SCHMOLZ + BICKENBACH

Supplemental investor report

April 3, 2017

SCHMOLZ + BICKENBACH
Group

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CERTAIN DEFINITIONS

Definitions

As used in this supplemental report:

- "**ABS Amendment Agreement**" means the amendment and restatement agreement dated March 31, 2017 in relation to the ABS Facility.
- "**ABS Facility**" means our asset-backed security finance conduit program, as described in "*Description of Other Indebtedness–ABS Facility*".
- **"Business Unit"** means a group of legal entities that are considered a single economic and cash-generating unit for management performance analysis purposes.
- "**CHF**" or "**Swiss Francs**" means the lawful currency of Switzerland.
- "**Company**" means SCHMOLZ+BICKENBACH AG, a Swiss corporation.
- "**EBIT**" means operating profit (loss) or alternatively net income (loss) before earnings after taxes from discontinued operations, income taxes and financial result.
- "**EBITDA**'' means operating profit (loss) (EBIT) before depreciation, amortization and impairments.
- "**EBT**" means earnings before taxes or, alternatively, net income (loss) before earnings after taxes from discontinued operations and income taxes.
- "**euro**" or "**€**" means the single currency of the participating member states in the ''Third Stage of the European Economic and Monetary Union of the Treaty Establishing the European Community", as amended from time to time.
- "**EU**" means the European Union.
- "**forging mill**" means a facility with machines that use presses or hammers to shape metal into the required form.
- "**free-cutting steel**" means a type of quality and engineering steel that contains a higher percentage of certain elements (primarily sulfur or lead) than that contained in carbon steel, making it comparatively easier to cut and shape with machine tools.
- "**Group**" or "**SCHMOLZ+BICKENBACH**" means the Company together with its consolidated subsidiaries.
- "**IFRS**" means the International Financial Reporting Standards issued by the International Accounting Standards Board.
- "**kt**" or "**kilotons**" means thousand metric tons.
- "**melting shop**" means a facility which melts, refines and treats steel.
- "**Member State**" means a member state of the European Economic Area.
- "**mt**" means million metric tons.
- "**mtpy**" means million metric tons per year.
- "**R&D**" means research and development.
- "**ton**" or "**t**" means metric ton.
- "**Shredded Scrap**" means scrap purchased FOB Rotterdam.
- "**United Kingdom**" means the United Kingdom of Great Britain and Northern Ireland.
- "**United States**" or "**US**" means the United States of America.
- "**we**", "**us**" and "**our**" means the Company and/or the Group as the context requires.
- "**$**" or "**US dollar**" means the lawful currency of the United States.

EXCHANGE RATE INFORMATION

The following tables set forth, for the periods set forth below, the high, low, average and period end Bloomberg Composite Rate expressed as U.S. dollars per €1.00 and Swiss Francs (expressed as CHF) per €1.00. The Bloomberg Composite Rate is a "best market" calculation, in which, at any point in time, the bid rate is equal to the highest bid rate of all contributing bank indications and the ask rate is set to the lowest ask rate offered by these banks. The Bloomberg Composite Rate is a mid-value rate between the applied highest bid rate and the lowest ask rate. The average rate for a year means the average of the Bloomberg Composite Rates on the last day of each month during a year. The average rate for a month, or for any shorter period, means the average of the daily Bloomberg Composite Rates during that month, or shorter period, as the case may be.

The exchange rates set forth in these tables are provided for information purposes only. The rates may differ from the actual rates used in the preparation of the financial information appearing in this supplemental report. We do not represent that the U.S. dollar or CHF amounts referred to below could be or could have been converted into euro at any particular rate indicated or any other rate.

	U.S. Dollars per €1.00			
Year	**High**	**Low**	**Average**	**Period End**
2012	1.3463	1.2053	1.2858	1.3197
2013	1.3804	1.2772	1.3283	1.3789
2014	1.3925	1.2100	1.3285	1.2100
2015	1.2099	1.0492	1.1100	1.0866
2016	1.1527	1.0384	1.1068	1.0547
2017 (through March 30, 2017)	1.0864	1.4027	1.6051	1.0704

	U.S. Dollars per €1.00			
Month	**High**	**Low**	**Average**	**Period End**
September 2016	1.1254	1.1153	1.1212	1.1228
October 2016	1.1218	1.0874	1.1023	1.0963
November 2016	1.1115	1.0555	1.0786	1.0599
December 2016	1.0767	1.0384	1.0542	1.0547
January 2017	1.0784	1.0427	1.0630	1.0784
February 2017	1.1254	1.1153	1.1212	1.1228
March 2017 (through March 30, 2017)	1.0864	1.0506	1.0683	1.0704

The Bloomberg Composite Rate of the euro on March 30, 2017 was $1.0704 per €1.00.

	CHF per €1.00			
Year	**High**	**Low**	**Average**	**Period End**
2012	1.2186	1.2007	1.2051	1.2072
2013	1.2616	1.2079	1.2306	1.2253
2014	1.2372	1.2009	1.2146	1.2026
2015	1.2031	0.9882	1.0685	1.0863
2016	1.1145	1.0687	1.0900	1.0729
2017 (through March 30, 2017)	1.0779	1.0635	1.0695	1.0691

	CHF per €1.00			
Month	**High**	**Low**	**Average**	**Period End**
September 2016	1.0965	1.0844	1.0920	1.0913
October 2016	1.0969	1.0810	1.0884	1.0856
November 2016	1.0821	1.0703	1.0785	1.0789
December 2016	1.0839	1.0687	1.0748	1.0729
January 2017	1.0745	1.0647	1.0716	1.0683
February 2017	1.0694	1.0635	1.0659	1.0640
March 2017 (through March 30, 2017)	1.0779	1.0635	1.0695	1.0691

The Bloomberg Composite Rate of the euro on March 30, 2017 was CHF1.06908 per €1.00.

INDUSTRY AND MARKET DATA

This supplemental report contains and refers to our numerical data, market data, commercial publications and publicly available information or estimates, which are based primarily on publicly available market data or numerical data from publicly available or commercial sources including Steel & Metals Market Research GmbH ("**SMR**") Baker Hughes, Eurofer, Worldsteel, BMI Research and the London Metal Exchange ("**LME**"). The data in this supplemental report regarding market conditions, market developments, growth rates, market trends and the competitive environment in the markets and segments in which we operate, is based on a market study (which is not publicly available) that was commissioned by us or on our estimates which in turn are generally based on public data or figures derived from publicly available sources.

Except as otherwise stated, market share data, as well as our assessment of our comparative competitive position, has been derived by comparing our sales figures to our estimates of our competitor's sales figures for the same period, and by comparing published statistical data and information from independent sources such as SMR, Baker Hughes, Eurofer, Worldsteel, BMI Research and LME. We believe that the estimates included herein, which are not based on publicly available sources, have been prepared with reasonable care and reflect the underlying information in a nonbiased way. The information derived from our internal estimates can differ from the estimates of our competitors or from future surveys conducted by market research institutes or other independent sources. The information contained in this supplemental report obtained from publicly available sources or otherwise taken from third parties has been accurately reproduced, indicating its source. However, investors should consider that market studies are often based on information and assumptions that may not be exact or appropriate and are, by nature, forward-looking and speculative. In addition, publicly available or commercial sources often contain diverging information. Information published by third parties as well as the external sources on which our estimates are based have not been verified by us. Therefore, we cannot assume any responsibility for the accuracy of the data and the accuracy of the information on which our estimates are based.

