), increased CeramTec Holding's capital reserves by EUR 378,148k. The capital reserves are freely available and not subject to any earmarking.

Accumulated losses

The line item "Retained earnings" contains current losses incurred by the CeramTec Holding Group and those incurred in previous years. This also includes reserves for the remeasurement of pension obligations (after taxes) amounting to EUR -22,676k (31 December 2016: EUR -25,092k).

Other comprehensive income

Accumulated other comprehensive income relates to foreign currency translation adjustments and a reserve for changes in the fair value of hedging instruments, net of taxes.

4.9 Provisions for pension obligations

Within the CeramTec Holding Group, there are defined benefit and contribution plans in place granting eligible employees benefits in the event of retirement, occupational disability or death in the latter case to employees' surviving dependents. These benefits are generally based on the length of employee service and level of remuneration or contributions of the eligible employees taking into account conditions in terms of tax, labor and welfare law in the respective country.

In Germany, there are various direct commitments which depend on the pay and period of service that are capped. These commitments do not contain any rights to inflation-related pension adjustments. These defined benefit plans were closed for employees that joined after 1 January 2002. There is also a defined benefit plan in place with direct commitments for a fixed pension amount which depends on the employee's length of service. This plan was also closed for employees that joined after 1 January 2002. For management of the German CeramTec Holding group companies, there are direct commitments in place comprising benefits that depend on pay and length of service and are capped as well as benefits that are calculated based on the performance of the Company. The eligible employees are also entitled to deferred compensation which is subsidized by the relevant group company depending on the achievement of personal targets by employees.

Since the end of 2014, the Company has committed itself to directly providing benefits as compensation to employees who have been enrolled into Höchster Pensionskasse VVaG, which was subject to reorganisation of Höchster Pensionskasse VVaG that might be to their disadvantage. The obligation is measured annually by an actuarial expert.

The pension plan in the UK is a funded defined benefit plan. The plan is administered by an external institution managed by employer and employee representatives. The representatives are legally obligated to represent the interests of the entitled employees and are responsible for investment decisions and managing the asset. The pension plan is closed. The plan grants the entitled employees annual pension payments, the amount of which depends on the length of service and the last salary earned. Pension payments are also made in the event of death. The obligation is measured annually by an actuarial expert.

The provisions for pension obligations break down as follows:

	31 December 2017	31 December 2016
	EUR k	EUR k
Germany	94,489	94,359
UK	3,743	7,855
Other	215	196
Total	**98,447**	**102,410**

The following table shows the amount of the obligation and plan assets as well as the provisions and other assets disclosed in the consolidated statement of financial position as of 31 December 2017.

	2017		
	German plans	Foreign plans	Total
Change in benefit obligations	EUR k	EUR k	EUR k
Benefit obligations at the beginning of the fiscal year	**94,359**	**12,470**	**106,829**
Service cost	3,209	32	3,241
Interest expense	1,491	318	1,809
Remeasurements	-2,241	-200	-2,441
from the change in demographic assumptions	*0*	*-246*	*-246*
from the change in financial assumptions	*-2,022*	*287*	*-1,735*
Experience adjustments	*-219*	*-241*	*-460*
Foreign currency translation	0	-427	-427
Benefits paid	-2,329	-628	-2,957
Benefit obligations at the end of the year	**94,489**	**11,565**	**106,054**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	**0**	**4,419**	**4,419**
Interest income from plan assets	0	114	114
Expense for managing the plans	0	-213	-213
Employer contributions	0	3,619	3,619
Remeasurements	0	455	455
from the change in financial assumptions	*0*	*455*	*455*
Foreign currency translation	0	-172	-172
Benefits paid	0	-615	-615
Market value of the plan assets at the end of the year	**0**	**7,607**	**7,607**
Net obligation amount / provisions for benefits	**94,489**	**3,958**	**98,447**

The following table shows the amount of the obligation and plan assets as well as the provisions disclosed in the consolidated statement of financial position in the comparative period as of 31 December 2016.

	2016		
	German plans	Foreign plans	Total
Change in benefit obligations	EUR k	EUR k	EUR k
Benefit obligations at the beginning of the fiscal year	**78,554**	**12,765**	**91,319**
Service cost	2,714	30	2,744
Interest expense	1,858	413	2,271
Remeasurements	13,549	2,145	15,694
from the change in financial assumptions	*14,240*	*2,171*	*16,411*
Experience adjustments	*-691*	*-26*	*-717*
Foreign currency translation	0	-1,800	-1,800
Benefits paid	-2,316	-1,083	-3,399
Benefit obligations at the end of the year	**94,359**	**12,470**	**106,829**
Change in plan assets			
Market value of plan assets at the beginning of the fiscal year	0	5,279	5,279
Interest income from plan assets	0	177	177
Expense for managing the plans	0	-286	-286
Employer contributions	0	474	474
Remeasurements	0	491	491
from the change in financial assumptions	*0*	*491*	*491*
Foreign currency translation	0	-685	-685
Benefits paid	0	-1,031	-1,031
Market value of the plan assets at the end of the year	0	4,419	4,419
Net obligation amount for benefits	**94,359**	**8,051**	**102,410**

The calculation of the pension obligation was based on the following assumptions as of 31 December 2017:

	Germany	Abroad
Interest rate (in %)	1.70	2.50
Wage and salary trend (in %)	2.50	N/A
Pension increases (in %)	2.00	3.00 - 3.30
Life expectancy	2005G standard tables	Mortality tables

The calculation of the pension obligation was based on the following assumptions as of 31 December 2016:

	Germany	Abroad
Interest rate (in %) p.a.	1.60	2.70
Wage and salary trend (in %) p.a.	2.50	N/A
Pension increases (in %) p.a.	2.00	3.00 - 3.40
Life expectancy	2005G standard tables	Mortality tables

The average term of the benefit obligations amounts to 21.4 years in Germany and 16.0 years abroad.

