

# **2018 ANNUAL REPORT**



## CeramTec TopCo GmbH

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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 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.

## **KEY FIGURES**

2018	2017	2016
<b>600.2</b> €	556.3 ∈	<b>493.3</b> €
226.5 €	201.2 €	185.6 €
373.7 €	355.2 €	307.8 €
<b>183.4</b> €	<b>200.8</b> €	<b>145.7</b> €
226.3 €	206.7 €	171.4 €
37.7 %	37.2 %	34.7 %
33.3 €	27.5 €	14.6 €
85.3 %	86.7 %	91.5 %
3,589	3,537	3,187
1,468.6 ∈	<b>870.1</b> €	<b>931.0</b> €
6.5 x	4.2 x	4.7 x
	600.2 € 226.5 € 373.7 € 183.4 € 226.3 € 37.7 % 33.3 € 85.3 % 3,589 1,468.6 €	600.2 € 556.3 €   226.5 € 201.2 €   373.7 € 355.2 €   183.4 € 200.8 €   226.3 € 206.7 €   37.7 % 37.2 %   33.3 € 27.5 €   85.3 % 86.7 %   3,589 3,537   1,468.6 € 870.1 €

<sup>10</sup> Management Adjusted EBITDA minus Capital Expenditures (net), divided by Management Adjusted EBITDA

<sup>a</sup>Defined as Net Debt divided by Management Adjusted EBITDA

# CeramTec is a leading global developer, manufacturer, and supplier 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.

The Industrial business develops and supplies a broad range of highly specialized, performancecritical components for a myriad of applications in the Automotive, Aeronautics/Defence, Machinery, Electronics, Medical equipment, Chemical 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, operational and technical expertise.

## **OWNERSHIP**



BC Partners is a leading international private equity firm with over €20 billion of assets under management. Established in 1986, BC Partners has played an active role in developing the European buy-out market for over 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 108 investments in companies with a total enterprise value of over €135 billion and is currently investing its tenth private equity fund.



The Public Sector Pension Investment Board (PSP Investments) is one of Canada's largest pension investment managers with CAD\$158.9 billion of net assets as of September 30, 2018. 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 the federal Public Service, the Canadian Forces, the Royal Canadian Mounted Police and the Reserve Force. Headquartered in Ottawa, PSP Investments has its principal business office in Montréal and offices in New York, London and Hong Kong. For more information, visit investpsp.com.



The Ontario Teachers' Pension Plan (Ontario Teachers') is Canada's largest single-profession pension plan, with \$193.9 billion in net assets as at June 30, 2018. It holds a diverse global portfolio of assets, approximately 80% of which is managed in-house, and has earned an average annualized rate of return of 9.9% since the plan's founding in 1990. Ontario Teachers' 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 323,000 active and retired teachers

## **MANAGEMENT BOARD\***



**Dr. Hadi Saleh** Chief Executive Officer

Eric Oellerer Chief Financial Officer

**Richard Boulter** President Industrial

## **SUPERVISORY BOARD\*\***

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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

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**Prof. Dr. Jürgen Huber** Honorary Professor at the TU Braunschweig and consultant

**Jörg Kammermann** Vice Chairman IG BCE Bavaria

Alexander Schätz Chairman of the Works Council at the CeramTec site in Lauf

Axel Meyersiek Senior Partner at BC Partners in Hamburg

Moritz Elfers Principal at BC Partners in Hamburg

**Monika Träger** Chairwoman of the Works Council at the CeramTec site in Marktredwitz

Dr. Michael Mertin Management Consultant

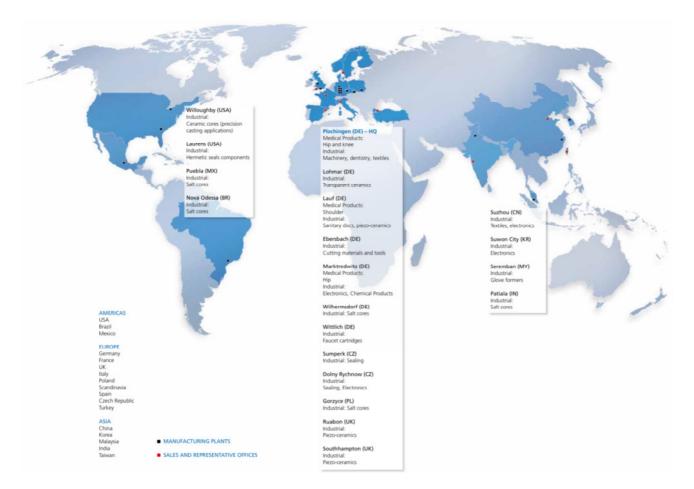
\* Management Board of CeramTec BondCo GmbH

\*\*Supervisory Board of CeramTec GmbH

(1) Chairman of the Supervisory Board

(2 Deputy Chairman of the Supervisory Board

# **OUR LOCATIONS**



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

Based on the Sale and Purchase Agreement (SPA) signed on 10 October 2017 the former owner Cinven sold and transferred the shares of CeramTec Holding GmbH, Plochingen (in the following "CeramTec Holding") to CeramTec AcquiCo GmbH, Plochingen (in the following "CeramTec AcquiCo") owned by a Consortium led by Funds advised by leading private equity firm BC Partners ("BC Partners"). As at 22 February 2018 all requirements were fulfilled. According to the SPA the transfer of ownership was effective after 10 working days, respectively as of 8 March 2018. CeramTec AcquiCo is a 100% subsidiary of CeramTec BondCo GmbH, Plochingen (in the following "CeramTec BondCo"), which itself is a 100% subsidiary of CeramTec TopCo GmbH (in the following "CeramTec TopCo"). CeramTec TopCo is the ultimate parent, for which Consolidated Financial Statements and Consolidated Pro-Forma Financial Statements are prepared.

The purpose of this Operational and Financial Review is to show the development of the financial results of the operating advanced ceramics business for the twelve months period ended December 31, 2018 in comparison to the twelve months period ended December 31, 2017. The financial data as of and for the twelve months period ended December 31, 2018 have been derived from the Condensed Pro-Forma Consolidated Financial Statements prepared as described in section 1.2 of the Notes thereto. The period ended December 31, 2017 includes the contribution of the acquired UK Electro-ceramics business from the date of closing of the Transaction in April 2017. The condensed pro-forma consolidated financial statements give a true and fair view of the results of operations and financial position of the Group.

The following discussion should be read in conjunction with the information contained in our legal consolidated financial statements for the twelve months period ended December 31, 2018 and the pro-forma consolidated financial statements for the twelve months period ended December 31, 2018 including the notes thereto. In the following, we discuss certain financials on an adjusted basis, before giving effect to depreciation and amortization and certain extraordinary, non-recurring items.

The figures in this review are presented in Euro. The amounts are in millions of Euros (EUR m). All amounts are rounded using standard commercial principles. In some cases, adding single values to the total values may therefore lead to differences. Due to rounding differences, figures in tables and cross-references may differ slightly from the actual figures (units of currency, percentages, etc.).

