



## 2017 ANNUAL REVIEW

**CeramTec**  
THE CERAMIC EXPERTS

	2017	2016	2015
<b>Total Revenue</b>	<b>556.3</b> €	<b>493.3</b> €	<b>501.3</b> €
Revenue Medical Products	201.2 €	185.6 €	182.7 €
Revenue Industrial	355.2 €	307.8 €	318.6 €
<b>EBITDA</b>	<b>200.8</b> €	<b>145.7</b> €	<b>154.3</b> €
Management Adjusted EBITDA	206.7 €	171.4 €	164.2 €
Management Adjusted EBITDA margin (%)	37.2 %	34.7 %	32.7 %
Capital Expenditures (net)	27.5 €	14.6 €	26.7 €
Cash Conversion Ratio <sup>(1)</sup> (%)	86.7 %	91.5 %	83.7 %
Employees	3,537	3,187	3,286
Net Debt	<b>870.1</b> €	<b>931.0</b> €	<b>958.3</b> €
Leverage <sup>(2)</sup>	<b>4.2 x</b>	<b>4.7 x</b>	<b>5.3 x</b>

<sup>(1)</sup> Management Adjusted EBITDA minus Capital Expenditures (net), divided by Management Adjusted EBITDA

<sup>(2)</sup> Defined as Net Debt divided by Management Adjusted EBITDA

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**FINANCIAL CALENDAR**

**CeramTec is a leading global developer of advanced ceramic products.**

Our ceramic products are made from highly specialized materials and are characterized by their superior mechanical, electrical, thermal and biochemical properties.

Our operations are divided into two businesses: Medical Products and Industrial.

The Medical Products business focuses on BIOLOX® ceramic components for medical implants. Due to their biocompatibility, high wear resistance, manufacturing precision and quality, BIOLOX®-based implants have a positive effect on patients' lives and create real added value for healthcare systems.

# Developer, manufacturer, and supplier

The Industrial business develops and supplies a broad range of highly specialized, performance-critical components for a myriad of applications in the Automotive, Aeronautics/Defence, Machinery, Electronics, Medical equipment and other industries.

Our success is based on market leadership in ceramic hip components and highly specialized industrial niches, our sustained technological edge underpinned by continuous advancements, long-standing customer relationships and our global commercial and technical expertise.

# Ownership

## BC Partners

BC Partners is a leading international private equity firm with over €17 billion of assets under management. Established in 1986, BC Partners has played an active role in developing the European buy-out market for three decades. BC Partners executives operate as an integrated team through the firm's offices in Europe and North America, acquiring and developing businesses to create value in partnership with management. Since inception, BC Partners has completed 99 investments in companies with a total enterprise value of €121 billion and is currently investing its tenth private equity fund.



The Public Sector Pension Investment Board is one of Canada's largest pension investment managers with C\$135.6 billion of net assets under management as at March 31, 2017. It manages a diversified global portfolio composed of investments in public financial markets, private equity, real estate, infrastructure, natural resources and private debt. Established in 1999, PSP Investments manages net contributions to the pension funds of Canada's federal Public Service, the Canadian Armed Forces, the Royal Canadian Mounted Police and the Reserve Force. As at March 31, 2017, PSP Investments held private equity investments of C\$15.9 billion (12% of its net assets). Since its inception, the private equity asset class has invested in more than 20 companies and 50 funds, deploying over C\$10 billion in capital on a global scale. Since Headquartered in Ottawa, Canada, PSP Investments has its principal business office in Montréal and offices in New York and London, its European hub.



The Ontario Teachers' Pension Plan is Canada's largest single-profession pension plan, with C\$180.5 billion in net assets as at June 30, 2017. It holds a diverse global portfolio of assets, approximately 80% of which is managed in-house, and has earned an annualized gross rate of return of 10.1% since the Plan's founding in 1990. As at June 30, 2017, OTPP held private equity investments of C\$28.8 billion (16% of its net assets). Since inception, it has invested in more than 500 companies and funds, deploying approximately C\$40 billion in capital on a global scale. Ontario Teachers' Pension Plan is an independent organization headquartered in Toronto. Its Asia-Pacific region office is located in Hong Kong and its Europe, Middle East & Africa region office is in London. The defined-benefit plan, which is fully funded, invests and administers the pensions of the province of Ontario's 318,000 active and retired teachers.

# The Management Team\*



**Dr. Hadi Saleh**  
Chairman of the Executive Board | CEO



**Dominique Janbon**  
Member of the Executive Board | CFO

# The Supervisory Board\*

**Dr. Günter von Au**<sup>(1)</sup>

Vice-Chairman and non-executive member of the Board of Directors at Clariant International Ltd.

**Roland Nosko**<sup>(2)</sup>

District Manager of the Industrial Union for Mining, Chemicals and Energy (IG BCE), Nuremberg

**Falco Pichler**

Principal at BC Partners in Hamburg

**Jürgen Haas**

Chairman of the CeramTec Works Council in Lauf and Chairman of the CeramTec Central Works Council

**Thomas Heise**

Global Sales Director Electronic Devices

**Prof. Dr. Jürgen Huber**

Honorary Professor at the TU Braunschweig and consultant

**Jörg Kammermann**

Vice Chairman IG BCE Bavaria

**Franz-Josef Köstler**

Chairman of the Works Council at the CeramTec site in Marktredwitz

**Axel Meyersiek**

Senior Partner at BC Partners in Hamburg

**Moritz Elfers**

Principal at BC Partners in Hamburg

**Monika Träger**

Vice-Chairwoman of the Works Council at the CeramTec site in Marktredwitz

**Dr. Michael Mertin**

Management Consultant

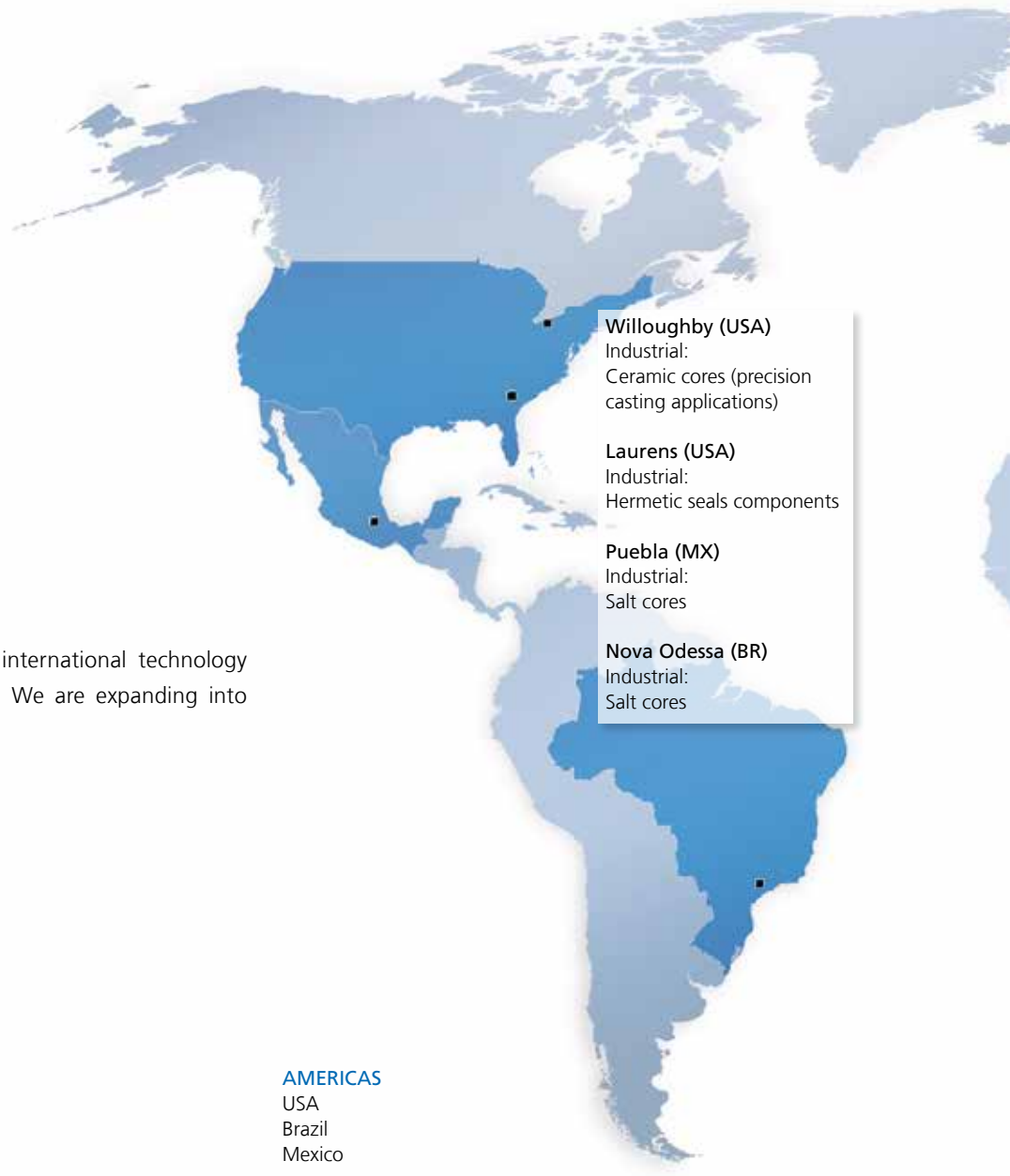
\* Status as of April 18, 2018

<sup>(1)</sup> Chairman of the Supervisory Board

<sup>(2)</sup> Deputy Chairman of the Supervisory Board

# Growing Beyond Borders

CeramTec is one of the leading international technology providers with a global presence. We are expanding into emerging markets and Asia.



## AMERICAS

USA  
Brazil  
Mexico

## EUROPE

Germany  
France  
UK  
Italy  
Poland  
Scandinavia  
Spain  
Czech Republic  
Turkey