The employer contributions and benefit payments expected to be paid during the next fiscal year amount to EUR 331k and EUR 2,686k, respectively.

The risk from changes in actuarial assumptions underlying the measurement of defined pension plans is borne by the relevant group company. The sensitivity analyses presented in the table below were performed based on reasonably possible changes in assumptions as of the reporting date. The change in key actuarial assumptions would have the following impact (in EUR k) on the present value of pension obligations:

	Change	Effect 31 December 2017
Discount rate	- 0.50 % points	11,696
	+ 0.50 % points	-10,032
Wage and salary trend	- 0.50 % points	-256
	+ 0.50 % points	265
Increase in pensions	- 0.50 % points	-10,757
	+ 0.50 % points	11,867
Life expectancy	+ 1 year	4,580

The change in key actuarial assumptions would have had the following impact (in EUR k) on the present value of pension obligations in the previous year:

	Change	Effect 31 December 2016
Discount rate	- 0.50 % points	12,043
	+ 0.50 % points	-10,312
Wage and salary trend	- 0.50 % points	-237
	+ 0.50 % points	247
Increase in pensions	- 0.50 % points	-10,981
	+ 0.50 % points	12,143
Life expectancy	+ 1 year	4,754

There are no plan assets for German plans. The plan assets of the foreign plans break down into the following assets:

	31 December 2017 EUR k	31 December 2016 EUR k
Securities/shares	3,509	3,549
Fixed-interest securities	3,678	466
Real estate	420	404
	7,607	**4,419**

The fair value of the securities and shares were determined based on prices quoted on active markets, while the fair value of real estate was not based on prices quoted on active markets. The real estate contained in plan assets relates to non-owner-occupied property in the UK. The investment horizon for plan assets takes into account the expected payout profile.

From 1 January 2002 to 31 December 2014, all new hires at CeramTec GmbH, CeramTec Service GmbH and Emil Müller GmbH joined the pension fund Dynamit Nobel VVaG. Furthermore, some active and former employees of CeramTec GmbH and Emil Müller GmbH are members of the pension fund Hoechst-Gruppe VVaG. These pension funds are multi-employer plans which are defined benefit plans. The two pension funds are subject to regulatory supervision. In the event that the funds are unable to settle their obligations, the employer is legally liable for the vested benefits (secondary liability). This obligation remains in place even if the CeramTec Holding Group were to terminate its participation in the plans. However, terminating its participation would generally not directly result in having to make supplementary payments. In the consolidated financial statements, these pension plans are classified as defined contribution plans in accordance with IAS 19.34. As several employers are responsible for these pension funds, contributions made by the CeramTec Holding Group can under certain circumstances be used to finance another entity's employee benefits.

Dynamit Nobel VVaG is funded for commitments made before 1 December 2007 with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the member contributions and return on plan assets, sufficiently fund the agreed payments according to actuarial principles. Once pension payments have begun, the pension fund assumes the statutory pension adjustments provided it has the sufficient means to do so. In the last few years, the pension adjustments could not be assumed by the pension fund and had to be funded by the employers. For commitments made as of 1 December 2007, the employees and employer made a fixed, income-based contribution. There is no obligation on the part of the employer to adjust current pension benefits. Surpluses are used to increase the pension benefits. Although the existing obligations were fully covered by assets in accordance with German accounting standards for pension funds, the additional capital requirements have not been satisfied. There is a plan approved by regulatory authorities in place to remedy the contravention of requirements. Deficits, for example due to the pension fund earning an insufficient return on assets, may result in the CeramTec Holding Group having to make additional payments. The proportion of members whose membership is based on an existing or former work contract with CeramTec GmbH, CeramTec Service GmbH or Emil Müller GmbH of the total number of pension fund members amounts to around 26 % for active employees, around 11 % for non-contributory employees and around 4 % for pensioners.

The pension fund Hoechst-Gruppe VVaG is funded with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the employees' member contributions and pension fund surpluses, sufficiently fund the agreed payments according to actuarial principles. Once pension payments have begun, the pension fund assumes the statutory pension adjustments provided it has the sufficient means to do so. The proportion of members whose membership is based on an existing or former work contract with the CeramTec Holding Group for active employees, non-contributory employees and pensioners ranges between around 0.1 % and 0.15 % in each case.

As of 1 December 2014, company pension schemes underwent some realignment, and all employees whose membership was based on an existing contract with the pension fund Dynamit Nobel VVaG were enrolled into Höchster Pensionskasse VVaG. Since 1 January 2015, contributions have not been paid anymore to the pension fund Dynamit Nobel VVaG, and the employees have become extraordinary members. All new hires become members of Höchster Pensionskasse VVaG. The employees and employer make a fixed, income-based contribution to Höchster Pensionskasse VVaG. There is no obligation on the part of the employer to adjust current pension benefits. Surpluses are used to increase the pension benefits. CeramTec GmbH has committed itself to directly providing benefits as compensation for the realignment which involved enrolling the employees into another pension fund, which may be to their disadvantage.

The contributions made to the pension fund amounted to EUR 2,454k in the fiscal year (previous year: EUR 2,514k). The expenses are recorded in cost of sales, selling costs, research and development as well as general administrative costs. Planned contributions of EUR 2,650k are expected to be made in 2018.

Expenses for additional defined contribution plans related to the employer's share of contributions to the German state pension insurance scheme, and amounted to EUR 10,319k (previous year: EUR 10,288k).

