# CeramTec TopCo GmbH

# Plochingen / Germany

Consolidated Financial Statements and
Group Management Report
for the financial year from 1 January to
31 December 2018

**TRANSLATION**
– German version prevails –

CeramTec
THE CERAMIC EXPERTS

# CeramTec TopCo GmbH

Plochingen/Germany

## Group Management Report

for Financial Year 2018

# 1 Basic information about the consolidated group

## 1.1 Preliminary remarks

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

CT TopCo is the direct parent company, and holds all shares of CeramTec BondCo GmbH, Plochingen/Germany, (CT BondCo), which, in turn, is the direct parent company of CeramTec AcquiCo GmbH, Plochingen/Germany, (CT AcquiCo), of which it holds all shares. CeramTec AcquiCo acquired all shares of CeramTec Holding GmbH, the former CeramTec Group, effective as of 8 March 2018.

The CeramTec TopCo Group (hereinafter referred to as: CT TopCo Group) hence consisted of only the mentioned three holding companies from 1 January 2018 to the acquisition date. In 2018, the CT TopCo Group hence operated its business for only around 10 months.

CT TopCo prepares for the first time consolidated financial statements for the financial year from 1 January to 31 December 2018.

In addition to the financial statements of CT TopCo (parent company), the consolidated financial statements include the financial statements of subsidiaries which are directly and indirectly controlled by CT TopCo. Of 23 fully consolidated subsidiaries, 9 are headquartered in Germany, and 14 are headquartered abroad. The notes to the consolidated financial statements include details of shareholdings.

The consolidated financial statements of CT TopCo are prepared by applying Sec. 315e (1) in conjunction with (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

We are a leading global developer, manufacturer and supplier of high performance ceramics ("HPC") solutions. Our 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). We have 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. We currently offer 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.

Our 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 2018, we generated 37.7% 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 2018, 62.3% of our revenue was generated by our Industrial business.

We generate 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 medical products, are exported world-wide.

We have a global manufacturing footprint with 20 facilities across Europe, North America, Asia and South America. Manufacturing plants in Germany are located at Plochingen (headquarters), Marktredwitz, Lauf, Ebersbach, Wittlich, Lohmar and Wilhermsdorf.

Our 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

Our 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 we are underrepresented such as the United States 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 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. Our R&D efforts consist mainly of applications development in response to customer requirements and we often partner with customers to develop innovative solutions and processes with high commercialization potential. We have 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 our total revenue in the last five years. All our R&D cost is recognized in profit or loss in the period in which our R&D cost is incurred.

While we cooperate with many leading research institutions and universities, we aim to focus on commercial applications. Our R&D efforts are also directed towards the innovation of new products and development of new materials to respond to anticipated customer needs.

In the financial year, expenses for the consolidated group's research and development efforts amounted to EUR 18,571k, and the ratio of research and development expenses to revenues was 3.7 %. At the balance sheet date, 191 people were employed in research and development.

## 2 Report on business

### 2.1 Development of the overall economy and industry-specific environment

#### Development of the overall economy

The Institute for the World Economy expects the global economy to grow at 3.7 % in 2018, according to the Institute's Economic Outlook report released on 11 December 2018. In 2018 global economic growth varied across different regions although in 2017 the global economy had maintained its upward momenturm in almost every major economy. While U.S. economic growth accelerated again, spurred by fiscal stimulus that provided a significant economic boost, the eurozone and Japanese economies lost significant momentum. A deterioration in financial conditions resulted in a slowdown in manufacturing output growth in emerging countries. Increasingly, trade conflict between the United States and China is a key factor that has impacted economic conditions since the beginning of 2018.

The eurozone’s economy expanded at a substantially slower pace because, among other reasons, car manufacturing output decreased sharply. Changes in the labor market reflected slower economic growth. As Brexit discussions continued, there was some uncertainty over future economic conditions in the United Kingdom and across Europe.

There is an indication that gross domestic product, that is a broad measurement of Germany’s overall economic activity, increased by 1.5 % in 2018. Thus economic growth turned out substantially lower than a year ago (2.2%), mainly because economic growth was influenced by one-off factors such as the worldwide harmonized light vehicles testing procedure, or WLTP, that brought disruption to the automotive production process, and low water levels on German rivers that were frustrating shipper efforts to navigate. After manufacturing disruption is overcome, the dynamism of the German economy is expected to increase during the first half of 2019, and Germany’s economic performance is expected to improve by 1.7 % in 2019.

U.S. economic activity looked relatively robust, driven by strong private consumption growth. However, investment dynamics weakened substantially from the third quarter. The gross domestic product of the United States is expected to grow by 2.9% for the full year of 2018.

After broad-based economic growth picked up in emerging countries in the previous year, manufacturing output growth slowed down moderately across most emerging countries during 2018. China's gross domestic product (GDP) growth rate of 6.5 % was only slightly lower than the growth rate in the previous year. Overall, economic growth in the Asia region is projected to remain strong. By contrast, Turkey and Argentina went into a recession.

## Development of the industry in which the Company operates

General Macroeconomic and Other Developments in our Key Geographical Target Markets

Our sales to our customers are mostly concentrated in Europe and specifically in Germany. However, although our customers are concentrated in Europe, many of them, especially medical and automotive customers, are export oriented, global companies. Consequently, we view our business 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

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

Globally, the market share of ceramic ball heads as a percentage of THR procedures performed rises continuously. 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 the U.S. and China.

Demand Cycles in Various End Markets Supplied by our Industrial Business

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

In addition to the overall GDP growth rate influencing the results of operations of our Industrial business, each of our industrial markets is also influenced by separate and distinct factors and has a different economic cycle. In particular, the automotive, electronics, construction and industrial end markets we serve are cyclical, and both general macroeconomic and other factors can influence demand from any one of these markets for our products. Demand for our products is significantly affected by the business success of our 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 our automotive customers and thereby also influencing demand for our ceramic components in automobiles and engines.

The CeramTec TopCo Group's key revenue drivers include, among others, the automotive market, the electronics market, textile, construction and various other industrial niche markets. 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 our revenue.

## 2.2 Development of business

The CT TopCo Group consisted of only three holding companies from 1 January 2018 to 8 March 2018, the acquisition date. In 2018, the CT TopCo Group hence operated its business for only around 10 months.

The CT TopCo 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 CT TopCo Group operates in a very heterogeneous market and in the financial year achieved revenues totaling EUR 496,909k.

The management of the CT TopCo Group had forecast for year 2018 a slight rise in full-year revenue, EBITDA, and adjusted EBITDA generated from operations. In actuality, the revenue and adjusted EBITDA were slightly higher than planned, while the EBITDA fell substantially short of the planned level because of unplanned transaction costs and the effects of purchase price allocation adjustments on inventories.

In the financial year 2018, order intake amounted to EUR 527,662k, and as of 31 December 2018 the backlog of orders on hand amounted to EUR 206,201k.

Net operating result adjusted for non-recurring items, depreciation, amortization, write-downs, and valuation allowances (adjusted EBITDA) amounted to EUR 184,849k. Adjusted EBITDA margin was hence 37.2 %.

CeramTec GmbH, Plochingen/Germany, is the largest company which engages in operating activities, and is part of the CT TopCo Group.

# 3 Presentation of the state of affairs of the consolidated group

## 3.1 Results of operations

In the financial year 2018, the CT TopCo Group achieved revenues of EUR 496,909k.

Medical Products had revenues of EUR 187,516k, and CT TopCo Group's Industrial business had revenues of EUR 309,393k.

Europe and Germany are the most important markets in terms of sales, accounting for 68.7 % of the revenues of the consolidated group. Asia and North America account for 15.1 % and 13.1 % of the revenues respectively.

The consolidated group made a gross profit in the financial year of EUR 160,301k. Gross margin (gross profit in relation to revenue) amounted to 32.3 %.

The ratio of selling costs to revenue, expressed as a percentage, stands at 16.3 %, the ratio of research and development costs to revenue stands at 3.7 %, and the ratio of general administrative costs to revenue stands at 5.7 %.

Net operating result amounted to EUR 21,192k in the financial year 2018.

Negative net finance result of EUR -123,423k results from interest income and similar income of EUR 1,626k, and interest expense and similar expenses of EUR 125,049k.

In the financial year, interest income resulted mainly from discounting of financial liabilities of EUR 1,463k. Interest expense was due mainly to expenses for interest on a syndicated loan and corporate bond of EUR 52,605k, interest on a shareholder loan of EUR 31,971k, and interest expense from derivatives of EUR 22,028k.

Loss for the period breaks down as follows:

| (EURk) | 2018 |
|---|---|
| Loss before income tax | -102,231 |
| Current income tax expense | -17,320 |
| Deferred tax income | 32,415 |
| **Net loss for the year** | **-87,136** |

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

| (EURk) | 2018 |
|---|---|
| Net operating result | 21,192 |
| Depreciation, amortization, write-downs / impairments | 122,561 |
| **EBITDA** | **143,753** |
| Adjustments | 41,096 |
| **Adjusted EBITDA** | **184,849** |

EBITDA has been adjusted to reflect special items that mainly include the effects of purchase price allocation adjustments on inventories (EUR 16,500k), transaction costs that have been expensed and are associated with the acquisition of the business (EUR 10,346k), and other transaction costs (EUR 2,051k) as well as the costs of strategic consulting services and reorganization (EUR 6,950k).

In the financial year, adjusted EBITDA in relation to revenue was 37.2 %.

## 3.2 Net assets and financial position

### Asset and capital structure

Goodwill results from the acquisition of the CeramTec Group in the current financial year. It was allocated to the cash-generating units (CGU) Medical (EUR 874,613k) and Industrial (EUR 466,818k).

The trademarks CeramTec, BIOLOX, SPK and DAI Ceramics were identified during the acquisition process. The recorded carrying amount of these trademarks amounted to EUR 59,000k as of 31 December 2018. The useful life for the recognized trademarks was classified as indefinite.

Technology has a carrying amount of EUR 320,211k, and primarily contains the basic technology underlying the Medical Products business, and the basic technology underlying the Industrial business. These have an average weighted remaining useful life of 17.2 years.

Customer relationships have a carrying amount of EUR 723,613k and primarily contain customer relationships from medical applications. These have an average weighted remaining useful life of 16.1 years.

Long-term and short-term other financial assets include mainly the termination rights of EUR 20,988k (1 January 2018: EUR 0k) associated with the corporate bond issue which are carried in the balance sheet, and must be separated.

Trade receivables amounted to EUR 52,880k. Note that in 2017 a factoring agreement was concluded whereby receivables of EUR 14,146k were sold as of the balance sheet date.

Cash and cash equivalents include cash in bank of EUR 21,049k (1 January 2018: EUR 39k), and cash on hand of EUR 9k (1 January 2018: EUR 0k). For details see explanations on liquidity.

Equity of EUR 405,613k (1 January 2018: EUR -9,222k) accounts for 13.8% of total capital.

Long-term provisions of EUR 105,083k (1 January 2018: EUR 0k) include mainly provisions for retirement benefits of EUR 100,200k (1 January 2018: EUR 0k).