In addition, certain information in this supplemental report is not based on published data obtained from independent third parties or extrapolations thereof, but information and statements reflecting our best estimates based upon information obtained by us from trade and business organizations and associations, independent third-party reports that are not publicly available, consultants and other contacts within our industry, as well as information published by our competitors and which we believe is reliable. In particular, (i) information on our market position is based on information obtained from trade and business organizations, independent third-party reports that are not publicly available and associations and other contacts within the industries in which we compete, and (ii) information on industry trends is based on our senior management team's business experience and experience in the industry and the local markets in which we operate. We cannot assure you that any of the assumptions that we have made in compiling this data are accurate or correctly reflect our position in our markets, but such information reflects our beliefs and wherever referenced in this supplemental report is so qualified. The definitions, assumptions and methods we use in analyzing and describing our industry and markets may, moreover, differ from those used by other companies in our industry. You should therefore use caution in comparing our discussion of our industry and markets with those of such other companies.

Individual figures and financial and market data including percentages shown in this supplemental report have been rounded using standard business rounding principles (*kaufmännische Rundung*). The totals or subtotals contained in tables may differ from the non-rounded figures contained elsewhere in this supplemental report due to such rounding. Furthermore, figures that have been rounded may not add up to the subtotals or totals contained in tables or stated elsewhere in this supplemental report.

The forward-looking estimates and forecasts derived from third-party studies included in this supplemental report may prove to be inaccurate. Accordingly, neither we nor our management assume responsibility for the future accuracy of the opinions expressed in this supplemental report or as to the actual occurrence of any predicted developments. In addition, it is emphasized that we do not assume any obligation beyond the legal requirements and do not intend to update any such forward-looking statements or to adjust them to future events or developments.

FORWARD-LOOKING STATEMENTS

This supplemental report contains certain forward-looking statements. Forward-looking statements are statements that do not refer to historical facts and events. Any statement containing the words “shall”, “may”, “will”, “could”, “expects”, “predicts”, “assumes”, “supposes”, “estimates”, “believes”, “plans”, “intends”, “projects”, “potential” or similar phrases indicate such forward-looking statements.

This applies, in particular, to statements in this supplemental report regarding the future financial returns, plans and expectations related to our business and management, growth and profitability, the markets in which we are active, as well as general economic and regulatory conditions and other factors affecting us.

Forward-looking statements are based on current estimates and assumptions made by us to the best of our knowledge. Such forward-looking statements are based on assumptions and factors that may or may not occur in the future and are subject to known and unknown risks and uncertainties. Such forward-looking statements are not guarantees of future performance and our actual results including our net assets, financial position and results of operations may materially differ from or be more negative than those expressed explicitly or implied by these forward-looking statements. Our business is subject to a number of risks and uncertainties that could also cause a forward-looking statement, estimate or prediction to become inaccurate. Factors which can lead to material differences between actual results and developments and the results and developments assumed or implied in connection with the forward-looking statements are among others:

- general economic conditions,
- inability to fund our capital expenditures,
- the cyclicality of the steel industry, especially the market for special long steel,
- legal and administrative proceedings brought by competition authorities,
- changes in technology, as well as substitute materials and new technologies that could reduce demand and prices for our products,
- adverse trends in raw materials and other material prices,
- exchange rate fluctuations,
- changes in the competitive markets in which we operate,
- our ability to maintain high quality standards,
- inability to retain or attract management and key personnel,
- changes in payment terms we receive from suppliers,
- loss of a key suppliers or failure to obtain consumables of the required quality,
- interruptions in operations at our facilities,
- work stoppages,
- increases in the cost of energy resources or disruptions in energy supplies,
- unfavorable changes to tax and social security laws,
- risks related to transfer pricing rules,
- adequacy of insurance coverage,
- compliance with health and safety laws,
- litigation we may be involved in from time to time,
- regulatory changes or costs of compliance with current and future environmental, health and safety regulations,
- claims arising out of warranties and representations relating to the transfer of certain of our assets,
- risks associated with our IT systems,
- risks related to joint ventures,
- risks related to geographic concentration in Europe, Canada and the United States,
- political, economic and legal risks and uncertainties and a potential increase of instability in the countries where we operate,

- risks arising from substitute materials and new technologies,
- risk of inadequate internal controls and risk management,
- varied tax and social security laws and regulations in the countries where we operate,
- inability to secure our intellectual property rights,
- inventory management and adaptation of production facilities to customer demand,
- changes in the value of retirement and other obligations to our employees,
- our substantial leverage and debt service obligations,
- risks associated with our capital structure,
- the effects of our restrictive debt covenants on our ability to finance our future operations and capital needs and to pursue business opportunities and activities,
- our ability to realize benefits from our ongoing and future cost savings and efficiency programs,
- availability and costs of financing,
- the creditworthiness of our customers,
- risks that changes in assumptions in the underlying value of certain assets would result in impairment of such assets,
- our ability to raise future financing, and
- force majeure and other unforeseeable events.

Investors are strongly advised to read sections "*Risk Factors*", "*Management's Discussion and Analysis of Financial Condition and Results of Operations*", "*Industry and Competition*" and "*Business*", which include a more detailed description of factors that have an impact on our business and the markets in which we operate. In light of these risks, uncertainties and assumptions, the future events described in this supplemental report may not occur.

We undertake no obligation, and do not intend, to update or revise any forward-looking statement, whether as a result of new information, future events or developments or otherwise.

RISK FACTORS

The occurrence of the risks described below, individually or together, in addition to any risks that are not presently known or that we believe are immaterial and not described herein, could have a material adverse effect on our business, results of operations and financial condition.

Some of the statements made in this supplemental report may be deemed to be "forward-looking statements" that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including the risks described below and elsewhere in this supplemental report. See "Forward-Looking Statements".

Risks Related to Our Business and the Special Long Steel Industry

Our results can be and have been substantially affected by macroeconomic trends, economic downturns and financial crises have had in the past and may in the future have a material adverse effect on our results of operations and financial condition

Our activities and results are affected by international, national and regional economic demand and price for special long steel products are sensitive to even small changes, both actual or in sentiment, of gross domestic product ("**GDP**") and industrial production growth, which has occurred previously, may lead to a materially disproportionate corresponding decline in our volumes sold. GDP growth and industrial production growth are significant drivers in the end markets in which our customers operate, in particular the engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace industry. Our business performance is strongly influenced by our economic dependency on these sectors, all of which have faced serious and simultaneous declines in sales during the recent global financial and economic crisis in 2009. The occurrence of such crises could again have a significant negative effect on our business performance. In addition, our business performance may be negatively affected by general underlying trends in a number of industry sectors. The negative development of such industry sectors on which we are strongly dependent could lead to a negative effect on our business performance. Adverse changes in macroeconomic conditions directly affect demand for special steel products and therefore our sales volumes, which are key drivers for our results of operations. In the event of adverse economic conditions, the reduction in real demand for special long steel, which is at the beginning of the value chain for the products produced in our customers end markets, is typically exacerbated by inventory destocking throughout the supply chain as industry participants, including our customers, look to preserve liquidity by reducing inventory.

Our industry has experienced significant corrections in the past. The prices for our special long steel products were at historically high levels until mid-2008, primarily as a result of significant raw material cost inflation and increasing demand. Beginning in the third quarter of 2008 and for much of 2009, the disruption experienced by the global financial markets dramatically impacted industrial activity and consumer and government spending (including spending on infrastructure and energy initiatives). Demand for special long steel products and services declined precipitously on a global basis. The global prices for steel products also decreased in response to market conditions. The downward trend continued until the second half of 2009, then demand and prices started gradually increasing. In the second half of 2011, the turbulence in the financial markets and the sovereign debt issues in Europe resulted in a decrease in orders by some of our customers. 2015 was again a difficult year for our industry. Crude steel production fell for the first time since 2009 by 3.3% and global demand for steel also dropped for the first time by 3.0% in 2015 following steady growth rates since 2009 according to World Steel Association. The decrease of steel demand in the Chinese market by 5.4% in 2015 was an important cause for this negative development. In 2016, according to World Steel Association, global steel demand increased slightly by 0.2% to around 1.5 billion tons. While global steel demand dropped in China (-1.0%), Brazil (-14.4%), Russia (-3.6%), United States (-1.2%) and Japan (-0.4%), it increased by 2.0% in Germany, our most important market.