4.10 Other provisions and provision for taxes

Provisions developed as follows in the fiscal year:

	Balance as of 31 December 2016	Additions from acquisition of businesses	Additions	Utilization	Reversal	Unwinding of the discount	Exchange difference	Balance as of 31 December 2017
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Provisions for employee bonuses	9,591	22	13,419	8,753	211	0	-203	13,865
Provisions for warranties	2,899	0	1,316	75	252	0	-2	3,886
Provisions for environmental risks	421	0	89	30	140	1	-23	318
Provisions for long-service awards	5,047	0	0	235	4,141	0	0	671
Provision for solvency requirements	5,266	0	0	1,985	0	0	0	3,281
Provisions for litigation risks	2,209	0	365	495	1,073	0	-17	989
Provisions for taxes	2,790	0	12,638	2,790	0	0	-60	12,578
Other provisions	1,627	251	1,594	674	123	0	-101	2,574
	29,851	**273**	**29,421**	**15,037**	**5,941**	**1**	**-406**	**38,162**

Provisions for environmental risks relate to the elimination of residual pollution, renovation measures and water conservation practices. Estimations and, where possible, external expert opinions were used to measure the amount of the provisions.

The valuation of the provisions for long-service awards considered new arrangements agreed with the Company’s works council in the year 2016. Based on an addendum to a works agreement (Betriebsvereinbarung), the obligations were remeasured in 2017.

A provision was recognized for a solvency plan for the closed pension fund Höchster Pensionskasse VVaG which has been approved by the German Federal Financial Supervisory Authority (Bafin).

The provision for taxes includes anticipated income tax payments for past assessment periods.

Other provisions primarily comprise provisions for severance pay, legal and consulting fees as well as provisions for other contingent liabilities.

The maturities of the provisions were as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Current provisions	33,020	19,215
Non-current provisions	5,142	10,636
Total	**38,162**	**29,851**

The cash outflow of provisions is expected to be 87 % within one year and 13 % between more than one and 15 years.

4.11 Financial liabilities to affiliates

Financial liabilities to affiliates comprise a loan payable to Faenza Luxembourg S.à.r.l, Luxembourg, of EUR 55,355k (31 December 2016: EUR 154,423k), and the following table breaks down the non-current and current portions of the loan by their maturity:

	31 December 2017 EUR k	31 December 2016 EUR k
Non-current financial liabilities		
Loan payable	53,845	98,021
Accrued interest	1,510	0
	55,355	**98,021**
Current financial liabilities		
Loan payable	0	52,830
Accrued interest	0	3,572
	0	**56,402**
Total	**55,355**	**154,423**

The loan increases every year on 29 August by the amount of incurred expenses for interest which is unpaid.

4.12 Financial liabilities to third parties

The financial liabilities to third parties are broken down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Non-current financial liabilities		
Liabilities to banks	355,697	618,791
Liabilities from the bond	300,583	299,214
Derivative financial instruments	4,120	7,490
Finance lease liabilities	1,305	1,404
Purchase price for technology	0	105
Total	**661,705**	**927,004**

	31 December 2017 EUR k	31 December 2016 EUR k
Current financial liabilities		
Liabilities to banks	228,077	46,016
Liabilities from the bond	9,489	9,489
Derivative financial instruments	3,142	3,540
Discounts and bonuses	2,861	1,855
Finance lease liabilities	8	26
Other current financial liabilities	1,845	1,603
Total	**245,422**	**62,529**

Liabilities to banks nominally amount to EUR 291,300k from a tranche in EUR and EUR 296,689k from a tranche in USD. These loans have variable interest rates and mature on 30 August 2020. Transaction costs associated with the loan of EUR 19,733k are spread over the term of the loan using the effective interest method. The tranche in USD is secured by currency swaps of EUR 198,300k concluded against foreign currency risks. This hedging relationship is recognized as a cash flow hedge.

The bond has a fixed interest rate and a nominal volume of EUR 306,700k. This bond matures on 15 August 2021. The CeramTec Holding Group has a termination option for this bond, which is recognized as a separate financial asset (note 4.3). Associated transaction costs of EUR 13,120k are spread over the term of the bond using the effective interest method. Further information on the loans, the bond and derivatives can be found in note 4.15.

Payment obligations from finance leases break down as follows over future years:

	Total	up to 1 year	1 to 5 years	more than 5 years
Present value of minimum lease payments	1,313	8	280	1,025
Interest effect	830	15	400	415
Minimum lease payments	**2,143**	**23**	**680**	**1,440**

Lease payments of EUR 8k, which are due in 2018, are recognized under current financial liabilities.

Reference is made to note 4.2 as regards the items of property, plant and equipment recognized under finance leases.

All leases include contractually agreed installments. There are no sub-lease arrangements. CeramTec Suzhou has a renewal option for real estate leases.

4.13 Other liabilities

Other liabilities break down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Other current liabilities		
Wages and salaries including taxes	6,433	6,261
Real estate transfer tax	793	4,151
Amounts payable under the terms of contracts with customers	27	818
Other current liabilities	1,847	2,228
Total	**9,100**	**13,458**

In the reporting year, EUR 818k was reported as revenue which, in the previous year, had been recognized as amounts payable under the terms of contracts with customers.

Other current liabilities are mainly attributable to liabilities to employees, liabilities from social security contributions, liabilities to pension funds as well as deferred income.

4.14 Rental and lease obligations

Operating lease commitments mainly relate to land and buildings as well as technical equipment and machinery.

The corresponding payment obligations break down as follows over future accounting periods:

	31 December 2017 EUR k	31 December 2016 EUR k
up to 1 year	1,946	1,689
1 to 5 years	1,941	933
More than 5 years	485	0
Total	**4,372**	**2,622**

In the fiscal year, expenses from rental and lease agreements amounted to EUR 2,938k (previous year: EUR 3,185k).

4.15 Financial instruments

The following table shows the carrying amounts and fair values of the financial assets and financial liabilities reported in the consolidated financial statements, sorted by class and measurement category in accordance with IAS 39.

