

**CeramTec TopCo GmbH
Plochingen**

**Operating and Financial Review
for the period ended
30 June 2020**

As of 8 March 2018, the former owner Cinven closed the acquisition of CeramTec Group by a Consortium led by Funds advised by leading private equity firm BC Partners (“BC Partners”). The Public Sector Pension Investment Board (PSP Investments) and Ontario Teachers’ Pension Plan (Ontario Teachers’) are part of the consortium. The transaction was announced in October 2017. On 22 February 2018, anti-trust authorities approved the takeover. As a result, CeramTec AcquiCo GmbH (“CeramTec AcquiCo”) acquired the shares in CeramTec Holding GmbH (“CeramTec Holding”). CeramTec AcquiCo is a 100% subsidiary of CeramTec BondCo GmbH (“CeramTec BondCo”), which is itself a 100% subsidiary of CeramTec TopCo. Based on the described acquisition CeramTec TopCo indirectly obtained control of the operating Advanced Ceramics Business as from the acquisition date 8 March 2018. CeramTec TopCo is the ultimate parent and prepares the interim condensed consolidated financial statements.

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 six-month period ended June 30, 2020 in comparison to the six months period ended June 30, 2019. The financial data for both periods have been derived from the interim condensed consolidated financial statements.

The following discussion should be read in conjunction with the information contained in our interim condensed consolidated financial statements for the six months period ended June 30, 2020 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.

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 in for example medical equipment or the metering industry. 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 the six months period ended June 30, 2020, it generated 42.5% 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 behavior, making them one of the few materials that are durable and stable enough to withstand the corrosive effects of bodily fluids. More than 18 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 represent 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 increasingly used in the future for various other joint replacements, such as knee, dental and shoulder implants.

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 the six-month period ended June 30, 2020, 57.5% 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 piezo components are widely used in highly specialized sensors for medical equipment and in numerous metering devices and our material and process know-how allows us to develop tailor made solutions to the specific requirements of our customers. 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 for combustion as well electric 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, reduce the exposure of our Industrial business to any single industry or product.

Results of Operations

The following table sets forth amounts from our income statement along with the percentage change for the six-month period ended June 30, 2020 compared to the six-month period ended June 30, 2019.

	Six months Ended June 30,		
	2020	2019	Change
	<i>(in EUR m)</i>		<i>(%)</i>
Revenue	280.2	326.2	-14.1
Cost of sales	168.9	183.0	-7.7
Gross profit	111.3	143.2	-22.3
Selling costs	45.2	49.2	-8.3
Research and development costs	10.8	11.7	-7.8
General administrative costs	11.8	14.4	-17.9
Other income and expenses (-), net.....	-135.8	1.3	N/A
Operating income	-92.3	66.5	N/A
Interest income and other finance income.....	0.8	6.8	-88.6
Interest expenses and other finance costs.....	70.6	51.0	38.4
Financial result	-69.8	-44.2	57.8
Profit/(Loss) before income tax	-162.1	22.3	N/A
Income tax expense.....	2.8	-13.0	N/A
Net profit/(loss) for the period	-159.3	9.3	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, 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 following table.

	Six months Ended June 30,		
	2020	2019	Change
	<i>(in EUR m)</i>		<i>(%)</i>
Revenue	280.2	326.2	-14.1
Cost of sales*	138.7	152.0	-8.8
Gross profit*	141.5	174.2	-18.8
Selling costs*	19.5	23.3	-16.3
Research and development costs*	9.4	10.4	-9.5
General administrative costs*	9.0	9.6	-6.3
Other income and expenses (-), net*	3.2	-0.1	N/A
Management Adjusted EBITDA	106.8	130.8	-18.3
- Exceptional Items	8.5	10.6	-19.9
EBITDA	98.3	120.2	-18.2
- Amortization, Depreciation and impairment charges on non-current assets	190.6	53.4	256.9
Operating income	-92.3	66.5	N/A

* Excluding depreciation, amortization and exceptional items

The following table provides a breakdown of the Exceptional Items for the six months ended June 30, 2020, compared to the six months ended June 30, 2019.

	Six months Ended June 30,	
	2020	2019
	<i>(in EUR m)</i>	
Exceptional items	8.5	10.6
Restructuring costs	1.5	5.6
Other non-recurring costs	6.5	4.3
Foreign exchange conversion effects	-1.0	0.3
Acquisition costs	0.3	0.4
Start-up losses	0.7	-
Discontinued operations	0.5	-

Restructuring costs in 2019 and 2020 mainly comprise severance payments for the reduction of staff at CeramTec GmbH and CeramTec-EETEC GmbH for restructuring initiatives undertaken mainly in our Industrial business.