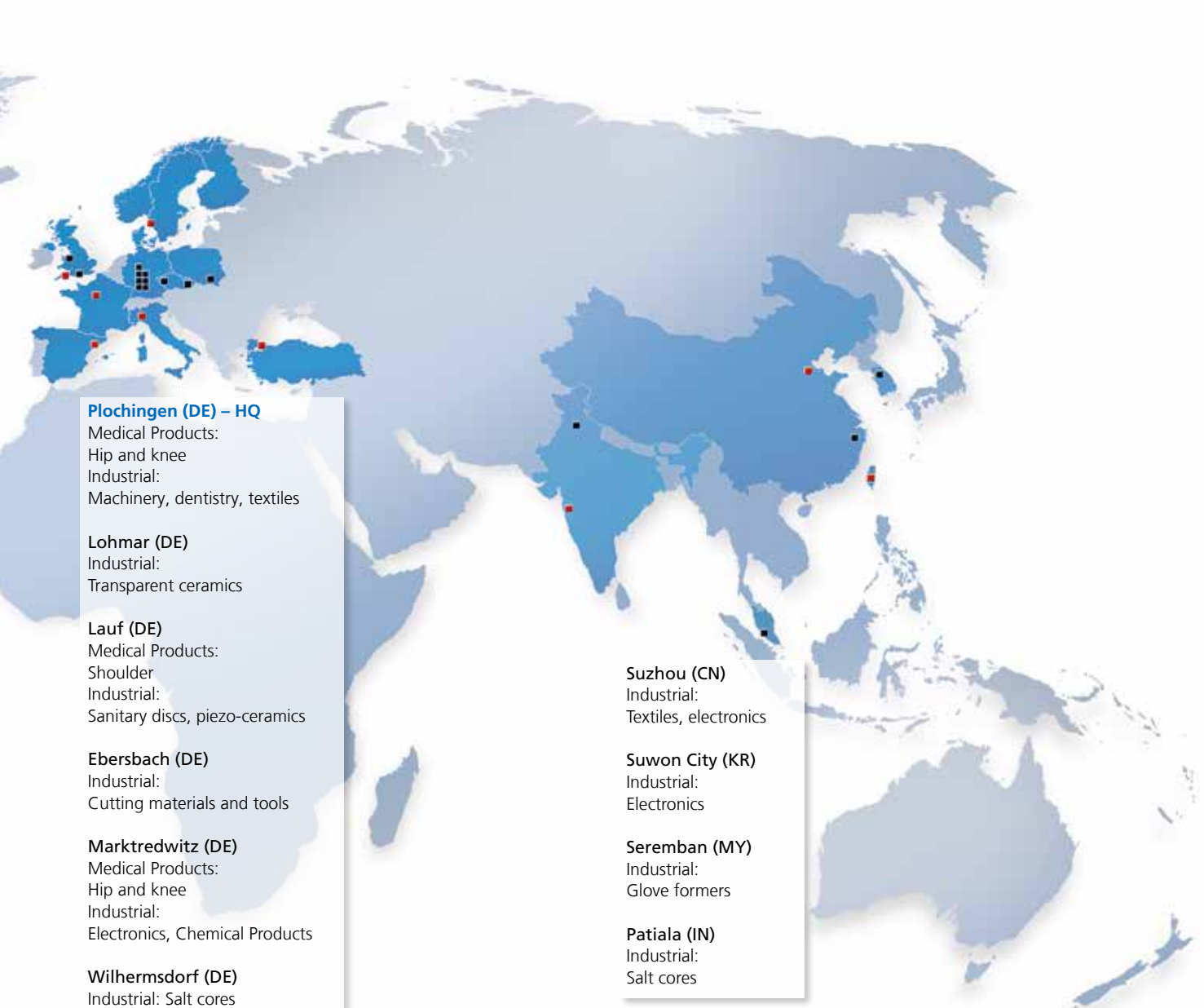
## ASIA

China  
Korea  
Malaysia  
India  
Taiwan

■ MANUFACTURING PLANTS

■ SALES AND REPRESENTATIVE OFFICES





**Plochingen (DE) – HQ**  
 Medical Products:  
 Hip and knee  
 Industrial:  
 Machinery, dentistry, textiles

**Lohmar (DE)**  
 Industrial:  
 Transparent ceramics

**Lauf (DE)**  
 Medical Products:  
 Shoulder  
 Industrial:  
 Sanitary discs, piezo-ceramics

**Ebersbach (DE)**  
 Industrial:  
 Cutting materials and tools

**Marktredwitz (DE)**  
 Medical Products:  
 Hip and knee  
 Industrial:  
 Electronics, Chemical Products

**Wilhermsdorf (DE)**  
 Industrial: Salt cores

**Wittlich (DE)**  
 Industrial:  
 Faucet cartridges

**Sumperk (CZ)**  
 Industrial: Sealing

**Dolny Rychnow (CZ)**  
 Industrial:  
 Sealing, Electronics

**Gorzyce (PL)**  
 Industrial: Salt cores

**Ruabon (UK) <sup>(1)</sup>**  
 Industrial:  
 Piezo-ceramics

**Southampton (UK) <sup>(1)</sup>**  
 Industrial:  
 Piezo-ceramics

**Suzhou (CN)**  
 Industrial:  
 Textiles, electronics

**Suwon City (KR)**  
 Industrial:  
 Electronics

**Seremban (MY)**  
 Industrial:  
 Glove formers

**Patiala (IN)**  
 Industrial:  
 Salt cores

<sup>(1)</sup> Acquired in 2017 from Morgan Advanced Materials

**1921**

**Philipp Rosenthal & Co. AG** cooperates with AEG on technical porcelain / **STEMAG AG** (Steatit-Magnesia Aktiengesellschaft) established

**1971**

**Rosenthal Technik AG** established to manufacture technical ceramics

**1954**

**Feldmühle AG** acquires Südplastik und Keramik Gesellschaft

**1991**

Feldmühle AG's ceramic operations become an independent business under **Cerasiv GmbH**

**1992**

Feldmühle AG sells Cerasiv GmbH to **Metallgesellschaft AG**, Frankfurt

**1996**

Merger of Cerasiv GmbH and Hoechst CeramTec AG into **CeramTec AG** as part of the **mg technologies AG Group**

**1985**

**Hoechst AG** acquires Rosenthal Technik AG and changes the company name to **Hoechst CeramTec AG**

**2004**

CeramTec AG purchased by **Rockwood Holdings Inc.**, Princeton, NJ, USA

3537

Around the world **3,537** qualified **employees** in our company's business divisions in Germany and our many subsidiaries and offices are dedicated to achieving success for our customers.

**1903**  
**Thomaswerke**  
 established in  
 Marktrechwitz

**1951**  
**Südplastik und Keramik  
 Gesellschaft (SPK)**  
 established in Plochingen

# 114

**A 114-year success story**

What began as a porcelain manufacturing business 114 years ago is now a materials specialist for advanced technical ceramics with a global presence.

**2013**  
 Acquisition of the CeramTec Group by **European private equity firm Cinven**

**2015**  
 Acquisition of **DAI Ceramics** in Willoughby, OH

**2017**  
 Acquisition of the Electro Ceramics Division from **Morgan Advanced Materials**

**2017**  
 Acquisition of the CeramTec Group **by consortium led by BC Partners**

# 20

The CeramTec Group is active at **20 production sites** and via its agencies, offices, and branches around the globe. We understand the markets and we speak our customers' language.

# MANAGEMENT

# ENT REPORT

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*As of September 1, 2013 CeramTec Holding GmbH obtained control of the advanced ceramics business consisting of CeramTec GmbH and its subsidiaries, CeramTec North America Corporation, PST Press + Sintertechnik Sp.z o.o. and Press and Sinter Technics de Mexico, S.A. de C.V. (CeramTec Holding Group). The purpose of this MD&A is to show the development of the financial results of the operating advanced ceramics business for the twelve month period ended December 31, 2017 in comparison to the twelve month period ended December 31, 2016. The financial data as of and for the twelve month periods ended December 31, 2017 and December 31, 2016 respectively have been derived from the audited consolidated financial statements of the CeramTec Holding Group.*

*The following discussion should be read in conjunction with the information contained in our audited consolidated financial statements for the twelve month period ended December 31, 2017 including the notes thereto. In the following, we discuss certain financial quantities on an adjusted basis, before giving effect to depreciation and amortization and certain extraordinary, non-recurring items.*

*Due to rounding differences, figures in tables and cross-references may differ slightly from the actual figures (units of currency, percentages, etc.).*

## Overview

We are a leading global developer, manufacturer and supplier of high performance ceramics ("HPC") solutions for various end markets including medical, automotive, industrial, consumer and electronics. Our HPC solutions are made of advanced ceramics, which are highly specialized materials with superior biological/chemical, mechanical, thermal, electric / magnetic or optical 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

Our Medical Products business focuses on developing and manufacturing ceramic components for hip joint prostheses, such as ball heads and cup inserts used in total hip replacement ("THR") procedures. In 2017, it generated 36.2% of our revenue.

Ceramic materials are 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. Our HPC medical solutions are biologically inert and have high wear resistance and excellent friction behaviour, making them one of the few materials that are durable and stable enough to withstand the corrosive effects of bodily fluids. More than 15 million of our BIOLOX® ceramic components have been implanted in patients globally to date. We estimate that nearly one in two hip joint implant systems sold worldwide includes at least one ceramic component, and we estimate our BIOLOX® products represented more than 95% of the ceramic components used for these hip joint implant systems. We believe that our BIOLOX® brand has come to symbolize high quality and innovation and is increasingly preferred by surgeons and other medical professionals. We anticipate that our HPC solutions will be used for various other joint replacements, such as knee and shoulder implants in the future.

## Industrial

Our 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, defense, electronics, industrial machinery and medical equipment. In 2017, 63.8% of our revenue was generated by our Industrial business.

Our dedicated teams of scientists and engineers collaborate closely with customers to develop tailor made solutions and production processes to fulfill distinct functionality and performance requirements. We believe that we are one of the few advanced ceramics manufacturers with a full-range of HPC materials and manufacturing processes. Our HPC solutions are often used in performance-critical components. For example, our cutting tools have a longer life and faster cutting speeds

compared to non-HPC cutting tools, allowing our customers to save costs and reduce downtime. In automotive engineering, HPC products, including our piezo ceramic components, play a vital role in increasing safety, improving cost-effectiveness and enhancing comfort in vehicles. Our ceramic substrates are used for a variety of purposes in the electronics and telecommunications sector, including measurement and control technology and entertainment electronics. We believe that the specialized, mission critical nature of our solutions, our long standing customer relationships and our highly diversified portfolio of solutions and customer base, reduces the exposure of our Industrial business to any single industry or product.

### Key Factors Affecting Results of Operations and Financial Condition

#### Hip Replacement Market Growth and Ceramic Hip Implant Components Penetration

Our total revenues and operating profit are significantly influenced by the development of the market for hip replacements in general and the penetration rate for ceramic hip implants. The ceramic components we manufacture include ball heads, cup inserts and option heads (used for revisions). To date, more than 15 million of our BIOLOX® ceramics components have been implanted in patients globally. In 2017, we sold 1.51 million BIOLOX® hip implant components.

The total size of the ball heads, inserts and option heads market addressed by CeramTec amounted to approximately €745 million in 2016 (including metal and polyethylene). The total addressable market is expected to grow with the number of total hip replacement procedures, a key driver of demand for ceramic ball heads and inserts. Further, ceramic as a material is increasingly used in revisions and partial hip replacement. In developed markets such as Europe and the United States, growth in the artificial hip joint market is primarily driven by an aging population as well as by an increase in obesity rates. Both age and obesity are significant contributors to hip joint problems. Additionally, there are indications that the younger population, those who are less than 65 years old, are electing to have primary hip replacements earlier in life so that they can maintain and enjoy an active lifestyle. Such younger patients are taking advantage of improvements in technology

leading to better wearability and increased life spans of hip implant prostheses.

Similarly, growth in artificial hip joints in emerging markets also stems from an aging population and, in some countries, increased obesity. However, in developing countries there are additional drivers of growth, such as the proliferation of osteoarthritis and osteonecrosis (reduced blood flow to bones), improved availability of medical care and prosthetic procedures coupled with increased household incomes and broader access to funded healthcare.

#### Our Position as Supplier of Choice for Ceramic Hip Implant Components

We have a strong market position in ceramic components for hip replacements. We estimate nearly one in two hip joint implant systems sold worldwide include at least one ceramic component and we estimate that our BIOLOX® products represent more than 95% of the ceramic components for these hip joint implant systems.

The top four orthopedic implant OEMs, DePuy, Smith & Nephew, Stryker and Zimmer Biomet, together have a market share of more than 60% in the worldwide market for hip joint implant systems. We maintain good and long-standing customer relationships to each of these OEMs.

#### 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, Asia and other regions than indicated by the split of revenues by geography. We estimate that the underlying demand outside Europe drives approximately 40% of our revenue.

While our Medical Products are not particularly affected by macroeconomic developments in our geographic markets, revenue in our Industrial business is influenced by economic growth in our target markets, particularly in Europe.

## **Demand Cycles in Various End Markets Supplied by our Industrial Business**

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 other industrial end markets we serve are cyclical. Demand for our products is also 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.