	Measurement category of IAS 39[1]	31 December 2017 Carrying amount EUR k	Fair value EUR k
Financial assets			
Cash and cash equivalents	LaR	14,753	14,753
Trade receivables	LaR	52,096	52,096
Other financial assets	LaR	2,029	2,029
Separated termination rights HfT	FVtPL	19,963	19,963
Currency swaps in effective hedges	Hedge	21,233	21,233
Total		**110,074**	**110,074**
Financial liabilities			
Bond liabilities	FLAC	310,072	321,728
Liabilities to banks	FLAC	583,774	588,038
Trade payables	FLAC	26,676	26,676
Finance lease liabilities	FLAC	1,313	1,313
Trade payables owed to affiliates	FLAC	135	135
Other financial liabilities	FLAC	4,706	4,706
Liabilities to affiliates	FLAC	55,355	56,446
Separated interest rate floors HfT	FVtPL	6,932	6,932
Interest rate cap HfT	FVtPL	330	330
Total		**989,293**	**1,006,304**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

	Measurement category of IAS 39[1]	31 December 2016 Carrying amount EUR k	Fair value EUR k
Financial assets			
Cash and cash equivalents	LaR	124,585	124,585
Trade receivables	LaR	53,553	53,553
Other financial assets	LaR	296	296
Separated termination rights HfT	FVtPL	24,459	24,459
Currency swaps in effective hedges	Hedge	60,119	60,119
Total		**263,012**	**263,012**
Financial liabilities			
Bond liabilities	FLAC	308,702	325,746
Liabilities to banks	FLAC	664,807	672,864
Trade payables	FLAC	22,376	22,376
Finance lease liabilities	FLAC	1,430	1,430
Trade payables owed to affiliates	FLAC	205	205
Other financial liabilities	FLAC	3,564	3,563
Liabilities to affiliates	FLAC	154,423	157,377
Separated interest rate floors HfT	FVtPL	10,275	10,275
Interest rate cap HfT	FVtPL	755	755
Total		**1,166,536**	**1,194,591**

[1] HfT: held for trading; LaR: loans and receivables; FVtPL: measured at fair value through profit or loss; FLAC: financial liabilities measured at amortized cost; hedge: hedge accounting

If the fair value is not available in the form of a market price, it is calculated based on different valuation parameters. Depending on the availability of observable parameters and the significance of these parameters when calculating the fair value, the fair value is allocated to level 1, 2 or 3 of the fair value hierarchy. The allocation is based on the following factors:

Level 1: Quoted (unadjusted) prices in markets for identical assets or liabilities that the entity can access at the measurement date

Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Non-observable measurement parameters for the asset or liability

The following table shows the fair value hierarchy for derivative financial instruments that are recognized at fair value in the consolidated financial statements:

		31 December 2017	
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Currency swaps in effective hedges	0	21,233	0
Separated termination rights HfT	0	19,963	0
Financial liabilities			
Separated interest rate floors HfT	0	6,932	0
Interest rate caps HfT	0	330	0

		31 December 2016	
	Level 1	Level 2	Level 3
	EUR k	EUR k	EUR k
Financial assets			
Separated termination rights HfT	0	24,459	0
Currency swaps in effective hedges	0	60,119	0
Financial liabilities			
Separated interest rate floors HfT	0	10,275	0
Interest rate caps HfT	0	755	0

The following table shows the fair value hierarchy for the financial instruments that are not recognized at fair value in the consolidated financial statements; however, their fair value is provided in the notes to the financial statements. The Group does not disclose the fair value of financial instruments when the carrying amount is a reasonable approximation of fair value, such as short-term trade receivables and payables.

	31 December 2017		
	Level 1 EUR k	Level 2 EUR k	Level 3 EUR k
Financial liabilities			
Bond liabilities	321,728	0	0
Liabilities to banks	0	588,038	0
Liabilities to affiliates	0	56,446	0
Finance lease liabilities	0	1,313	0

	31 December 2016		
	Level 1 EUR k	Level 2 EUR k	Level 3 EUR k
Financial liabilities			
Bond liabilities	325,746	0	0
Liabilities to banks	0	672,864	0
Finance lease liabilities	0	1,430	0
Liabilities to affiliates	0	157,377	0

The fair value of the publicly listed bond corresponds to the nominal value multiplied by the market value at the reporting date. Accordingly, the fair value measurement is allocated to level 1 in the fair value hierarchy.

Liabilities to banks are subject to interest based on the interest rates observable on the market, such as EURIBOR or LIBOR, on the basis of which the fair value is calculated. Accordingly, these are allocated to level 2 in the fair value hierarchy.

The fair values of the separated derivatives are measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

Currency swaps are measured on the basis of a discounted cash flow method, which takes into account the observable mean closing rates, yield curves and currency spreads between currencies. All currency swaps had a positive market value as of the end of the reporting period. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement of the currency swaps is therefore allocated to level 2 in the fair value hierarchy.

The fair value of the interest rate cap is measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation (volatility) of the currencies concerned. All key input parameters were directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of all other financial instruments is calculated using a discounted cash flow method as well as by taking into account measurement parameters that can be directly or indirectly observed on the market. Accordingly, these financial instruments were allocated to level 2 in the fair value hierarchy.

For assets and liabilities that are recognized at fair value in the consolidated financial statements on a recurring basis, the CeramTec Holding Group assesses whether a transfer between the levels of the fair value hierarchy took place as of the end of each reporting period (based on the lowest level that is significant to measurement as a whole). There were no transfers between level 1 and 2 during the reporting period.

Net gains and losses as well as total interest income and expenses

The following table presents the net gains and losses from financial assets and liabilities in accordance with IAS 39.