The occurrence of such crises could again have a significant negative effect on our business performance. In addition, our business performance may be negatively affected by trends in certain industry sectors. The negative development of such industry sectors on which we are strongly dependent could lead to a material negative effect on our business performance.

In addition, such disruptions may adversely affect the ability of our customers or other contracting parties (including financial institutions acting as hedge counterparties) to fulfill their contractual obligations, which could result in write-offs of our receivables or other claims. Moreover, an economic decline or stagnation could endanger our continued ability to fulfill our obligations, in particular under our financing agreements.

Our business is capital intensive and we may not be able to fund our capital expenditures as planned

Our business requires significant capital expenditures, including in the areas of product line extensions, production plant maintenance and transportation as well as compliance with current and future obligations under environmental laws and regulations. We rely on cash flows from our operating activities and on external sources of funding, including third-party borrowings, to finance our capital expenditures.

Our ability to obtain financing at acceptable costs and in amounts sufficient to meet on going, planned and future capital expenditures could be materially adversely affected by many factors beyond our control, including the state of the economies of the countries in which we operate and our ability to obtain credit. In the short term, we are able to delay part of our capital expenditures including routine maintenance for a period generally up to one year without significant damage to our equipment. Longer periods of delay could have a materially adverse impact on our business, prospects, financial condition, cash flows and results of operations.

Our ability to adequately implement capital improvements may be adversely affected by a number of factors, including changes in the terms of existing financing arrangements, changes in economic conditions, plant and machine breakdowns, adverse events such as fire, explosions and floods, environmental incidents, regulatory developments, product or specification changes, delays in project completion, cost overruns, and defects in design or construction.

Our potential inability to finance on going, planned and future capital expenditures or to finance such expenditures at an acceptable cost or at all may have a materially adverse impact on our business, prospects, financial condition, cash flows and results of operations.

The special long steel industry in which we operate is cyclical in nature, and we are significantly dependent on our customers' end markets

Because we are at the beginning of the supply chain, we are highly dependent on demand in the end markets in which our customers operate, especially the engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace industry. These industries tend to be cyclical, and we are dependent not only on general production volumes of our customers, but also on changes in product attributes and on the development of new products, which, for example, requires our customers to develop and manufacture new tools. Further, stocking and de-stocking effects particularly impact special long steel producers, as they are at the beginning of the production value chain. As a result, demand for our products is reduced in times of economic weakness, which may materially adversely affect our business, financial condition and results of operations.

We are currently subject to, and may in the future become subject to, legal and administrative proceedings brought by competition authorities; adverse outcomes in such proceedings could result in significant costs and other negative consequences

The German Federal Cartel Office is investigating alleged price-fixing in the stainless steel industry. In November 2015, as part of the industry-wide investigation, a non-compliance procedure was initiated against the former subsidiary of the Company, Deutsche Edelstahlwerke GmbH. The German Federal Cartel Office has subsequently extended the investigation with the same reference number to include the Company as well as another subsidiary, SCHMOLZ+BICKENBACH Edelstahl GmbH. According to a procedural statement of the German Federal Cartel Office from November 2016, representatives of these companies are under suspicion of violating the applicable German competition laws by fixing prices and price components as well as production restrictions and exchanging sensitive competition information through an association of iron and metal-processing industries in Düsseldorf. We are cooperating with the investigation, and are conducting an internal investigation of the matter.

The investigations are still ongoing. An adverse outcome in these proceedings, or any similar proceedings in Germany or elsewhere in the future, could impose significant costs and fines on us, damage our reputation and result in claims from customers or could otherwise have a material adverse effect on our business, financial condition and results of operations. In the event of such an adverse outcome, we cannot assure you of the extent to which our cooperation with the ongoing investigation, our internal investigation, or any other measures we have taken or may take would result in a reduction of any fines or a mitigation of any other sanctions imposed as a consequence.

Changes in technology and changes in the end user markets may affect the industry in which we operate, and our failure to adapt to such changes could negatively impact our business activities

We rely on relatively sophisticated technology in the operation of our business. While we believe that we currently benefit from some of the most advanced technological systems available in our industry, no assurance can be given that we will be able to adequately access, adapt to and take advantage of future technological advances. In addition, while we undertake research and development in an effort to develop new technologies and improve our processes and efficiency for our business, such activities are inherently uncertain and we might encounter practical difficulties in implementing our research results in an effective and efficient manner. Moreover, advances in technology could limit the need for our services or our customers could acquire some of the technology that we use in the operation of our business, which could reduce the need for our products and services. In addition, shifts in technologies used in end customers markets may affect our industry. For instance, the production of electrically powered cars requires significantly less special long steel and, therefore, the demand for our products will decrease if a shift from cars powered by fossil fuels to electronically powered cars occurs. Furthermore, economic changes in the end user markets, such as the rise of the so-called sharing economic, could reduce the demand for our products. Our failure to adapt to technological advances, develop and introduce new technologies or respond to rapid market changes, the adoption of new technologies by our customers, or other changes in the end user markets could have a material adverse effect on our business, assets, financial condition and results of operations.

Our financial condition may be negatively affected by adverse trends in raw and other material prices

Our operations depend on the cost and availability of raw materials. The main raw materials for special long steel are alloys (principally nickel and chromium, but also vanadium, molybdenum, manganese and others) and scrap. We are exposed to price volatility with respect to each of these raw materials, which we purchase both under long-term supply contracts (fixed volumes typically not prices) and in the spot market. In addition, since most of the raw materials we use are finite resources, their prices may also fluctuate in response to any scarcity or perceived scarcity of reserves and the evolution of the pipeline of new exploration projects to replace depleted reserves. Rising raw material prices increase the carrying value of our inventory, which leads to additional financing needs and decreased net working capital efficiency.

Especially for longer-term contracts we sell our special long steel products based on an industry-accepted price surcharge system, in which the effective price at delivery consists of the base price, which is negotiated with the customers, and the scrap and alloy surcharge, which allows us to pass on to the customer underlying scrap and alloy price volatility based on standard industry indices, for example the LME for nickel. In general, the surcharge system works as follows:

- The base price is negotiated with the customer and depends mainly on market supply and demand.
- The scrap surcharge is a supplementary charge added by the producers to the selling price of steel, passing on changes (whether increases or decreases) in the price for scrap directly to customers. The scrap surcharge is based on an index price system for scrap; the actual amount of the surcharge is determined on the final sale date and varies depending on the type of product and the country where the product is produced.
- The alloy surcharge is applied in the same manner as the scrap surcharge and allows special steel producers to pass on the changes (whether increases or decreases) in prices for alloys. The concept of the alloy surcharge is calculated using raw material prices quoted on certain accepted exchanges, such as Metal Bulletin, Platts Metals, CRU/Ryan's Notes etc. The alloy surcharge was introduced in Europe, the United States and Canada in response to significant volatility in the price for these materials, which has historically been driven by fluctuations in demand, increasing or decreasing inventory levels, changes in production capacity and speculation by metal traders. Like the scrap surcharge, the actual amount of the surcharge is determined on the final sale date and varies depending on the type of product and the country where the product is produced.

In accordance with the practice in the European special long steel industry, we are exposed to fluctuations in raw material prices for the time delay between the raw material delivery and the subsequent invoicing to the customer (when the price of the raw materials is fixed and charged to the customer). We are therefore exposed to raw material price volatility for a certain period of time through

a timing mismatch. In the United States and Canada, there is a similar market practice, but with the surcharge for our Production division calculated at the time of order (rather than time of sale).