In addition to the above-mentioned long-term provisions and deferred tax assets of EUR 318,200k (1 January 2018: EUR 1,933k), long-term liabilities of the consolidated group include mainly liabilities to banks of EUR 1,045,858k (1 January 2018: EUR 0k), liabilities arising from the issuance of a corporate bond of EUR 411,990k (1 January 2018: EUR 419,923k) and derivative financial instruments that have a negative market value of EUR 12,748k (1 January 2018: EUR 0k), and financial liabilities to affiliated companies of EUR 552,688k (1 January 2018: EUR 0k).

Equity and long-term liabilities cover 103.4 % of the CT TopCo Group's long-term assets.

Liabilities to banks nominally amount to EUR 938,000k from a tranche in EUR and EUR 139,689k from two tranches in USD. These loans have variable interest rates and mature on 8 March 2025. Transaction costs associated with the loan that originally amounted to EUR 25,529k are spread over the term of the loan using the effective interet method.

The bond has a fixed interest rate and a nominal volume of EUR 406,000k (1 January 2018: nominal volume of EUR 406,000k). In the financial year, a group company acquired bonds amounting to EUR 5,000k nominally. This bond matures on 15 December 2025. The CT TopCo Group has a termination option for this bond, which is recognized as a separate financial asset (see above). Associated transaction costs that originally amounted to EUR 12,532k are spread over the term of the bond using the effective interest method.

The negative market value of derivative financial instruments relates to embedded interest-rate floors which must be separated, and an interest-rate cap.

Financial liabilities to affiliated companies consist of a shareholder loan of EUR 523,798k (1 January 2018: EUR 0k), and accrued interest on the loan of EUR 28,890k (1 January 2018: EUR 0k). The loan matures on 31 December 2028, and bears interest of 7.3 % p. a.

Short-term financial liabilities to third parties of EUR 22,227k (1 January 2018: EUR 888k) include mainly accrued interest on bonds payable of EUR 7,895k (1 January 2018: EUR 888k), derivate financial instruments that have a negative market value of EUR 5,012k (1 January 2018: EUR 0k), and the short-term part of liabilities to banks of EUR 3,103k (1 January 2018: EUR 0k).

Operating working capital (inventories and trade receivables, less trade payables and provisions recognized for operating activities) amounts to EUR 88,565k as of 31 December 2018.

## Capital investment

In the reporting year, EUR 30,468k in total was spent on property, plant and equipment, and intangible assets, in addition to the acquisition of a business. Capital investment should be considered in relation to depreciation, amortization, and impairments of EUR 122,307k.

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 (around 1/3) and Industrial businesses (around 2/3). Capital investment in the Medical Products business is designed to add capacity and improve productivity, capital investment in the Industrial business is related to machinery replacement, and improves 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 110,797k from its operations.

The cash outflows resulting from the consolidated group’s investing activities amounted to EUR 2,493,369k. In the reporting period, the cash outflows included the purchase price payment of EUR 2,467,068k for the acquisition of the shares in CeramTec Holding GmbH, the former group parent company, effective as of 8 March 2018.

With respect to financing activities, the cash inflows amounted to EUR 2,403,591k. The cash inflows resulted mainly from contributions to the capital reserve account of EUR 500,367k, cash receipts from issuance of a bond of EUR 392,430k, and cash proceeds from a syndicated loan of EUR 1,084,733k and a shareholder loan of EUR 523,798k.

Overall, the consolidated group's liquid funds amount to EUR 21,058k as of the balance sheet date (prior year: EUR 39k).

The CT TopCo Group has a revolving credit line under which it could borrow up to EUR 75,000k, 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 CT TopCo 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 CT TopCo Group.

The CT TopCo 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 at least 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 CT TopCo Group.

Earnings and expectations for the next few months are discussed with the management of the parent company of CT TopCo 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 CT TopCo Group employed a workforce of 3,589 people.

The staffing structure is as follows:

| | 31 Dec. 2018 |
|---|---|
| **Employees by region** | |
| Europe | 650 |
| Germany | 2,116 |
| Asia | 477 |
| North and South America | 346 |
| | **3,589** |
| **Employees by function** | |
| Manufacturing | 2,813 |
| Sales | 329 |
| Research and development | 191 |
| Administration | 256 |
| | **3,589** |

Details vary, but the management and employees of the CT TopCo 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 2018, the recruitment of skilled employees and executive personnel continued to be in the foreground for the CT TopCo Group.

On the balance sheet date, 154 apprentices in total were employed by the CT TopCo 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 various 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 our manufacturing sites are located. Most of our production is located within the European Union and specifically in Germany. As a result, we are 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. We have 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, we will continue to focus on customer satisfaction, conserving scarce resources, energy management as well as working conditions for our 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 CT TopCo Group in 2018 amounted to EUR 1,577k.

CeramTec’s Industrial business has been certified according to DIN EN ISO 9001 and, specifically with respect to Automotive Engineering, IATF 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 2018, has been implemented. A deadline extension for all outstanding actions was approved.

## 5 Report on subsequent events

Events of special importance did not occur after the end of the reporting period.

# 6 Report on outlook, opportunities and risks

## 6.1 Report on outlook

### Framework – overall economy and industry in which the Company operates

According to forecasts produced by the Institute for the World Economy on 11 December 2018, the world economy will grow by 3.4 % in the financial year 2019. The world economy is hence expected to grow at a slightly slower pace than in the past few years because of the adverse impact of trade policy on the world economy. The Indian and Chinese economies are projected to grow by 7.5% and 6.1 % respectively, the highest rates of growth. Germany and the Eurozone as a whole are anticipated to grow by 1.7%, and the United States economy is expected to grow by 2.5 %. Growth rates for Germany were reduced by the German federal government on 30 January 2019 to 1.0 % according to the German federal government's 2019 Annual Economic Report.

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, such as allergic reactions and other documented safety concerns.

Low to moderate growth in 2019 can be expected for the industries described in Chapter 2.1 although we expect end markets to be more volatile. 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 CT TopCo Group's business and income

We forecast for the financial year 2019 a moderate rise in full-year revenue, EBITDA adjusted for special items, and positive cash flow generated from operations that is comparable to 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 2019.

## 6.2 Report on opportunities and risks

The CT TopCo 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 us compensate for the weakness of demand experienced in individual markets or regions. Also, our broad portfolio of products, low customer concentration, and a large number of industries which we serve, allow us 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

The CT TopCo Group is exposed to foreign currency risks associated mainly with foreign currency loans (USD) used to receive financing.

In addition, the CT TopCo 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 financial covenants. The CT TopCo Group must hence comply with a financial covenant when an amount defined in the loan agreement is drawn down from a revolving credit line under which up to EUR 75,000k 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. In addition, an analysis must be undertaken by the end of the financial year to determine whether the value of the collateral used to secure the syndicated loan does not fall below a certain threshold. When this happens, additional collateral must be provided. At the end of the current financial year, the collateral value did not fall below the threshold. The management expects that the Company will continue to comply with the financial covenants 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 are underrepresented such as the United States 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 existing presence in Suzhou, China, we also intend to partner with local players to accelerate growth and achieve scale as well as maximize our existing expertise to focus on key projects and achieve true "local" status.

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

In addition, we intend to focus on capturing emerging growth opportunities beyond our 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 our Medical Products business, we intend 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 our 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 CT TopCo Group operate in many markets. The risk position did not change substantially. 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 CT TopCo 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 CT TopCo Group which go beyond the risks that every entrepreneur must take.

## Corporate governance declaration

Insofar as CT TopCo 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, have not been fully achieved so far. CeramTec GmbH remains committed to achieving the gender quota targets.

Plochingen/Germany, 22 March 2019

**CeramTec TopCo GmbH**

The management

Dr. Hadi Saleh

# CeramTec TopCo GmbH

# Plochingen

# Consolidated Financial Statements
# for the year ended
# 31 December 2018

**CeramTec TopCo GmbH, Plochingen**

## Consolidated statement of financial position as at 31 December 2018

| Assets | Notes | 31 December 2018 | 1 January 2018 |
|---|---|---|---|
| | | EUR k | EUR k |
| Goodwill | 4.1 | 1.341.431 | 0 |
| Other intangible assets | 4.1 | 1.105.674 | 0 |
| Property, plant and equipment | 4.2 | 288.994 | 0 |
| Other financial assets | 4.3 | 21.063 | 34.020 |
| Other assets | 4.4 | 1.316 | 23.690 |
| Deferred tax assets | | 363 | 0 |
| **Non-current assets** | | **2.758.841** | **57.710** |
| Inventories | 4.5 | 96.497 | 0 |
| Trade receivables | 4.6 | 57.880 | 0 |
| Income tax receivable | | 3.242 | 0 |
| Other financial assets | 4.3 | 2.397 | 406.000 |
| Other receivables and assets | 4.4 | 8.667 | 31 |
| Cash and cash equivalents | 4.7 | 21.058 | 39 |
| **Current assets** | | **189.741** | **406.070** |
| **Total assets** | | **2.948.582** | **463.780** |

## CeramTec TopCo GmbH, Plochingen

## Consolidated statement of financial position as at 31 December 2018

| **Equity and Liabilities** | **Notes** | **31 December 2018** | **1 January 2018** |
|---|---|---|---|
| | | EUR k | EUR k |
| Issued capital | 4.8 | 25 | 25 |
| Capital reserves | 4.8 | 500.417 | 50 |
| Accumulated losses | 4.8 | -96.096 | -9.297 |
| Accumulated other comprehensive income | 4.8 | 1.267 | 0 |
| **Equity** | | **405.613** | **-9.222** |
| Provisions for pension obligations | 4.9 | 100.200 | 0 |
| Other provisions | 4.10 | 4.883 | 0 |
| Financial liabilities to affiliates | 4.11 | 552.688 | 0 |
| Financial liabilities to third parties | 4.12 | 1.471.844 | 419.923 |
| Deferred tax liabilities | | 318.200 | 1.933 |
| **Non-current liabilities** | | **2.447.815** | **421.856** |
| Other provisions | 4.10 | 20.156 | 0 |
| Provision for taxes | 4.10 | 6.347 | 0 |
| Financial liabilities to third parties | 4.12 | 22.227 | 888 |
| Trade payables | | 34.907 | 50.258 |
| Other liabilities | 4.13 | 11.517 | 0 |
| **Current liabilities** | | **95.154** | **51.146** |
| **Total liabilities** | | **2.542.969** | **473.002** |
| **Total equity and liabilities** | | **2.948.582** | **463.780** |

CeramTec TopCo GmbH, Plochingen

## Consolidated statement of comprehensive income

## from 1 January to 31 December 2018

| | Notes | 1 January to 31 December 2018 |
|---|---|---|
| | | EUR k |
| Revenue | 3.1 | 496.909 |
| Cost of sales | 3.2 | 336.608 |
| **Gross profit** | | **160.301** |
| Selling costs | 3.3 | 81.087 |
| Research and development costs | 3.4 | 18.571 |
| General administrative costs | 3.5 | 28.262 |
| Other income and expenses (-), net | 3.6 | -11.189 |
| **Operating income** | | **21.192** |
| Interest income and other finance income | | 1.626 |
| Interest expenses and other finance costs | | 125.049 |
| **Financial result** | 3.7 | **-123.423** |
| **Loss before income tax** | | **-102.231** |
| Income tax expense | 3.8 | 15.095 |
| **Net loss for the period** | | **-87.136** |
| **Items that will not be reclassified through profit or loss** | | |
| Income / expenses (-) from the remeasurement of pension provisions | | 453 |
| Deferred taxes | | -116 |
| | | **337** |
| **Items that may be reclassified subsequently to profit or loss** | | |
| Changes in the fair value of financial assets available for sale | | 331 |
| Deferred taxes | | -95 |
| | | **236** |
| Exchange differences on translation of foreign operations | | 1.031 |
| **Other comprehensive income / loss (-), net of income tax** | | **1.604** |
| **Total comprehensive income / loss (-)** | | **-85.532** |