	31 December 2017			
	Change in fair value	Currency translation	Impairment loss	Total
	EUR k	EUR k	EUR k	EUR k
Loans and receivables (LaR)	0	1,416	-10	1,406
Cash and cash equivalents	0	-1,177	0	-1,177
Separated termination rights/ interest rate floors HfT (FVtPL)	-1,153	0	0	-1,153
Total	**-1,153**	**239**	**-10**	**-924**

	31 December 2016			
	Change in fair value	Currency translation	Impairment loss	Total
	EUR k	EUR k	EUR k	EUR k
Loans and receivables (LaR)	0	-258	-60	**-318**
Cash and cash equivalents	0	260	0	**260**
Separated termination rights/ interest rate floors HfT (FVtPL)	18,636	0	0	**18,636**
Financial liabilities at amortized cost (FLAC)	0	-2,115	0	**-2,115**
Intercompany loans	0	-180	0	**-180**
Total	**18,636**	**-2,293**	**-60**	**16,283**

Net gains from the changes in fair value of embedded derivatives are primarily due to changes in market interest rates.

The following table shows the total interest income and expenses from financial assets and liabilities that are measured at amortized cost using the effective interest method.

	2017	2016
	EUR k	EUR k
Total interest expense	59,557	68,981
Total interest income	206	96

Furthermore, finance fees of EUR 127k, which are not part of the effective interest method, were recognized in profit or loss during the reporting period.

Derivative financial instruments and hedge accounting

The following table shows the fair value and nominal value of derivative financial instruments as of 31 December 2017 and 31 December 2016:

	31 December 2017 Nominal value EUR k	31 December 2017 Fair value EUR k
Derivatives with a positive fair value		
Separated termination rights HfT	306,700	19,963
Currency swaps in effective hedges	198,300	21,233
Derivatives with a negative fair value		
Separated interest rate floor HfT	588,038	-6,932
Interest rate cap HfT	309,120	-330
Total	**1,402,158**	**33,934**

	31 December 2016 Nominal value EUR k	31 December 2016 Fair value EUR k
Derivatives with a positive fair value		
Separated termination rights HfT	306,700	24,459
Currency swaps in effective hedges	226,900	60,119
Derivatives with a negative fair value		
Separated interest rate floor HfT	672,864	-10,275
Interest rate cap HfT	364,720	-755
Total	**1,571,184**	**73,548**

Embedded derivatives

As described in note 4.12, the CeramTec Holding Group took out a syndicated loan with several USD and EUR tranches with various banks in August 2013. The loans include embedded interest rate floors, which obliges the CeramTec Holding Group to pay a minimum interest rate that exceeds the variable interest rate. Furthermore, the bond issued in August 2013 contains various agreements that entitle the CeramTec Holding Group to prematurely repay the bond. Both the interest rate floors and termination rights were separated from the host contract in accordance with the provisions of IAS 39 and recognized as stand-alone derivatives at fair value through profit or loss.

Cash flow hedges

The currency swaps were designated as hedging instruments in cash flow hedges in order to hedge a portion of the foreign currency risk resulting from the loans in USD. The ongoing interest and principal repayments from the loans and the currency swaps are made at the same time each quarter and will have an impact on profit or loss until the swaps mature in 2018. There were no ineffective cash flow hedges recognized in the reporting period.

The following table shows the amount for the reporting period recognized in other comprehensive income and reclassified from there to profit or loss:

	2017 EUR k	2016 EUR k
Currency swaps in effective hedges		
Net gains/losses recognized in other comprehensive income	-38,886	4,297
Reclassification from other comprehensive income to profit or loss	37,397	-4,060
Total other comprehensive income at the end of the period	**-1,489**	**237**

The amounts reclassified from other comprehensive income to profit or loss were recognized in the financial result, so as to offset the effects from foreign currency translation of the secured portion of the loans in USD.

5 Notes to the consolidated statement of cash flows

In the consolidated statement of cash flows, cash flow from operating activities is determined using the indirect method, while cash flow from investing and financing activities is determined using the direct method. The cash and cash equivalents presented in the statement of cash flows correspond to the item of the statement of financial position and comprise cash in hand, bank balances and cash investments with an original term of up to three months. The bank balances are not subject to drawing restrictions.

In the reporting period, the cash flow from investing activities included the purchase price payment of EUR 55,485k for the acquisition of the UK electro-ceramics business, that has two manufacturing sites, from Morgan Advanced Materials plc., Stourport-on-Severn, Great Britain. No cash and cash equivalents were taken over.

Other non-cash income and expenses primarily contain changes in the fair value of financial instruments and accrued interest.

During the fiscal year, the Group paid cash of EUR 2,003k to purchase property, plant and equipment previously purchased on account. At the same time, additions to property, plant and equipment in the fiscal year amounted to EUR 3,429k that will affect cash during the following accounting period.

No subsidies affected the consolidated group's cash account in the fiscal year.

In the fiscal year, liabilities arising from financing activities break down as follows:

	Liabilities to banks	Bond liabilities	Shareholder loan liabilities	Derivative financial instruments	Finance lease liabilities	Total
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Balance as of 31 December 2016	664,807	308,702	154,423	11,030	1,430	1,140,392
Change in cash flow from financing activities						
Repayments	-36,275	0	-97,620	0	0	-133,895
Interest payments	-22,145	-25,303	-7,832	0	0	-55,280
	-58,420	**-25,303**	**-105,452**	**0**	**0**	**-189,175**
Interest expenses	29,775	26,673	6,384	23	96	62,951
Effect of foreign currency translation	-52,022	0	0	-1	-87	-52,110
Fair value changes	0	0	0	-3,342	0	-3.342
Other changes	-366	0	0	-448	-126	-940
	-22,613	**26,673**	**6,384**	**-3,768**	**-117**	**6,559**
Balance as of 31 December 2017	**583,774**	**310,072**	**55,355**	**7,262**	**1,313**	**957,776**

Interest expenses of the bond liabilities contain EUR 1,370k expenses from the effective interest method.