## **Business 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 among others, hip joint prostheses components, actuators in engine valves for fuel injection systems, electronic substrates for chip resistors and electrical vehicles, high speed cutting tools and piezo components critical for many different sensors. 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 2018, it generated 37.7% 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 16 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, defence, electronics, industrial machinery and medical equipment. In 2018, 62.3% 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 fulfil 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 with a global reach. 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 2018, we sold 1.69 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 orthopaedic 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 with growing demand from China. We maintain good and long-standing customer relationships to each of these OEMs as well as numerous other OEMs worldwide.

## 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, textile and other industrial end markets we serve are cyclical and subject to technological changes. 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 is 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 of government regulation and subsidies on 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 in new markets. Our product development is mainly focused on delivering customer driven innovations and next generation solutions. We invest in the development of new materials and processes, new medical solutions and selected own product innovations such as PERLUCOR®, a wear and chemically 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 2018, our R&D expenses were €22.5 million, equal to 3.8% 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 in 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, we continue 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 implement measures to increase organizational cost effectiveness and drive productivity across all businesses. In our Industrial business, we continued with a comprehensive reorganization started in 2016, where we combined various independent reporting units into larger, more streamlined commercial units and consolidated our operations in Europe

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 Development**

In our core medical products market price pressure due to competition has been historically limited. This is due to our position as the market leader with unrivalled clinical and quality track record, our close relationship with our customers and limited appetite of medical professionals to switch away from proven solutions.

We are also among the market leaders in many of the industrial niche markets that we target. Our main HPC competitors either target different markets or have a different geographical focus. Additionally, 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 are 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, 2018 compared to the twelve month period ended December 31, 2017. All figures are unaudited in EUR million, as reported.

	Twelve N Dece		
	2018	2017	Change
	(in € million)	(in € million)	(%)
Revenue	600.2	556.3	7.9
Cost of sales	392.6	317.6	23.6
Gross profit	207.6	238.7	-13.0
Selling costs	95.0	80.7	17.7
Research and development costs	22.5	20.4	10.7
General administrative costs	31.8	22.7	39.8
Other income and expenses (-), net	-11.3	-12.5	-9.5
Operating income	47.0	102.4	71.6
Interest income and other finance income	1.6	5.4	-70.0
Interest expenses and other finance costs	135.0	62.9	>100.0
Financial result	-133.3	-57.5	>100.0
Profit/(Loss) before income tax	-86.3	45.0	N/A
Income tax expense	10.3	-20.3	N/A
Net profit/(loss) for the period	-76.0	24.6	N/A

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, to be an important indicator of business performance. Management adjusted EBITDA, its main components and its reconciliation to Operating Income as reported is shown in the following table.

	Dece		
	2018	2017	Change
	(in € million)	(in € million)	(%)
Revenue	600.2	556.3	7.9
Cost of sales*	284.4	264.1	7.7
Gross profit*	315.8	292.2	8.1
Selling costs*	48.6	47.9	1.6
Research and development costs*	20.5	18.3	11.8
General administrative costs*	20.4	19.3	5.6
Other income and expenses (-), net*	0.1	0.0	>100.0
Management Adjusted EBITDA	226.3	206.7	9.5
- Exceptional items	42.9	5.9	>100.0
EBITDA	183.4	200.8	-8.7
- Amortization, Depreciation and Impairment charges on non-current assets	135.5	98.3	37.8
Operating Income	47.0	102.4	-54.1

## Twelve Months Ended December 31,

\* Excluding depreciation, amortization and exceptional items

The following table provides a breakdown of our exceptional items for the twelve months ended December 31, 2018, compared to the twelve months ended December 31, 2017.

	Twelve Months Ended December 31,		
	2018 201		
	(in € million)	(in € million)	
Restructuring costs	3.6	2.4	
Other non-recurring	7.9	2.2	
Foreign exchange conversion effects	0.0	-0.2	
Additional contribution related to pensions	2.1	-	
Acquisition costs	0.2	1.4	
Transaction related costs	12.6	-	
PPA on Inventories	16.5	-	
Total Exceptional Items	42.9	5.9	

Restructuring costs in 2017 and 2018 mainly comprise costs related to our productivity initiatives undertaken in our Medical Products and Industrial businesses, in 2018 additional costs for Management change.

Other non-recurring mainly comprise of consulting and litigation expenses.

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 favour of Pensionskasse Dynamit Nobel VVaG. The provision was based on the planned payments until 2021. Additional contribution for 2018 is based on annual projection by German Federal Financial Supervisory Authority.

Acquisition costs in 2017 and 2018 represent costs related to the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc, which was completed in April 2017.

Transaction related costs comprise certain impacts due to the CeramTec AcquiCo acquisition with effectiveness 8 March 2018.

PPA on inventories comprises of step-ups at transactions, in finished goods and work in progress inventories calculated based on customary asset valuation methodology.

#### Revenue

The following table provides a breakdown of our revenue for the twelve months ended December 31, 2018, compared to the twelve months ended December 31, 2017.

	Twelve Months Ended December 31,		
	2018 2017		Change
	(in € million)	(in € million)	(%)
Medical Products	226.5	201.2	12.6
Industrial	373.7	355.2	5.2
thereof Specialty Applications	102.3	91.6	11.7
thereof Industrial Solutions	155.5	146.3	6.4
thereof CT North America	49.0	55.6	-12.0
thereof Emil Müller Companies	24.1	25.1	-4.3
thereof other units /consolidation	42.8	36.6	17.1
Total Revenue	600.2	556.3	7.9

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, 2018 was €600.2 million, an increase of €43.9 million or 7.9%, as compared to €556.3 million for the twelve months ended December 31, 2017.

Revenue in our Medical Products business was €226.5 million for the twelve months ended December 31, 2018, an increase of €25.3 million or 12.6%, as compared to €201.2 million for the twelve months ended December 31, 2017. 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  $\in$ 373.7 million for the twelve months ended December 31, 2018, an increase of  $\in$ 18.5 million or 5.2%, as compared to  $\in$ 355.2 million for the twelve months ended December 31, 2017. This increase was mainly due to overall strong demand in the major markets such as Electronics and Automotive as well as other industrial end markets such as Textile machinery products. The increase is supported by commercial excellence initiatives and the full year effect of the acquisition of the UK electro-ceramics business from Morgan Advanced Materials plc contributing additional  $\in$ 5.2 million. The decrease in CT North America is mainly due to

cyclical demand for the EOC catalyst carriers and a discontinued medical project. 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, 2018, compared to the twelve months ended December 31, 2017 by region. The split is mainly unchanged between the periods.