## CeramTec TopCo GmbH, Plochingen

## Consolidated statement of cash flows
## from 1 January to 31 December 2018

| | 1 January - 31 December 2018 EUR k |
|---|---|
| Net loss for the period | -87.136 |
| Tax income | -15.095 |
| Interest result | 92.466 |
| Amortisation, depreciation and impairment charges of non-current assets | 122.561 |
| Gain (-) / loss on disposal of property, plant and equipment and intangible assets | 150 |
| Increase / decrease (-) in provisions (excluding deferred taxes) | -2.566 |
| Income tax refund / payment (-) | -29.248 |
| Other non-cash expenses / income (-), net | 30.659 |
| Increase (-) / decrease in inventories | 7.094 |
| Increase (-) / decrease in trade receivables | 672 |
| Increase (-) / decrease in other receivables and (financial) assets | 32.955 |
| Increase / decrease (-) in trade payables | -42.361 |
| Decrease (-) in other (financial) liabilities | 646 |
| **Cash flow from operating activities** | **110.797** |
| | |
| Cash received from disposals of property, plant and equipment | 580 |
| Cash paid (-) for investments in property, plant and equipment | -25.022 |
| Cash paid (-) for investments in intangible assets | -1.859 |
| Cash paid (-) for the acquisition of production sites | -2.467.068 |
| **Cash flow from investing activities** | **-2.493.369** |
| | |
| Proceeds from capital contributed to capital reserve | 500.367 |
| Proceeds from bond issuance | 392.430 |
| Cash paid (-) for repayment of portion of bond issue | -4.814 |
| Proceeds of syndicated loans that have been raised | 1.084.733 |
| Repayment (-) of syndicated loan | -45.253 |
| Interest paid (-) | -47.670 |
| Proceeds of shareholder loan | 523.798 |
| **Cash flow from financing activities** | **2.403.591** |
| | |
| **Change in cash and cash equivalents** | **21.019** |
| | |
| Net foreign exchange difference | 0 |
| | |
| Cash and cash equivalents at the beginning of the period | 39 |
| | |
| **Cash and cash equivalents at the end of the period** | **21.058** |

**For further explanation, please see the details in the notes to the consolidated financial statements in Chapter 5**

**CeramTec TopCo GmbH, Plochingen**

## Consolidated statement of changes in equity for the period ended 31 December 2018

| | Issued capital | Capital reserves | Revenue reserves and consolidated net income | Accumulated other comprehensive income | | Equity |
|---|---|---|---|---|---|---|
| | | | | Financial assets available for sale | Difference from currency translation | |
| | EUR k | EUR k | EUR k | EUR k | EUR k | EUR k |
| **1 January 2018** | **25** | **50** | **-9.297** | **0** | **0** | **-9.222** |
| Net loss for the period | 0 | 0 | -87.136 | 0 | 0 | -87.136 |
| Other comprehensive income / loss (-) | 0 | 0 | 337 | 236 | 1.031 | 1.604 |
| *Total comprehensive income / loss (-)* | *0* | *0* | *-86.799* | *236* | *1.031* | -85.532 |
| Owner contributions | 0 | 500.367 | 0 | 0 | 0 | 500.367 |
| **31 December 2018** | **25** | **500.417** | **-96.096** | **236** | **1.031** | **405.613** |

# CeramTec TopCo GmbH

# Plochingen

# Notes to the Consolidated Financial Statements for the year ended 31 December 2018

# 1 General

## 1.1 Corporate information and purpose of the Company

The purpose of CeramTec TopCo GmbH (hereinafter "CeramTec TopCo") 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.

CeramTec TopCo and its subsidiaries 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. 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 TopCo'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 764651. CeramTec TopCo is the parent company of the Group ("CeramTec TopCo Group" or "Group") and the ultimate parent, which prepares exempting consolidated financial statements.

The management of CeramTec TopCo approved the consolidated financial statements on 22 March 2019 for submission to the shareholder meeting.

## 1.2 Basis of preparation

As of 8 March 2018, the former owner Cinven closed the acquisition of CeramTec Group by a Consortium led by Funds advised by leading private equity firm BC Partners ("BC Partners"). The Public Sector Pension Investment Board (PSP Investments) and Ontario Teachers' Pension Plan (Ontario Teachers') are part of the consortium. The transaction was announced in October 2017. On 22 February 2018, anti-trust authorities approved the takeover. As a result, CeramTec AcquiCo GmbH (in the following "CeramTec AcquiCo") acquired the shares in CeramTec Holding GmbH (in the following "CeramTec Holding"). CeramTec AcquiCo GmbH is a 100% subsidiary of CeramTec BondCo GmbH (in the following "CeramTec BondCo"), which is itself a 100% subsidiary of CeramTec TopCo. CeramTec TopCo is the ultimate parent, and prepares the consolidated financial statements.

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 consolidated financial statements are prepared for the largest and smallest groups of consolidated companies.

CeramTec TopCo and the subsidiaries CeramTec BondCo and CeramTec AcquiCo were founded in 2017. For the CeramTec TopCo Group there were no requirements according to IFRS or German local Gaap (HGB) to present consolidated financial statements for the fiscal year ending 31 December 2017. Until the CeramTec Group was acquired, the CeramTec TopCo Group consisted of the above-mentioned holding companies without running an operating business. Upon acquisition of the CeramTec Group as of 8 March 2018, the duty to prepare consolidated financial statements for the fiscal year 2018 arises. The holding companies were consolidated for the first time as of 1 January 2018 (beginning of the first fiscal year of the consolidated group). Prior year figures for the consolidated statement of comprehensive income as well as the consolidated statement of cash flows are not presented.

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 TopCo 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 Business combination

CeramTec AcquiCo acquired 100% of the shares of CeramTec Holding, the former parent company, effective as of 8 March 2018. CeramTec AcquiCo is a wholly owned subsidiary of CeramTec BondCo which, in turn, is a wholly owned subsidiary of CeramTec TopCo. CeramTec TopCo is the ultimate parent company in Germany.

The acquisition took place to accelerate CeramTec's growth targets, especially outside the core European markets, supporting the launch of new product initiatives and investing in the expansion of production facilities to support further growth in the hip implants market.

The acquisition of the shares was financed by equity contributions and a shareholder loan of EUR 1,024,165k granted by a shareholder of CeramTec TopCo, CTEC Acquisition S.à.r.l., Luxembourg (hereinafter "CTEC Acquisition"). Additional funds of EUR 392,430k were raised by issuing a bond, and loans of EUR 1,084,733k were taken out.

The consideration transferred to obtain control amounts to EUR 2,478,949k. The total consideration given consists of only cash. The fair value of the assets acquired and the liabilities assumed amounts to EUR 1,137,395k. The acquisition hence results in goodwill of EUR 1,341,554k as of 8 March 2018. The following table shows a purchase price allocation that categorizes the purchase price into the various assets acquired and liabilities assumed:

| | Fair value EURk |
|---|---|
| Trademarks | 58,971 |
| Technology | 335,953 |
| Customer relationships | 761,580 |
| Orders on hand | 33,500 |
| Other intangible assets | 1,820 |
| **Intangible assets** | **1,191,824** |
| Land and buildings | 106,555 |
| Technical equipment and machinery | 168,918 |
| Other equipment, furniture and fixtures | 6,292 |
| Assets under construction | 12,841 |
| **Property, plant and equipment** | **294,606** |
| Other assets | 667 |
| Inventories | 102,202 |
| Trade receivables | 58,552 |
| Other financial assets | 277 |
| Other receivables and assets | 9,391 |
| Cash and cash equivalents | 11,881 |
| **Assets** | **1,669,400** |

| | |
|---|---|
| Provisions | 144,395 |
| Financial liabilities to third parties | 5,581 |
| Deferred taxes | 348,111 |
| Other short-term liabilities | 33,918 |
| **Liabilities** | **532,005** |
| | |
| Total net assets at fair value | **1,137,395** |
| Total consideration transferred | 2,478,949 |
| **Goodwill arising on acquisition** | **1,341,554** |

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 or future economic benefits, anticipated revenue growth and forecast 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 10,346k, 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 496,909k and EUR 115,615k respectively. If the assets and liabilities had been acquired as of 1 January 2018 already, the revenues would have been EUR 103,291k higher, and the results after taxes before the deduction of transaction costs of the consolidated group would have been EUR 8,108k higher.

## 1.4 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 TopCo has a direct or indirect shareholding are included in the consolidated financial statements for the fiscal year:

| | Share of capital in % | | Business activities |
|---|---|---|---|
| Name of the entity | 31 December 2018 | 1 January 2018 | |
| CeramTec BondCo GmbH, Plochingen | 100.00 | 100.00 | 1 |
| CeramTec AcquiCo GmbH, Plochingen | 100.00 | 100.00 | 1 |
| CeramTec Holding GmbH, Plochingen | 100.00 | --- | 1 |
| CeramTec Group GmbH, Plochingen * | 100.00 | --- | 1 |
| CeramTec FinCo GmbH, Plochingen | 100.00 | --- | 1 |

| Name of the entity | Share of capital in % 31 December 2018 | Share of capital in % 1 January 2018 | Business activities |
|---|---|---|---|
| CeramTec GmbH, Plochingen | 100.00 | --- | 2 |
| Cerasiv GmbH Innovatives Keramik-Engineering, Plochingen | 100.00 | --- | 1 |
| CeramTec-ETEC GmbH, Lohmar | 100.00 | --- | 3 |
| Emil Müller GmbH, Wilhermsdorf | 100.00 | --- | 3 |
| CeramTec UK Ltd., Southampton/Great Britain | 100.00 | --- | 3 |
| CeramTec Czech Republic s.r.o., Sumperk/Czech Repubic | 100.00 | --- | 3 |
| CeramTec Ibérica Innovative Ceramic Engineering S.L., Vilassar de Mar/Spain | 100.00 | --- | 4 |
| CeramTec Innovative Ceramic Engineering, (M) Sdn. Bhd., Seremban/Malaysia | 100.00 | --- | 3 |
| CeramTec Korea Ltd., Suwon-Si/South Korea | 100.00 | --- | 3 |
| CeramTec Suzhou Ltd., Suzhou/China | 100.00 | --- | 3 |
| PST Press Sintertécnica Brasil Ltda., Nova Odessa/Brazil | 100.00 | --- | 3 |
| CeramTec India Innovative Ceramic Engineering Pvt. Ltd., Panaji - Goa/India | 99.90 | --- | 3 |
| Press and Sinter Technics de Mexico S.A. de C.V., Puebla/Mexico | 100.00 | --- | 3 |
| CeramTec BidCo LLC, Laurens/USA | 100.00 | --- | 1 |
| CeramTec Acquisition LLC, Laurens/USA | 100.00 | --- | 1 |
| CeramTec North America LLC, Laurens/USA | 100.00 | --- | 3 |
| DAI Ceramics Inc., Willoughby/USA | 100.00 | --- | 3 |
| PST Press + Sintertechnik Sp. z.o.o., Gorzyce/Poland | 100.00 | --- | 3 |

1 Entities perform the functions of a holding company.
2 Manufacturing and distribution companies operate in the Industrial and Medical Products segments.
3 Manufacturing and distribution companies operate in the Industrial segment.
4 Distribution companies.