By revenue, the automotive market was the largest single end market for our Industrial business, followed by 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. For example, effects such as government subsidies for new car sales have materially affected the automobile sector in the past, specifically in Germany and other European countries. In addition, we have in the past been affected by political and fiscal decisions, for example by decisions of the Chinese government that had an impact on the textile industry in China.

## **Development of New Products, Materials and Processing Technologies**

As a manufacturer of HPC products we believe that our continued emphasis on research and development is key to our future profitability and our reputation as a technology leader in HPC. To ensure the sustainability of our business, we continuously research and develop materials as well as manufacturing and coating processes for new products in established and new markets. Our product development is mainly focused on delivering customer driven innovations and next generation solutions. We also invest in the development of new materials and processes, new medical solutions and selected own product innovations such as PERLUCOR®, a wear and

chemical resistant transparent ceramic material that is three to four times the hardness and strength of glass and is already used in a wide range of applications. We believe that such growth investments are crucial to continued success in our target markets.

We have a strong, centralized R&D infrastructure. In 2017, our R&D expenses were €20.4 million, equal to 3.7% of revenue. Our innovations play a fundamental role in our ability to maintain and grow our global market share in the different markets in which we operate. Revenue from products that were either newly developed and introduced, materially modified existing products or products modified for sale to a new customer within five years before the relevant period represented approximately 25% to 30% of our total revenue in the last five years. We expect that modification, innovation and new product design will continue to be a key driver of our success.

## **Expansion through Acquisitions and Growth Investment**

We have over the past year engaged in M&A activity to strategically grow our business. In April 2017, we acquired the UK electro-ceramics business from Morgan Advanced Materials plc, which produces integrated piezo components.

In addition to growth through strategic acquisitions, 2017 we continued to invest in our infrastructure and machinery in order to maintain and expand our production capabilities.

## **Cost Effectiveness through Simplification of Industrial Business and Business Excellence Initiatives**

In order to improve our earnings and cash flows, we have implemented a number of measures to increase organizational cost effectiveness and drive productivity in operations. In our Industrial business, we began implementing a comprehensive reorganization in 2016 and 2017. The reorganization is based on three guiding principles: simplification, scale and standardization. As part of the reorganization, we combined various independent reporting units into three separate clusters within the Industrial business and consolidated our operations in Europe under a centralized unit.

We increased cost effectiveness based on multiple improvement levers.



In our Medical Products business, we refocused our R&D organization on the most attractive, customer-driven projects in the pipeline based on a structured opportunity management process. We implemented a new logistics system and an optimized equipment layout to reduce lead times on the shop floor, reduce rework and quality costs, as well as tooling and overhead costs.

We operate our company on a lean management, flat hierarchy philosophy and have not substantially increased the size of our administrative team for many years despite our growth in revenue. We have a centrally coordinated, structured program in place, that focuses primarily on our European operations and that aims to continuously improve our product quality, productivity and manufacturing processes' efficiency, as well as to improve the cost effectiveness of research and development, sales, and administrative functions. In addition, we have implemented commercial excellence initiatives to improve customer focus, cross selling and commercial delivery, through implementation of a structured opportunity management process, including the implementation of customer relationship management and the education of our sales force.

### **Price Pressure**

Due to our position as the market leader in our core medical products market, our close relationship with our customers and high switching costs for our customers, price pressure due to competition has been historically limited.

We are also among the market leaders in some of the industrial niche markets that we target. Most of our main HPC competitors have either a different target market or geographical focus. Additionally, due to the large variety of our products, we are the sole supplier of certain specialized products in certain niche areas. However, specifically in the automotive and electronics market our customers regularly stipulate annual cost improvements.

### **Seasonality**

Our business is moderately affected by seasonal volatility in order volumes. We register a slight slowdown of new orders in the summer months and in December, related mainly to procurement and supply chain management of our customers, mainly Medical OEMs. The fluctuations in revenue we experience over the course of a year are similar from year to year and moderately low. Our revenue is usually strongest in the first quarter of a year and lowest in the fourth quarter.

## Results of Operations

The following table sets forth amounts from our income statement along with the percentage change for the twelve month period ended December 31, 2017 compared to the twelve month period ended December 31, 2016. All figures are unaudited in EURm as reported.

	Twelve Months Ended December 31,		
	2017	2016	Change
	(in € million)	(in € million)	(%)
Revenue	556.3	493.3	12.8
Cost of sales	317.6	294.9	7.7
<b>Gross profit</b>	<b>238.7</b>	<b>198.4</b>	<b>20.3</b>
Selling costs	80.7	91.5	-11.8
Research and development costs	20.4	22.8	-10.6
General administrative costs	22.7	22.2	2.5
Other income and expenses (-), net	-12.5	-2.2	>100.0
<b>Operating income</b>	<b>102.4</b>	<b>59.7</b>	<b>71.6</b>
Interest income and other finance income	5.4	18.7	-71.0
Interest expenses and other finance costs	62.9	73.6	-14.5
<b>Financial result</b>	<b>-57.5</b>	<b>-54.9</b>	<b>4.8</b>
<b>Profit/(Loss) before income tax</b>	<b>45.0</b>	<b>4.8</b>	<b>&gt;100.0</b>
Income tax expense	-20.3	-10.0	>100.0
<b>Net profit/(loss) for the period</b>	<b>24.6</b>	<b>-5.2</b>	<b>N/A</b>

Our management considers the results of operations on the adjusted basis, before giving effect to depreciation and amortization as well as certain extraordinary, non-recurring items, with Management adjusted EBITDA as an important indicator of business performance. Management adjusted EBITDA, its main components and its reconciliation to Operating Income as reported are shown in the table below.

	Twelve Months Ended December 31,		
	2017	2016	Change
	(in € million)	(in € million)	(%)
Revenue	556.3	493.3	12.8
Cost of sales*	264.1	238.6	10.7
<b>Gross profit*</b>	<b>292.2</b>	<b>254.7</b>	<b>14.7</b>
Selling costs*	47.9	47.4	0.9
Research and development costs*	18.3	19.9	-7.6
General administrative costs*	19.3	16.3	3.1
Other income and expenses (-), net*	0.0	0.3	>100
<b>Management Adjusted EBITDA</b>	<b>206.7</b>	<b>171.4</b>	<b>20.6</b>
– Exceptional items	5.9	25.8	-77.1
<b>EBITDA</b>	<b>200.8</b>	<b>145.6</b>	<b>27.9</b>
– Amortization, Depreciation and impairment charges on non-current assets	98.3	85.9	14.4
<b>Operating income</b>	<b>102.4</b>	<b>59.7</b>	<b>71.6</b>

\* Excluding depreciation, amortization and exceptional items

The following table provides a breakdown of our exceptional items for the twelve months ended December 31, 2017, compared to the twelve months ended December 31, 2016:

	<b>Twelve Months Ended</b>	
	<b>December 31,</b>	
	<b>2017</b>	<b>2016</b>
	<i>(in € million)</i>	<i>(in € million)</i>
Restructuring costs .....	2.5	3.3
Other non-recurring .....	2.2	16.0
Foreign exchange conversion effects .....	-0.2	-
Additional contribution related to pensions .....	-	5.3
Acquisition costs .....	1.4	1.2
<b>Total Exceptional Items .....</b>	<b>5.9</b>	<b>25.8</b>

Restructuring costs in 2016 mainly comprise severance payments for the reduction of staff at CeramTec GmbH and for management changes at CeramTec Service GmbH. Restructuring costs in 2017 mainly comprise costs related to our productivity initiatives undertaken in our Medical Products and Industrial businesses.

Other non-recurring comprise of consulting and litigation expenses, mainly related to a patent lawsuit, which was dismissed in 2017, and to a series of legal proceedings in relation to intellectual property rights.

Foreign exchange conversion effects reflect certain impacts related to currency conversions that are accounted for in our Operating income.

Additional contribution related to pensions represent the expenses relating to the pension plan at Pensionskasse Dynamit Nobel VVaG, which was closed at the end of 2014 but with a continuing contractual obligation to cover potential underfunding. On July 20, 2016, the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) approved the solvency plan dated June 24, 2016 in favor of Pensionskasse Dynamit Nobel VVaG. The provision was based on the planned payments until 2021.

Acquisition costs in 2016 and 2017 represent costs related to the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc, which was completed in April 2017.

## Revenue

The following table provides a breakdown of our revenue for the twelve months ended December 31, 2017, compared to the twelve months ended December 31, 2016:

	<b>Twelve Months Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>Change</b>
	<i>(in € million)</i>	<i>(in € million)</i>	<i>(%)</i>
<b>Medical Products .....</b>	<b>201.2</b>	<b>185.6</b>	<b>8.4</b>
<b>Industrial .....</b>	<b>355.2</b>	<b>307.8</b>	<b>15.4</b>
<i>thereof Specialty Applications .....</i>	91.6	83.5	9.7
<i>thereof Industrial Solutions .....</i>	146.3	136.0	7.5
<i>thereof CT North America .....</i>	55.6	44.4	25.3
<i>thereof Emil Müller Companies .....</i>	25.1	26.2	-4.2
<i>thereof other units /consolidation .....</i>	36.6	17.1	114.0
<b>Total revenue .....</b>	<b>556.3</b>	<b>493.3</b>	<b>12.8</b>

The revenue presented for the individual units in Industrial includes internal revenue to Group companies. The line item "other units / consolidation" includes all internal revenue between the clusters listed under "Industrial" to show the amount by which the total revenue figure for Industrial has been reduced to account for such internal revenue.

Total revenue for the twelve months ended December 31, 2017 was €556.3 million, an increase of €63.0 million or 12.8%, as compared to €493.3 million for the twelve months ended December 31, 2016.

Revenue in our Medical Products business was €201.2 million for the twelve months ended December 31, 2017, an increase of €15.6 million or 8.4%, as compared to €185.6 million for the twelve months ended December 31, 2016. This increase was mainly due to a volume increase in ball-heads and inserts, partly offset by price reductions.

Revenue in our Industrial business was €355.2 million for the twelve months ended December 31, 2017, an increase of €47.4 million or 15.4%, as compared to €307.8 million for the twelve months ended December 31, 2016. This increase was mainly due to overall strong demand across major markets such as Automotive and Electronic, strong U.S. market conditions leading to revenue growth of 25.3% at CeramTec North America, and other industrial end markets such as Textile machinery products. The increase is supported by commercial excellence initiatives and the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc contributing additional €21.6 million. The decrease at our Emil Müller Companies was mainly driven by lower volumes at a top customer in automotive.

The following table provides a breakdown of our revenue for the twelve months ended December 31, 2017, compared to the twelve months ended December 31, 2016 by region. The split is mainly unchanged between the periods.

	<b>Twelve Months Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>Change</b>
	<i>(in € million)</i>	<i>(in € million)</i>	<i>(% of net sales)</i>
Europe (excluding Germany) .....	243.9	210.8	15.7
Germany .....	138.4	133.1	4.0
North America .....	85.5	73.0	17.1
Asia .....	72.1	61.4	17.4
Other regions .....	16.4	15.1	8.8
<b>Total net sales</b> .....	<b>556.3</b>	<b>493.3</b>	<b>12.8</b>

### Cost of Sales and Gross Profit

The following table shows a break-down of our cost of sales for the twelve month periods ended December 31, 2016 and 2017. All figures are unaudited in EURm as reported.