Other non-recurring costs in 2020 mainly are comprised of non-recurring consulting and litigation expenses, Covid-19 costs for measures to safeguard employees' health, additional IT spending to adjust to changed work environment, costs of plant shutdown following partly government enacted plant closures or closures related to customers closing their facilities as well as severance payments and short time working impact, while 2019 mainly comprises non-recurring consulting and litigation expenses.

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

Acquisition costs in 2020 and 2019 comprise costs related to the acquisition of CeramTec by BC Partners.

Start-up losses reflect the ramp up cost of our knee and dental businesses in Medical.

Discontinued operations mainly comprise the exit / discontinuation of some product groups in our Industrial business.

Revenue

The following table provides a breakdown of our revenue for the six months ended June 30, 2020, compared to the six months ended June 30, 2019, by business:

	Six months Ended June 30,		
	2020	2019	Change
	<i>(in EUR m)</i>		<i>(%)</i>
Medical Products	119.2	136.4	-12.6
Industrial	161.0	189.8	-15.2
.....			
Total revenue	280.2	326.2	-14.1
.....			

Total revenue for the six months ended June 30, 2020 was €280.2 million, a decrease of €-46.0 million or -14.1%, as compared to €326.2 million for the six months ended June 30, 2019.

Revenue in our Medical Products business was €119.2 million for the six months ended June 30, 2020, a decrease of €-17.2 million or -12.6%, as compared to €136.4 million for the six months ended June 30, 2019. Revenues were impacted by lower order income and order cancellations and postponements from customers in the context of a lower level of elective surgeries taking place due Covid-19.

Revenue in our Industrial business was €161.0 million for the six months ended June 30, 2020, a decrease of €-28.8 million or -15.2%, as compared to €189.8 million for the six months ended June 30, 2019. This decrease was mostly due to lower volumes across most products groups due to lower demand from customers and order cancellations following the Covid-19 outbreak as well as in general slowing markets

for automotive and electronics components already before the Covid-19 outbreak. These impacts were partly compensated by good volume growth for piezo ceramics for sensors for different end markets, especially for medical equipment.

The following table provides a breakdown of our revenue for the six months ended June 30, 2020, compared to the six months ended June 30, 2019, by region.

	Six months Ended June 30		
	2020	2019	Change
	<i>(in EUR m)</i>		<i>(%)</i>
Europe (excluding Germany)	122.9	144.9	-15.2
Germany	58.3	74.4	-21.7
Asia	44.9	51.5	-12.9
North America	49.1	47.3	+3.9
Other regions	5.1	8.1	-37.2
Total net sales	280.2	326.2	-14.1

Cost of Sales and Gross Profit

The following table provides a breakdown of our cost of sales for the six months ended June 30, 2020, compared to the six months ended June 30, 2019.

	Six months Ended June 30			
	2020		2019	
	<i>(in EUR m)</i>	<i>(% of net sales)</i>	<i>(in EUR m)</i>	<i>(% of net sales)</i>
Personnel expenses	63.2	22.6	67.6	20.7
Material and packing costs	49.5	17.7	62.5	19.2
Amortization and depreciation	28.1	10.0	27.8	8.5
Other cost of sales	28.1	10.0	25.0	7.7
Cost of sales	168.9	60.3	183.0	56.1

Cost of sales was €168.9 million (60.3% of revenue) for the six months ended June 30, 2020, a decrease of €-14.1 million or -7.7%, compared to €183.0 million (56.1% of revenue) for the six months ended June 30, 2019. Excluding amortization and depreciation and non-recurring items, our adjusted cost of sales decreased by -8.8% from €152.0 million or 46.6% of revenue for the six months ended June 30, 2019 to €138.7 million or 49.5% of revenue for the six months ended June 30, 2020.

Gross profit was €111.3 million for the six months ended June 30, 2020, a decrease of €-31.9 million or -22.3%, as compared to €143.2 million for the six months ended June 30, 2019.

Adjusted gross profit margin, before giving effect to depreciation and amortization and non-recurring items, was 50.5% for the six months ended June 30, 2020 compared to 53.4% for the six months ended June 30, 2019, suffering from a lower fixed cost absorption and a lower productivity due to various Covid-19 impacts.