	Twelve N Dece		
	2018 2017		Change
	(in € million)	(in € million)	(%)
Europe (excluding Germany)	259.9	243.9	6.5
Germany	152.6	138.4	10.3
North America	79.7	85.5	-6.8
Asia	89.5	72.1	24.1
Other regions	18.5	16.4	12.8
Total Revenue	600.2	556.3	7.9

## **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, 2017 and 2018. All figures are unaudited in EURm as reported.

	Twelve Months Ended December 31,				
	2018 2017				
	(in € million)	(% of sales)	(in € million)	(% of sales)	
Material and packaging costs	118.7	19.8	106.8	19.2	
Personnel expenses	125.3	20.9	115.9	20.8	
Amortization and Depreciation	88.0	14.7	49.7	8.9	
Other cost of sales	60.6	10.1	45.3	8.1	
Total cost of sales	392.6	65.4	317.6	57.1	

Cost of sales was  $\in$ 392.6 million (65.4% of revenue) for the twelve months ended December 31, 2018, an increase of  $\in$ 75.0 million or 23.6%, as compared to  $\in$ 317.6 million (57.1% of revenue) for the twelve months ended December 30, 2017, the increase being driven by amortization and depreciation. 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 7.7% from  $\in$ 264.1 million or 47.5% of revenue for the twelve months ended December 31, 2017 to  $\in$ 284.4 million or 47.4% of revenue for the twelve months ended December 31, 2018.

Gross profit was €207.6 million for the twelve months ended December 31, 2018, a decrease of €31.1 million or -13.0%, as compared to €238.7 million for the twelve months ended December 31, 2017. Our Adjusted gross profit margin increased to 52.6% for the twelve months ended December 31, 2018, from 52.5% for the twelve months ended September 30, 2016, mainly due to higher sales and productivity excellence partly offset by factor cost increase and repairs. Note that 2017 results were positively impacted by the release of a jubilee provision in June 2017.

#### **Selling Costs**

Selling costs were  $\leq 95.0$  million (15.8% of revenue) for the twelve months ended December 31, 2018, an increase of  $\leq 14.3$  million or 17.7%, as compared to  $\leq 80.7$  million (14.5% of revenue) for the twelve months ended December 31, 2017. Excluding amortization and depreciation 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  $\leq 48.6$  million or 8.1% of revenue for the twelve months ended December 31, 2018 from  $\leq 47.9$  million or 8.6% of revenue for the twelve months ended December 31, 2017.

#### **Research and Development Costs**

Research and development costs were  $\in 22.5$  million (3.8% of revenue) for the twelve months ended December 31, 2018, an increase of  $\in 2.2$  million or 10.7%, as compared to  $\in 20.4$  million (3.7% of revenue) for the twelve months ended December 31, 2017. Excluding amortization and depreciation and non-recurring items such as additional contribution to pension fund and severance payments, our Adjusted research and development costs increased to  $\in 20.5$  million or 3.4% of revenue for the twelve months ended December 31, 2018 from  $\in 18.3$  million or 3.3% of revenue for the twelve months ended December 31, 2017. We continue to invest in the development of new medical products, customer driven innovation in industrial and to support selected strategic projects.

#### **General Administrative Costs**

General administrative costs were  $\in$ 31.8 million (5.3% of revenue) for the twelve months ended December 31, 2018, an increase of  $\in$ 9.0 million or 39.8%, as compared to  $\in$ 22.7 million (4.1% of revenue) for the twelve months ended December 31, 2017. This increase was mainly due to higher consulting and transaction related expenses. 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  $\in$ 20.4 million or 3.4% of revenue for the twelve months ended December 31, 2017 and remain broadly unchanged as a percentage of sales.

#### **Other Income and Expenses**

Other expense was  $\leq 11.3$  million for the twelve months ended December 31, 2018, a decrease of  $\leq 1.2$  million compared to other expenses of  $\leq 12.5$  million for the twelve months ended December 31, 2017, includes 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, while 2018 was driven by transaction related expenses. Excluding non-recurring items such as a gain from a land sale, impairment expenses, transaction related expenses and foreign exchange effects, our Adjusted other income, net, were  $\leq 0.1$  million for the twelve months ended December 31, 2018, an increase of  $\leq 0.1$  million as compared with Adjusted other income, net of  $\leq 0.0$  million for the twelve months ended December 31, 2017.

#### **Interest Income and Other Finance Income**

Interest income and other finance income was  $\leq 1.6$  million for the twelve months ended December 31, 2018, a decrease of  $\leq 3.8$  million or 70.0%, as compared to  $\leq 5.4$  million for the twelve months ended December 31, 2017. This decrease was mainly due to a lack of exchange rate gains, net compared to the twelve months ended December 31, 2017 ( $\leq 5.2$  million) partly compensated by interest income from the effective interest method of  $\leq 1.4$  million.

#### Interest Expenses and Other Finance Costs

Interest expenses and other finance costs were  $\in$ 135.0 million for the twelve months ended December 31, 2018, an increase of  $\in$ 72.0 million or 114.5%, as compared to  $\in$ 62.9 million for the twelve months ended December 31,

2017. This increase was mainly due to higher interest expenses and losses on derivative valuations. The financial expenses of  $\leq$ 135.0 million include  $\leq$ 61.7 million of interest expenses from syndicated loan, revolving credit line and bond,  $\leq$ 32.8 million of interest expenses from a shareholder loan,  $\leq$ 22.0 million losses on derivative valuations,  $\leq$ 8.0 million exchange rate losses,  $\leq$ 5.9 million of expenses from the effective interest rate method and  $\leq$ 4.6 million of other interest expenses.

## **Income Tax Expenses**

Income tax benefits were  $\leq 10.3$  million for the twelve months ended December 31, 2018, an increase of  $\leq 30.7$  million as compared to income tax expenses of  $\leq 20.3$  million for the twelve months ended December 31, 2017. This decrease was mainly due to lower current tax expenses as well as due to a higher deferred tax income mainly relating to the higher depreciation from the PPA step-ups.

## **Net Profit / Loss**

As a result of the developments described above, net loss for the period was €76.0 million for the twelve months ended December 31, 2018, a decrease of €100.6 million compared to a net profit of €24.6 million for the twelve months ended December 31, 2017.

## **Financial Condition, Liquidity and Capital Resources**

As of December 31, 2018, 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):

	As of December 31, 2018
	(in € million)
Gross debt (without accrued transaction costs)	1,489.7
thereof Bond	401.0
thereof Term loans	1,077.7
thereof Mark-to-market measured currency swaps	-
thereof Accrued interest	11.0
Cash	21.1
Net debt	1,468.6
Undrawn Revolving Credit Facility	75.0

# **Cash Flow Statement**

The following table shows the cash flow statement for the twelve month period ended December 31, 2018. All figures are unaudited in EURm as reported.