	<b>Twelve Months Ended December 31,</b>			
	<b>2017</b>		<b>2016</b>	
	<i>(in € million)</i>	<i>(% of net sales)</i>	<i>(in € million)</i>	<i>(% of net sales)</i>
Material and packing costs .....	106.8	19.2	88.7	18.0
Personnel expenses .....	114.1	20.5	108.1	21.9
Amortization and depreciation .....	43.2	7.8	56.3	11.4
Other costs of sales .....	53.5	9.6	41.9	8.5
<b>Total cost of sales</b> .....	<b>317.6</b>	<b>57.1</b>	<b>294.9</b>	<b>59.8</b>

Cost of sales was €317.6 million (57.1% of revenue) for the twelve months ended December 31, 2017, an increase of €22.7 million or 7.7%, as compared to €294.9 million (59.8% of revenue) for the twelve months ended December 30, 2016. Excluding amortization and depreciation and non-recurring items such as additional contribution to pension fund, consulting costs and severance payments, our adjusted cost of sales increased by 10.7% from €238.6 million or 48.4% of revenue for the twelve months ended December 31, 2016 to €264.1 million or 47.5% of revenue for the twelve months ended December 31, 2017.

Gross profit was €238.7 million for the twelve months ended December 31, 2017, an increase of €40.3 million or 20.3%, as compared to €198.4 million for the twelve months ended December 31, 2016. Our Adjusted gross profit margin increased to 52.5% for the twelve months ended December 31, 2017, from 51.6% for the twelve months ended September 30, 2016, mainly due to higher sales and productivity excellence partly offset by cost increase and repairs, and further impacted by the release of a jubilee provision in 2017.

### **Selling Costs**

Selling costs were €80.7 million (14.5% of revenue) for the twelve months ended December 31, 2017, a decrease of €10.8 million or 11.8%, as compared to €91.5 million (18.5% of revenue) for the twelve months ended December 31, 2016. Excluding amortization and depreciation (including €29.0 million amortization for intangible assets) and non-recurring items such as non-recurring litigation costs, additional contribution to pension fund, consulting costs and severance payments, our Adjusted selling costs increased to €47.9 million or 8.6% of revenue for the twelve months ended December 31, 2017 from €47.4 million or 9.6% of revenue for the twelve months ended December 31, 2016.

### **Research and Development Costs**

Research and development costs were €20.4 million (3.7% of revenue) for the twelve months ended December 31, 2017, a decrease of €2.4 million or 10.6%, as compared to €22.8 million (4.6% of revenue) for the twelve months ended December 31, 2016. Excluding amortization and depreciation

and non-recurring items such as additional contribution to pension fund and severance payments, our Adjusted research and development costs decreased to €18.3 million or 3.3% of revenue for the twelve months ended December 31, 2017 from €19.9 million or 4.0% of revenue for the twelve months ended December 31, 2016. This decrease was mainly due to streamlining medical R&D and the refocusing of our organization through the Innovation Excellence initiative.

### **General Administrative Costs**

General administrative costs were €22.7 million (4.1% of revenue) for the twelve months ended December 31, 2017, an increase of €0.5 million or 2.5%, as compared to €22.2 million (4.5% of revenue) for the twelve months ended December 31, 2016. This increase was mainly due to higher bonus accruals. Excluding amortization and depreciation and non-recurring items such as additional contribution to pension fund, acquisition consulting and severance payments, our Adjusted general administrative costs increased to €19.3 million or 3.5% of revenue for the twelve months ended December 31, 2017 from €16.3 million or 3.3% of revenue for the twelve months ended December 31, 2016 and remain broadly unchanged as a percentage of sales.

### **Other Income and Expenses**

Other expense was €12.5 million for the twelve months ended December 31, 2017, an increase of €10.3 million compared to other expenses of €2.2 million for the twelve months ended December 31, 2016. This increase was mainly due to impairment expenses for intangible assets, acquisition costs for the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc and restructuring costs partially offset by a gain from a land sale related to our Colyton site. Excluding non-recurring items such as a gain from a land sale, impairment expenses and foreign exchange effects, our Adjusted other income, net, were €0.0 million for the twelve months ended December 31, 2017, a decrease of €0.3 million as compared with Adjusted other income, net of €0.3 million for the twelve months ended December 31, 2017, due to certain types of operating income not being present in the twelve months ended December 31, 2017.

### Interest Income and Other Finance Income

Interest income and other finance income was €5.4 million for the twelve months ended December 31, 2017, a decrease of €13.3 million or 71.0%, as compared to €18.7 million for the twelve months ended December 31, 2016. This decrease was mainly due to the lack of gains resulting from the fair value measurement of derivatives and higher foreign currency effects in the twelve months ended December 31, 2017.

### Interest Expenses and Other Finance Costs

Interest expenses and other finance costs were €62.9 million for the twelve months ended December 31, 2017, a decrease of €10.7 million or 14.5%, as compared to €73.6 million for the twelve months ended December 31, 2016. This decrease was mainly due to lower interest expenses. The financial expenses of €62.9 million include €47.2 million of interest expenses from syndicated loan, revolving credit line and bond, €6.4 million of interest expenses from a shareholder

loan, €5.9 million of expenses from the effective interest rate method, €1.2 million of losses on derivative valuations and €2.3 million of other interest expenses.

### Income Tax Expenses

Income tax expenses were €20.3 million for the twelve months ended December 31, 2017, an increase of €10.3 million as compared to €10.0 million for the twelve months ended December 31, 2016. This increase was mainly due to an increase of taxable income, partly compensated by lower deferred tax expenses from valuation of derivatives.

### Net Profit / Loss

As a result of the developments described above, net profit for the period was €24.6 million for the twelve months ended December 31, 2017, an increase of €29.8 million compared to a net loss of €5.2 million for the twelve months ended December 31, 2016.

### Financial Condition, Liquidity and Capital Resources

As of December 31, 2017, the gross financial debt, the cash balance as well as the undrawn Revolving Credit Facility were as follows (all figures are unaudited in EURm as reported):

	<b>As of December 31, 2017</b>
	<i>(in € million)</i>
Gross financial debt (without accrued transaction costs) .....	884.8
<i>thereof bond</i> .....	306.7
<i>thereof term loans</i> .....	588.0
<i>thereof mark-to-market measure cross-currency swaps</i> .....	-21.2
<i>thereof accrued interest</i> .....	11.4
Cash .....	14.8
Net debt .....	870.1
Undrawn Revolving Credit Facility .....	100.0

## Cash Flow Statement

The following table shows the cash flow statement for the twelve month period ended December 31, 2017. All figures are unaudited in EURm as reported.

	Twelve Months Ended December 31,	
	2017	2016
	(€ million)	(€ million)
Net income/(loss) for the period	24.6	-5.2
Income tax expenses	20.3	10.0
Interest result	61.5	71.2
Amortization, depreciation and impairment charges of non-recurrent assets	98.3	86.0
Gain (-) / Loss on disposal of fixed assets	-3.1	0.1
Increase / decrease (-) in provisions (excluding deferred taxes)	-4.2	9.4
Income tax refund / (payment)	-22.7	-16.2
Other non-cash expenses / income (-), net	-8.3	-15.1
Increase (-) / decrease in inventories	-6.5	-1.8
Increase (-) / decrease in trade receivables	4.6	-0.4
Increase (-) / decrease in other receivables and (financial) assets	-2.7	1.7
Increase / decrease (-) in trade payables	0.8	-0.9
Increase / decrease (-) in other (financial) liabilities	-4.1	-0.7
<b>Cash flow from operating activities</b>	<b>158.4</b>	<b>138.0</b>
Cash received from disposals of property, plant and equipment	3.3	0.3
Cash paid (-) for investments in property, plant and equipment	-25.3	-15.0
Cash received from grants	0.0	0.1
Cash paid (-) for investments in intangible assets	-0.7	-0.7
Cash paid (-) for the acquisition of entities	-55.5	0.0
<b>Cash flow from investing activities</b>	<b>-78.2</b>	<b>-15.2</b>
Repayment (-) of syndicated loan	-36.3	-30.1
Interest paid (-)	-55.3	-54.1
Repayment of shareholder loan	-97.6	0.0
<b>Cash flow from financing activities</b>	<b>-189.2</b>	<b>-84.2</b>
<b>Change in cash and cash equivalents</b>	<b>-109.0</b>	<b>38.6</b>
Net foreign exchange difference	-0.8	-0.4
Cash and cash equivalents at the beginning of the period	124.6	86.5
<b>Cash and cash equivalents at the end of the period</b>	<b>14.8</b>	<b>124.6</b>

Cash flows from operating activities increased from €138.0 million for the twelve months ended December 31, 2016 to €158.4 million for the twelve months ended December 31, 2017, principally due to an increase in our EBITDA, mainly driven by higher volumes with limited price erosion, higher productivity from operational excellence initiatives, as well as a decrease in selling, general and administrative expenses due to cost management.

Cash flows used in investing activities increased from €15.2 million for the twelve months ended December 31, 2016 to €78.2 million for the twelve months ended December 31, 2017, principally due to the purchase price payment of €55.5 million for the UK electro-ceramics business of Morgan Advanced Materials plc.

#### Cash flows used in financing activities

Cash flows used in financing activities increased from €84.2 million for the twelve months ended December 31, 2016 to €189.2 million for the twelve months ended December 31, 2017, mainly due to a partial repayment of €97.6 million relating to the existing Shareholder Loan.

#### Capital Expenditures

The following table provides an overview of our capital expenditures for the twelve months ended December 31, 2016 and 2017:

	Twelve Months ended December 31,	
	2017	2016
Additions to intangible assets	0.7	0.7
Additions to property, plant and equipment	26.8	13.9
<b>Capital expenditures (gross)</b>	<b>27.5</b>	<b>14.5</b>
Government grants	-	0.1
<b>Capital expenditures (net)</b>	<b>27.5</b>	<b>14.6</b>
Additions from business acquisitions	57.6	-

In general, our capital investment is split evenly between maintenance and growth projects. The lower investment spending in the year ended December 31, 2016 was mainly driven by phasing of growth projects, which reflected the market conditions in the first half of 2016, and an increased focus on asset productivity.

Cash outflow for the twelve months ended December 31, 2017 for intangible assets amounts to €0.7 million and for tangible assets amounts to €25.3 million.

#### Employees

By the end of the financial year the CeramTec Group employed 3,537 people, an increase of 11.0% from the previous year. The increase includes 260 employees of the acquired UK Electro-ceramic business that have transferred to CeramTec.

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

In addition, 140 apprentices were employed by CeramTec group as of December 31, 2017.



## Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2017:

Payments due by period	2017	2018	2019	2020	2021	2022	2023 and beyond
	(€ million)	(€ million)	(€ million)	(€ million)	(€ million)	(€ million)	(€ million)
<b>Contractual obligations</b>							
Trade payables	26.7	26.7	0.0	0.0	0.0	0.0	0.0
Trade payables owed to affiliates	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Liabilities to banks	583.8	25.0	25.8	590.0	0.0	0.0	0.0
Bond liabilities	310.1	25.3	25.3	25.3	332.0	0.0	0.0
Liabilities to affiliates	55.4	0.0	0.0	0.0	0.0	0.0	92.9
Finance lease liabilities	1.3	0.0	0.3	0.1	0.1	0.1	1.4
Other financial liabilities	4.7	4.7	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>982.0</b>	<b>81.9</b>	<b>51.3</b>	<b>615.3</b>	<b>332.1</b>	<b>0.1</b>	<b>94.4</b>

## Lease Commitments

As of December 31, 2017, our future payment obligations from finance leases break down as follows:

	Total	Up to 1 year	1 to 5 years	More than 5 years
	(€ million)	(€ million)	(€ million)	(€ million)
<b>Finance lease commitments</b>				
Present value of minimum lease payments	1.3	0.0	0.3	1.0
Interest effect	0.8	0.0	0.4	0.4
<b>Minimum lease payments</b>	<b>2.1</b>	<b>0.0</b>	<b>0.7</b>	<b>1.4</b>

Our operating lease commitments mainly relate to land and buildings as well as technical equipment and machinery. As of December 31, 2017, our future payment obligations from operating leases break down as follows:

	Total	Up to 1 year	1 to 5 years	More than 5 years
	(€ million)	(€ million)	(€ million)	(€ million)
<b>Operating lease payment obligations</b>	<b>4.4</b>	<b>2.0</b>	<b>1.9</b>	<b>0.5</b>

## Pension Commitments

We provide our employees with various defined benefit and defined contribution pension plans in relation to retirement, invalidity and death benefits. The promised benefits differ from country to country depending on the legal, tax and economic conditions. Furthermore, the existing plans are subject

to the respective local requirements as well as the financing and the plan assets of pension plans. The following table shows the pension obligations and market value of the plan assets of the defined benefit plans at the beginning and at the end of the financial year 2017:

	Year Ended December 31, 2017		
	German plans	Foreign plans	Total
	(in € million)	(in € million)	(in € million)
<b>Benefit obligations at the beginning of the year</b>	<b>94.4</b>	<b>12.5</b>	<b>106.8</b>
Service costs	3.2	0.0	3.2
Interest expenses	1.5	0.3	1.8
Remeasurements	-2.2	-0.2	-2.4
Foreign currency translation	0.0	-0.4	-0.4
Benefits paid	-2.3	-0.6	-3.0
<b>Benefit obligations at the end of the year</b>	<b>94.5</b>	<b>11.6</b>	<b>106.1</b>
<b>Market value of plan assets at the beginning of the financial year</b>	<b>0.0</b>	<b>5.3</b>	<b>5.3</b>
Interest income from plan assets	0.0	0.1	0.1
Expense for managing the plans	0.0	-0.2	-0.2
Employer contributions	0.0	0.5	0.5
Remeasurements	0.0	3.6	3.6
Foreign currency translation	0.0	-0.2	-0.2
Benefits paid	0.0	-0.6	-0.6
<b>Market value of the plan assets at the end of the year</b>	<b>0.0</b>	<b>7.6</b>	<b>7.6</b>
<b>Net obligation amount for pension benefits</b>	<b>94.5</b>	<b>4.0</b>	<b>98.4</b>

The actuarial decrease is primarily due to slightly higher discount rate for the German plans of 1.7% for the year ended December 31, 2017, as compared to 1.6% for the year ended December 31, 2016. The expected contributions to the defined benefit plans by the employer until December 31, 2018 amount to €0.3 million. For the year ended December 31, 2018 it's expected to make benefit payments in the amount of €2.7 million.

## Contingencies

Group Companies are exposed to a limited number of litigation processes linked to the normal business activities mainly related to issues under commercial, product liability and

environmental law. To the extent that quantifiable obligations are expected to arise from these processes, the Group Companies establish appropriate provisions on the balance sheet. There are no outstanding cases that are expected to impact materially the Group's net assets, financial position and/or results of operations.

## Critical Accounting Policies and Significant Accounting Estimates

Please refer to our consolidated financial statements as of December 31, 2017 for a detailed description of the accounting policies and accounting estimates applied.

## Recent Developments

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

On March 8, 2018 the ownership of the company was transferred to the Consortium, following the fulfillment of all regulatory requirements. With transferring ownership, existing financial obligations have been repaid and a new financing has become effective.

Dr. Hadi Saleh was appointed the CEO of the company, after Henri Steinmetz, the CEO since 2016 left the company upon completion of the transaction, with full agreement of the Supervisory board.

No further reportable events occurred.

## Unaudited Pro forma As Adjusted Financial Information

The following table show unaudited pro forma as adjusted leverage information, consistent with the presentation of these figures in the CTC BondCo prospectus:

Pro forma as adjusted net third party senior secured indebtedness . . . . .	1.115,9
Pro forma as adjusted net third party indebtedness . . . . .	1.521,9
Pro forma as adjusted interest expense . . . . .	58,2
Ratio of pro forma as adjusted net third party senior secured indebtedness to Pro Forma Adjusted EBITDA . . . . .	5.3x
Ratio of pro forma as adjusted net third party indebtedness to Pro Forma Adjusted EBITDA . . . . .	7.3x
Ratio of Pro Forma Adjusted EBITDA to pro forma as adjusted interest expense. . . . .	2.8x

Pro forma as adjusted net third party senior secured indebtedness is defined as third party senior secured indebtedness minus cash and cash equivalents as adjusted for the Transactions, reflecting the amounts outstanding under the Term Loan Facility (euro equivalent), as if the Transactions had been completed as of December 30, 2017

Pro forma as adjusted net third party indebtedness is defined as third party indebtedness minus cash and cash equivalents as adjusted for the Transactions, reflecting the amounts outstanding under the Term Loan Facility and the principal amount of the Notes, as if the Transactions had been completed as of December 30, 2017

Pro forma as adjusted interest expense is defined as interest expense for the period from January 1, 2017 to December 30, 2017, as if the Transactions had been completed as of January 1, 2017 and consists of interest on the Term Loan Facility and the Notes as well as the commitment fees on our undrawn Revolving Credit Facility

The following table reconciles Management adjusted EBITDA to Pro Forma adjusted EBITDA for the twelve months ended December 31, 2017:

EURm	FY 2017
<b>Management Adjusted EBITDA</b>	206.7
<b>Medical Products adjustments</b>	
Implemented price initiatives	0.1
Productivity initiative and consulting expenses	1.2
Product equipment relocation	0.1
Total Medical Products	1.4
<b>Industrial adjustments</b>	
Transparent ceramics start-up	2.8
Industrial business simplification initiative	0.5
MF carrier tape	0.2
Total Industrial	3.5
<b>Acquisition of UK Electro-ceramics</b>	1.6
<b>Release of jubilee provision</b>	-4.1
<b>Pro forma Adjusted EBITDA</b>	<b>209.1</b>

# FINANCIARIA

# FINANCIAL REPORT



## CeramTec Holding GmbH, Plochingen

### Condensed consolidated statement of comprehensive income

#### from 1 January to 31 December 2017

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

**CeramTec Holding GmbH, Plochingen**  
**Condensed consolidated statement of financial position**  
**as at 31 December 2017**

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



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

**CeramTec Holding GmbH, Plochingen**  
**Condensed consolidated statement of cash flows**  
**from 1 January to 31 December 2017**

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

## CeramTec Holding GmbH, Plochingen

### Condensed consolidated statement of changes in equity for the period ended 31 December 2017

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



# Notes to the Consolidated Financial Statements for the Year Ended 31 December 2017

## 1 General

### 1.1 Corporate information and purpose of the Company

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

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

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

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

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

### 1.2 Basis of preparation

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

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

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

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

### 1.3 Entities included in the consolidated financial statements

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

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

1 Entities perform the functions of a holding company.

2 Entity has been allocated ratably to Medical and Industrial cash-generating units (CGU).

3 Entities have been allocated to the Industrial CGU.

4 Entities have been allocated to the Emil Müller CGU.

5 Entities have been allocated to the CeramTec-ETEC CGU.

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

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

#### 1.4 Changes to the consolidated group

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

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

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

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

The fair value of the acquired receivables equals the gross amount of the receivables created by contract because it is assumed that the total amount of the receivables will be paid. Goodwill represents the value of the expected future results. In addition, the transferred consideration was paid for future economic benefits or expected synergistic effects, revenue growth and future market developments. The future economic benefits are embodied in the goodwill because they do not meet the recognition criteria for other intangible assets. Transaction costs related to the acquisition of the business amount to EUR 1,347k, and are reported under the line item "other income / expenses (-), net".

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

## 2 Accounting principles and policies

### 2.1 Basis of consolidation

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

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

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

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

#### Business combinations and goodwill

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

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

For acquisitions of equity investments with shares in capital below 100%, IFRS 3 allows for the goodwill attributable to non-controlling interests to also be recognized. Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's

net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS.

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

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

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

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

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. If the internal management reporting structure is reorganized, any goodwill



allocated to a cash-generating unit is reallocated based on the new reporting structure. Any goodwill reallocated under these circumstances is measured based on the relative values of the newly established operation and the portion of the cash-generating unit.

### Foreign currency translation

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

Differences from the currency translation of assets and liabilities compared to the translation of the prior year as well as exchange differences between the income statement and the statement of financial position are recognized under other comprehensive income and retained in equity under accumulated other comprehensive income. These amounts recognized under other comprehensive income are reclassified to the income statement upon the partial or complete disposal of a subsidiary included in the consolidated financial statements. Foreign currency transactions in the local financial statements are translated at the spot rate at the date of the transaction. The exchange rates of significant currencies used for the currency translation to the euro are as follows:

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

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

## 2.2 Accounting policies

### Revenue recognition

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

### Revenue from the sale of goods

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

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

### Services

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

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

### Interest income, royalties, dividend income

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

### Research and development costs

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

### Intangible assets

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

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

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

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

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

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

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

### Property, plant and equipment

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

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

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

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

event that the impairment loss is reversed, the amortized cost is written up.

### Leases

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

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

### Government grants

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

### Financial instruments

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

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

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

### Financial assets

Financial assets are allocated to the following categories:

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

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

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

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

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

**Financial assets at fair value through profit or loss** encompass financial assets held for trading and financial assets designated upon initial recognition as measured at fair value through profit or loss. Financial assets are classified as held for trading if they were acquired for the purpose of selling or repurchasing in the near term. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. As of the reporting date, the CeramTec Holding Group has not made use of the option to

designate primary financial instruments upon initial recognition as financial assets at fair value through profit or loss. Changes in the fair value of financial assets measured at fair value through profit or loss are presented as finance income or finance costs in the income statement. Within the CeramTec Holding Group, the termination rights agreed in the bond represent embedded derivatives to be separated which are allocated to the "held-for-trading" category.

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

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

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

available-for-sale financial assets are derecognized or an impairment loss is charged. At this point in time the gains or losses are reclassified from other comprehensive income to profit or loss. The CeramTec Holding Group does not hold any available-for-sale financial assets.

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

#### **Financial liabilities**

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

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

**Financial liabilities at fair value through profit or loss** include financial liabilities held for trading as well as financial liabilities categorized upon initial recognition as financial liabilities at fair value through profit or loss. Financial liabilities are classified as held for trading if they are held for the purpose of selling in the near future. Derivative financial instruments, including embedded derivatives to be separated from the host contract, are also classified as held for trading if they are not designated as effective hedging instruments within the scope of IAS 39. Changes in the fair value of financial liabilities recognized through profit or loss are presented as finance income or finance costs in the income statement. Within the CeramTec Holding Group, the interest rate floors contained in the syndicated loan agreement represent separated embedded derivatives which are allocated to the held-for-trading category.

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

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

#### Offsetting financial instruments

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

#### Hedges

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

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

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

#### Measurement at fair value

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

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

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

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

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

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

### **Inventories**

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

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

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

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

### **Cash and cash equivalents**

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

### **Provisions for pension obligations**

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

The obligations are discounted using discount rates derived from high-quality, fixed-interest corporate bonds with the same currency and term. If no high-quality, fixed-interest

corporate bonds are available, yields on government bonds are used instead. Net interest on the net liability is determined by multiplying the net liability with the discount rate.

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

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

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

### **Provisions**

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

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

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

### **Contingent liabilities and contingent assets**

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

## Taxes

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

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

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary 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 Holding (as the parent), CeramTec Group GmbH, CeramTec FinCo GmbH, CeramTec Service GmbH, CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH. There is also a consolidated tax group for VAT purposes between CeramTec Service GmbH as the parent company and

CeramTec GmbH, Cerasiv GmbH Innovatives Keramik-Engineering, CeramTec-ETEC GmbH and Emil Müller GmbH.