The change or elimination of the price surcharge system, whether due to changes in market practice, customer acceptance, legal changes or for any other reasons, could materially adversely affect our business, financial condition and results of operations.

A portion of our product sales is not based on the price surcharge system, but is sold at a fixed price that is set at the time of order. The price surcharge system is irrelevant for these sales and does not protect us from price fluctuations and availability of raw materials. Although with respect to fixed-price orders we may enter into hedging agreements in an effort to limit exposure to price fluctuations for certain confirmed orders, mainly for the price fluctuation of nickel and alloys, these hedging agreements cover only part of our exposure to price fluctuations of raw materials and only part of the raw materials on which we rely for such orders, and this exposure may materially adversely affect our business, financial condition and results of operations.

Fluctuations in currencies may adversely affect our financial condition and results of operations

The functional currency of the majority of our revenue and costs is the euro, with a substantial part denominated in Swiss francs, U.S. dollars and Canadian dollars. Although we seek to hedge our currency risk, any substantial currency fluctuation may adversely impact our future results of operations. For example, due to the substantial depreciation of the euro against the Swiss franc following the removal of the Swiss Franc peg to euro, the results of operations of our Swiss plants have been materially adversely affected. Any future significant depreciation or fluctuation of the euro against the Swiss franc, or of the U.S. dollar against the Canadian dollar, or of any currency in which costs are incurred against the currency in which revenue is calculated, may materially adversely affect our business, financial condition and results of operations.

In addition, our results of operations and financial condition may be adversely affected by certain long-term trends in exchange rates, and, in particular, a strong euro or a strong Swiss franc currency trend. A substantial part of our operating costs, in particular for energy and personnel costs, is incurred in euro. A strong euro adversely impacts on our competitive position in markets with weaker local currencies, because our local competitors benefit from having a substantial portion of their costs based in those weaker currencies, enabling them to offer their products at lower prices. For example, any increase of the euro against other currencies affects mainly our exports to the Americas and Asia and may materially adversely affect our financial condition and results of operations. Similarly, our Swiss plants incur costs in Swiss francs and a strong Swiss franc adversely impacts on our competitive position in markets with weaker local currencies. This may put significant pressure on the competitiveness of our products and sales volumes in respective markets.

We operate in a competitive industry

The special long steel market within which we operate is characterized by a competitive landscape. The special long steel segment is a niche market, which is itself subdivided into quality and engineering steel, stainless long steel, and tool steel segments. Competition is based on several factors, including service, know-how, availability of products, price, performance and quality of products. Our competitors, most of whom are well established in the market and who may have significantly more financial resources than us, may develop new production technologies or products that are more cost effective or more popular than our technologies or products. This may have a material adverse effect on our ability to maintain or increase our market share while maintaining profitability.

We operate in an environment of steadily increasing competition, e.g. from Eastern Europe, India, and China. We may not have sufficient resources to make necessary investments and may not have sufficient access to qualified personnel in order to continue to successfully compete in the market. Our competitors may have greater financial and personnel resources or know-how, may be able to adapt more rapidly to changing customer demands or succeed in implementing an improved marketing strategy. In addition, the highly competitive nature of our industry, combined with excess production capacity for some steel products, has at times exerted downward pressure on prices of our products. Any of these factors may lead to a significant loss of market share and any failure to successfully compete in the markets in which we operate or any intensification of the competition we face may materially adversely affect our business, financial condition and results of operations.

The performance of our business is significantly dependent on our ability to maintain high quality standards and comply with complex, highly technical customer specifications.

The market for special long steel products is characterized by highly specific technical requirements. These can include a variety of chemistries and treatments designed to impart qualities such as specific levels of elasticity, strength, ductility, toughness, fatigue resistance or corrosion resistance. Our products are used in performance-critical end use products. A significant portion of these products must satisfy high performance requirements and are subjected to severe environmental stresses in their end use, such as high temperatures, exposure to hazardous substances, high speed and continuous pressure. The performance, quality and safety of our products are critical to the success of our business.

These characteristics depend significantly on the effectiveness of quality control systems, which in turn depend on a number of factors, including the production process, the design of the systems and our ability to ensure that personnel adhere to quality control guidelines and policies. We have in the past experienced issues with customers due to deviations by us from homologated processes in our production, even if these deviations did not result in any deficiencies in the quality of the products produced. Any significant failure or deterioration of our quality control systems, or failure by responsible personnel to adhere to our guidelines and policies, could result in our delivery of products that fail to meet customer specifications, deviations from homologated processes or equipment, or the failure of our products to perform adequately in their intended applications.

Failure, or the perceived failure, of our products to meet the required precise technical specifications could lead to significant expense for our customers, and result in product recalls, product liability claims or other significant costs to us. Product liability claims and product recalls, or any other issues with respect to the quality of our products, could harm our reputation both with our existing customers and with respect to potential new customers. Our inability to meet the quality and technical requirements required by the end markets that we serve and any failure or perceived failure of our products could have a material adverse effect on our business, prospects, financial condition, cash flows and results of operations.

Our inability to retain or to attract management and key personnel may have a material adverse effect on our business, financial condition and results of operations

Our business and future development relies on the continued involvement and performance of our senior management and other key personnel. Our senior management team has extensive experience within the steel industry; for example our chief executive officer has more than 20 years of experience in the steel industry. Our chief financial officer has over 20 years of experience in our business, respectively. The other members of senior management, in particular our Business Unit managers, have an average of 22 years in our industry. We may not be able to retain the members of the current management team and other key employees or to attract qualified and experienced personnel to fill vacant positions within a short period of time. In addition, our business and future development depends on our ability to retain individual persons in key positions, particularly at the level of the executive committee as well as technical personnel, who are highly skilled and knowledgeable about the special long steel industry and have company-specific know-how, technological and production know-how, or have sustained relationships with our customers. The demand and, therefore, costs for skilled engineers, operators, sales force and support functions will continue to increase, also reflecting the significant demand from other industries. Continuous high demand for skilled labor and continued increases in labor costs could make it difficult for us to attract quality employees and could have a material adverse effect on our business, financial condition and results of operations. Furthermore, demographic developments in the countries we operate could negatively affect our ability to find suitable personnel. Any failure to attract or retain key managers, technical experts, or key sales or marketing personnel may materially adversely affect on our business, financial condition and results of operations.

Changes in the payment terms we receive from our suppliers could materially adversely affect our liquidity

The payment terms we receive from our suppliers are dependent on several factors, including our payment history with them, their credit granting policies, contractual provisions, our credit profile, industry conditions, our recent operating results, financial position and cash flows and the suppliers' ability to obtain credit insurance on amounts that we owe. Adverse changes in any of these factors, certain of which may not be wholly in our control, may induce our suppliers to shorten the payment terms of their invoices, particularly given our high level of outstanding indebtedness. Given the large

amounts and volume of our purchases from suppliers, a change in payment terms may materially adversely affect our liquidity and our ability to make payments to our suppliers, and consequently may materially adversely affect our business, financial condition and results of operations.

Any loss of a key supplier and the failure to obtain consumables of the required quality may materially adversely affect our business, financial condition or results of operations

Certain of our raw materials, particularly metal alloys, are sourced from oligopolistic markets where only a limited number of suppliers operate. The availability of raw materials from third-party suppliers may be negatively affected by factors outside of our control, including interruptions in supplier production, allocation of raw materials by suppliers to other customers, price fluctuations, export restrictions and transportation costs. As a result of these factors, suppliers may fail to deliver materials in a timely manner, experience quality problems or financial difficulties. If our suppliers experience financial difficulties, we may experience tighter credit terms from them, which could increase our working capital needs and potentially reduce our liquidity, or they may default under their obligations. In addition, any failure to maintain existing relationships with suppliers could negatively affect our ability to manufacture our products. Furthermore, failure to obtain the required quality of consumables (e.g. electrodes) may harm our production. As a result of any of the above, we may be materially adversely affected in our business, financial condition and results of operations.