Selling Cost

Selling costs were €45.2 million (16.1% of revenue) for the six months ended June 30, 2020, a decrease of €-4.1 million or -8.3%, as compared to €49.2 million (15.1% of revenue) for the six months ended June 30, 2019. Excluding amortization and depreciation and non-recurring items, our adjusted selling costs decreased by €-3.8 million to €19.5 million or 6.9% of revenue for the six months ended June 30, 2020, compared to €23.3 million or 7.1% of revenue for the six months ended June 30, 2019.

Research and Development Cost

Research and development costs were €10.8 million (3.8% of revenue) for the six months ended June 30, 2020, a decrease of €-0.9 million or -7.8%, as compared to €11.7 million (3.6% of revenue) for the six months ended June 30, 2019. Excluding amortization and depreciation and non-recurring items, our adjusted research and development costs decreased by €-1.0 million to €9.4 million or 3.4% of revenue for the six months ended June 30, 2020 compared to €10.4 million or 3.2% of revenue for the six months ended June 30, 2019.

General Administrative Cost

General administrative costs were €11.8 million (4.2% of revenue) for the six months ended June 30, 2020, a decrease of €-2.6 million or -17.9%, as compared to €14.4 million (4.4% of revenue) for the six months ended June 30, 2019. Excluding amortization and depreciation and non-recurring items, our adjusted general administrative costs decreased by €-0.6 million to €9.0 million or 3.2% of revenue for the six months ended June 30, 2020 compared to €9.6 million or 2.9% of revenue for the six months ended June 30, 2019.

Other Income and Expenses

Other expenses were €-135.8 million for the six months ended June 30, 2020, an increase of €134.5 million compared to other expense of €1.3 million for the six months ended June 30, 2019. This increase was mainly due to impairment effects on Industrial goodwill. Excluding non-recurring items, our adjusted other income, net, increased to €3.2 million or 1.1% of revenue for the six months ended June 30, 2020 compared to €-0.1 million or 0.0% of revenue for the six months ended June 30, 2019.

Interest Income and Other Financial Income

Interest income and other finance income was €0.8 million for the six months ended June 30, 2020, a decrease of €-6.0 million as compared to €6.8 million for the six months ended June 30, 2019. This decrease was mainly due to a lack of income resulting from the fair value measurement of derivatives.

Interest Expenses and Other Finance Costs

Interest expenses and other finance costs were €70.6 million for the six months ended June 30, 2020, an increase of €19.6 million as compared to €51.0 million for the six months ended June 30, 2019. The financial expenses of €70.6 million include €30.2 million losses resulting from the fair value measurement of derivatives, €25.5 million of interest expenses from syndicated loan, revolving credit line and bond, €9.6 million of interest expenses from a shareholder loan, €2.3 million exchange rate losses, €2.2 million of expenses from the effective interest rate method and €0.8 million of other interest expenses.

Income Tax Expenses

Income tax income were €2.8 million for the six months ended June 30, 2020, a change of €15.9 million as compared to €13.0 million income tax expenses for the six months ended June 30, 2019. This was mainly due to higher deferred tax income respectively lower deferred tax expense resulting from the valuation of derivatives and a lower current tax expense resulting from the German Tax Group.

Net Profit / Loss

As a result of the developments described above, net loss for the period was €159.3 million for the six months ended June 30, 2020, compared to a net income of €9.3 million for the six months ended June 30, 2019.

Financial Condition, Liquidity and Capital Resources

As of June 30, 2020, the gross financial debt, the cash balance as well as the Revolving Credit Facility and Ancillary Line were as follows:

	As of June 30, 2020 <i>(in EUR m)</i>
Gross financial debt (without accrued transaction costs)	1,511.0
<i>thereof bond</i>	406.0
<i>thereof term loans</i>	1,027.1
<i>thereof revolving credit facility</i>	67.0
<i>thereof ancillary line</i>	0.0
<i>thereof accrued interest</i>	10.9
Cash.....	90.9
Net debt.....	1,420.1
Undrawn Revolving Credit Facility.....	0.0
Undrawn Ancillary Line.....	8.0

The management adjusted EBITDA for the last twelve months ended June 30, 2020 was €220.3 million leading to the net debt leverage ratio of 6.4x, compared to the management adjusted EBITDA for the last twelve months ended June 30, 2019 of €236.7 million and the net debt leverage ratio of 6.0x, respectively. The business has continually reduced the net debt leverage ratio over the past quarters but was in Q2/2020 affected by overall softer business mainly due to Covid-19.

In January 2020, a distribution of €55 million was made from the group as a repayment on the shareholder loan and shareholder loan interest. In February 2020, €18 million and a further €49 million in March 2020 were drawn from the revolving credit facility.