## 2.3 Estimation uncertainties and exercise of judgment

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

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

### Business combinations

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

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

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

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

### Impairment of non-financial assets

Assumptions were made to calculate the recoverable amount to determine whether impairment losses had to be recognized on intangible assets and property, plant and equipment. In this regard, future cash flows were derived from the budget planning and medium-term forecast for each of the cash-generating units. Management assumes that the assumptions and estimates, on which the discounted cash flows are based,

are accurate. Nevertheless, changes in the economic environment and growth assumptions can affect impairment testing resulting in the need to recognize impairment losses or to reverse impairment losses in the future.

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

#### Valuation allowances on receivables

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

#### Provisions for pension obligations

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

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

#### Provisions

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

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

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

#### Deferred tax assets

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

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

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

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

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

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

#### Revised and newly issued IFRSs and IFRICs not yet compulsory

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



<b>Standards and interpretations</b>	<b>Date of first-time adoption</b>
IFRS 14: "Accounting for Regulatory Deferral Accounts"	1 January 2016
Amendments to IFRS 10 and IAS 28: "Sales or Contributions of Assets Between an Investor and its Associate/Joint Venture"	deferred indefinitely
IFRS 9: "Financial Instruments"	1 January 2018
IFRS 15: "Revenue from Contracts with Customers"	1 January 2018
Clarifications to IFRS 15	1 January 2018
Amendments to IFRS 2: "Accounting for Cash-settled Share-based Payment Transactions"	1 January 2018
Amendments to IFRS 4: "Effects of the Different Initial Application Dates of IFRS 9 and the Standard Superseding IFRS 4"	1 January 2018
Annual Improvements Project (2014 – 2016) for IFRS 1 and IAS 28	1 January 2018
Amendments to IAS 40: "Transfers to or from Investment Property Classification"	1 January 2018
IFRIC 22: "Accounting for Transactions that Include Consideration in a Foreign Currency"	1 January 2018
IFRS 16: "Accounting for Leases"	1 January 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	1 January 2019
Amendments to IAS 28: "Long-term Interests in Associates and Joint Ventures"	1 January 2019
Amendments to IFRS 9: "Prepayment Features with Negative Compensation"	1 January 2019
Annual Improvements Project (2015 – 2017) for IFRS 3, IFRS 11, IAS 12 and IAS 23	1 January 2019
IFRS 17: "Insurance Contracts "	1 January 2021

## IFRS 9

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

- The requirements for scope of application, recognition and derecognition in IFRS 9 are carried over mostly unchanged from IAS 39 Financial Instruments: Recognition and Measurement.
- IFRS 9 amends IAS 39 to incorporate a new classification model for financial assets.
- Subsequent to initial recognition, financial assets will be divided in the future into three classifications depending on various measurement criteria and various policies on the recognition of value changes. The criteria for classifying financial assets are based on the instrument's contractual cash flows and business model within which the instrument is held. If the criteria are met, financial assets are measured at amortised cost (AC) using the effective interest method; fair value through other comprehensive income (FVTOCI); or fair value through profit or loss (FVTPL). In general, classifications are mandatory. However, entities have a small number of options to choose from.
- The IFRS 9 accounting model for financial liabilities is broadly the same as that in IAS 39. The only key difference relates to financial liabilities designated under the fair value option. IFRS 9 requires the amount of the change in the liabilities' fair value attributable to changes in the credit risk to be recognized in OCI.
- Under IFRS 9, which introduces a new impairment model, the accounting for expected losses and interest revenue in the future can be viewed as a three-step process. Thus, credit losses expected at the date of initial recognition are required to be measured at the present value of 12-month expected credit losses (step 1). A loss allowance for life-time expected credit losses is required for a financial instrument if the credit risk on that financial instrument has increased significantly since initial recognition (step 2). If objective evidence of impairment is identified, interest revenue is calculated using the net carrying amount of the asset (i.e. its carrying amount excluding the loss allowance) (step 3).
- The general hedge accounting requirements of IFRS 9 retain the three types of hedge accounting mechanisms in IAS 39. However, greater flexibility has been introduced to the types of transactions eligible for hedge accounting under IFRS 9, and IFRS 9 allows an entity to more appropriately reflect its

risk management activities in the financial statements. Significant differences arise from the types of hedged items and hedging instruments eligible for hedge accounting that have been broadened, and new hedge effectiveness criteria, particularly hedge effectiveness criteria that do not require that the level of offset must be between 80 and 125%.

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

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

- The reclassification of financial assets depending on the business model within which they are held, and their contractual cash flows, will not have a substantial effect on measurement policies. The same is true for trade receivables sold under a factoring agreement. Last year, for the first time certain receivables were sold resulting in derecognition of the receivables.
- The CeramTec Group will presumably use a simplified impairment approach for trade receivables and finance lease receivables under which a loss allowance at an amount equal to lifetime expected credit losses on all instruments is recognized irrespective of the credit risk of the instrument.
- Because the new hedge accounting requirements should allow the CeramTec Group to more appropriately reflect its risk management activities in the financial statements, and the types of hedged items and hedging instruments have been broadened that are eligible for hedge accounting, the management expects that under IFRS 9 existing hedging relationships continue to qualify for hedge accounting, on the basis of an assessment of the hedging relationships which has been performed.

## **IFRS 15**

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

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

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

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

## **IFRS 16**

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

### 3 Notes to the consolidated statement of comprehensive income

#### 3.1 Revenue

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

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

#### 3.2 Cost of sales

The cost of sales breaks down as follows:

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

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

#### 3.3 Selling costs

Selling costs primarily contain amortization, depreciation and personnel expenses.

#### 3.4 Research and development costs

Research and development costs mainly contain personnel expenses.

#### 3.5 General administrative costs

General administrative costs primarily contain personnel expenses.

#### 3.6 Other income / expenses (-), net

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

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

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

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

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

### 3.7 Financial result

The financial result breaks down as follows:

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

The exchange rate gains and losses result from loans not designated in the functional currency of the group companies.

More information on interest income and interest expenses from derivatives can be found in note 4.15.

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

### 3.8 Income tax

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

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

	2017	2016
	EURk	EURk
Germany	28,680	-5,874
Abroad	16,272	10,710
<b>Total</b>	<b>44,952</b>	<b>4,836</b>

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

	2017	2016
	EURk	EURk
Current income tax expense	-30,543	-17,132
Deferred tax income	10,203	7,122
<b>Income tax expense</b>	<b>-20,340</b>	<b>-10,010</b>

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

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

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

#### Deferred taxes

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

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

	31 December	
	2017	2016
	EURk	EURk
Deferred tax assets	249	851
Deferred tax liabilities	150,721	156,258
<b>Net amount of deferred tax liabilities</b>	<b>150,472</b>	<b>155,407</b>

The deferred tax assets and liabilities stem from the following:

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

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

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

#### Unused tax losses and interest carryforwards

Unused tax losses and interest carryforwards break down as follows:

	2017 EURk	2016 EURk
Interest carryforwards <i>on which no deferred tax assets are recognized</i>	100,696	97,905
Foreign unused tax losses <i>on which no deferred tax assets are recognized</i>	2,930	3,385
Total unused tax losses <i>on which no deferred tax assets are recognized</i>	2,930	3,385

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

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

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

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

### 3.9 Additional information on the type of expenses

#### Cost of materials

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

#### Personnel expenses

Personnel expenses break down as follows:

	2017	2016
	EURk	EURk
Wages and salaries	145,465	137,488
Social security contributions incl. pension expenses	35,076	38,811
<b>Total</b>	<b>180,541</b>	<b>176,299</b>

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

#### Employees

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

	2017	2016
	average Headcount	average Headcount
Salaried employees	1,280	1,170
Wage earners	2,117	2,059
<b>Total</b>	<b>3,397</b>	<b>3,229</b>

#### Amortization and depreciation

Amortization and depreciation break down as follows:

	2017	2016
	EURk	EURk
Amortization of intangible assets	45,657	44,901
Depreciation of property, plant and equipment	38,122	38,558
Impairment of goodwill and intangible assets	14,545	2,471
Impairment of property, plant and equipment	0	26
<b>Total</b>	<b>98,324</b>	<b>85,956</b>

## 4 Notes to the consolidated statement of financial position

### 4.1 Goodwill and intangible assets

Goodwill and intangible assets break down as follows:

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

## 4.2 Property, plant and equipment

Property, plant and equipment breaks down as follows:

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

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

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

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

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

#### 4.3 Other financial assets

The following table breaks down other financial assets as follows:

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

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

#### 4.4 Other assets

The following table breaks down other assets as follows:

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

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

#### 4.5 Inventories

Inventories break down as follows:

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

Other inventories include packaging materials and spare parts for machinery.

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

#### 4.6 Trade receivables

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

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

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

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

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

	31 December 2017 EURk	31 December 2016 EURk
not yet due	0	20
past due up to 30 days	0	49
past due up to 60 days	97	44
past due up to 90 days	36	45
past due more than 90 days	339	377
<b>Total</b>	<b>472</b>	<b>535</b>

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

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

	31 December 2017 EURk	31 December 2016 EURk
past due up to 30 days	8,748	7,991
past due up to 60 days	958	1,250
past due up to 90 days	282	61
past due more than 90 days	174	163
<b>Total</b>	<b>10,162</b>	<b>9,465</b>

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

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

	2017 EURk	r 2016 EURk
<b>Allowance on 1 January</b>	<b>535</b>	<b>644</b>
Addition	63	118
Reversed	-54	-58
Utilization	-49	-176
Foreign currency translation and other	-23	7
<b>Allowance on 31 December</b>	<b>472</b>	<b>535</b>

#### 4.7 Cash and cash equivalents

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

## 4.8 Equity

### Issued capital

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

### Capital reserves

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

### Accumulated losses

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

### Other comprehensive income

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

## 4.9 Provisions for pension obligations

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

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

that are calculated based on the performance of the Company. The eligible employees are also entitled to deferred compensation which is subsidized by the relevant group company depending on the achievement of personal targets by employees.

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

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

The provisions for pension obligations break down as follows:

	31 December 2017 EURk	31 December 2016 EURk
Germany	94,489	94,359
UK	3,743	7,855
Other	215	196
<b>Total</b>	<b><u>98,447</u></b>	<b><u>102,410</u></b>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

	31 December 2017 EURk	31 December 2016 EURk
Securities/shares	3,509	3,549
Fixed-interest securities	3,678	466
Real estate	420	404
	<b>7,607</b>	<b>4,419</b>

The fair value of the securities and shares were determined based on prices quoted on active markets, while the fair value of real estate was not based on prices quoted on active markets. The real estate contained in plan assets relates to non-owner-occupied property in the UK. The investment horizon for plan assets takes into account the expected payout profile. From 1 January 2002 to 31 December 2014, all new hires at CeramTec GmbH, CeramTec Service GmbH and Emil Müller GmbH joined the pension fund Dynamit Nobel VVaG. Furthermore, some active and former employees of CeramTec GmbH and Emil Müller GmbH are members of the pension fund Hoechst-Gruppe VVaG. These pension funds are multi-employer plans which are defined benefit plans. The two pension funds are subject to regulatory supervision. In the event that the funds are unable to settle their obligations, the employer is legally liable for the vested benefits (secondary liability). This



obligation remains in place even if the CeramTec Holding Group were to terminate its participation in the plans. However, terminating its participation would generally not directly result in having to make supplementary payments. In the consolidated financial statements, these pension plans are classified as defined contribution plans in accordance with IAS 19.34. As several employers are responsible for these pension funds, contributions made by the CeramTec Holding Group can under certain circumstances be used to finance another entity's employee benefits.