* On 11 April 2018, CeramTec Service GmbH (in the following "CeramTec Service") merged with its shareholder, CeramTec Group GmbH (in the following "CeramTec Group"), effective as of 1 January 2018.

CeramTec TopCo has a direct shareholding in CeramTec BondCo GmbH, and an indirect shareholding in the other subsidiaries.

CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group, CeramTec FinCo 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 2018 pursuant to Sec. 264 (3) HGB.

## 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 TopCo obtains control over them. They are deconsolidated on the date on which CeramTec TopCo 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 TopCo, 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 TopCo 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 TopCo 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 IFRS 9 *Financial Instruments*, 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 IFRS 9, 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 TopCo, 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 TopCo 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 1 January 2018 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 2018 | | 1 January 2018 |
|---|---|---|---|---|
| | | Closing rate | Average rate | Closing rate |
| **USD** | USA | 1.1454 | 1.1815 | 1.1993 |
| **CNY** | China | 7.8778 | 7.8071 | 7.8044 |
| **GBP** | Great Britain | 0.9027 | 0.8848 | 0.8872 |
| **PLN** | Poland | 4.3028 | 4.2604 | 4.1770 |
| **CZK** | Czech Republic | 25.7780 | 25.6431 | 25.5350 |

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 in accordance with the five-step model framework in accordance with IFRS 15: 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 been transferred to the customer.

The Group does not offer guarantees to customers that provide greater protection than the laws of Germany. The Group generally does not grant extended payment terms. The Group does not offer substantial quantity discounts or price discounts to customers.

The CeramTec TopCo Group companies will determine upon conclusion of a contract whether revenue should be recognized at a point in time or over time. The CeramTec TopCo Group determines whether control is transferred over time if certain criteria are met. If not, revenue is recognized when control is passed to the customer.

The CeramTec TopCo 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).

### *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.

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 250 are expensed immediately. Low-value assets with a cost of between EUR 250 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.

***Financial assets***

Financial assets are recognised when a group entity becomes a party to the contractual provisions of the instrument.

Financial assets are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets (other than financial assets at fair value through profit or loss) are added to the fair value of the financial assets on initial recognition. Transaction costs directly attributable to the acquisition of financial assets at fair value through profit or loss are recognised immediately in profit or loss.

Financial assets are recognised and derecognised on a trade date basis if delivery of assets within the time frame established by regulation or convention in the marketplace is required.

All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

*Classification of financial assets*

Debt instruments that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms of the financial asset give rise to solely payments of principal and interest on the principal amount outstanding.

Debt instruments that meet the following conditions are subsequently measured at FVTOCI:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- the contractual terms of the financial asset give rise to solely payments of principal and interest on the nominal amount outstanding.

By default, all other financial assets are subsequently measured at FVTPL.

The Group neither recognises debt instruments that are measured at FVTOCI nor equity instruments designated to be classified as FVTOCI.

*Amortised cost and effective interest method*

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest income over the relevant period.

For financial instruments other than purchased or originated credit-impaired financial assets, the effective interest rate is the rate that discounts estimated future cash receipts (including all fees that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) excluding expected credit losses, through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount on initial recognition. For purchased or originated credit-impaired financial assets, a credit-adjusted effective interest rate is calculated by discounting the estimated future cash flows, including expected credit losses.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. On the other hand, the gross carrying amount of a financial asset is the amortised cost of a financial asset before adjusting for any loss allowance.

Interest income is recognised using the effective interest method for debt instruments measured subsequently at amortised cost and at FVTOCI. For financial instruments other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the net carrying amount of the financial asset at the beginning of the reporting period that follows the occurrence of objective evidence of impairment. If, in subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset at the beginning of the following reporting period.

For purchased or originated credit-impaired financial assets, the Group recognises interest income by applying the credit-adjusted effective interest rate to the amortised cost of the financial asset from initial recognition. The calculation does not revert to the gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit-impaired.

Interest income is recognised in the consolidated statement of comprehensive income and is included in the "Interest income and other finance income" line item.

*Financial assets at FVTPL*

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss to the extent they are not part of a designated hedging relationship. The net gain or loss recognised in profit or loss incorporates any dividend or interest earned on financial assets and is included in the “Interest income and other finance income” line item.

*Impairment of financial assets*

The Group recognises a loss allowance for expected credit losses (ECL) on investments in debt instruments that are measured at amortised cost or at FVTOCI, finance lease receivables, trade receivables and contract assets. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognises lifetime ECL for trade receivables. The expected credit losses on these financial assets are estimated by reference to past default experience of a debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the debtor. Irrespective of the above analysis, the Group considers that default has occurred when a financial asset is more than 60 days / 90 days past due unless the Group has reasonable and supp0rtable information to demonstrate that a more lagging default criterion is more appropriate.

For all other financial instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12m ECL.

The Group directly writes off a financial asset and hence reduces the gross carrying amount when there is informati0n indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures. Any recoveries made are recognised in profit or loss.

In addition to using external sources of information, the measurement of expected credit losses is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above.

*Derecognition of financial assets*

Derecognition of financial assets is done by the Group only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss. In addition, on derecognition of an investment in a debt instrument classified as at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is reclassified to profit or loss. In contrast, on derecognition of an investment in equity instruments which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to retained earnings.

***Financial liabilities***

Financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. Financial liabilities are measured at amortised cost using the effective interest method, or at fair value through profit or loss.

Financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the issue of financial liabilities (other than financial liabilities at fair value through profit or loss) are deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

*Financial liabilities at FVTPL*

Financial liabilities are classified as Financial liabilities at FVTPL when the financial liability is 1) contingent consideration of an acquirer in a business combination, 2) held for trading, or 3) it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

- it forms part of a contract containing one or more embedded derivatives, and IFRS 9 permits the entire combined contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value with any gains or losses arising on changes in fair value recognised in profit or loss to the extent that they are not part of a designated hedging relationship.

However, for financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognised in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of liability is recognised in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to retained earnings upon derecognition of the financial liability.

*Financial liabilities measured at amortised cost*

Financial liabilities that are not 1) contingent consideration of an acquirer in a business combination, 2) held-for-trading, or 3) designated as at FVTPL, are Financial liabilities subsequently measured at amortised 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 of a financial liability on initial recognition.

*Derecognition of financial liabilities*

Derecognition of financial liabilities is done by the Group when, and only when, the Group’s obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

***Derivative financial instruments***

Derivative financial instruments 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.

Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

### *Offsetting financial instruments*

Financial assets and liabilities are offset and the net amount reported in the statement of financial position if there is a legally enforceable 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.

### *Measurement at fair value*

On the reporting date, the CeramTec TopCo 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 TopCo 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 TopCo 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 2018G 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 differences 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 BondCo (as the parent), CeramTec AcquiCo, CeramTec Holding (beginning on 1 August 2018), CeramTec Group, CeramTec FinCo GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. In the abridged fiscal year 1 January 2018 – 31 July 2018, CeramTec Holding GmbH was not included in the consolidated tax group relationship with CeramTec BondCo, and was hence liable to income tax.

There was 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 until May 2018 inclusive. Since June 2018, there has been a consolidated tax group for VAT purposes between CeramTec AcquiCo as the new parent company and CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. Until May 2018 inclusive, CeramTec AcquiCo was an independent entrepreneur as defined in the German Value Added Tax Act (UStG).

## 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 TopCo 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 TopCo 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 TopCo Group.

Goodwill of EUR 1,341,431k and other intangible assets of EUR 1,105,674k 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 can be found in notes 4.1 Goodwill and Intangible Assets and 4.2 Property, Plant and Equipment.

### *Valuation allowances on receivables*

Allowances for doubtful debts are recognised based on assumptions about default risk and expected loss given default. The CeramTec TopCo Group exercises judgment to make the assumptions and select inputs used in determining the allowances by reference to past default experience, prevailing market conditions, and forward-looking estimates as of the end of the reporting period.

Accordingly, receivables are reduced by appropriate specific 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). The allowances are allocated to level 3 in the fair value hierarchy under IFRS 9. As of the reporting date, an impairment loss of EUR 530k 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 100,200k 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 31,386k 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 TopCo 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 363k 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

***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** |
|---|---|
| Amendments to IFRS 10 and IAS 28: "Sales or Contributions of Assets Between an Investor and its Associate/Joint Venture" | deferred indefinitely |
| 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 |
| IAS 19: "Employee Benefits" | 1 January 2019 |
| IFRS 3: "Business Combinations" | 1 January 2021 |
| IFRS 17: "Insurance Contracts " | 1 January 2021 |

The aforementioned changes will have no effect on the consolidated financial statements of CeramTec TopCo Group, except for IFRS 16.

IFRS 16 introduces a comprehensive model for the identification of lease arrangements and accounting treatments for both lessors and lessees. IFRS 16 will supersede the current lease guidance including IAS 17 Leases and the related interpretations when it becomes effective.

IFRS 16 distinguishes leases and service contracts on the basis of whether an identified asset is controlled by a customer. Distinctions of operating leases (off balance sheet) and finance leases (on balance sheet) are removed for lessee accounting, and are replaced by a model where a right-of-use asset and a corresponding liability have to be recognised for all leases by lessees (i.e. all on balance sheet) except for short-term leases and leases of low value assets.

The right-of-use asset is initially measured at cost and subsequently measured at cost (subject to certain exceptions) less accumulated depreciation and impairment losses, adjusted for any re-measurement of the lease liability. The lease liability is initially measured at the present value of the lease payments that are not paid at that date. Subsequently, the lease liability is adjusted for interest and lease payments, as well as the impact of lease modifications, amongst others. Furthermore, the classification of cash flows will also be affected as operating lease payments under IAS 17 are presented as operating cash flows; whereas under the IFRS 16 model, the lease payments will be split into a principal and an interest portion which will be presented as financing and operating cash flows respectively.

Furthermore, extensive disclosures are required by IFRS 16.

The CeramTec TopCo Group has determined an opening right-of-use asset and a corresponding liability of EUR 4,844k as of 1 January 2019. Operating result takes account of depreciation of right-of-use assets, and interest expense associated with unwinding of discount on lease liabilities is included in financial result.

# 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:

| | 2018<br>EURk |
|---|---|
| **Regions** | |
| Europe (w/o Germany) | 215,843 |
| Germany | 125,734 |
| North America | 64,988 |
| Asia | 75,126 |
| Rest of world | 15,218 |
| **Total** | **496,909** |
| **Businesses** | |
| Industrial | 309,393 |
| Medical products | 187,516 |
| **Total** | **496,909** |

Unfilled orders on hand amount to EUR 206,201k as of the balance sheet date, of which EUR 136,489k and EUR 69,712k are attributable to the Industrial and Medical Products businesses respectively.