	Twelve Months Ende December 31,	
	2018	2017
	(in € million)	(in € million)
Net profit / net loss (-) for the period	-76.0	24.6
Income tax expense / benefit (-)	-10.3	20.3
Interest result	103.1	61.5
Amortisation, depreciation and impairment charges of non-current assets	136.4	98.3
Gain (-) / loss on disposal of property, plant and equipment and intangible assets	0.1	-3.1
Decrease (-) in provisions (excluding deferred taxes)	-0.4	-4.2
Income tax payment (-)	-31.4	-22.7
Other non-cash income (-) / expenses, net	31.1	-8.3
Increase (-) / decrease in inventories	-5.0	-6.5
Decrease in trade receivables	-5.8	4.6
Increase (-) / decrease in other receivables and (financial) assets	31.1	-2.7
Increase / decrease (-) in trade payables	-43.1	0.8
Increase / decrease (-) in other (financial) liabilities	1.5	-4.1
Cash flow from operating activities	131.2	158.4
Cash received from disposals of property, plant and equipment	0.6	3.3
Cash paid (-) for investments in property, plant and equipment	-30.3	-25.3
Cash paid (-) for investments in intangible assets	-1.9	-0.7
Cash paid (-) for the acquisition of entities	-2,478.9	-55.5
Cash flow from investing activities	-2,510.6	-78.2
Cash received from contribution to capital reserve	500.6	0.0
Cash received from issuance of bond	392.5	0.0
Cash paid for the repurchase of bond	-4.8	0.0
Cash received from syndicated loan	1,084.7	0.0
Cash paid (-) for amortization of syndicated loan	-55.2	-36.3
Interest paid (-)	-52.8	-55.3
Cash received from shareholder loan	520.7	-97.6
Cash flow from financing activities	2,385.7	-189.2
Increase in cash and cash equivalents	6.3	-109.0
Net foreign exchange difference	0.0	-0.8
Cash and cash equivalents at the beginning of the period	14.8	124.6
Cash and cash equivalents at the end of the period	21.1	14.8

Cash flows from operating activities decreased from  $\leq$ 158.4 million for the twelve months ended December 31, 2017 to  $\leq$ 131.2 million for the twelve months ended December 31, 2018, principally due to a decrease in our reported EBITDA and one time transaction expenses.

Cash flows used in investing activities increased from €78.2 million for the twelve months ended December 31, 2017 to €2,510.6 million for the twelve months ended December 31, 2018, principally due to the CeramTec AcquiCo acquisition with effectiveness 8 March 2018 compared to the purchase price payment of €55.5 million for the UK electro-ceramics business of Morgan Advanced Materials plc. paid in 2017

## Cash flows used in financing activities

Cash flows used in financing activities increased from €189.2 million outflow for the twelve months ended December 31, 2017 to €2,510.6 million for the twelve months ended December 31, 2018, mainly due to income from new financing including bond and loans.

## **Capital Expenditures**

The following table provides an overview of our capital expenditures for the twelve months ended December 31, 2017 and 2018.

	Twelve Months Ended December 31,		
	2018	2017	
	(in € million)	(in € million)	
Additions to intangible assets	1.9	0.7	
Additions to property, plant and equipment	31.4	26.8	
Capital expenditures (gross)	33.3	27.5	
Government grants	-	-	
Capital expenditures (net)	33.3	27.5	
Additions from business acquisitions	-	57.6	

In general, our capital investment is split evenly between maintenance and growth projects. The increased investment spending in the year ended December 31, 2018 was mainly driven by phasing of growth projects, which reflected the market conditions in 2018. Cash outflow for the twelve months ended December 31, 2017 for intangible assets amounts to  $\leq$ 1.9 million and for tangible assets amounts to  $\leq$ 30.3 million.

## **Employees**

By the end of the financial year the CeramTec Group employed 3,589 people, an increase of 1.5% from the previous year.

	Headcount December 31,		
	2018 20		
Total Employees	3,589	3,537	
Thereof by region			
Europe (excluding Germany)	650	655	
Germany	2,116	2,042	
North- and South America	346	333	
Asia	477	507	
Thereof by function			
Manufacturing	2,813	2,778	
Sales	329	325	
Research and development	191	186	
Administration	256	248	

In addition, 154 apprentices were employed by CeramTec group as of December 31, 2018.

## **Contractual Obligations**

The following table summarizes our payments due by period from our contractual obligations as of December 31, 2018.

Payments due by period (in € million)	2018	2019	2020	2021	2022	2023	After 2023	
Trade payables	34.9	34.9	-	-	-	-	-	
Liabilities to banks	1,049.0	37.4	33.8	33.6	33.4	33.6	1,101.9	
Bond liabilities	419.9	21.3	21.3	21.3	21.3	21.3	458.5	
Liabilities to affiliates	552.7	-	-	-	-	-	1,125.3	
Finance lease liabilities	1.3	0.1	0.1	0.1	0.1	0.1	0.9	
Other financial liabilities	6.2	6.2	-	-	-	-	-	
Total	2,064.0	99.9	55.2	55.0	54.8	55.0	2,686.6	

## **Lease Commitments**

As of December 31, 2018, our future payment obligations from finance leases break down as follows.

Finance lease commitments (in € million)	Total	Up to 1 year	1 to 5 years	More than 5 years
Present value of minimum lease payments	1.3	0.0	0.3	0.9
Interest effect	0.7	0.1	0.3	0.3
Minimum lease payments	2.0	0.1	0.6	1.3

Our operating lease commitments mainly relate to land and buildings as well as technical equipment and machinery. As of December 31, 2018, our future payment obligations from operating leases break down as follows.

	Total	Up to 1 year	1 to 5 years	More than 5 years	
<b>Operating lease payment obligations</b> (in € million	2.3	1.4	1.0	0.0	

## **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 2018.

	Year Ended December 31, 2018		
	German plans	Foreign plans	Total
	(in € million)	(in € million)	(in € million)
Benefit obligations at the beginning of the year	94.5	11.6	106.1
Service costs	3.0	0.0	3.0
Interest expenses	1.6	0.3	1.9
Remeasurements	-0.4	-0.4	-0.8
Foreign currency translation	0.0	-0.2	-0.2
Benefits paid	-2.3	-0.5	-2.8
Benefit obligations at the end of the year	96.4	10.8	107.2
Market value of plan assets at the beginning of the financial year	0.0	7.6	7.6
Interest income from plan assets	0.0	0.2	0.2
Expense for managing the plans	0.0	-0.1	-0.1
Employer contributions	0.0	0.3	0.3
Remeasurements	0.0	-0.4	-0.4
Foreign currency translation	0.0	-0.2	-0.2
Benefits paid	0.0	-0.4	-0.4
Market value of the plan assets at the end of the year	0.0	7.0	7.0
Net obligation amount for pension benefits	96.4	3.8	100.2

The actuarial increase is primarily due to changes in demographic assumptions (mortality tables) The expected contributions to the defined benefit plans by the employer until December 31, 2019 amount to €0.4 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.

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## **Critical Accounting Policies and Significant Accounting Estimates**

Please refer to notes to our consolidated financial statements for a detailed description of the accounting policies and accounting estimates applied.