Interruptions in operations at our facilities may have a material adverse effect on our business, financial condition and results of operations

We operate nine production facilities (of which six are facilities with on-site melting shops and rolling/forging mills and three are rolling/forging mills without on-site melting shops), eleven processing facilities with a network of over 70 sales & service branches in more than 30 countries, and our results of operations are dependent on the continued performance of our production facilities and our ability to complete product orders on schedule. Our special long steel manufacturing processes are complex, adapted to the variations in the properties of certain raw materials, and dependent on critical steelmaking equipment, such as furnaces, continuous casters, rolling mills, forging equipment and electrical equipment. Operations may be interrupted by equipment failures, fire, natural disasters, work stoppages, power outages, IT failures or other reasons. We have experienced, and may continue to experience, unanticipated plant outages, industrial accidents or equipment failures. In particular (without limitation), we are exposed to significant risk of fire due to the use of heat and the presence of large quantities of melted metals in our production facilities. For example, in 2016, one of our Swiss steel mills experienced two interruptions of five days each due to fire, which lead to production delays. Furthermore, a fire at a switch station at a German plant in 2016 lead to an effective downtime of 11 days, and could have lead to a downtime of approximately four weeks if the timing of the interruption had not partially fallen into a planned summer shutdown. In addition, we may be subject to transportation disruptions or disruptions in the supply of raw materials and energy, and productions may not start as forecast at our new or upgraded facilities.

Our production facilities and processing facilities generally each produce different products. As a result, in the event of a prolonged disruption in production or processing, we are unlikely to be able to compensate for the lost production or interruption in service with production or service from our unaffected production facilities. If we are not able to satisfy demand through existing inventories, our business, financial condition and results of operations may be materially adversely affected.

Any significant labor stoppages may have a material adverse effect on our business, financial condition and results of operations

We have strong unions and similar workers' organizations at several of our facilities, which may commence strikes and similar measures which may lead to the disruption of the production process and consequent increase of costs and delay in delivery of our products. We have entered into collective labor agreements, including in Germany, France, Switzerland, Canada and the United States, and believe that our present labor relations are good. However, there can be no assurance that work slowdowns, work stoppages or strikes will not occur prior to or during the renegotiation of any new collective labor agreements, or in connection with any future wage or benefit negotiations between management and employees, and we are unable to estimate the effect of any such slowdowns, stoppages or strikes on our operations. We may not be able to absorb successfully any future disruption and as a result our business, financial condition and results of operations may be materially adversely affected. Furthermore, work slowdowns, work stoppages or strikes are particularly likely when we implement restructurings, and those actions may delay such restructurings and cause significant expenses and/or foregone revenue.

Any increase in the costs of energy resources or disruptions in energy supplies may materially adversely affect our business, financial condition and results of operations

In our production process, we rely on a steady supply of significant amounts of energy, such as electricity and natural gas, at commercially reasonable terms. In 2014, 2015 and 2016, our total energy expenses accounted for 7.1%, 7.1% and 7.6% of our net costs (defined as the sum of changes in semi-finished goods, cost of materials, other operating income, personnel costs, other operating expenses), respectively. Electricity and natural gas are the primary sources of energy used in the production process. Electricity is mainly used for running the electric arc furnaces to melt the scrap. Natural gas is used to heat the furnaces in subsequent production stages.

Energy expenses are affected by various factors, including the availability of supplies of particular sources of energy, energy prices and regulatory decisions and utility privatizations, which are beyond our control. Electricity and gas prices at our main production facilities have been volatile in the past and may increase in the future. We attempt to limit our exposure to the volatility of electricity and natural gas prices by combining long-term supply contracts and purchasing energy at spot prices. These supply contracts are entered into by the various Group companies at a local level and have varying expiration dates, and we remain exposed to any future increase of energy prices after these contracts expire.

The third EU emissions trading period (2013–2020) is expected to result in substantial costs for electricity and gas suppliers which will be reflected in price increases for consumers. See "*–We are subject to increasingly stringent environmental regulations*". As an energy-intensive industrial and trading group, such increases in costs for electricity and gas could materially adversely affect our results of operations if the costs cannot be completely passed on to customers. Furthermore, we currently benefit from certain reductions in energy surcharges, in particular in accordance with the German Renewable Energies Act ("**EEG**"). In December 2013, the European Commission launched an in-depth investigation into the Federal Republic of Germany's EEG for compatibility with EU state aid rules. Proceedings have since been concluded. The Commission approved the applicable German laws with certain amendments. At the same time, a revised version of the EEG was issued in Germany, with new provisions governing the period from January 1, 2015. Similar state aid investigations may be started in Switzerland or in other jurisdictions, and unfavorable regulatory changes in respect to the reductions in energy surcharges may be implemented. Any unfavorable amendments to reductions in energy surcharges, whether due to state aid investigations of for other reasons, could have a materially adverse effect on our profitability, business, financial condition and results of operations.

Additionally, the Swiss government has proposed a new long-term strategy ("**Energiestrategie 2050**") which is scheduled to be subject to a popular vote in May this year. If accepted, this may lead to a significant increase of our energy expenses. However, it is difficult for us to estimate the impact of this new strategy during the ongoing political process and, more generally, the impact of regulatory changes in the energy sector in general.

Natural catastrophes, geopolitical conditions or similar events could affect the electricity grids or natural gas grids. In the past decade, political crises gave rise to concerns about the reliability of gas supplies and may affect such energy suppliers in the future. Sanctions or other political restrictions affecting our energy supply could have a material adverse effect on our business, prospects, financial condition, cash flows and results of operations.

Any disruptions in the supply of energy resources, for instance due to production restrictions, reduced spare capacity due to pressure on energy suppliers, or the non-availability of power plants, could temporarily impair our ability to manufacture products for our customers. Any increase in our energy expenses or relative changes in energy expenses to which our competitors are exposed has previously and may continue to have a materially adverse effect on our profitability, business, financial condition and results of operations.

The determination of our worldwide tax provision for income taxes is subject to significant judgment, and a number of factors could have a material adverse effect on our financial results and could increase the volatility of those results.

Due to the global nature of our business, we are subject to income taxes in multiple jurisdictions. Significant judgment and estimation is required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are various transactions and calculations, including intercompany transactions and cross-jurisdictional transfer pricing, for which the ultimate tax determination is uncertain or otherwise subject to interpretation. We are regularly audited by tax

authorities. These authorities may become more aggressive in their interpretation of applicable laws, rules and regulations over time, whether as a result of economic pressures or otherwise. Tax authorities may disagree with our intercompany charges, cross-jurisdictional transfer pricing or other matters and assess additional taxes. Although we believe our tax estimates are reasonable, the final determination of tax audits could be materially different from our historical income tax provisions and accruals. Any additional tax liabilities resulting from such final determination could have a material adverse effect on our financial position, results of operations, or cash flows in the period or periods for which that determination is made.

As we continue our international growth, the number of jurisdictions in which we earn income and accumulate cash flow may increase. Repatriation of funds held by our subsidiaries in foreign jurisdictions may result in a higher effective tax rate and incremental cash tax payments. In addition, future changes in tax legislation could have a significant adverse effect on our tax rate, the carrying value of deferred tax assets, or our deferred tax liabilities. Any of these changes could affect our profitability. Our effective tax rate in the future could also be adversely affected by changes to our operating structure, changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities and the discovery of new information in the course of our tax return preparation process.