## 3.2 Cost of sales

The cost of sales breaks down as follows:

| | 2018<br>EURk |
|---|---|
| Material and packaging costs | 100,040 |
| Personnel expenses | 103,497 |
| Amortization and depreciation | 79,898 |
| Other costs of sales | 53,173 |
| **Total** | **336,608** |

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

## 3.3 Selling costs

Selling costs primarily contain amortization and depreciation as well as 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:

| | 2018<br>EURk |
|---|---|
| Transaction costs | -10,346 |
| Write-downs and impairment | -897 |
| Losses on disposal of property, plant and equipment | -150 |
| Foreign currency results | -63 |
| Addition to allowance for bad debts | -63 |
| Income from reversal of allowances for bad debts | 2 |
| Sundry other income | 521 |
| Sundry other expenses | -193 |
| **Total** | **-11,189** |

Transaction costs of EUR 10,346k were incurred in connection with the acquisition of CeramTec Holding and its subsidiaries (see 1.3).

Write-downs and impairment resulted mainly from the permanent shutdown of machinery (EUR 643k), and write-downs on advance payments for a construction project in India which will be abandoned from today's perspective (EUR 254k).

Sundry other income includes mainly a refund of real estate transfer tax (EUR 204k).

### 3.7 Financial result

The financial result breaks down as follows:

| | 2018<br>EURk |
|---|---|
| Income from discounting of financial liabilities | 1,463 |
| Other interest income | 163 |
| **Interest income and other finance income** | **1,626** |
| Interest expense from derivatives | 22,028 |
| Interest expense from shareholder loan | 31,971 |
| Interest expense from syndicated loan | 30,882 |
| Interest expense from bond | 21,723 |
| Exchange rate losses | 8,707 |
| Expense from unwinding the discount on financial liabilities | 4,944 |
| Interest expense from provision and use of revolving line of credit | 660 |
| Other interest expenses | 4,196 |
| Interest capitalized | -62 |
| **Interest expenses and other finance costs** | **125,049** |
| **Total financial result** | **-123,423** |

The exchange rate 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 1,487k, which are due to unwinding the discount on provisions.

### 3.8 Income tax

Since 1 January 2018, there has been a consolidated tax group for income tax purposes between CeramTec BondCo and its German subsidiaries.

CeramTec TopCo is not included in the German consolidated tax group for income tax purposes and, in the abridged fiscal year 1 January 2018 – 31 July 2018, CeramTec Holding was not within the consolidated tax group.

This means that German corporate income tax and trade tax is only levied at the level of the parent company, CeramTec BondCo.

CeramTec TopCo also has indirect shareholdings in foreign corporations.

The current income taxes of the CeramTec TopCo 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 loss before income tax of EUR -102,231k is allocable to Germany and abroad as follows:

| | 2018<br>EURk |
|---|---|
| Germany | -110,661 |
| Abroad | 8,430 |
| **Total** | **102,231** |

Tax income of EUR 15,095k breaks down as follows:

| | 2018<br>EURk |
|---|---|
| Current income tax expense | -17,320 |
| Deferred tax income | 32,415 |
| **Tax income** | **15,095** |

Overall, the Company's weighted tax rate (based to the allocation of profit before tax and mainly driven by the German entities) is 28.7 %, which will be used for the 2018 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.

| | 2018 | |
|---|---|---|
| | EURk | % |
| **Loss before income tax** | **102,231** | |
| Expected tax income | 29,297 | 28.7% |
| Permanent differences | -2,665 | -2.6% |
| Effects of changed income tax rates | 758 | 0.7% |
| Non-recognition of deferred tax assets on interest carryforwards | -13,017 | -12.7% |
| Tax income for previous years | 1,297 | 1.3% |
| Other adjustments | -575 | -0.6% |
| **Tax income and effective tax rate** | **15,095** | **14.8%** |

The effects of permanent differences result mainly from add-backs of expenses of EUR 3,325k to operating profit which are subject to German trade tax, other non-deductible operating expenses of EUR 274k, less tax-free income of EUR -934k.

### *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 the taxes are levied by the same tax authority.

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

| | 31 December 2018 EURk |
|---|---|
| Deferred tax assets | 363 |
| Deferred tax liabilities | 318,200 |
| **Net amount of deferred tax liabilities** | **317,837** |

The deferred tax assets and liabilities stem from the following:

| | 31 December 2018 Assets EURk | 31 December 2018 Liabilities EURk |
|---|---|---|
| Tax loss carryforwards | 53 | 0 |
| Property, plant and equipment | 194 | 25,256 |
| Goodwill and other intangible assets | 3,526 | 317,598 |
| Inventories, receivables and other assets | 17,060 | 7,404 |
| Non-current provisions | 22,222 | 6,998 |
| Current provisions and other liabilities | 4,448 | 8,084 |
| **Total deferred taxes** | **47,503** | **365,340** |
| Offsetting | -47,140 | -47,140 |
| **Deferred taxes** | **363** | **318,200** |

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

| | 2018 EURk |
|---|---|
| **Net amount of deferred tax liabilities as of 1 January** | **1,933** |
| Deferred tax income shown in the income statement | -32,415 |
| Changes in deferred taxes recognized in other comprehensive income | 211 |
| Changes arising from acquisitions and disposals | 348,111 |
| Other changes (e.g. changes arising from foreign currency translation) | -3 |
| **Net amount of deferred tax liabilities as of 31 December** | **317,837** |

Deferred tax liabilities (EUR 6,571k) set off against deferred tax assets (EUR 4,638k) make up the net amount of deferred tax liabilities as of 1 January 2018.

Other comprehensive income contains deferred tax expense on the remeasurement of defined benefit plans of EUR 116k, and deferred tax expense on gain/loss arising on changes in the fair value of financial instruments available for sale of EUR 95k.

**Unused tax losses and interest carryforwards**

Unused tax losses and interest carryforwards break down as follows:

| | 31 December 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| Interest carryforwards | 51,153 | 0 |
| *on which no deferred tax assets are recognized* | *51,153* | *0* |
| Foreign unused tax losses | 606 | 0 |
| *on which no deferred tax assets are recognized* | *393* | *0* |
| Total unused tax losses | 970 | 16,160 |
| *on which no deferred tax assets are recognized* | *757* | *0* |

Deferred tax assets were recognized on unused tax losses of EUR 213k (1 January 2018: EUR 16,160k).

Foreign unused tax losses, for which deferred tax assets have been capitalized, result from unused tax losses made by a group company in Spain of EUR 213k (1 January 2018: EUR 0k). The tax loss carryforwards in Spain do not expire. The loss carryforwards as of 1 January 2018 resulted from CeramTec BondCo, and were completely used up in the current fiscal year.

Temporary differences in connection with shares in subsidiaries in the amount of EUR 2,073k 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 2018, cost of materials amounted to EUR 114,557k. Cost of materials are mainly contained in cost of sales and research and development

### *Personnel expenses*

Personnel expenses break down as follows:

| | 2018<br>EURk |
|---|---|
| Wages and salaries | 129,383 |
| Social security contributions | 24,315 |
| Pension expenses | 6,986 |
| **Total** | **160,684** |

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

### *Employees*

On average, the Group employed 3,554 people in the fiscal year. These break down as follows:

| | 2018<br>Average headcount |
|---|---|
| Salaried employees | 1,335 |
| Wage earners | 2,219 |
| **Total** | **3,554** |

### *Amortization and depreciation*

Amortization and depreciation break down as follows:

| | 2018<br>EURk |
|---|---|
| Amortization of intangible assets | 88,077 |
| Depreciation of property, plant and equipment | 33,587 |
| Impairment of property, plant and equipment | 643 |
| **Total** | **122,307** |

## 4 Notes to the consolidated statement of financial position

### 4.1 Goodwill and intangible assets

Goodwill and intangible assets break down as follows:

| | | Other intangible assets | | | | |
|---|---|---|---|---|---|---|
| | **Goodwill** | Trade-marks | Techno-logy | Custo-mer relati-onships | Other | **Total** |
| | EURk | EURk | EURk | EURk | EURk | EURk |
| **Cost** | | | | | | |
| **1 January 2018** | **0** | **0** | **0** | **0** | **0** | **0** |
| Additions from business combinations | 1,341,554 | 58,971 | 335,953 | 761,580 | 35,320 | 2,533,378 |
| Additions | 0 | 0 | 0 | 0 | 1,859 | 1,859 |
| Disposals | 0 | 0 | 0 | 0 | -10 | -10 |
| Reclassifications | -123 | 29 | -176 | 220 | -2 | -52 |
| **31 December 2018** | **1,341,431** | **59,000** | **335,777** | **761,800** | **37,167** | **2,535,175** |
| **Amortizati-on/impairment** | | | | | | |
| **1 January 2018** | **0** | **0** | **0** | **0** | **0** | **0** |
| Additions to amortization | 0 | -2 | 15,574 | 38,180 | 34,325 | 88,077 |
| Disposals | 0 | 0 | 0 | 0 | -10 | -10 |
| Exchange differences | 0 | 2 | -8 | 7 | 2 | 3 |
| **31 December 2018** | **0** | **0** | **15,566** | **38,187** | **34,317** | **88,070** |
| **Net carrying amounts** | | | | | | |
| 31 December 2018 | **1,341,431** | **59,000** | **320,211** | **723,613** | **2,850** | **2,447,105** |
| 1 January 2018 | **0** | **0** | **0** | **0** | **0** | **0** |

Goodwill results from the acquisition of CeramTec Holding and its subsidiaries in the current fiscal year (see note 1.3). It was allocated to the cash-generating units (CGUs) Medical (EUR 874,613k), and Industrial (EUR 466,818k).

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.

As of 8 March 2018, the trademarks CeramTec, BIOLOX, SPK and DAI Ceramics were identified. The recorded carrying amount of these intangible assets amounted to EUR 59,000k as of 31 December 2018. As the recognized trademarks 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 trademarks were allocated to the cash-generating units Medical (EUR 33,200k) and Industrial (EUR 25,800k).

Technology has a carrying amount of EUR 320,211k and primarily contains the basic technology underlying high-performance ceramics. This has an average weighted remaining useful life of 17.2 years.

Customer relationships have a carrying amount of EUR 723,613k and primarily contain customer relationships from medical applications. This has an average weighted remaining useful life of 16.1 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 (-), net.

For the cash-generating units, the annual impairment test was performed as of 31 October 2018. 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 TopCo 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 financial budgets are prepared on the basis of historical experience, and reflects the management's expectations for the next three or five years, respectively.

An infinite growth rate of 1 % was determined. The weighted average cost of capital is 8.70 %. Equity costs were calculated using a base interest rate of 1.25 % and a market risk premium of 6.75 %.

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 unit Medical over its value in use.

The cash-generating unit Industrial would have to be written down by EUR 32,100k if the weighted average cost of capital rose by 0.25 % points, and it would have to be written down by EUR 18,600k if the EBITDA margin deteriorated by 0.5 % points.