Cash Flow Statement

The following table shows the cash flow statement for the six months period ended June 30, 2020 and for the six months period ended June 30, 2019.

	Six months ended June 30, 2020 <i>(in € million)</i>	Six months ended June 30, 2019 <i>(in € million)</i>
Net profit / (loss) for the period.....	-159.3	9.3
Income tax expenses / benefit (-)	-2.8	13.0
Interest result	37.2	49.4
Amortization, depreciation and impairment changes of non-current assets	190.6	53.7
Gain (-) / Loss on disposal of fixed assets	0.0	0.0
Increase / decrease (-) in provisions (excluding deferred taxes)	-3.7	-3.4
Income tax refund / (payment)	-14.2	-9.8
Other non-cash expenses / income (-), net.....	30.3	-7.5
Increase (-) / decrease in inventories	-1.7	-1.6
Increase (-) / decrease in trade receivables	-4.6	-12.6
Increase (-) / decrease in other receivables and (financial) assets.....	-1.7	-0.3
Increase / decrease (-) in trade payables.....	-2.5	-6.6
Increase / decrease (-) in other (financial) liabilities	-5.0	11.1
Cash flow from operating activities	62.6	94.7
Cash received from disposals of property, plant and equipment	0.2	0.1
Cash paid (-) for investments in property, plant and equipment.....	-17.1	-20.8
Cash received from grants	0.0	0.0
Cash paid (-) for investments in intangible assets.....	-1.8	-0.5
Cash paid (-) for the acquisition of entities	0.0	0.0
Cash flow from investing activities.....	-18.7	-21.2
Cash received from / repayment (-) of syndicated loan	0.0	-33.4
Interest paid (-)	-63.1	-28.3
Cash received from drawing / repayment (-) of revolver loan	67.0	0.0
Cash received from / repayment (-) of shareholder loan.....	-19.6	0.0
Cash paid for capitalized leases (right-of-use assets)	-1.3	-1.4
Cash flow from financing activities.....	-17.0	-63.0
Change in cash and cash equivalents.....	26.9	10.4
Net foreign exchange difference	-0.4	0.1
Cash and cash equivalents at the beginning of the period.....	64.4	21.1
Cash and cash equivalents at the end of the period.....	90.9	31.5

Cash flows from operating activities decreased from €94.7 million for the six months ended June 30, 2019 to €62.6 million for the six months ended June 30, 2020. The decrease is driven by an overall lower business in the context of Covid-19 partly compensated by solid operative working capital management.

Cash flows used in investing activities for property, plant and equipment and intangible assets decreased from €-21.2 million for the six months ended June 30, 2019 to €-18.7 million for the six months ended June 30, 2020 which is in line with previous year. Due to Covid-19 outbreak investing outflows were partly reduced or postponed.

Cash flows used in financing activities decreased from an outflow of €-63.0 million for the six months ended June 30, 2019 to an outflow of €-17.0 million for the six months ended June 30, 2020. This is mainly due to cash received from drawing the revolving credit facility of €18m in February and €49 million in March.

Capital Expenditures

The following table provides an overview of our capital expenditures (w/o right-of-use assets) for the six months ended June 30, 2020 and 2019:

	Six months ended June 30, 2020	Six months ended June 30, 2019
Additions to intangible assets	1.8	0.5
Additions to property, plant and equipment	11.5	19.7
Capital expenditures (gross)	13.3	20.2
Government grants	0.0	0.0
Capital expenditures (net)	13.3	20.2
Additions from business acquisitions	0.0	0.0

In general, our capital investment is split evenly between maintenance and growth projects. Cash outflow for the six months ended June 30, 2020 for intangible assets amounts to €1.8 million and for tangible assets amounts to €17.1 million.

Employees

As of June 30, 2020, the CeramTec Group employed a workforce of 3,465 people, a decrease of -4.1% compared to the previous year.

Headcount	June 30, 2020	June 30, 2019
Employees by region		
Europe (w/o Germany)	627	652
Germany	2.028	2.138
North and South America	311	346
Asia	499	479
	3.465	3.615
Employees by function		
Manufacturing	2.749	2.836
Sales	292	309
Research and development	173	208
Administration	251	261
	3.465	3.615

Recent Developments

The economic impact of Covid-19 is still difficult to assess. We currently assume that the earnings situation (EBITDA) in 2020 will be significantly negatively affected. With regard to the financial position in 2020, cash flow from operating activities is likely to be significantly below the previous year's level but should remain clearly positive.

Plochingen, 19 August 2020

CeramTec TopCo GmbH

The Management

Dr. Hadi Saleh