6 Other notes

6.1 Management of financial risks

The CeramTec Holding Group is exposed to credit risks and various market risks. Credit risks are mainly due to receivables from customers. Market risks are primarily attributable to the risk of changes in variable interest rates and exchange rate risks. Furthermore, the CeramTec Holding Group is exposed to liquidity risks, which mainly results from the loans in EUR and USD taken out in August 2013 as well as the bond also issued in August 2013.

The CeramTec Holding Group operates on the basis of an appropriate framework to manage financial risks, which is an integral part of ongoing business operations and financing activities. Taking these risk management objectives into consideration, risks are identified, assessed and managed on an ongoing basis. The CeramTec Holding Group may enter into derivative financial instruments to hedge certain financial risks. By contrast, it is not permitted to enter into derivative financial instruments for speculative purposes.

Market risks

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk comprises risks arising from exchange rate and interest rate fluctuations and other price risks, such as share price risks and commodity price risks.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. In connection with the loans in USD, the CeramTec Holding Group is exposed to foreign currency risks from changes in the USD/EUR exchange rate.

The CeramTec Holding Group has secured 81.36 % of the nominal volume of the loans in USD against risk from fluctuations in the USD/EUR exchange rate by entering into USD/EUR currency swaps (further information on hedging cash flow risks can be found in note 4.15).

The following sensitivity analysis in terms of the foreign currency risk was prepared taking into account the hedges in place on 31 December 2017 and on the basis that the portion of financial instruments in foreign currency will remain constant. The table shows the effects on net income and equity for the period taking into account a hypothetical change of +/- 10 % to the closing rate and forward rate as of the reporting date for the CeramTec group companies' main foreign currency items.

	31 December 2017							
	Change in the spot rate %	Change in the forward rate %	USD	GBP	CZK	PLN	CNY	**Total**
Earnings effect before tax in EUR k	+10%		3,089	330	26	-304	-457	**2,684**
	-10%		-3,776	-402	-32	372	1,147	**-2,691**
Effect on equity in EUR k		+10%	-4,792	0	0	0	0	**-4,792**
		-10%	6,583	0	0	0	0	**6,583**

The effect on the net income for the period are attributable to the hypothetical change in the carrying amount of non-derivative assets and liabilities in the respective foreign currency. The effect on equity stems from the hypothetical change in the market value of the USD/EUR currency swaps, which are recognized in other comprehensive income as a result of the designation as a hedging instrument.

Interest rate risk

Interest rate risk is the risk that the fair value of fixed-interest rate financial instruments or the future cash flows of variable-interest rate financial instruments will fluctuate because of changes in market interest rates.

The variable-interest rate loans in USD and EUR expose the CeramTec Holding Group in particular to a cash flow risk from the change in the EURIBOR and LIBOR interest rates. By comparison, changes in variable interest rates relating to the fixed-interest rate bond may lead to a change in fair value. However, this risk does not impact the net income or equity for the period, as the bond is carried at amortized cost and changes in fair value are not recognized.

In 2014, a CeramTec group company entered into an agreement governing an interest rate cap of EUR 441,040k linked to 3-month EURIBOR. The interest rate cap limits the maximum variable interest rate to 2 %.

The following table shows the effects on the financial result assuming a hypothetical change of +/- 100 basis points to the variable USD and EUR interest rates.

	31 December 2017	
	Increase/decrease in basis points	Effect on interest expense
		EUR k
EUR	+100	0
	-100	0
USD	+100	830
	-100	-397

A decline in the interest rate has no effect on the EURO interest expense as a result of the interest rate floor of 1 % agreed in the syndicated loan agreement. A rise of 100 basis points in EURO has no effect as a result of the negative EUR interest rate and interest rate floor of 1 %.

Credit risk

Credit risk is the risk that a counterparty will not meet its obligations from financial instruments, leading to a financial loss for the creditor. At the CeramTec Holding Group, the credit risk is primarily due to trade receivables, cash and cash equivalents and other receivables.

Trade receivables are attributable to numerous customers in various sectors and regions. Default risks in customer receivables are locally monitored, assessed and limited by using credit insurance. After taking credit insurance into account, the maximum default risk on trade receivables is approximately 37 % of the carrying amount.

Cash and cash equivalents mainly comprise bank balances and cash in hand. In connection with the investment of cash and cash equivalents, the CeramTec group companies are exposed to losses from credit risks if counterparties do not meet their obligations. The resulting risk position is managed by diversifying their counterparties. For example, cash and cash equivalents are only invested at banks with excellent credit ratings. There are no cash and cash equivalents past due or impaired as of the reporting date. The maximum credit risk for cash and cash equivalents corresponds to the carrying amount.

The credit risk position from other financial assets corresponds to the carrying amount of these instruments. The CeramTec Holding Group considers this credit risk to be immaterial as of the reporting date.

The termination option separated from the bond is not exposed to any credit risk as of the reporting date, because the positive market value is based solely on a potential premature repayment of the bond and a more favorable opportunity to refinance for the CeramTec Holding Group; as such, there is no actual cash receivable from the banks.

Liquidity risk

Liquidity risk is the risk that the CeramTec group companies will not be able to fulfill their financial obligations when they fall due. The objective of the management of the CeramTec Holding Group is to minimize the liquidity risk as far as possible by ensuring sufficient financing and credit lines from banks. In light of this, the CeramTec group companies had an undrawn and confirmed credit line of EUR 100,000k as of the reporting date. Furthermore, the CeramTec group companies had cash and cash equivalents of EUR 14,753k.