### 4.2 Property, plant and equipment

Property, plant and equipment breaks down as follows:

| | Land and buildings | Plant and machinery | Other equipment | Assets under construction | **Total** |
|---|---|---|---|---|---|
| | EURk | EURk | EURk | EURk | EURk |
| **Cost** | | | | | |
| **1 January 2018** | **0** | **0** | **0** | **0** | **0** |
| Additions from business combinations | 106,555 | 168,918 | 6,292 | 12,841 | 294,606 |
| Additions | 797 | 12,161 | 2,549 | 13,102 | 28,608 |
| Disposals | -38 | -471 | -356 | 0 | -866 |
| Reclassifications | 923 | 9,549 | 152 | -10,624 | 0 |
| Exchange differences | -407 | 637 | 37 | 99 | 367 |
| **31 December 2018** | **107,830** | **190,794** | **8,674** | **15,418** | **322,716** |
| **Amortization/impairment** | | | | | |
| **1 January 2018** | **0** | **0** | **0** | **0** | **0** |
| Additions to amortization | 5,760 | 25,106 | 2,721 | 0 | 33,587 |
| Additions to impairment | 0 | 643 | 0 | 0 | 643 |
| Disposals | 0 | -246 | -352 | 0 | -599 |
| Exchange differences | 14 | 73 | 3 | 0 | 90 |
| **31 December 2018** | **5,774** | **25,576** | **2,372** | **0** | **33,722** |
| **Net carrying amounts** | | | | | |
| **31 December 2018** | 102,056 | 165,219 | 6,301 | 15,418 | 288,994 |
| **1 January 2018** | 0 | 0 | 0 | 0 | 0 |

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.

In the fiscal year, borrowing costs of EUR 62k were capitalized in property, plant and equipment.

There were contractual commitments to acquire property, plant and equipment of EUR 28,611k as of the reporting date (1 January 2018: EUR 0k).

Property, plant and equipment under finance leases contains rented buildings with a net carrying amount of EUR 1,252k (1 January 2018: EUR 0k), and furniture and fixtures with a net carrying amount of EUR 4k (1 January 2018: EUR 0k). 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 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| ***Other non-current financial assets*** | | |
| Separated termination rights | 20,988 | 34,020 |
| Derivative financial instruments | 26 | 0 |
| Insurance claims | 49 | 0 |
| **Total** | **21,063** | **34,020** |
| ***Other current financial assets*** | | |
| Receivables arising from amounts retained by a factor as a security | 2,032 | 0 |
| Other financial assets | 365 | 406,000 |
| **Total** | **2,397** | **406,000** |

The CeramTec TopCo 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.

As of 1 January 2018, an account receivable due from an escrow agent amounted to EUR 406,000k because of the issuance of the bond. At this point in time, the criteria for a transfer of ownership in March 2018 were not yet met.

Because of a low risk of default, in the reporting period no loss allowance for other financial assets was recognised.

## 4.4 Other assets

The following table breaks down other assets as follows:

| | 31 December 2018 | 1 January 2018 |
|---|---|---|
| | EURk | EURk |
| ***Other non-current assets*** | | |
| Deferred finance costs for the revolving credit line | 916 | 0 |
| Other deferred finance costs | 0 | 23,690 |
| Other assets | 400 | 0 |
| **Total** | **1,316** | **23,690** |
| ***Other current assets*** | | |
| Prepaid insurance | 2,869 | 0 |
| VAT receivables | 2,710 | 31 |
| Receivables from energy tax refunds | 1,154 | 0 |
| Deferred finance costs for the revolving credit line | 219 | 0 |
| Sundry assets | 1,715 | 0 |
| **Total** | **8,667** | **31** |

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

## 4.5 Inventories

Inventories break down as follows

| | 31 December 2018 | 1 January 2018 |
|---|---|---|
| | EURk | EURk |
| Raw materials | 32,042 | 0 |
| Work in progress | 32,144 | 0 |
| Finished goods | 27,670 | 0 |
| Merchandise | 3,097 | 0 |
| Other inventories | 1,544 | 0 |
| **Total** | **96,497** | **0** |

Other inventories include packaging materials and spare parts for machinery.

At the reporting date the allowance for write-downs on inventories amounts to EUR 12,605k. The expense resulting from increasing the write-downs by EUR 1,472 is reported under cost of sales.

### 4.6 Trade receivables

At the end of the reporting period, trade receivables amounted to EUR 57,880k (1 January 2018: EUR 0k) after taking into account valuation allowance of EUR 530k (1 January 2018: EUR 0k).

A factoring agreement was concluded in 2017 whereby receivables of EUR 14,146k were sold as of the balance sheet date. Under the terms of the agreement, EUR 2,032k 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 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| **Carrying amount before impairment** | **58,410** | **0** |
| thereof not yet due on the reporting date | 43,613 | 0 |
| thereof past due on the reporting date | 14,797 | 0 |
| past due up to 30 days | 11,255 | 0 |
| past due up to 60 days | 2,019 | 0 |
| past due up to 90 days | 506 | 0 |
| past due more than 90 days | 1,017 | 0 |

The age structure of the impairment losses as of the reporting date breaks down as follows:

| | 31 December 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| not yet due | 0 | 0 |
| past due up to 30 days | 22 | 0 |
| past due up to 60 days | 57 | 0 |
| past due up to 90 days | 47 | 0 |
| past due more than 90 days | 404 | 0 |
| **Total** | **530** | **0** |

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

| | 31 December 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| past due up to 30 days | 11,224 | 0 |
| past due up to 60 days | 1,941 | 0 |
| past due up to 90 days | 442 | 0 |
| past due more than 90 days | 461 | 0 |
| **Total** | **14,068** | **0** |

Loss allowances are based on information about a customer developed internally or obtained from external sources, and an estimate of the likelihood of default. The loss allowances mainly include specific loss allowances for receivables due from customers that have entered into bankruptcy proceedings, or are in severe financial difficulty.

Default risks in the majority of trade receivables (usually between 75 % - 80 %) of CeramTec GmbH, Plochingen/Germany, the largest company that engages in operating activities, are limited by using credit insurance. After taking credit insurance into account, the maximum default risk on trade receivables of CeramTec TopCo Group comes to around 51 % of the carrying amount as of the balance sheet date.

Based on the CeramTec TopCo Group's historical credit loss experience and customer structure, the Group is expected to sustain a small loss in the event of default, taking into account future-oriented macroeconomic information and existing insurance that protects the Group against loss on receivables. The resulting allowances on trade receivables are of minor importance.

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 Group has recognised loss allowances of 10 % and 40 % against all receivables over 60 days and 90 days past due respectively.

The following table shows the development of allowances on trade receivables during the past reporting period. Additional general risks of non-payment are considered remote.

| Allowances | 2018<br>EURk | 2017<br>EURk |
|---|---|---|
| **Allowance on 1 January 2018** | **0** | **0** |
| Addition | 63 | 0 |
| Reversed | -4 | 0 |
| Utilization | -2 | 0 |
| Foreign currency translation | 12 | 0 |
| Change recognized in profit or loss | 69 | 0 |
| Changes to the consolidated group | 461 | 0 |
| **Allowance on 31 December 2018** | **530** | **0** |

## 4.7 Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 21,049k (1 January 2018: EUR 39k) and cash in hand of EUR 9k (1 January 2018: EUR 0k).

## 4.8 Equity

### *Issued capital*

The fully paid in capital stock of the parent company CeramTec TopCo amounts to EUR 25k (1 January 2018: EUR 25k).

### *Capital reserves*

Effective as of 8 March 2018, CTEC Acquisition S.á.r.l., Luxembourg, increased CeramTec Top-Co's capital reserves by EUR 500,367k in its capacity as the sole shareholder of CeramTec Top-Co. 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 TopCo Group and those incurred in previous years. This also includes reserves for the remeasurement of pension obligations (after taxes) amounting to EUR 337k (1 January 2018: EUR 0k).

### *Other comprehensive income*

Accumulated other comprehensive income relates to foreign currency translation adjustments and a reserve for financial assets available for sale, net of taxes.

## 4.9 Provisions for pension obligations

Within the CeramTec TopCo 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 TopCo 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 Hoechster 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 2018<br>EURk | 1 January 2018<br>EURk |
|---|---:|---:|
| Germany | 96,430 | 0 |
| UK | 3,559 | 0 |
| Other | 211 | 0 |
| **Total** | **100,200** | **0** |

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 2018.

| **Change in benefit obligations** | German plans EURk | Foreign plans EURk | Total EURk |
|---|---|---|---|
| **Benefit obligations at the beginning of the fiscal year** | **0** | **0** | **0** |
| Addition due to changes to the consolidation group | 94,892 | 11,626 | 106,518 |
| Service cost | 2,506 | 139 | 2,645 |
| Interest expense | 1,322 | 276 | 1,598 |
| Remeasurements | -339 | -510 | -849 |
| *from the change in demographic assumptions* | *1,353* | *-78* | *1,275* |
| *from the change in financial assumptions* | *-3,369* | *-436* | *-3,805* |
| *Experience adjustments* | *1,677* | *4* | *1,681* |
| Foreign currency translation | 0 | -248 | -248 |
| Benefits paid | -1,951 | -457 | -2,408 |
| **Benefit obligations at the end of the year** | **96,430** | **10,826** | **107,256** |
| **Change in plan assets** | | | |
| **Market value of plan assets at the beginning of the fiscal year** | **0** | **0** | **0** |
| Addition due to changes to the consolidated group | 0 | 7,644 | 7,644 |
| Interest income from plan assets | 0 | 185 | 185 |
| Expense for managing the plans | 0 | -125 | -125 |
| Employer contributions | 0 | 327 | 327 |
| Remeasurements | 0 | -394 | -394 |
| *from the change in financial assumptions* | *0* | *-394* | *-394* |
| Foreign currency translation | 0 | -166 | -166 |
| Benefits paid | 0 | -415 | -415 |
| **Market value of the plan assets at the end of the year** | **0** | **7,056** | **7,056** |
| **Net obligation amount / provisions for benefits** | **96,430** | **3,770** | **100,200** |

The calculation of the pension obligation was based on the following assumptions as of 31 December 2018:

| | Germany | Abroad |
|---|---|---|
| Interest rate (in %) | 1.90 | 2.80 |
| Wage and salary trend (in %) | 3.50 | N/A |
| Pension increases (in %) | 2.00 | 3.00 - 3.40 |
| Life expectancy | 2018G standard tables | Mortality tables |

The average term of the benefit obligations amounts to 21.3 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 450k and EUR 2,748k, 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<br>31 December 2018 |
|---|---|---|
| Discount rate | - 0.50 % points | 11,784 |
| | + 0.50 % points | -10,115 |
| Wage and salary trend | - 0.50 % points | -550 |
| | + 0.50 % points | 398 |
| Increase in pensions | - 0.50 % points | -10,576 |
| | + 0.50 % points | 11,697 |
| Life expectancy | + 1 year | 4,608 |

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

| | 31 December 2018 | 1 January 2018 |
|---|---|---|
| | EURk | EURk |
| Securities/shares | 3,046 | 0 |
| Fixed-interest securities | 3,610 | 0 |
| Real estate | 400 | 0 |
| | **7,056** | **0** |

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 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 TopCo 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 TopCo 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 TopCo 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 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 TopCo 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 Hoechster 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 Hoechster Pensionskasse VVaG. The employees and employer make a fixed, income-based contribution to Hoechster 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 2,139k in the fiscal year. The expenses are recorded in cost of sales, selling costs, research and development as well as general administrative costs. Planned contributions of EUR 2,646k are expected to be made in 2019.

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 8,905k.