## **Recent Developments**

No reportable events occurred.

## **Unaudited Pro forma As Adjusted Financial Information**

The following table shows unaudited pro forma as adjusted leverage information for CeramTec AcquiCo GmbH, consistent with the rules set-out in the Facilities Agreement dated December 14, 2017 and the CTC BondCo Prospectus.

	As of December 31, 2018
	(in € million)
Pro forma as adjusted net third party senior secured indebtedness	1.056,6
Pro forma as adjusted net third party indebtedness	1,457.6
Pro forma as adjusted interest expense	59.3
Consolidated Pro-Forma EBITDA	234.5
Ratio of pro forma as adjusted net third party senior secured indebtedness to Consolidated Pro Forma EBITDA	4.5x
Ratio of pro forma as adjusted net third party indebtedness to Consolidated Pro Forma	
EBITDA	6.2x
Ratio of Consolidated Pro Forma EBITDA to pro forma as adjusted interest expense	4.0x

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 31, 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 31, 2017

Pro forma as adjusted interest expense is defined as interest expense for the period from January 1, 2018 to December 30, 2018, as if the Transactions had been completed as of January 1, 2018 and consists of interest on the Term Loan Facility and the Notes as well as the commitment fees on our undrawn Revolving Credit Facility.

Consolidated Pro-Forma EBITDA is calculated as set out in the Facilities Agreement and is higher than the Management Adjusted EBITDA presented elsewhere in this document by  $\in$ 8.3 million, this amount consisting of certain net pension and other post-employment benefit costs of  $\in$ 6.0 million, certain non-cash charges, write-downs and expenses corrected for the inventory step-up of  $\in$ 1.6 million, and other costs related mainly to management fees in the amount of  $\in$ 0.7 million.

CONDENSED PRO-FORMA CONSOLIDATED FINANCIAL STATEMENTS FOR THE PERIOD ENDED 31 DECEMBER 2018 FOR CERAMTEC TOPCO GMBH, PLOCHINGEN

# CeramTec TopCo GmbH, Plochingen Condensed PRO-FORMA consolidated statement of financial position as at 31 December 2018

Assets	Notes	31 December 2018	31 December 2017
		(in € thousand)	(in € thousand)
Goodwill		1,341,431	561,573
Other intangible assets	4.1	1,105,674	538,304
Property, plant and equipment	4.2	288,994	266,815
Other financial assets	4.3	21,063	20,017
Other assets	4.4	1,316	678
Deferred tax assets		363	249
Non-current assets		2,758,841	1,387,636
Inventories		96,497	86,529
Trade receivables	4.5	57,880	52,096
Income tax receivables		3,242	3,304
Other financial assets	4.3	2,397	23,208
Other receivables and assets	4.4	8,667	5,084
Cash and cash equivalents	4.6	21,058	14,753
Current assets		189,741	184,974
Total Assets		2,948,582	1,572,610

# CeramTec TopCo GmbH, Plochingen Condensed PRO-FORMA consolidated statement of financial position as at 31 December 2018

Equity and Liabilities	Notes	31 December 2018	31 December 2017
		(in € thousand)	(in € thousand)
Issued capital	4.7	25	25
Capital reserves	4.7	500,417	378,148
Accumulated losses	4.7	-96,096	-92,365
Accumulated other comprehensive income	4.7	1,267	1,079
Equity		405,613	286,887
Provisions for pension obligations		100,200	98,447
Other provisions		4,883	5,142
Financial liabilities to affiliates	4.8	552,688	55,355
Financial liabilities to third parties	4.9	1,471,844	661,705
Deferred tax liabilities	-1.5	318,200	150,721
Non-current liabilities		<b>2,447,815</b>	971,370
Other provisions		20,156	20,442
Provision for taxes		6,347	12,578
Financial liabilities to third parties	4.9	22,227	245,422
Trade payables		34,907	26,676
Trade payables to affiliates		0	135
Other liabilities	4.10	11,517	9,100
Current liabilities		95,154	314,353
Total liabilities		2,542,969	1,285,723
Total equity and liabilities		2,948,582	1,572,610

## CeramTec TopCo GmbH, Plochingen

# **Condensed PRO-FORMA consolidated statement of comprehensive income** from 1 January to 31 December 2018

		1 Januar	y to 31 December
	Notes	2018	2017
		(in€thousand)	(in € thousand)
Revenue	3.1	600,199	556,325
Cost of sales	3.2	392,586	317,606
Gross profit		207,613	238,719
Selling costs	3.3	94,968	80,676
Research and development costs	3.4	22,550	20,378
General administrative costs	3.5	31,779	22,735
Other income and expenses (-), net	3.6	-11,301	-12,483
Operating income		47,015	102,447
Interest income and other finance income		1,628	5,425
Interest expenses and other finance costs		134,963	62,920
Financial result	3.7	-133,335	-57,495
Profit / loss (-) before income tax		-86,320	44,952
Income tax benefit / expense (-)		10,329	-20,340
Net profit / net loss (-) for the period		-75,991	24,612
Items that will not be reclassified through	profit or loss		
Income from the remeasurement of defined	-	453	2,971
Deferred taxes		-116	-556
		337	2,415
Items that may be reclassified subsequent	ly to profit or	loss	
Losses (-) / gains on cash flow hedges		-1,031	-1,489
Deferred taxes		295	427
		-736	-1,062
Changes in the fair value of financial assets hel	d for sale	331	0
Deferred taxes		-95	0
Exchange differences on translation of foreign	operations	688	-8,505
Other comprehensive income / loss (-), net of	income tax	525	-7,152

Total comprehensive income / loss (-)	-75,466	17,460
	-	•

# CeramTec TopCo GmbH, Plochingen

# Condensed PRO-FORMA consolidated statement of cash flows from 1 January to 31 December 2018

	1 Januar	y to 31 December
	2018	2017
	(in€thousand)	(in€thousand)
Net profit / net loss (-) for the period	-75,991	24,612
Income tax expense / benefit (-)	-10,329	20,340
Interest result	103,054	61,462
Amortisation, depreciation and impairment charges of non-current assets	136,369	98,324
Gain (-) / loss on disposal of property, plant and equipment and intangible assets	138	-3,071
Decrease (-) in provisions (excluding deferred taxes)	-438	-4,187
Income tax payment (-)	-31,421	-22,719
Other non-cash income (-) / expenses, net	31,140	-8,344
Increase (-) / decrease in inventories	-5,018	-6,542
Decrease in trade receivables	-5,784	4,571
Increase (-) / decrease in other receivables and (financial) assets	31,123	-2,723
Increase / decrease (-) in trade payables	-43,120	842
Increase / decrease (-) in other (financial) liabilities	1,481	-4,130
Cash flow from operating activities	131,205	158,435
Cash received from disposals of property, plant and equipment	591	3,294
Cash paid (-) for investments in property, plant and equipment	-30,305	-25,321
Cash paid (-) for investments in intangible assets	-1,902	-733
Cash paid (-) for the acquisition of entities	-2,478,949	-55,485
Cash flow from investing activities	-2,510,564	-78,245
Cash received from contribution to capital reserve	500,603	0
Cash received from issuance of bond	392,469	0
Cash paid for the repurchase of bond	-4,814	0
Cash received from syndicated loan	1,084,733	0
Cash paid (-) for amortization of syndicated loan	-55,250	-36,275
Interest paid (-)	-52,797	-55,280
Cash received from shareholder loan	520,718	-97,620
Cash flow from financing activities	2,385,662	-189,175
Increase in cash and cash equivalents	6,303	-108,985
Net foreign exchange difference	2	-847
Cash and cash equivalents at the beginning of the period	14,753	124,585
Cash and cash equivalents at the end of the period	21,058	14,753