Our international operations subject us to a complicated regime of transfer pricing rules and VAT assessment

We are regularly subject to tax audits by Swiss and other tax authorities. Any such audit could lead to demands for additional tax, interest on such tax, and penalties for noncompliance with tax laws. This risk exists, in particular, with regard to transfer pricing rules and VAT statements.

We are present or represented in over 30 countries. Like many internationally active companies, we are subject to potential tax liability risk in connection with transfer pricing issues. Uncertainties in interpretation of transfer pricing legislation could lead tax authorities to challenge our prices and make adjustments which could result in significant additional liabilities.

In Switzerland, value-added tax is reported to the Federal Tax Administration by way of self-assessment. There is no assurance that future VAT audits would not lead to the incurrence of additional VAT payment obligations. If this were to occur, it could have a material adverse effect on our business, financial conditions and results of operations.

The complexity of international fiscal systems and of cross-border VAT regulations, as well as changes in the current practice of tax authorities and courts, may lead to incomplete and inaccurate tax declarations which may result in additional tax payments. For instance, stricter rules regarding base erosion and profit shifting (BEPS), that is, tax avoidance strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations, could lead to the incurrence of additional tax obligations and to a higher administrative burden. This or any other such change could have a material adverse effect on our business, financial conditions and results of operations.

Our insurance policies may not be adequate to cover all the risks we face and, if we no longer were covered by our existing insurance, it may be difficult to obtain replacement insurance on acceptable terms or at all

Our policy is to maintain general and product liability insurance, property damage insurance and additional insurances covering our main insurable risks to the extent such insurance coverage is available for reasonable premiums. However, there can be no assurance that the existing insurance coverage is sufficient to cover all potential risks that could have a negative impact on our business, financial condition and results of operations. In addition, we may not be able to enter into new insurance agreements on commercially acceptable terms and conditions in the future. The materialization of any of these risks may materially adversely affect our business, financial condition and results of operations.

Breaches of the health and safety laws may adversely affect our business, financial condition and results of operations

We operate in a broad range of jurisdictions, including Europe and North America, where we are subject to increasingly stringent health and safety laws and regulations. The manufacture and distribution of our products is an inherently dangerous activity which involves substantial risks and our workers are subject to accidents, some of which may result in injuries or death. Any failure to comply with the existing, or any future, protection standards may result in lengthy investigations, substantial

fines, civil claims and criminal penalties, the suspension of operating permits or operations, as well as litigation. Although we attempt to monitor and reduce accidents in our production facilities, we remain exposed to risks of incidents such as explosions or gas leaks, fires, vehicular accidents, other incidents involving mobile equipment, or exposure to potentially hazardous materials. In particular (without limitation), we are exposed to significant risk of fire due to the use of heat and the presence of large quantities of melted metals in our production facilities (see also "*–Interruptions in operations at our facilities may have a material adverse effect on our business, financial condition and results of operations*").

Furthermore, one of our key raw materials is steel scrap. Although we actively monitor our scrap supplies for radioactivity or other contamination, it is possible that our detection systems (including Geiger counters) may fail, for example due to equipment failure and associated human error. Any use of contaminated scrap would require us to destroy or otherwise dispose of the affected scrap and any affected products and equipment and could result in work stoppages, reputational damage, as well as customer claims.

Any such incident may lead to production stoppages, loss of key personnel or assets, and subject employees and third parties living near the affected facilities to health and safety risk. Any failure by us to prevent a health or safety risk from occurring and causing damage or loss may materially adversely affect our reputation, business, financial condition and results of operations.

We may be subject to costly litigation, which may affect our reputation, result in the diversion of management's time, impose damages or prevent us from marketing our existing or future products

We are from time to time involved in various lawsuits, claims and proceedings in relation to the conduct of our presently and previously owned businesses. Such claims could include proceedings with regards to product liability, environmental issues, health and safety, neighborhood law, and claims regarding our trade practices and on antitrust matters. Our products are sold to and used in a number of safety critical applications, such as airplanes. In addition, we distribute products to our customers based on certain specifications. Any delivery by us of a product which is defective, not delivered in time or not in accordance with the customers' specifications may lead to catastrophic personal injuries, property damage and financial loss, such as business interruptions and product recalls, of customers and third parties. Although we maintain product liability insurance in amounts consistent with the specialty long steel market practice, we may not be fully insured against all potential damage which may arise out of a product liability claim, and any such claims could harm our reputation. We may be required to pay contractual penalties and to compensate for the damages arising out of product liability claims. We may not prevail in the claims made against us, which may have a material adverse impact on our business, financial condition and results of operations, including as a result of significant monetary damages or reputational loss. This in turn may materially adversely affect our business, financial condition and results of operations. We have in the past been impacted by anti-dumping proceedings in the United States against certain steel products, from among other countries, Germany and France. In the event such proceedings are reinstated or extend to our other products, our business, financial condition and results of operations may be materially adversely affected. See *"Business–Legal Proceedings".*

We have incurred in the past, and may continue to incur, substantial environmental liability in connection with our past, present or future operations

We may be subject to claims made for damage to property or injury or adverse health effects to persons, including employees, resulting from the environmental, health or safety impacts of our operations or past contamination. We may also be required to incur significant costs in order to comply with agency orders or statutory requirements concerning the investigation and remediation of contaminations. We are subject to increasingly stringent environmental laws and regulations within each of the jurisdictions in which we operate. We may be required to pay potentially significant fines and penalties, including possible criminal sanctions, as a result of past, present or future violations of any of the applicable environmental laws and regulations. Our liability also extends to any violation or waste management and disposal practices that occurred prior to the acquisition by us of the responsible subsidiaries or assets and may be imposed regardless of our actions or fault. Environmental risk is inherent to our operations, and we may become subject to material liabilities with respect to our operations, which may materially adversely affect our business, financial condition and results of operations.

Consistent with the market practice in the steel industry, certain of our production facilities utilized asbestos until the 1980s. Several claims have been made by former employees alleging workplace exposure to asbestos during operations at these production facilities. In particular, there are ongoing legal proceedings relating to asbestos in connection with a French subsidiary of the Group, and provisions in the amount of €1 million were made. Although there have been no material financial consequences as a result to date, there can be no assurance that we will not be subject to future significant claims for compensation or damages caused to our reputation in the future, which may materially adversely affect our business, financial condition and results of operations. We also cannot make any assurances that we will not be subject to further investigations, substantive clean-up liabilities, or personal injury claims, or that we will be able to remedy all environmental and asbestos related issues effectively. The competent authorities have made and may in the future make specific requests that we investigate, rehabilitate or reduce or control emissions at certain of our sites. For example, at our plant in Siegen, Germany, we are currently implementing a water treatment project, to be completed in April 2017, which was agreed with and formally ordered by the competent authorities. There can be no assurance that we will not be subject to further investigations, material environmental clean-up liabilities or recultivation obligations in the future.

Some of our manufacturing facilities are located on properties with a long history of industrial use, whether by us or previous occupiers. In the past, grounds of some of the properties on which we operate were found to be contaminated with various contaminants, in particular metal and chemical fiber substances, with certain lots also containing waste (slag) disposal sites. This has led us to incur costs of cleaning and refurbishment. Further, these are existing known or suspected contaminations on some of our lands and buildings, e.g. in Witten (Germany), St-Joseph-de-Sorel (Canada) and Emmenbrücke (Switzerland). While none of these contaminations currently require us to conduct remediation measures, they would most likely have to be cleaned up if the contaminated lots were to be adapted for a different type of use or if the competent environmental protection agency changes its assessment of the contamination's threat to the environment or human health. It is generally difficult to estimate exact costs of clean-up measures in connection with contaminations, but costs incurred could be material.