### 4.10 Other provisions and provision for taxes

Provisions developed as follows in the fiscal year:

| | Balance as of 1 January 2018 EURk | Additions from acquisition of businesses EURk | Additions EURk | Utilization EURk | Reversal EURk | Unwinding of the discount EURk | Exchange difference EURk | Balance as of 31 December 2018 EURk |
|---|---|---|---|---|---|---|---|---|
| Provisions for employee bonuses | 0 | 15,559 | 8,544 | 10,389 | 820 | 0 | 78 | 12,972 |
| Provisions for warranties | 0 | 3,596 | 1,100 | 517 | 892 | 0 | 1 | 3,028 |
| Provisions for environmental risks | 0 | 312 | 2 | 28 | 2 | 0 | 15 | 299 |
| Provisions for long-service awards | 0 | 671 | 889 | 671 | 0 | 0 | 0 | 889 |
| Provision for solvency requirements | 0 | 3,281 | 2,086 | 1,377 | 0 | 0 | 0 | 3,990 |
| Provisions for litigation risks | 0 | 1,085 | 503 | 112 | 166 | 0 | 5 | 1,575 |
| Provisions for taxes | 0 | 17,946 | 6,385 | 17,946 | 0 | 0 | -39 | 6,346 |
| Other provisions | 0 | 3,071 | 1,811 | 2,468 | 154 | 1 | 26 | 2,287 |
| | **0** | **45,521** | **21,321** | **33,508** | **2,034** | **1** | **85** | **31,386** |

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.

A provision was recognized for a solvency plan for the pension fund Dynamit Nobel 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 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| Current provisions | 26,503 | 0 |
| Non-current provisions | 4,883 | 0 |
| Total | **31,386** | **0** |

The cash outflow of provisions is expected to be 84 % within one year and 16 % between more than one and 15 years.

### 4.11 Financial liabilities to affiliates

Financial liabilities to affiliates comprise a loan payable to CTEC Acquisition S.à.r.l., Luxembourg, of EUR 552,688k (1 January 2018: EUR 0k).

| | 31 December 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| **Non-current financial liabilities** | | |
| Loan payable | 523,798 | 0 |
| Accrued interest | 28,890 | 0 |
| | **552,688** | **0** |

Unpaid interest is added annually to the Company's loan balance on 31 December, for the first time on 31 December 2019.

### 4.12 Financial liabilities to third parties

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

| | 31 December 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| ***Non-current financial liabilities*** | | |
| Liabilities to banks | 1,045,858 | 0 |
| Liabilities from the bond | 411,990 | 419,923 |
| Derivative financial instruments | 12,748 | 0 |
| Finance lease liabilities | 1,248 | 0 |
| **Total** | **1,471,844** | **419,923** |

| | 31 December 2018<br>EURk | 1 January 2018<br>EURk |
|---|---|---|
| ***Current financial liabilities*** | | |
| Derivative financial instruments | 5,012 | 0 |
| Liabilities to banks | 3,103 | 0 |
| Liabilities from the bond | 7,895 | 888 |
| Discounts and bonuses | 2,961 | 0 |
| Finance lease liabilities | 8 | 0 |
| Other current financial liabilities | 3.248 | 0 |
| **Total** | **22,227** | **888** |

Liabilities to banks nominally amount to EUR 938,000k from a tranche in EUR and EUR 139,689k from two tranches in USD. These loans have variable interest rates and mature on 8 March 2025. Transaction costs associated with the loan of EUR 25,529k are spread over the term of the loan using the effective interest method.

The bond has a fixed interest rate and a nominal volume of EUR 406,000k (1 January 2018: a nominal volume of EUR 406,000k). In the fiscal year, a group company acquired bonds of EUR 5,000k nominally. This bond matures on 15 December 2025. The CeramTec TopCo Group has a termination option for this bond, which is recognized as a separate financial asset (note 4.3). Associated transaction costs of EUR 12,532k 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 | 1,256 | 8 | 301 | 947 |
| Interest effect | 733 | 87 | 304 | 342 |
| **Minimum lease payments** | **1,989** | **95** | **605** | **1,289** |

Lease payments of EUR 8k, which are due in 2019, 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 Ltd., Suzhou/China, has a renewal option for real estate leases.

### 4.13 Other liabilities

Other liabilities break down as follows:

| | 31 December 2018 EURk | 1 January 2018 EURk |
|---|---|---|
| ***Other current liabilities*** | | |
| Wages and salaries including taxes | 8,113 | 0 |
| Real estate transfer tax | 1,279 | 0 |
| Amounts payable under the terms of contracts with customers | 135 | 0 |
| Other current liabilities | 1,990 | 0 |
| **Total** | **11,517** | **0** |

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 2018 EURk | 1 January 2018 EURk |
|---|---|---|
| up to 1 year | 1,358 | 0 |
| 1 to 5 years | 964 | 0 |
| **Total** | **2,322** | **0** |

As of the accounting reference date, there were no lease obligations arising from operating leases that had a term of more than 5 years.

In the fiscal year, expenses from rental and lease agreements amounted to EUR 1,743k.

## 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 IFRS 9.

| | Measurement category of IFRS 9[1] | 31 December 2018 Carrying amount EURk | Fair value EURk |
|---|---|---|---|
| ***Financial assets*** | | | |
| Cash and cash equivalents | AC | 21,058 | 21,058 |
| Trade receivables | AC | 57,880 | 57,880 |
| Other financial assets | AC | 2,446 | 2,446 |
| Interest rate cap | AC | 26 | 26 |
| Separated termination rights | FVtPL | 20,988 | 20,988 |
| **Total** | | **102,398** | **102,398** |
| ***Financial liabilities*** | | | |
| Bond liabilities | AC | 419,884 | 389,760 |
| Liabilities to banks | AC | 1,048,961 | 1,077,822 |
| Trade payables | AC | 34,907 | 34,907 |
| Finance lease liabilities | AC | 1,256 | 1,256 |
| Other financial liabilities | AC | 6,209 | 6,209 |
| Liabilities to affiliates | AC | 552,688 | 656,600 |
| Separated interest rate floors | FVtPL | 12,205 | 12,205 |
| Interest rate cap | FVtPL | 5,556 | 5,556 |
| **Total** | | **2,081,666** | **2,184,315** |

[1] AC: measured at amortised cost using the effective interest method; FVtOCI: fair value through other comprehensive income; FVtPL: measured at fair value through profit or loss

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 2018 | |
|---|---|---|---|
| | Level 1 | Level 2 | Level 3 |
| | EURk | EURk | 0,00 |
| ***Financial assets*** | | | |
| Separated termination rights | 0 | 20,988 | 0 |
| Interest rate caps | 0 | 26 | 0 |
| ***Financial liabilities*** | | | |
| Separated interest rate floors | 0 | 12,205 | 0 |
| Interest rate caps | 0 | 5,556 | 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 2018 | |
|---|---|---|---|
| | Level 1 | Level 2 | Level 3 |
| | EURk | EURk | EURk |
| ***Financial liabilities*** | | | |
| Bond liabilities | 389,760 | 0 | 0 |
| Liabilities to banks | 0 | 1,077,822 | 0 |
| Liabilities to affiliates | 0 | 656,600 | 0 |
| Finance lease liabilities | 0 | 1,256 | 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 of 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.

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 are observable for the assets and liabilities, either directly or indirectly at 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 on a recurring basis, the CeramTec TopCo 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 fair value 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 IFRS 9.

| | 31 December 2018 | | | |
|---|---|---|---|---|
| | Change in fair value | Currency translation | Impairment loss | Total |
| | EURk | EURk | EURk | EURk |
| Financial assets | | | | |
| Trade receivables | 0 | -344 | -61 | -405 |
| Cash and cash equivalents | 0 | 281 | 0 | 281 |
| Separated termination rights - FVtPL | -13,032 | 0 | 0 | -13,032 |
| | -13,032 | -63 | -61 | -13,156 |
| Financial liabilities | | | | |
| Interest rate floors – FVtPL | -18,568 | 0 | 0 | 18,568 |
| Financial liabilities at amortized cost | 0 | -6,689 | 0 | -6,689 |
| Financial liabilities to affiliated companies | 0 | -2,018 | 0 | -2,018 |
| | -18,568 | -8,707 | 0 | -21,275 |
| **Total** | **-31,600** | **-8,770** | **-61** | **-40,431** |

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.

| | 1 January to 31 December 2018 |
|---|---|
| Total interest expense | 90,209 |
| Total interest income | 1,626 |

Furthermore, finance fees of EUR 1,938k, which are not part of the effective interest method, were recognized in profit or loss during the reporting period.

### *Derivative financial instruments*

The following table shows the fair value and nominal value of derivative financial instruments as of 31 December 2018:

| | 31 December 2018 | |
|---|---|---|
| | Nominal value EURk | Fair value EURk |
| ***Derivatives with a positive fair value*** | | |
| Separated termination rights – HfT | 401,000 | 20,988 |
| ***Derivatives with a negative fair value*** | | |
| Separated interest rate floor – HfT | 938,000 | -12,205 |
| Interest rate cap – HfT | 1,010,507 | -5,530 |
| ***Total*** | **2,349,507** | **3,253** |

### *Embedded derivatives*

As described in note 4.12, the CeramTec TopCo Group took out a syndicated loan with one EUR and two USD tranches with a syndicate of banks in March 2018. The loans include embedded interest rate floors, which obliges the CeramTec TopCo Group to pay a minimum interest rate that exceeds the variable interest rate. Furthermore, the bond issued in December 2017 contains various agreements that entitle the CeramTec TopCo 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 IFRS 9 and recognized as stand-alone derivatives at fair value through profit or loss.

## 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 (excluding cash) of EUR 2,478,949k for the acquisition of the shares in the former parent company of the Group, CeramTec Holding, effective as of 8 March 2018. Cash of EUR 11,881k was taken over.

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

Additions to property, plant and equipment in the fiscal year amounted to EUR 3,586k that will affect cash during the following accounting period.

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 |
|---|---|---|---|---|---|---|
| | EURk | EURk | EURk | EURk | EURk | EURk |
| Balance as of 1 January 2018 | 0 | 420,811 | 0 | 0 | 0 | 420,811 |
| **Change in cash flow from financing activities** | | | | | | |
| Cash receipts | 1,039,480 | 392,430 | 523,798 | 0 | 0 | 1,955,708 |
| Cash payments | 0 | -4,814 | 0 | 0 | 0 | -4,814 |
| Interest payments | -30,321 | -14,269 | -3,080 | 0 | 0 | -47,670 |
| | **1,009,159** | **373,347** | **520,718** | **0** | **0** | **1,903,224** |
| Interest expenses | 39,961 | 20,259 | 31,970 | 199 | 76 | 92,466 |
| Effect of foreign currency translation | 1,334 | 0 | 0 | 0 | -12 | 1,322 |
| Fair value changes | 0 | 0 | 0 | 18,571 | 0 | 18,571 |
| Addition due to the acquisition of a business | 0 | 0 | 0 | 0 | 1,299 | 1,299 |
| Derecognition other short-term financial assets | 0 | -406,000 | 0 | 0 | 0 | -406,000 |
| Other changes | -1,493 | 11,468 | 0 | -1,010 | -107 | 8,859 |
| | **39,802** | **-374,273** | **31,970** | **17,760** | **1,256** | **-283,485** |
| **Balance as of 31 December 2018** | **1,048,960** | **419,885** | **552,689** | **17,760** | **1,256** | **2,040,550** |

As of 1 January 2018, other financial assets due from an escrow agent of EUR 406,000k were associated with the issuance of the bond. At this point in time, the criteria for a transfer of ownership in March 2018 were not yet met. Upon the transfer of ownership, the account receivable was eliminated against financial liabilities, with no effect on income for the period.