# SELECTED EXPLANATORY NOTES TO THE CONDENSED PRO-FORMA CONSOLIDATED FINANCIAL STATEMENTS FOR THE PERIOD ENDED 31 DECEMBER 2018

## **1. General information**

## 1.1. Corporate information and purpose of the Company

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

The subsidiaries of CeramTec TopCo 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 TopCo's registered office is located at CeramTec-Platz 1-9 in 73207 Plochingen, Germany, and the entity is registered with the Amtsgericht (local court) Stuttgart, Germany, under the number HRB 764651. CeramTec TopCo is the parent company of the Group and the ultimate parent, which prepares exempting consolidated financial statements.

The management of CeramTec TopCo authorized for issue the condensed PRO-FORMA consolidated financial statements for the period ended 31 December 2018 on 22 March 2019.

## 1.2. Basis of preparation

Based on the Sale and Purchase Agreement (SPA) signed on 10 October 2017 the former owner Cinven sold and transferred the shares of CeramTec Holding GmbH, Plochingen (in the following "CeramTec Holding") to CeramTec AcquiCo GmbH, Plochingen (in the following "CeramTec AcquiCo") owned by a Consortium led by Funds advised by leading private equity firm BC Partners ("BC Partners"). As at 22 February 2018 all requirements were fulfilled. According to the SPA the transfer of ownership was effective after 10 working days, respectively as of 8 March 2018. In light of this transaction, the condensed PRO-FORMA consolidated financial statements were prepared as an aggregation of two analysis periods for the two different ultimate parents, to enable a consistent view of the operating entities in the consolidated group: for the period 1 January 2018 to 28 February 2018 and the prior fiscal year for the consolidated group of the former ultimate parent CeramTec Holding GmbH; for the period 1 March 2018 to 31 December 2018 for consolidated group of the current ultimate parent CeramTec TopCo.

The condensed PRO-FORMA consolidated financial statements are prepared in accordance with IFRS/IAS. These condensed PRO-FORMA consolidated financial statements do not include all of the information and disclosures required in the legal condensed consolidated financial statements according to IAS 34 Financial Reporting.

The condensed PRO-FORMA consolidated financial statements give a true and fair view of the results of operations and financial position of the Group.

The condensed PRO-FORMA 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 some cases, adding single values to the total values may lead to differences.

For the purpose of clarity, various items in the statement of financial position and statement of comprehensive income were combined and explained accordingly in the selected explanatory notes to the 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 or settled within twelve months from the reporting date. The expense recognized in profit or loss is presented according to 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 TopCo has a direct or indirect shareholding are included in the consolidated financial statements for the fiscal year:

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

1 Entities perform the functions of a holding company.

2 Manufacturing and selling entities in the Medical and Industrial business.

	Share of capital in %	Principle Activity
Name of the entity	31 December	
Nume of the entry	2018	

3 Manufacturing and selling entities in the Industrial business.

4 Selling entities.

As at 11 April 2018 CeramTec Service GmbH was merged into its parent company CeramTec Group GmbH with effectiveness from 1 January 2018.

## 1.4. Changes to the consolidated Group

CeramTec AcquiCo acquired with effectiveness 8 March 2018 100 % of the shares of CeramTec Holding and its subsidiaries. CeramTec AcquiCo is a 100% subsidiary of CeramTec BondCo, which is itself a 100% subsidiary of CeramTec TopCo. CeramTec TopCo is the ultimate parent, for which Consolidated Financial Statements are prepared.

The following figures represent the purchase price allocation and show the amounts recognized as of the acquisition date for each major class of assets acquired and liabilities assumed:

	Fair Value EUR k
Trademarks	58.971
Technology	335.953
Customer relationships	761.580
Order backlog	33.500
Other intangible assets	1.820
Intangible Assets	1.191.824
Land and buildings	106.555
Technical equipment and machinery	168.918
Other equipment, operating and office equipment	6.292
Construction in progress	12.841
Property, plant and equipment	294.606
Other assets	667
Inventories	102.202
Trade accounts receivable	58.552
Financial assets to third parties	277
Other accounts receivable and assets	9.391
Cash and cash equivalents	11.881
Total Assets	1.669.400
Provisions	144.395
Financial liabilities to third parties	5.581
Deferred taxes	348.111
Current liabilities	33.918
Total liabilities	532.005
Total identifiable net assets at fair value	1.137.395
Total consideration transferred	2.478.949
Goodwill arising on acquisition	1.341.554

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

The goodwill recognized mainly comprises future profits, which are expected to be realized within the next years and which cannot be recognized as separate assets. Total consideration transferred consists only of cash. No other class of consideration was transferred to obtain control.

The fair value of receivables equals the carrying amount as accounted for in accordance with IFRS. It is expected that the cash flows of bad debt allowances cannot be collected.

The acquisition related costs amount to EUR k and were recognized in the line item of the income statement "Other income and expenses net (-)".

## 2. Accounting principles and policies

The accounting policies and the consolidation principles applied in the condensed PRO-FORMA consolidated financial statements are in line with the International Financial Accounting Standards (IFRS/IAS). For details please refer to the legal consolidated financial statements for the period ended 31 December 2018.

## Foreign currency translation

The condensed PRO-FORMA consolidated financial statements are prepared in euros, the functional currency of the 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 are as follows:

		31 Dec 2018	1 Jan to 31 Dec 2018	31 Dec 2017	1 Jan to 31 Dec 2017
		Period-end exchange rate	Average exchange rate	Period-end exchange rate	Average exchange rate
USD	USA	1,1454	1,1815	1,1993	1,1293
CNY	China	7,8778	7,8071	7,8044	7,6267
GBP	Great Britain	0,9027	0,8848	0,8872	0,8762
PLN	Poland	4,3028	4,2604	4,1770	4,2564
CZK	Czech Republic	25,7780	25,6431	25,5350	26,3276

The individual items in the condensed PRO-FORMA 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.