In addition, we may be subject to environmental liabilities in connection with contamination at facilities owned or operated by us which has not yet been detected. Many of the lots on which we operate have been used for industrial purposes for many decades, and it is likely that prior uses resulted in some sort of contamination of these lots. There can be no assurance that such contamination, once detected and found to pose a threat to the environment or human health, will not necessitate clean-up measures or other remediation action in the future, which could involve substantial costs for us and have a negative impact on the value of the real estate concerned. Environmental laws may impose liability on owners and occupiers of contaminated facilities to investigate and clean up the contamination, regardless of whether the contamination was caused by their disposal activity or the legality of the disposal activity at the time it occurred. As such, any significant contamination that occurs or that we discover in the future could result in material costs and liabilities.

We are subject to increasingly stringent environmental regulations

We are subject to increasingly stringent environmental laws and regulations within each of the jurisdictions in which we operate, including rules governing the extent of hazardous constituents in products such as lead or hexavalent chromium (chromium 6), the treatment and discharge of waste water, generation and disposal of solid and hazardous industrial waste, control of atmospheric and water pollution, and remediation of environmental contamination at our operating facilities and third-party disposal sites, as well as any improvement works that may be required by local authorities. Further, environmental regulations might restrict the use of certain materials or elements contained in our current products. The replacement of such materials or elements may require the incurrence of significant costs or not be feasible. In addition, the sale of such products might be materially interrupted before replacement materials or elements become available.

Depending on the size and scope of operations our facilities require various permits to operate, including air emission permits, operating permits, wastewater discharge permits etc. Changes in the scope of operations, time limits on existing permits and future environmental laws may require us to apply for the renewal of existing or the issuance of new permits. We will only be able to obtain these permits if we continue to meet all permit requirements.

The facilities of certain Group companies emit carbon dioxide in the ordinary course of their respective operations. Compliance with existing, new or proposed regulations governing such emissions, including the European Union Emissions Trading Scheme ("**ETS**"), might lead to a need to reduce such

greenhouse gas emissions, to purchase rights to emit from third parties, or to make other changes to our business or capital investments, any of which could result in significant additional costs or could reduce demand for our products. Moreover, these regulations and the enforcement of those regulations typically become more stringent over time. To date, our carbon dioxide emissions have remained below the amount of emission allowances granted to us under relevant laws and regulations. Going forward our emissions may increase in excess of our allowances causing us significant financial penalties or the need to purchase allowances at significant additional cost.

For example, under the ETS, a certain amount of emission rights was allocated free of charge to companies until the end of 2020, thereby providing a no-cost cap on the carbon dioxide emissions of their production facilities. While we and other European Union companies received all necessary emission rights free of charge during the previous trading period (2008–2012), the ETS became more restrictive in the current trading period (2013–2020). See "*–Any increase in the costs of energy resources or disruptions in energy supplies may materially adversely affect our business, financial condition and results of operations*". Since 2013, both the cap on total annual emissions in the European Union and the amount of emission rights allocated at no cost are scheduled to be gradually reduced by 2020. As a result, manufacturing companies generally will be required to purchase a steadily increasing amount of emission rights during that period. Following Commission Decision 2014/746/EU of October 27, 2014, the manufacture of ferroalloys (including stainless steel) has been recognized to pose a significant risk of carbon leakage. In the event that we do not continue to receive sufficient carbon leakage protection, or are not otherwise allocated a sufficient amount of emission rights in the future, including free emission rights, our costs will significantly increase. Such costs are also dependent on the price of emission allowances, which currently is expected to increase. As a result, we may be forced to increase the price of our products, which may put us at a competitive disadvantage compared with companies not subject to the ETS. Additionally, measures to reduce carbon dioxide and other greenhouse gas emissions that could directly or indirectly affect us or our suppliers are currently being developed or may be developed in the future. These existing and possible new regulations regarding carbon dioxide and other greenhouse gas emissions, especially a revised ETS or a successor to the Kyoto Protocol under the United Nations Framework Convention on Climate Change, could have a material adverse effect on our business, prospects, financial condition, cash flows and results of operations.

Moreover, Directive 2010/75/EU of November 24, 2010 on Industrial Emissions (as amended, the "**IE Directive**") applies common rules for permitting and controlling industrial installations across Europe. Discharges to air, soil and water, as well as noise and safety are all covered by the IE Directive. The IE Directive, which, for example, was implemented in Germany in 2013, has and will continue to result in a stricter environmental oversight of our production facilities, particularly with respect to atmospheric emissions. It is likely that the implementation of the IE Directive and respective updates of environmental permits will require us to invest in additional emission reduction measures for one or more of our production facilities. These processes are expected to be ongoing for many years, may be costly and we may not obtain all required permits or meet all standards of the IE Directive on a timely basis, or at all, or that the costs of compliance with emission reduction measures will be within budgeted amounts.

More generally, environmental laws and regulations have an increasing impact on our activities in almost all the countries in which we operate. Some risk of environmental costs and liabilities is inherent in our production processes, and there can be no assurance that no material costs and liabilities will be incurred.

We generate waste, which may create liability under existing or future environmental, health and safety laws and regulations

We generate waste, including waste water, in the ordinary course of our manufacturing operations and are subject to a wide range of federal, state, and local environmental, health and safety laws and regulations, which impose onerous obligations on companies found in violation of environmental standards or otherwise operating on sites where wastes have been disposed of, irrespective of fault. We may be subject to future claims, investigations or proceedings that may impose fines, additional disposal costs or remedial obligations on us in respect of future pollution, hazardous wastes or other environmental issues at the facilities which we operate. Any such environmental liability on us may materially adversely affect our business, financial condition and results of operations.

We have been and may continue to be subject to claims arising out of warranties and representations given under agreements to transfer certain of our assets

We have granted certain representations and warranties and given undertakings in connection with the sale and transfer of certain former Group entities and other assets, such as Schmolz+Bickenbach Distributions GmbH. Certain of these representations have not expired, and we may be faced with claims arising out of the breach of any such past or future representations. Such representations, warranties and undertakings may be given in dispositions in the future. Although we do not currently know of any such claims or breaches, any such claim may materially adversely affect our business, financial condition and results of operations.

We are exposed to risks associated with information technology (IT) systems

We regularly receive and transmit personal, confidential and proprietary information by e-mail and other electronic means and therefore rely on the secure processing, storage and transmission of such information. Even if suitable measures are taken, a third party could gain access to the data transmitted or could place viruses or similar software which might damage our IT systems or disclose confidential data.

Furthermore, we rely on IT systems to effectively administer our operations. Our administrative processes and operations may be interrupted by technical faults, malfunctions, illegal interventions, network overload, maintenance work, the malicious blocking of electronic access by third parties, other shortcomings on the part of the network provider or other reasons. In addition, we may become dependent on one or more particular providers of software programs. If the software provider (or providers), upon which we depend, cease to provide updates or support for software programs relevant for us, it is not ensured that we can achieve a seamless and uninterrupted transition to a different software.

Our potential future acquisition activity could involve numerous risks, and our business and results may be impacted by our investments in joint ventures and/or the actions of our co-investors

We were engaged in material acquisitions in the past and may do so again in the future. Such potential future acquisition activity could involve numerous risks. We may be unable to arrange financing for our targeted companies on favorable terms and, as a result, elect to fund the acquisitions with our available cash and cash equivalents, which as a result would not be invested in existing operations. We may face difficulties in integrating the acquired companies with inconsistencies in systems, procedures, policies and business cultures, the diversion of management's attention from day-to-day business, negative customer reactions, the departure of key employees and the assumption of liabilities, such as environmental liabilities. These risks may materially adversely affect our business, financial condition, results of operations and cash flows. Furthermore, with regard to past acquisitions, we could have liabilities in respect of acquired operations that have not and may not be identified through our due diligence.