The table below shows the contractually agreed undiscounted cash flows for the financial liabilities and derivative financial instruments as of the reporting date. The following cash flows were taken into account:

- Undiscounted, contractually agreed interest and principal payments from the loans in USD and EUR, including payments that are attributable to the separated interest floor. Cash flows in USD were translated into EUR based on the USD/EUR forward rate applicable as of the reporting date. Premature, voluntary special payments or repayments have not been taken into account.

- Undiscounted, contractually agreed interest and principal payments for the bond. Premature, voluntary special payments or repayments have not been taken into account.

- Undiscounted, contractually agreed payments for the interest rate cap.

	31 December 2017						
	Carrying amount	2018	2019	2020	2021	2022	>2022
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Trade payables	26,676	26,676	0	0	0	0	0
Trade payables owed to affiliates	135	135	0	0	0	0	0
Liabilities to banks	583,774	25,039	25,777	589,856	0	0	0
Bond liabilities	310,072	25,303	25,303	25,303	332,003	0	0
Liabilities to affiliates	55,355	0	0	0	0	0	92,949
Finance lease liabilities	1,313	23	258	141	141	141	1,441
Other financial liabilities	4,706	4,706	0	0	0	0	0
Derivatives with a negative fair value							
Interest rate caps	330	336	0	0	0	0	0

	31 December 2016						
	Carrying amount	2017	2018	2019	2020	2021	> 2021
	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k	EUR k
Trade payables	22,376	22,376	0	0	0	0	0
Trade payables owed to affiliates	205	205	0	0	0	0	0
Liabilities to banks	664,807	28,373	29,322	27,416	668,157	0	0
Bond liabilities	308,702	25,303	25,303	25,303	25,303	332,003	0
Liabilities to affiliates	154,423	56,538	0	0	0	0	166,255
Finance lease liabilities	1,430	127	199	150	150	150	1,686
Other financial liabilities	3,564	3,564	0	0	0	0	0
Derivatives with a negative fair value							
Interest rate caps	755	448	336	0	0	0	0

Offsetting financial assets against financial liabilities

The USD/EUR currency swaps were entered into on the basis of ISDA Master Agreements, which includes conditional claims to offset financial assets and financial liabilities. These offsetting rights are only legally effective if future events (e.g. insolvency, payment arrears) should occur. As the currency swaps only had positive market values as of the reporting date, derivative assets were not matched with any corresponding liabilities that would have enabled potential offsetting.

Collateral

In connection with the syndicated loan, the assets of the German and American companies were provided as collateral to the extent that the syndicated loan is drawn. CeramTec Service GmbH, CeramTec Acquisition Corporation and CeramTec GmbH are the borrowers of the syndicated loan. In the USA, shares in CeramTec Acquisition Corporation and in CeramTec North America Corporation, all additional assets of CeramTec Acquisition and CeramTec North America Corporation as well as CeramTec GmbH's intellectual property registered in the USA were provided as collateral. In Germany, shares in CeramTec Service GmbH, CeramTec GmbH, CeramTec-ETEC GmbH, Cerasiv GmbH Innovatives Keramik-Engineering and Emil Müller GmbH, all intercompany receivables and bank accounts of CeramTec Group GmbH and CeramTec Service GmbH, all intercompany receivables, insurance receivables and trade receivables as well as bank accounts of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik-Engineering were provided as collateral. Furthermore, the intellectual property and land of CeramTec GmbH, CeramTec-ETEC GmbH, Emil Müller GmbH and Cerasiv GmbH Innovatives Keramik-Engineering were provided as collateral for the syndicated loan, or encumbered.

Risk from compliance with financial covenants

Compliance with a financial covenant was also agreed to in connection with obtaining the syndicated loan. CeramTec Holding Group must comply with the covenant if the revolving credit line for EUR 100m is drawn by an amount set in the loan agreement.

Capital management

The objective of capital management in the consolidated group is securing liquidity to make investments that increase the value of the organization. Therefore, the focus is on optimizing cash flows from operating activities as well as repaying liabilities on schedule. Recognized equity of EUR 286,887k (31 December 2016: EUR 269,427) and liabilities of EUR 1,285,723k (31 December 2016: EUR 1,468,514k) were recognized as of the reporting date. The equity ratio stands at 18.24 % (31 December 2016: 15.50 %).

6.2 Contingent liabilities

The entities within the consolidated group are involved as parties in a number of lawsuits. These proceedings are linked to ordinary business activities and mainly relate to commercial, product liability and environmental processes. The Group accrues for such obligations if a liability is probable to arise and the amount of the potential claim can be sufficiently estimated. Where claims and obligations arising are not considered probable nor remote, such contingent liabilities are disclosed separately in the consolidated financial statements.

6.3 Related party disclosures

Key management personnel

Key management personnel are people who are directly or indirectly responsible for the planning, directing and controlling the activities of the CeramTec Holding Group. This comprises the management of CeramTec Holding and the supervisory board of CeramTec GmbH.

In the fiscal year, the **general managers** of CeramTec Holding were:

Henri Steinmetz
Chief Executive Officer / HR director

Dominique Janbon
Chief Financial Officer

Dr. Hadi Saleh
Chief Operating Officer

The members of management received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to EUR 4,184k (previous year: EUR 2,250k) in the fiscal year. The payments for post-employment benefits amount to EUR 103k (previous year: EUR 206k). This amount comprises the service cost for pension obligations and contributions to defined contribution plans. In the fiscal year, former general managers were not granted with termination benefits (31 December 2016: EUR 971k). Additionally, pension obligations amounted to EUR 849k (31 December 2016: EUR 460k) as well as EUR 3,139k (31 December 2016: EUR 3,153k) for former managers.