# 3. Notes to the condensed PRO-FORMA consolidated statement of comprehensive income

## 3.1. Revenue

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

	2018	2017
	EUR k	EUR k
Regions		
Europe (w/o Germany)	259.916	243.940
Germany	152.636	138.395
North America	79.660	85.474
Asia	89.468	72.092
Rest of world	18.519	16.424
Total	600.199	556.325
Businesses		
Industrial	373.683	355.157
Medical products	226.516	201.168
Total	600.199	556.325

## 3.2. Cost of sales

The cost of sales break down as follows:

	2018 EUR k	2017 EUR k
Personnel expenses	125.348	115.867
Material and packaging costs	118.699	106.817
Amortization and depreciation	87.977	49.656
Other cost of sales	60.562	45.266
Total	392.586	317.606

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

## 3.3. Selling costs

Selling costs primarily contain amortization and depreciation as well as personnel expenses.

## 3.4. Research and development costs

Research and development costs primarily contain personnel expenses.

## 3.5. General administrative costs

General administrative costs primarily contain personnel expenses.

## 3.6. Other income and expenses (-), net

Other income and expenses (-), net break down as follows:

	2018	2017
	EUR k	EUR k
Acquisition costs	-10.346	-1.347
Amortization, depreciation and impairments	-897	-14.545
Foreign currency results	20	239
Losses (-) on disposal of property, plant and equipment	-138	-93
Additions to allowance for bad debts	-63	-63
Income from the reversal of allowances for bad debt	2	54
Gains / losses (-) on disposal of assets held for sale	0	3.164
Sundry other income	499	432
Sundry other expenses	-378	-324
Total	-11.301	-12.483

The acquisition costs in the reporting period occurred within the purchase process of the shares of CeramTec Holding (please refer to 1.4).

## 3.7. Financial result

The financial result breaks down as follows:

	2018	2017
-	EUR k	EUR k
Interest income from effective interest method	1.463	0
Exchange rate gains	0	5.219
Other interest income	165	206
Total interest income and other finance income	1.628	5.425
Interest expense from shareholder loans	32.786	6.384
Interest expense from syndicated loan	34.460	21.047
Interest expense from bond	26.502	25.303
Exchange rate losses	8.015	0
Interest expense from effective interest method	5.884	5.850
Interest expense from revolving credit line	775	864
Losses on derivative valuations	22.028	1.154
Other interest expenses	4.583	2.318
Less: Borrowing costs capitalized as part of qualifying assets	-70	0
Total interest expenses and other finance costs	134.963	62.920
Total financial result	-133.335	-57.495

# 4. Notes to the condensed PRO-FORMA consolidated statement of financial position

## 4.1. Other intangible assets

During the reporting period, the Group recognized amortization expenses of EUR 95.711k (2017: EUR 45.657k) which arise mainly from customer relationships and technology.

The Group purchased intangible assets at cost of EUR 1.902k (2017: EUR 733k).

## 4.2. Property, plant and equipment

During the reporting period, the Group purchased assets at cost of EUR 31.400k (2017: EUR 26.747k).

The recognized depreciation expenses and impairments amount to EUR 40.405k (2017: EUR 38.122k).

There were contractual commitments to acquire property, plant and equipment of EUR 28.611k as of the reporting date (31 December 2017: EUR 12.739k).

## 4.3. Other financial assets

The following table breaks down other financial assets as follows:

	31 December 2018 EUR k	31 December 2017 EUR k
Other financial assets (non-current)		
Separated termination rights	20.988	19.963
Derivative financial instruments	26	0
Insurance claims	49	54
Total	21.063	20.017
Other financial assets (current)		
Receivables arising from amounts retained by a factor as		
a security	2.032	1.768
Derivative financial instruments	0	21.233
Other financial assets	365	207
Total	2.397	23.208

CeramTec has a termination option for the issued bond. This termination option represents an embedded derivative, which is accounted for separately from the underlying transaction.

## 4.4. Other assets/other receivables and assets

The following table breaks down other assets / other receivables and assets as follows:

	31 December 2018	31 December 2017
	EUR k	EUR k
Other non-current assets		
Accrued finance costs for the revolving credit line	916	0
Other assets	400	678
Total	1.316	678
Other current assets		
Prepayments for insurance	2.869	341
VAT receivables	2.710	1.412
Receivables from energy tax refunds	1.154	1.541
Deferred finance costs for the revolving credit line	219	312
Sundry assets	1.715	1.478
Total	8.667	5.084

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

## 4.5. Trade receivables

At the end for the reporting period, trade receivables amounted to EUR 57.880k (31 December 2017: EUR 52.096k) after taking into account impairment losses of EUR 530k (31 December 2017: EUR 472k).

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

	31 December 2018 EUR k	31 December 2017 EUR k
Carrying amount (before impairment)	58.410	52.568
thereof not yet due on the reporting date	43.613	41.757
thereof past due on the reporting date	14.797	10.811
past due up to 30 days	11.255	8.748
past due up to 60 days	2.019	1.092
past due up to 90 days	506	331
past due more than 90 days	1.017	640

The carrying amount of receivable of EUR 14.146k was sold to PB Factoring GmbH according to the factoring agreement signed end of June 2017. Under the terms of the agreement EUR 2.032k were retained by the factor as of reporting date as a security, and recognized in other financial assets (current).

## 4.6. Cash and cash equivalents

Cash and cash equivalents contain bank balances of EUR 21.049k (31 December 2017: EUR 14.739k) and cash in hand of EUR 9k (31 December 2017: EUR 14k).

## 4.7. Equity

The following table breaks down the equity as follows:

	31 December 2018	31 December 2017
	EUR k	EUR k
Issued Capital	25	25
Capital Reserves	500.417	378.148
Accumulated losses	-96.096	-92.365
Accumulated Other Comprehensive Income	1.267	1.079
Total	405.613	286.887

The acquisition of the shares of CeramTec Holding by CeramTec AcquiCo was partly financed by equity contributions of the shareholder CTEC Acquisition provided as capital reserves.

## 4.8. Financial liabilities to affiliates

Financial liabilities to affiliates was comprised of a loan payable to CTEC Acquisition of EUR 552.688k (31 December 2017: EUR 55.355k against Faenza Luxembourg S.à.r.l).

	31 December 2018 EUR k	31 December 2017 EUR k
Non-current financial liabilities		
Loan payable	523.798	53.845
Accrued interest	28.890	1.510
	552.688	55.355

The actual loan increases every year on 31 December starting with the 31 December 2019 by the amount of incurred expenses for interest which is unpaid.

## 4.9. Financial liabilities to third parties

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

	31 December 2018 EUR k	31 December 2017 EUR k
Non-current financial liabilities		
Liabilities to banks	1.045.858	355.697
Liabilities from the bond	411.990	300.583
Derivative financial instruments	12.748	4.120
Finance lease liabilities	1.248	1.305
Total	1.471.844	661.705
Current financial liabilities		
Liabilities from the bond	7.895	9.489
Liabilities to banks	3.103	228.077
Derivative financial instruments	5.012	3.142
Discounts and bonuses	2.961	2.861
Finance lease liabilities	8	8
Other current financial liabilities	3.248	1.845
Total	22.227	245.422

With transferring ownership, existing financing was repaid and a new financing had become effective.