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

The pension fund Hoechst-Gruppe VVaG is funded with income-based contributions by entitled employees as well as variable employer contributions. The employers' contribution must, together with the employees' member contributions and pension fund surpluses, sufficiently fund the agreed payments according to actuarial principles. Once pension payments have begun, the pension fund assumes the statutory pension adjustments provided it has the sufficient means to do so. The proportion of members whose membership is based

on an existing or former work contract with the CeramTec Holding Group for active employees, non-contributory employees and pensioners ranges between around 0.1% and 0.15% in each case.

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

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

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

#### 4.10 Other provisions and provision for taxes

Provisions developed as follows in the fiscal year:

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

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

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

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

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

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

The maturities of the provisions were as follows:

	31 December 2017 EURk	31 December 2016 EURk
Current provisions	33,020	19,215
Non-current provisions	5,142	10,636
<b>Total</b>	<b>38,162</b>	<b>29,851</b>

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

#### 4.11 Financial liabilities to affiliates

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

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

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

#### 4.12 Financial liabilities to third parties

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

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

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

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

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

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

	Total EURk	Up to 1 year EURk	1 to 5 years EURk	More than 5 years EURk
Present value of minimum lease payments	1,313	8	280	1,025
Interest effect	830	15	400	415
<b>Minimum lease payments</b>	<b>2,143</b>	<b>23</b>	<b>680</b>	<b>1,440</b>

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

Reference is made to note 4.2 as regards the items of property, plant and equipment recognized under finance leases. All leases include contractually agreed installments. There are no sub-lease arrangements. CeramTec Suzhou has a renewal option for real estate leases.

#### 4.13 Other liabilities

Other liabilities break down as follows:

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

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

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

#### 4.14 Rental and lease obligations

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

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

	31 December 2017 EURk	31 December 2016 EURk
Up to 1 year	1,946	1,689
1 to 5 years	1,941	933
More than 5 years	485	0
<b>Total</b>	<b>4,372</b>	<b>2,622</b>

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

#### 4.15 Financial instruments

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

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

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

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

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

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

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

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

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

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

	31 December 2017		
	Level 1 EURk	Level 2 EURk	Level 3 EURk
<b>Financial assets</b>			
Currency swaps in effective hedges	0	21,233	0
Separated termination rights – HfT	0	19,963	0
<b>Financial liabilities</b>			
Separated interest rate floors – HfT	0	6,932	0
Interest rate caps – HfT	0	330	0
<b>31 December 2016</b>			
	Level 1 EURk	Level 2 EURk	Level 3 EURk
<b>Financial assets</b>			
Separated termination rights – HfT	0	24,459	0
Currency swaps in effective hedges	0	60,119	0
<b>Financial liabilities</b>			
Separated interest rate floors – HfT	0	10,275	0
Interest rate caps – HfT	0	755	0

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

	31 December 2017		
	Level 1	Level 2	Level 3
	EURk	EURk	EURk
<b>Financial liabilities</b>			
Bond liabilities	321,728	0	0
Liabilities to banks	0	588,038	0
Liabilities to affiliates	0	56,446	0
Finance lease liabilities	0	1,313	0

	31 December 2016		
	Level 1	Level 2	Level 3
	EURk	EURk	EURk
<b>Financial liabilities</b>			
Bond liabilities	325,746	0	0
Liabilities to banks	0	672,864	0
Finance lease liabilities	0	1,430	0
Liabilities to affiliates	0	157,377	0

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

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

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

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

The fair value of the interest rate cap is measured using the Black-Scholes/Hull-White valuation model, which considers both the observable yield curves and the fluctuation (volatility) of the currencies concerned. All key input parameters were

directly or indirectly derived from observable market data. The fair value measurement is therefore allocated to level 2 in the fair value hierarchy.

The fair value of all other financial instruments is calculated using a discounted cash flow method as well as by taking into account measurement parameters that can be directly or indirectly observed on the market. Accordingly, these financial instruments were allocated to level 2 in the fair value hierarchy. For assets and liabilities that are recognized at fair value in the consolidated financial statements on a recurring basis, the CeramTec Holding Group assesses whether a transfer between the levels of the fair value hierarchy took place as of the end of each reporting period (based on the lowest level that is significant to measurement as a whole). There were no transfers between level 1 and 2 during the reporting period.

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

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

	31 December 2017			
	Change in fair value	Currency trans-lation	Impair-ment loss	Total
	EURk	EURk	EURk	EURk
Loans and receivables (LaR)	0	1,416	-10	1,406
Cash and cash equivalents	0	-1,177	0	-1,177
Separated termination rights/interest rate floors – HfT (FVtPL)	-1,153	0	0	-1,153
<b>Total</b>	<b>-1,153</b>	<b>239</b>	<b>-10</b>	<b>-924</b>

	31 December 2016			
	Change in fair value	Currency trans-lation	Impair-ment loss	Total
	EURk	EURk	EURk	EURk
Loans and receivables (LaR)	0	-258	-60	<b>-318</b>
Cash and cash equivalents	0	260	0	<b>260</b>
Separated termination rights/interest rate floors – HfT (FVtPL)	18,636	0	0	<b>18,636</b>
Financial liabilities at amortized cost (FLAC)	0	-2,115	0	<b>-2,115</b>
Intercompany loans	0	-180	0	<b>-180</b>
<b>Total</b>	<b>18,636</b>	<b>-2,293</b>	<b>-60</b>	<b>16,283</b>

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

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

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

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

#### Derivative financial instruments and hedge accounting

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

	31 December 2017	
	Nominal value EURk	Fair value EURk
<b>Derivatives with a positive fair value</b>		
Separated termination rights – HfT	306,700	19,963
Currency swaps in effective hedges	198,300	21,233

#### Derivatives with a negative fair value

Separated interest rate floor – HfT	588,038	-6,932
Interest rate cap – HfT	309,120	-330
<b>Total</b>	<b>1,402,158</b>	<b>33,934</b>

	31 December 2016	
	Nominal value EURk	Fair value EURk
<b>Derivatives with a positive fair value</b>		
Separated termination rights – HfT	306,700	24,459
Currency swaps in effective hedges	226,900	60,119

#### Derivatives with a negative fair value

Separated interest rate floor – HfT	672,864	-10,275
Interest rate cap – HfT	364,720	-755
<b>Total</b>	<b>1,571,184</b>	<b>73,548</b>

#### Embedded derivatives

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

#### Cash flow hedges

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

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

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

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

## 5 Notes to the consolidated statement of cash flows

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

In the reporting period, the cash flow from investing activities included the purchase price payment of EUR 55,485k for the acquisition of the UK electro-ceramics business, that has two manufacturing sites, from Morgan Advanced Materials plc.,

Stourport-on-Severn, Great Britain. No cash and cash equivalents were taken over.

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

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

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

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

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

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



## 6 Other notes

### 6.1 Management of financial risks

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

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

#### Market risks

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk comprises risks arising from

exchange rate and interest rate fluctuations and other price risks, such as share price risks and commodity price risks.

#### Foreign currency risk

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

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

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

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

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

#### Interest rate risk

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

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

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

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

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

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

#### Credit risk

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

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

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

risk for cash and cash equivalents corresponds to the carrying amount.

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

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

#### Liquidity risk

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

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

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

	31. Dezember 2017						
	Carrying amount EURk	2018 EURk	2019 EURk	2020 EURk	2021 EURk	2022 EURk	> 2022 EURk
Trade payables	26,676	26,676	0	0	0	0	0
Trade payables owed to affiliates	135	135	0	0	0	0	0
Liabilities to banks	583,774	25,039	25,777	589,856	0	0	0
Bond liabilities	310,072	25,303	25,303	25,303	332,003	0	0
Liabilities to affiliates	55,355	0	0	0	0	0	92,949
Finance lease liabilities	1,313	23	258	141	141	141	1,441
Other financial liabilities	4,706	4,706	0	0	0	0	0

**Derivatives with a negative fair value**

Interest rate caps	330	336	0	0	0	0	0
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	31. Dezember 2016						
	Carrying amount EURk	2017 EURk	2018 EURk	2019 EURk	2020 EURk	2021 EURk	> 2021 EURk
Trade payables	22,376	22,376	0	0	0	0	0
Trade payables owed to affiliates	205	205	0	0	0	0	0
Liabilities to banks	664,807	28,373	29,322	27,416	668,157	0	0
Bond liabilities	308,702	25,303	25,303	25,303	25,303	332,003	0
Liabilities to affiliates	154,423	56,538	0	0	0	0	166,255
Finance lease liabilities	1,430	127	199	150	150	150	1,686
Other financial liabilities	3,564	3,564	0	0	0	0	0

**Derivatives with a negative fair value**

Interest rate caps	755	448	336	0	0	0	0
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**Offsetting financial assets against financial liabilities**

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

**Collateral**

In connection with the syndicated loan, the assets of the German and American companies were provided as collateral to the extent that the syndicated loan is drawn. CeramTec Service GmbH, CeramTec Acquisition Corporation and CeramTec GmbH are the borrowers of the syndicated loan. In the USA, shares in CeramTec Acquisition Corporation and in

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

### Risk from compliance with financial covenants

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

### Capital management

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

### 6.2 Contingent liabilities

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

### 6.3 Related party disclosures

#### Key management personnel

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

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

Henri Steinmetz  
Chief Executive Officer / HR director

Dominique Janbon  
Chief Financial Officer

Dr. Hadi Saleh  
Chief Operating Officer

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

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

personnel expenses are incurred if or before the defined events occur.

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

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

#### **Transactions with related parties**

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

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

#### **6.4 Auditor's fees**

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

	31 December 2017 EURk	31 December 2016 EURk
Audit services	470	464
Audit-related services	558	108
Other professional services	85	34
	<u>1,113</u>	<u>606</u>

#### **6.5 Subsequent events**

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

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

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

No further reportable events occurred.

## 7 Reconciliation to CeramTec Group GmbH

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

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

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

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

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

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

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

Plochingen, 7 March 2018

### CeramTec Holding GmbH

The management



Henri Steinmetz



Dominique Janbon



Dr. Hadi Saleh



SUSTAIN



# LIABILITY

# CeramTec's Management Policy



The CeramTec Group aims to achieve profitable, global growth while conserving energy and protecting natural resources. Our objective is to strengthen and advance CeramTec's international leadership position. As a customer-oriented problem solver, we therefore focus on application consulting and on the development of innovative, competitive, and sustainable processes for realizing products consistent with specifications. We have established a framework with reliable, risk-minimizing technical and organizational processes and creating an atmosphere of trust that fairly balances the interests of customers, business partners, employees and shareholders, as well as stakeholders such as the local communities and society in general. We conduct business according to a set of clearly defined management principles, which we review on an annual basis. The executive board of the CeramTec Group is committed to promoting compliance with these policies, to providing the resources that are required for implementation, and to conducting an annual review. For this, it will give an annual account (status analysis) regarding compliance with these management policies and will review the efficacy of the management systems once a year. As part of this process, special focus is placed on considering specially-approved requirements and binding obligations of our customers, society/the public, the government agencies, external interested parties, and legislative bodies, as well as on constantly improving our management system and minimizing risks in our processes.

**Products** – We strive to manufacture and market our high-quality products in the most cost-effective, sustainable, safe and eco-friendly way while conserving resources, taking into account the lifecycle of our products.

**Interested parties** – All of our efforts center around satisfying the requirements of all of our interested parties.

**Responsibility** – When it comes to our products, operations and services, we act with a strong commitment to safety, health, the environment, and profitability. We comply with all applicable standards, laws, regulations, in-house rules and

designated ethical principles as well as other obligations with regard to the context of the organization. Fair and ethical business practices apply both with respect to our employees and our business partners – from procurement and manufacturing through to delivery to our customers, all while considering the effects on society.