Interest expenses of bond liabilities include income of EUR 1,463k associated with discounting of financial liabilities that arose because the effective interest method was applied.

## 6 Other notes

### 6.1 Management of financial risks

The CeramTec TopCo 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 TopCo Group is exposed to liquidity risks, which mainly results from the EUR and USD loans taken out in EUR as well as the bond also issued in EUR.

The CeramTec TopCo Group operates on the basis of an appropriate framework to manage financial risks, which is an integral part of ongoing business operations and ongoing financing activities. Taking these risk management objectives into consideration, risks are identified, assessed and managed on an ongoing basis. The CeramTec TopCo 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 risks*

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 TopCo Group is exposed to foreign currency risks from changes in the USD/EUR exchange rate.

The following sensitivity analysis in terms of the foreign currency risk was prepared based on the assumption 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 TopCo Group companies' main foreign currency items.

| | 31 December 2018 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Change in the spot rate | | | | | | |
| | % | USD | GBP | CZK | PLN | CNY | **Total** |
| Earnings effect before tax in EUR k | +10% | 11,228 | -3 | 58 | -217 | -623 | **10,443** |
| | -10% | -13,723 | 4 | -71 | 265 | 762 | **-12,763** |

***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 TopCo 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.

CeramTec TopCo Group companies entered into agreements governing interest rate caps of EUR 873,000k linked to 3-month EURIBOR respectively USD 157,500k linked to 3-month LIBOR. The interest rate caps limit the maximum variable interest rates to 0.75 % respectively 2.75 %.

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 2018 | |
|---|---|---|
| | Increase/decrease in basis points | Effect on interest expense |
| | | EURk |
| EURO | +100 | 4,625 |
| | -100 | 0 |
| US Dollar | +100 | 562 |
| | -100 | -1,142 |

A decline in the interest rate has no effect on the interest expense associated with the loan in EUR as a result of the interest rate floor of 0.00 % agreed in the syndicated loan agreement. A rise of 100 basis points in USD interest rates has only a limited effect as a result of the interest rate cap of 2.75 % relating to 90% of the nominal value.

### *Collateral*

CeramTec AcquiCo, CeramTec BidCo LLC (in the following "US BidCo") and CeramTec GmbH are borrowers of the syndicated loan. In connection with the syndicated loan, certain assets of CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group, CeramTec GmbH, US BidCo, CeramTec Acquisition LLC and CeramTec North America LLC (in the following "CeramTec NA") were provided as collateral. In the USA, (i) shares in US BidCo, CeramTec Acqusition LLC and in CeramTec NA, (ii) all additional assets of US BidCo, CeramTec Acquisition LLC and CeramTec NA (including receivables, intellectual property and accounts) and (iii) CeramTec GmbH's intellectual property registered in the USA, were provided as collateral. In Germany, (i) shares in CeramTec AcquiCo, CeramTec Holding, CeramTec Group and CeramTec GmbH, (ii) receivables of CeramTec BondCo (intercompany receivables only), CeramTec AcquiCo (intercompany and acquisition agreement receivables, only), CeramTec Holding (insurance, intercompany and hedging receivables), CeramTec Group (insurance, intercompany and hedging receivables) and CeramTec GmbH (insurance, intercompany, hedging and trade receivables, (iii) bank accounts of CeramTec BondCo, CeramTec AcquiCo, CeramTec Holding, CeramTec Group and CeramTec GmbH and (iv) the intellectual property of CeramTec GmbH, were provided as collateral for the syndicated loan, or encumbered.

### *Risk from compliance with financial covenants*

Compliance with  financial covenants was agreed to in connection with obtaining the syndicated loan. The CeramTec TopCo Group must comply with a covenant provided that a revolving credit line for EUR 75m is utilised by a minimum amount as specified in the loan agreement. Because less than the amount defined in the loan agreement was drawn down from the revolving credit line, the Company was not required to test the calculation of the financial covenant. In addition, an analysis must be undertaken by the end of the financial year to determine whether the value of the collateral used to secure the syndicated loan does not fall below a certain threshold. When this happens, additional collateral must be provided. At the end of the current financial year, the collateral value did not fall below the threshold. The management expects that the Company will continue to comply with the financial covenant in the following financial year.

### *Liquidity risk*

Liquidity risk is the risk that the CeramTec TopCo group companies will not be able to fulfill their financial obligations when they fall due. The objective of the management of the CeramTec TopCo 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 TopCo group companies had an undrawn and confirmed credit line of EUR 75,000k as of the reporting date. Furthermore, the CeramTec group companies had cash and cash equivalents of EUR 21,058k.

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 2018 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Carrying amount EURk | 2019 EURk | 2020 EURk | 2021 EURk | 2022 EURk | 2023 EURk | >2023 EURk |
| Trade payables | 34,907 | 34,907 | 0 | 0 | 0 | 0 | 0 |
| Liabilities to banks | 1,048,961 | 37,361 | 33,810 | 33,553 | 33,370 | 33,633 | 1,101,905 |
| Bond liabilities | 419,885 | 21,315 | 21,315 | 21,315 | 21,315 | 21,315 | 458,499 |
| Liabilities to affiliates | 552,688 | 0 | 0 | 0 | 0 | 0 | 1,125,273 |
| Finance lease liabilities | 1,256 | 61 | 57 | 61 | 65 | 70 | 946 |
| Other financial liabilities | 6,209 | 6,209 | 0 | 0 | 0 | 0 | 0 |
| ***Derivatives with a negative fair value*** | | | | | | | |
| Interest rate caps | 5,556 | 1,587 | 1,587 | 1,587 | 795 | 0 | 0 |

### *Default 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 TopCo 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 amounts to 48 % 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 TopCo 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 default risk for cash and cash equivalents corresponds to the carrying amount.

The CeramTec TopCo Group considers this default risk to be immaterial as of the reporting date.

The termination option separated from the bond recognized as other financial asset 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 TopCo Group; as such, there is no actual cash receivable from counterparts.

Trade receivables

A loss allowance of EUR 530k is recognised for lifetime expected credit losses on trade receivables (in accordance with the simplified approach set out in IFRS 9). The net receivables portfolio amounts to EUR 57,880k after deducting the loss allowance from the gross receivables portfolio of EUR 58,410k. The gross receivables portfolio of receivables that are more than 30 days past due amounts to EUR 3,542k. The net receivables portfolio amounts to EUR 3,012k (level 3) after deducting the loss allowance of EUR 530k.

The loss allowance the Group is required to recognise is not determined based on external credit ratings. The expected credit losses are estimated by reference to factors that are specific to a debtor, information about the debtor's financial position, and past default experience of the debtor. It is allocated to level 3 of IFRS 9.

Non-payment risks are not expected to be associated with all other financial assets, including separated termination rights or the amount retained by a factor as a security for any bad debts that may arise.

***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 405,613k (1 January 2018: EUR -9,222k) and liabilities of EUR 2,542,969k (1 January 2018: EUR 473,002k) were recognized as of the reporting date. The equity ratio stands at 13.8 %.

## 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 TopCo Group.

In the fiscal year, the key management personnel of CeramTec TopCo Group were:

Dr. Hadi Saleh
Chief Executive Officer/ general manager since 12 March 2018
Chief Operating Officer until 11 March 2018

Richard Boulter
President Industrial since 5 November 2018

Eric Oellerer
Chief Financial Officer since 15 September 2018

Dominique Janbon
Chief Financial Officer until 31 August 2018

Frank Rohwedder, Thomas Christian Weinmann and Julien Zornig
General managers until 20 June 2018. Beginning on 20 June 2018, Dr. Hadi Saleh is the sole general manager of CeramTec TopCo GmbH.

The members of management received total remuneration (fixed and variable amounts) in the form of short-term employee benefits amounting to EUR 6,303k in the fiscal year. The payments for post-employment benefits amount to EUR 146k. This amount comprises the service cost for pension obligations and contributions to defined contribution plans. In the fiscal year, former general managers were granted with termination benefits of EUR 180k. Additionally, pension obligations amounted to EUR 584k as well as EUR 3,533k 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 CTEC Acquisition S.à.r.l., Luxembourg via CeramTec Management Beteiligungs GmbH & Co. KG or CeramTec Co-Investment GmbH & Co. KG. These indirect shares were acquired at fair value, which is calculated based on the purchase price for the acquisition of CeramTec Holding and its subsidiaries 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.

Information about the remuneration of the management of CT TopCo according to Sec. 314 (1) No. 6 German Commercial Code (HGB) is not provided

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

The total remuneration of the supervisory board in the fiscal year 2018 amounted to EUR 135k.

***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 552,688k (1 January 2018: EUR 0k), including interest, with a fixed interest rate of 8.255 % p.a. has been obtained from CeramTec TopCo's controlling shareholder, CTEC Acquisition S.à.r.l., Luxembourg. Interest expenses of EUR 31,971k were incurred in the fiscal year 2018. Unpaid interest is added annually to the Company's loan balance on 31 December, for the first time on 31 December 2019.

## 6.4 Auditor's fees

Overall, CeramTec TopCo Group's auditor's fees for the fiscal years, recognized in profit or loss in the consolidated statement of comprehensive income, break down as follows:

| | 31 December 2018 EURk | 1 January 2018 EURk |
|---|---|---|
| Audit services | 626 | 0 |
| Audit-related services | 54 | 0 |
| Other professional services | 50 | 0 |
| | **730** | **0** |

## 6.5 Subsequent events

Events of special importance did not occur after the end of the reporting period.

## 7 Reconciliation to CeramTec BondCo GmbH

If the consolidated statement of comprehensive income of CeramTec BondCo had been prepared instead of the consolidated statement of comprehensive income of CeramTec TopCo, 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 362k
- Lower sundry other expenses of EUR 2k

The total comprehensive income of CeramTec BondCo would therefore have been EUR 364k higher compared to the total comprehensive income recognized in these financial statements.

If the consolidated statement of financial position of CeramTec BondCo had been prepared instead of the consolidated statement of financial position of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following changes as of 31 December 2018:

- Higher receivables from affiliates of EUR 187k
- Lower liquid funds of EUR 9k
- Lower capital reserve of EUR 25k
- Lower financial liabilities to third parties of EUR 164k

This would have resulted in a EUR 342k higher level of group equity for CeramTec BondCo 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 BondCo had been prepared instead of the consolidated statement of cash flows presented in these financial statements.

Plochingen, 22 March 2019

**CeramTec TopCo GmbH**

The management

Dr. Hadi Saleh

## Independent auditors' report

To CeramTec TopCo GmbH, Plochingen/Germany

### Audit Opinions

We have audited the consolidated financial statements of CeramTec TopCo GmbH, Plochingen/Germany and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of CeramTec TopCo GmbH, Plochingen/Germany, for the financial year from 1 January to 31 December 2018.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the International Financial Reporting Standards (IFRSs) as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2018, and of its financial performance for the financial year from 1 January to 31 December 2018, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of the Group's corporate governance declaration pursuant to § 315d HGB.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

**Basis for the Audit Opinions**

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

**Responsibilities of the Executive Directors for the Consolidated Financial Statements and the Group Management Report**

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

**Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Stuttgart/Germany, 25 March 2019

**Deloitte GmbH**
Wirtschaftsprüfungsgesellschaft

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