Liabilities to banks nominally amount to EUR 938.000k (31 December 2017: EUR 291.300k) from a tranche in EUR and EUR 139.689k (31 December 2017: EUR 296.689k) from a tranche in USD. The actual loans have variable interest rates and mature on 8 March 2025. Transaction costs associated with the loan of EUR 25.529k (31 December 2017: EUR 19.733k) are spread over the term of the loan using the effective interest method. CeramTec TopCo Group companies entered into agreements governing interest rate caps of EUR 873,000k linked to 3-month EURIBOR respectively USD 157,500k linked to 3-month LIBOR. The interest rate caps limit the maximum variable interest rates to 0.75 % respectively 2.75 %.

The bond has a fixed interest rate and a nominal volume of EUR 401.000k (31 December 2017: EUR 306.700k against prior bond holders). In 2018 a company of the CeramTec TopCo-Group purchased bond shares with a nominal volume of EUR 5.000k. This bond matures on 15 December 2025. The CeramTec TopCo Group has a termination option for this bond, which is recognized as a separate financial asset (note 4.3). Associated transaction costs of EUR 12.532k (31 December 2017: EUR 13.120) are spread over the term of the bond using the effective interest method.

## 4.10. Other liabilities

Other liabilities break down as follows:

	31 December 2018	31 December 2017
	EUR k	EUR k
Other current liabilities		
Wages and salaries including taxes	8.113	6.433
Real estate transfer tax	1.279	793
Contract liabilities from contracts with customers	135	27
Other current liabilities	1.990	1.847
Total	11.517	9.100

# 5. Additional notes to the condensed PRO-FORMA consolidated statement of cash flows

In the condensed PRO-FORMA 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 condensed PRO-FORMA consolidated statement of financial position and comprise cash in hand, bank balances and cash investments with an original term of up to three months.

Other non-cash income and expenses primarily contain changes in the fair value of financial instruments and foreign exchange gains or losses.

An amount of EUR 14.146k of trade receivable was sold to PB Factoring GmbH according to the factoring agreement signed end of June 2017. The receipt of the proceeds from the factor was treated as an operating cash flow.

The cash flow from investing activities includes the purchase price payment of EUR 2.478.949k for transferring the shares of CeramTec Holding (please refer to 1.4) to CeramTec AcquiCo.

During the period 1 January to 31 December 2018, the Group paid cash EUR 3.429k 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 4.523k that will affect cash during the following accounting period.

## 6. Reconciliation to CeramTec BondCo GmbH

If the condensed consolidated statement of comprehensive income of CeramTec BondCo had been prepared instead of the condensed consolidated statement of comprehensive income of CeramTec TopCo, which is presented in these financial statements, this would have resulted in the following changes for the reporting period:

- lower general administrative expenses of EUR 362k
- lower other expenses of EUR 2k

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

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

- higher financial receivables to affiliates of EUR 187k
- lower cash and cash equivalents of EUR 9k
- lower capital reserves of EUR 25k
- lower financial liabilities to third parties of EUR 164k

This would have resulted in higher group equity of EUR 342k for the CeramTec BondCo compared to the group equity recognized in these financial statements.

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

Plochingen, 22 March 2019

## CeramTec TopCo GmbH

The management

Dr. Hadi Saleh

## **CERAMTEC 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 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 ecofriendly way while conserving resources, taking into account the lifecycle of our products.

## **Interested parties**

All of our efforts centre 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.

# **CERAMTEC 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 neighbouring 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 CO2 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 neighbour" 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. Our achievements are clearly visible in our key performance indicators. And we will continue to strengthen this commitment in the future.

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

Workforce		2015	2016	2017	2018
Total workforce <sup>(1)</sup>	Persons	3,432	3,184	3,537 <sup>(2)</sup>	3,589
of which male <sup>(1)</sup>	Persons	2,106	1,982	2,165	2,230
of which female <sup>(1)</sup>	Persons	1,326	1,202	1,372	1,359
Apprenticeship rate <sup>(3)</sup>	%	7.39%	7.02%	7.10%	7.18%
Health and Safety					
Staff away sick	%	1.54%	3.37%	3.75%	4.22%
CIP system suggestions <sup>(4)</sup>	Total number	11,071	7,540	3,363 <sup>(5)</sup>	3,349
Lost time accidents (LTAs)	Total number	10	5	18	16
LTA frequency rate	LTAs*200,000/hours worked	0.34	0.17	0.59	0.43
LTA severity rate	Lost days*200,000/hours worked	7.01	4.34	5.53	5.88
<b>Environment and Energy</b>					
Energy consumption <sup>(6)(7)</sup>	MWh	283,307	261,949	292,381	301,131
Energy consumption/€1m turnover <sup>(8)</sup>	MWh/€1m	565	531	526	502
Water consumption <sup>(9)</sup>	m³	277,873	270,394	267,262	294,623
Water consumption/€1m turnover <sup>(8)(9)</sup>	m³/€1m	555	548	480	491
Waste <sup>(10)</sup>	Tons	5,609	4,588	5,071	4,840
Waste/€1m turnover <sup>(8)(10)</sup>	Tons/€1m	11,20	9,3	9,1	8,1
CO2 emissions <sup>(6)(7)</sup>	Tons	99,122	93,522	101,465	106,567
CO2 emissions/€1m turnover <sup>(8)</sup>	Tons/€1m	198	190	182	178
Governance					
Incidents bribery and corruption	Total number	0	0	0	0

(1) Headcount including apprentices but excluding inactive employees

(2) Step-up also including the acquisition of UK electro-chemical business

(3) Apprentice model only used in Germany

(4) CIP = Continuous improvement; number does not include the sites in Brazil, India, Korea, Mexico and Poland

(5) Declining due to a system change

(6) Energy consumption at all production sites, excluding sales offices and agencies

(7) Including gas, electricity. Does not include fuel for car fleets and emergency power supply

(8) Based on turnover of €501 million in 2015, €493 million in 2016, €556 million in 2017 and €600 million in 2018

(9) Total water consumption at all production sites

(10) Hazardous and non-hazardous waste

(11) From energy consumption at production sites, excluding travel emissions

# **FINANCIAL CALENDAR**

## Schedule

29/03/2019	> Annual Report 2018
03/04/2019, 15:	00 CET > Investor Call for Annual Report 2018
24/05/2019	> Quarterly Report to March 31, 2019
29/05/2019	> Investor Call for Q1 2019
23/08/2019	> Quarterly Report to June 30, 2019
28/08/2019	> Investor Call for Q2 2019
22/11/2019	> Quarterly Report to September 30, 2019
27/11/2019	> Investor Call for Q3 2019