**Quality** – We plan, develop, implement, monitor and continuously improve all of our processes. We give reasonable consideration to the opportunities/risks of these processes. This applies to quality, work safety, health, environmental protection and energy management.

**Goals** – We set goals for ourselves for profitability, quality, safety, health and environmental protection based on these management policies while considering our strategic context and the most important requirements for our relevant, interested parties. We are also committed to long-term reductions in energy consumption and increasing our energy efficiency through continuous process improvement (CPI). We make information and resources available to meet these targets and constantly measure our level of success using key metrics to foster the growth of our business.

**Employees** – Having capable and responsible employees is important to us. We train our employees in ongoing courses focused on quality, work safety, health, environmental protection, codes of conduct and energy efficiency. We recognize successful performance of our employees and encourage them to excel. Every employee is responsible for doing his or her part to meet our quality, work safety, health, environmental protection and resource conservation targets.

**Sustainability** – For CeramTec, sustainability is a holistic concept for the future. In accordance with our corporate social responsibility policy and our code of conduct, we assume responsibility for our thoughts and our actions in economical, ecological and social dimensions. We follow guidelines and regulations that apply to all employees worldwide to ensure sustainability in all of our business operations.

# Corporate Social Responsibility Policy

## Our Sustainability Policy



### Principles of Sustainable Corporate Responsibility

Sustainability is embedded in our corporate culture and is integral to the worldwide CeramTec Group. Our CSR Policy supports our aim to achieve profitable, global growth, conserving energy and protecting natural resources, while acting in an ethical way with integrity, as outlined in our Management Policy. Sustainable development means taking responsibility for the impact our thoughts and actions have in the financial, environmental and social dimensions that affect our natural resources, our employees, our customers, society, financial markets, business partners and neighboring communities.

### Financial Responsibility: For Sustainable Business Development

We aim to achieve sustained, profitable growth for continued successful business development characterized by responsible business practices and integrity.

### Environmental Responsibility: For Sustainable Environmental Development

CeramTec is committed to making the world a greener place by keeping our ecological footprint as small as possible. We understand that ecological sustainability is a key component of our corporate social responsibility and strive to keep our own impact on the environment to a minimum by conducting environmentally-friendly, professional and safe operations. This includes conserving scarce resources such as raw materials, energy and water as well as avoiding and reducing CO<sub>2</sub> emissions and waste.

Our fair, ethical and environmentally-friendly approach incorporates everything from the management of our company, the manufacturing of our products to the procurement of resources and even our investments in buildings and facilities.

### Social Responsibility: For Sustainable Social Development

We are dedicated to improving society by operating our business in a responsible manner and always acting with integrity in all areas: as an employer, business partner and “good neighbor” and key member of the local community at all of our company’s sites. For CeramTec, taking responsibility for the people we have direct relationships with is a matter of principle. We are aware that our actions affect more than just the people we deal with directly – we also have a broader impact on society in general. This is why we strive to be a responsible and prudent business partner who follows sound ethical and moral principles, acts in accordance with the law and lives up to high standards for social responsibility by applying specific rules and guidelines.

### Corporate Governance: Acting with Integrity

CeramTec’s Executive Board and Supervisory Board consistently implement the principles of responsible corporate governance. These primarily comprise a compliance management system, an internal control system, and risk management. All are managed, monitored and reviewed in regular audits.

### Sustainable Materials: For Quality of Life and Profitability

Developing products made from advanced ceramics reflects our sense of responsibility when it comes to the future. We create sustainable solutions that are used worldwide in countless industries and fields of application. They improve quality of life, increase efficiency, enhance productivity, save energy and protect the environment – while supporting our customers in reaching their own sustainability targets.

### Put Responsibility into Practice

We consistently implement our basic principles of sustainable, responsible business management. Our efforts clearly pay off by conserving energy and protecting the environment and our natural resources. This is reflected in our social commitment for people in the community and our employees, in our training programs, equal opportunities, development and growth and health and safety.

The primary goal of our DIN ISO 14001-certified environmental management system is to promote environmental protection and prevent environmental pollution in line with financial, social and political requirements. Our energy management system, which is certified according to DIN ISO EN 50001, takes every aspect of the company into account – from pro-

cesses, methods and materials to products, buildings and facilities – to increase energy efficiency and sustainably reduce energy consumption.

Our achievements are clearly visible in our key performance indicators. And we will continue to strengthen this commitment in the future.

Key Figures	Unit	2014	2015	2016	2017
<b>Workforce</b>					
Total workforce <sup>(6)</sup>	Persons	3,403	3,432	3,184	3,537
of which male <sup>(6)</sup>	Persons	2,164	2,106	1,982	2,165
of which female <sup>(6)</sup>	Persons	1,239	1,326	1,202	1,372
Apprenticeship rate <sup>(3)</sup>	%	6.46%	7.39%	7.02%	7.10%
<b>Health and Safety</b>					
Staff away sick	%	2.04%	1.54%	3.37%	3.75%
Continuous improvement system suggestions <sup>(1)</sup>	Total number	11,117	11,071	7,540 <sup>(7)</sup>	3,363 <sup>(7)</sup>
Lost time accidents (LTAs)	Total number	10	10	5	18
LTA frequency rate	LTAs*200,000/total hours worked	0.34	0.34	0.17	0.59
LTA severity rate	Lost days*200,000/total hours worked	3.13	7.01	4.34	5.53
<b>Environment and Energy</b>					
Energy consumption <sup>(2)(4)</sup>	MWh	281,242	283,307	261,949	292,381
Energy consumption/€1m turnover <sup>(5)</sup>	MWh/€1m	592	565	531	526
Water consumption <sup>(2)(2.1)</sup>	m <sup>3</sup>	303,804	277,873	270,394	267,262
Water consumption/€1m turnover <sup>(5)</sup>	m <sup>3</sup> /€1m	640	555	548	480
Waste <sup>(2)(2.2)</sup>	Tons	6,075	5,609	4,588	5,071
Waste/€1m turnover <sup>(5)</sup>	Tons/€1m	12,79	11,20	9,3	9,1
CO <sub>2</sub> emissions <sup>(2)(2.3)(4)</sup>	Tons	92,575	99,122	93,522	101,465
CO <sub>2</sub> emissions/€1m turnover <sup>(5)</sup>	Tons/€1m	195	198	190	182
<b>Governance</b>					
Incidents bribery and corruption	Total Number	0	0	0	0

<sup>(1)</sup> Does not include the sites in Brazil, India, Korea, Mexico and Poland, since these have not yet implemented the CIP system

<sup>(2)</sup> Energy consumption at all production sites, excluding sales offices and agencies

<sup>(2.1)</sup> Total water consumption at all production sites

<sup>(2.2)</sup> Hazardous and non-hazardous waste

<sup>(2.3)</sup> From energy consumption at production sites, excluding travel emissions, etc.

<sup>(3)</sup> Apprentice model only used in Germany

<sup>(4)</sup> Gas, electricity. Does not include fuel for car fleets and emergency power supply

<sup>(5)</sup> Based on turnover of €475 million in 2014, €501 million in 2015, €493 million in 2016 and €556 million in 2017

<sup>(6)</sup> Headcount including apprentices but excluding inactive employees

<sup>(7)</sup> Declining due to a system change

# Corporate Governance

## Governance, Risk & Compliance

With its governance, risk and compliance structure (GRC), the CeramTec Group coordinates the broad range of corporate governance, enterprise risk management (ERM) and regulatory compliance requirements. For this purpose, the Governance, Risk & Compliance service centre was established in 2016. The GRC service centre is responsible for assisting the Executive Board in fulfilling its organisational obligations regarding compliance, risk management and internal control. Responsibilities and interfaces have been defined for compliance, risk management and the internal control system, which should thus prevent redundancies. In addition, a comprehensive and complete profile of the risk situation and mitigation should be guaranteed. Operationally, the GRC service centre closely collaborates with the Finance, HR, Controlling and Legal departments.

## Compliance

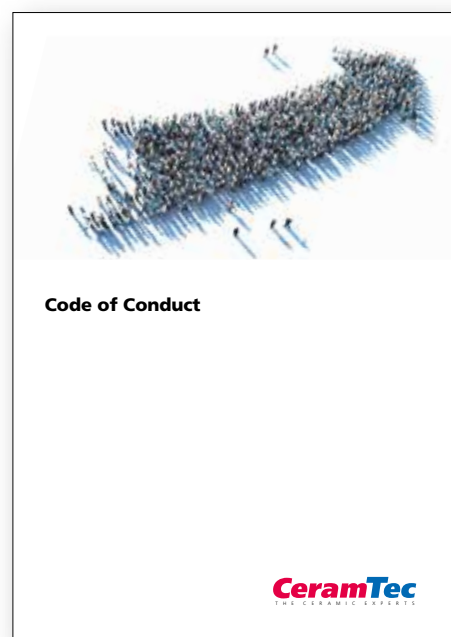
The Management Board of CeramTec Holding GmbH and its staff are committed to conducting business in accordance with the highest ethical standards and all applicable laws, rules and regulations. This Code of Conduct embodies this commitment. It is underpinned by the Compliance Management System (CMS), which systematically creates the prerequisites within the CeramTec Group to ensure that violations of compliance requirements can be avoided or significantly impeded, as well as identified and dealt with.

## Risk management

The risk management of the CeramTec Group comprises all activities and arrangements made to identify, assess, manage, and monitor risk. A risk is defined as the danger that events or actions might prevent CeramTec from achieving its business objectives or from successfully implementing its strategies. For all identified risks, the probability of occurrence and possible impact on achieving objectives are continually identified, assessed, appropriate action initiated and followed-up on.

## Internal control system

The internal control system consists of technological and organisational arrangements and controls that have been systematically designed to ensure compliance with guidelines and to prevent loss or damage that may be caused by the company's employees or by third parties. Controls can be performed both process-dependent or independently of the process. CeramTec's internal control system (ICS) represents the arrangements and controls ensuring the effectiveness and economic efficiency of business operations, as well as regularity and reliability of internal and external accounting, and compliance with statutory regulations relevant to the company.









## Schedule

18/04/2018	> Annual Report 2017
25/04/2018, 15:00 CET	> Investor Call for Annual Report 2017
29/06/2018	> Quarterly Report to March 31, 2018
04/07/2018	> Investor Call for Q1 2018
24/08/2018	> Quarterly Report to June 30, 2018
29/08/2018	> Investor Call for Q2 2018
23/11/2018	> Quarterly Report to September 30, 2018
28/11/2018	> Investor Call for Q3 2018



BIOLOX delta and BIOLOX forte ball heads and inserts, BIOLOX OPTION, BIOLOX DUO as well as the bicondylar knee implants made of BIOLOX delta and the ceramic blanks are registered by CeramTec's customers. They are not registered/available in all countries.

All other pictured implants (e.g. coated or porous implants for direct-to-bone application in hip, knee, spine and extremities, the unicondylar knee implants, BIOLOX CONTOURA ball heads, etc.) are under development and are not approved by any authorities.

This document contains forward-looking statements based on current assumptions and estimates made by the Executive Board regarding future developments. The statements made here are subject to risks and uncertainties that are beyond CeramTec's control and which cannot be precisely verified or estimated. Such factors include the overall market and economic situation, the behavior of other participants in the market, the successful integration of acquisitions, the implementation of the anticipated synergy effects and the measures carried out by state regulatory authorities. If these risks and uncertainties or any other events transpire, or if the assumptions upon which these statements are based prove false, then the actual results may deviate significantly from these express statements or implied assumptions. CeramTec neither intends nor is obligated to update any of these forward-looking statements in response to events or circumstances that may arise after the date of this report.

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