As part of a management participation program (MPP), the general managers were offered the option to indirectly acquire shares in parent company Faenza Holding S.à.r.l. via Faenza MEP GmbH & Co. KG. These indirect shares were acquired at fair value, which is calculated based on the purchase price for the acquisition of the high-performance ceramics division by the ultimate parent company. The shares primarily enable them to participate in earnings if certain events occur. The Company has no obligations from the management participation program. The MPP is therefore accounted for as equity-settled share-based payments in these consolidated financial statements in accordance with IFRS 2. As the shares were acquired at fair value, no benefits were granted to the general managers. This means that no personnel expenses are incurred if or before the defined events occur.

CeramTec GmbH has a **supervisory board** in accordance with the articles of incorporation.

The total remuneration of the supervisory board in the fiscal year 2017 amounted to EUR 178k (previous year: EUR 116k). In addition, in the fiscal year consultancy fees of EUR 45k (previous year: EUR 44k) were paid to members of the supervisory board.

Transactions with related parties

Entities and natural persons are deemed to be related parties when they exercise control over the reporting company or over its subsidiaries or when they have a significant influence on the reporting company's financial and business policy. A loan of EUR 55,355k (31 December 2016: EUR 154,423k), including interest, with a fixed interest rate of 8.255 % p.a. has been obtained from CeramTec Holding's controlling shareholder, Faenza Luxembourg S.à.r.l., Luxembourg. Interest expenses of EUR 6,384k (previous year: EUR 11,895k) were incurred in the fiscal year 2017. Unpaid interest is added annually to the Company's loan balance on 29 August.

In the fiscal year, Faenza Luxembourg S.à.r.l. charged the CeramTec Holding Group EUR 549k (previous year: EUR 545k) for consultancy services and out-of-pocket expenses, resulting in liabilities to affiliates as of 31 December 2017 of EUR 135k (31 December 2016: EUR 205k).

6.4 Auditor's fees

Overall, CeramTec Holding's auditor's fees for the fiscal years break down as follows:

	31 December 2017 EUR k	31 December 2016 EUR k
Audit services	470	464
Audit-related services	558	108
Other professional services	85	34
	1,113	**606**

6.5 Subsequent events

On 11 October 2017, CeramTec announced that a Consortium led by Funds advised by leading private equity firm BC Partners ("BC Partners") had reached an agreement to acquire CeramTec Group from its current owner Cinven. BC Partners is a leading international private equity firm, and has played an active role in developing the European buy-out market for three decades.

As at 22 February 2018 all requirements for the transfer of ownership were fulfilled, effective as of 8 March 2018.

With transferring ownership, existing financing will be repaid and a new financing will become effective.

No further reportable events occurred.

7 Reconciliation to CeramTec Group GmbH

If the consolidated statement of comprehensive income of CeramTec Group had been prepared instead of the consolidated statement of comprehensive income of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes for the fiscal year:

- Lower general administrative expenses of EUR 745k (previous year: EUR 185k)
- Lower interest expenses of EUR 5,475k (previous year: EUR 11,891k)
- Higher interest income of EUR 10,023k (previous year: EUR 9,162k)
- Higher tax expenses of EUR 55k (previous year: EUR 35k)
- Higher expenses for profit/loss transfers of EUR 84,161k (previous year: expenses of EUR 137,385k)

The total comprehensive income of CeramTec Group would therefore have been EUR 67,973k lower (previous year: EUR 116,182k lower) compared to the total comprehensive income recognized in these financial statements.

If the consolidated statement of financial position of CeramTec Group had been prepared instead of the consolidated statement of financial position of CeramTec Holding, which is presented in these financial statements, this would have resulted in the following changes as of 31 December 2017:

- Higher receivables from affiliates of EUR 50,219k (31 December 2016: EUR 19,273k)
- Lower financial liabilities to affiliates of EUR 55,354k (31 December 2016: EUR 154,423k)
- Lower financial liabilities to third parties of EUR 45k (31 December 2016: EUR 22k)
- Lower provisions of EUR 170k (31 December 2016: EUR 0k)
- Lower trade payables of EUR 65k (31 December 2016: EUR 53k)
- Higher tax payable of EUR 531k (31 December 2016: EUR 476k)

This would have resulted in a EUR 105,322k (31 December 2016: EUR 173,295k) higher level of group equity for the CeramTec Group compared to the group equity recognized in these financial statements.

There would have been no impact on the consolidated statement of cash flows if the consolidated statement of cash flows of CeramTec Group had been prepared instead of the consolidated statement of cash flows presented in these financial statements.

Plochingen, 7 March 2018

CeramTec Holding GmbH

The management

Henri Steinmetz | Dominique Janbon | Dr. Hadi Saleh

Independent Auditors' Report

We have audited the consolidated financial statements prepared by CeramTec Holding GmbH, Plochingen/Germany - comprising the balance sheet, the statement of comprehensive income, the cash flow statement, the statement of changes in equity, and the notes to the consolidated financial statements - and the group management report for the year ended 31 December 2017. The preparation of the consolidated financial statements and the group management report in accordance with International Financial Reporting Standards (IFRS), as applicable in the EU, and German commercial law as complementarily applicable under Section 315e (1) German Commercial Code (HGB) is the responsibility of the Company's management. Our responsibility is to express an opinion on the consolidated financial statements and the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Section 317 German Commercial Code (HGB) and German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with applicable accounting rules and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the consolidated group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a sample basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements of CeramTec Holding GmbH, Plochingen/Germany, comply with IFRS, as applicable in the EU, and German commercial law as complementarily applicable under Section 315e (1) German Commercial Code (HGB) and give a true and fair view of the net assets, financial position and results of operations of the consolidated group in accordance with these regulations. The group management report is consistent with the consolidated financial statements, complies with the legal requirements and as a whole provides a suitable view of the consolidated group's position and suitably presents the opportunities and risks of future development.

Stuttgart/Germany, 8 March 2018

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed: (Gillar)	Signed: (Röscheisen)
Wirtschaftsprüferin	Wirtschaftsprüfer
German Public Auditor	German Public Auditor