In December 2016, we signed a joint venture agreement with Tsingshan Group, a Chinese global market leader in the field of stainless steel, to support our growth in China. Additionally, we may decide to hold further material investments through joint ventures with third parties in the future. Investments in joint ventures may, under certain circumstances, involve risks not present where a third party is not involved, including the possibility that our partners or co-investors might become bankrupt, fail to fund their required capital contributions, perform their obligations poorly or not at all, or that make us liable to our co-investors' creditors in respect of our partner's share of joint venture liabilities. Co-investors may have economic or other business interests or goals that are inconsistent or in conflict with our business interests or goals, and may be in a position to block action with respect to our common investments or take actions contrary to our policies, objectives or interests. Disputes between us and our co-investors may result in litigation or arbitration that would increase our expenses and prevent our officers and directors from focusing their time and effort on our business and result in the loss of business opportunities and growth. Furthermore, actions by our co-investors, which we may be unaware of, or unable to control, such as political affiliations, illegal or corrupt practices and other activities, may cause reputational damage for us or result in adverse consequences to our common investments, including incurring costs, damages, fines or penalties, construction delays, reputational losses or the loss of key customer relationships. Consequently, actions by or disputes with our co-investors might result in subjecting assets owned by the joint venture to additional risk. The above risks could have a material adverse effect on our business, assets, financial condition and results of operations.

A substantial majority of our sales are concentrated in Europe, Canada and the United States, and an economic decline in Europe, Canada or the United States or protracted periods of weak growth in those regions could have a material adverse effect on our business, financial condition and results of operations

In 2016, we derived 91.3% of our revenue from customers in Europe, Canada and the United States (based on the location of the customer). Our sales have been concentrated in Europe, Canada and the United States generally because of the close proximity of these markets to our production facilities and our long established relationships with customers in these regions. The overall success of our operations, therefore, is closely tied to the economic prosperity and stability of Europe, Canada and the United States.

Many of our core markets have experienced severe economic downturns. These core markets have faced serious and simultaneous declines in sales during the recent global financial and economic crisis in 2009 and may again suffer such declines. See "*–Our results can be and have been substantially affected by macroeconomic trends, economic downturns and financial crises have had in the past and may in the future have a material adverse effect on our results of operations and financial condition*". We cannot easily diversify our geographical customer base because of the significant cost of shipping of our products to other markets and because of the importance of close collaboration in engineering and flexible delivery times. Any significant decrease in demand for special steel products or decline in the base price of these products, particularly in Europe, Canada and the United States, could result in significantly reduced profitability.

We are exposed to local business risks in a number of different jurisdictions, including a number of emerging markets, as well as risks inherent to international operations

We source and distribute our products in a multitude of countries. Although scrap steel is typically sourced locally to production plants, metal alloys which are key raw materials are mined and refined in numerous countries of origin, many of which are in emerging markets. In addition, our strategy includes the growth of our operations and distributions outside of our core European and North American markets. In particular, we have, among others, subsidiaries in South Africa, Dubai, China, Singapore, Malaysia, Russia, India and Brazil, which may expose us to certain risks to a greater extent than in connection with our operations in more developed markets. Further, we believe that sales generated outside of Europe, Canada and the United States will increasingly account for a significant portion of our total sales. In the year ended December 31, 2016, our revenue generated from these markets (based on the location of the customer) accounted for 8.7% of our revenue for this period.

Accordingly, we are subject to risks resulting from legal, political, fiscal, social and regulatory requirements and economic conditions as well as unforeseeable developments in a number of jurisdictions. These risks include political instability, social instability and levels of crime and corruption, differing economic cycles and adverse economic conditions, disruption of our operations, unexpected changes in regulations and tax rules, import restrictions and export licenses, tariffs and trade barriers, restrictions on foreign currency exchange, transport delays as well as difficulty in attracting and retaining qualified management and employees. Some countries in which we operate are rated by NGOs, such as Transparency International, as having a high level of corruption and related practices, including acceptance of kickbacks, bribes, facilitation payments or other illegal gains or benefits by customers or authorities.

A potential increase of political instability could adversely affect us

The recent political environment saw an increasing volatility and instability in several countries and regions in which we operate. For instance, in Europe, the United Kingdom held a referendum on June 23, 2016 in which a majority of voters voted to exit the European Union, popularly referred to as "Brexit". The UK Government has subsequently invoked Article 50 on March 29, 2017, and negotiations are expected to commence to determine the future terms of the United Kingdom's relationship with the European Union, including, among other things, the terms of trade between the United Kingdom and the European Union.

On March 30, 2017, the U.S. Department of Commerce announced its final determinations in the anti-dumping duty investigations of imports of certain carbon and alloy steel cut-to-length plate products from a number of countries, including France, Germany and Italy. As at the date of this supplemental report, we cannot predict whether the Department of Commerce or the U.S. International Trade Commission will announce similar findings with respect to our special long steel products or, they were to do so, what level of countervailing duties they would impose. Furthermore, on March 31, 2017, U.S. President Donald Trump signed two executive orders launching reviews of U.S. trade policy. The first

executive order mandates a review to identify alleged forms of trade abuse and nonreciprocal practices that the Trump administration believes may contribute to the U.S. trade deficit. Among the countries identified by the U.S. Commerce Department as potential subjects of this review are Switzerland, Germany, Italy, France and Canada. We have operations in all these jurisdictions.

The second executive order calls for a review of the United States' practice in collecting anti-dumping countervailing duties. The Trump administration has expressed a belief that the United States may be under-collecting such duties.

The resulting legal uncertainty from political instability could adversely affect us in various ways. We are therefore exposed to a number of factors, over which we have little to no control and which may materially adversely affect our business activities. These factors include, but are not limited to, the following:

- It may become more difficult for us to flexibly adjust our number of employees and/or our locations of operations due to political pressure imposed on us.
- We may be subject to rapid changes in tax legislation, which might negatively affect us, particularly as we have significant fixed investments in certain countries.
- We may be subject to rapid changes of legislation applicable to us.
- We could be subject to increased trade restrictions such as anti-dumping/anti-subsidy tariffs, export restrictions, embargos, import taxes, special monitoring measures, economic sanctions against certain countries, persons, businesses and organizations, as well as other protectionist or politically motivated restraints.

Substitute materials and new technologies could reduce market prices and demand for our products

Our products compete with substitute materials such as aluminium (particularly in the automotive industry), cement, carbon fiber, composites, glass, ceramics, plastic and wood. Changes in customer preferences, pricing of competing products, development of new or improved substitutes for our products and government regulatory initiatives mandating the use of such materials *in lieu* of our products could significantly reduce prices of, or demand for, our products. In particular, as a result of increasingly stringent regulatory requirements, as well as developments in alternative materials, designers, engineers and industrial manufacturers, especially those in the automotive industry, are increasing their use of lighter weight and alternative materials, such as aluminum, composites, plastics and carbon fiber in their products. In addition, price competition with respect to established grades of carbon steel and stainless steel and other products could increase through new steel developments. Loss of market share to substitute materials, increased government regulatory initiatives favoring the use of alternative materials, as well as the development of additional new substitutes for our products could have a material adverse effect on our business, prospects, financial condition, cash flows and results of operations.

Our risk management and internal controls may not prevent or detect violations of law and Group-wide policies

Our activities are subject to various laws, rules and regulations in the various jurisdictions in which we operate or sell our products. Our existing compliance processes and controls may not be sufficient to effectively prevent or detect inadequate practices, fraud and violations of law or Group-wide policies by our subsidiaries, intermediaries, sales agents, employees, directors and officers. In particular, we collaborate with intermediaries and sales agents the activities of which are beyond our control and whom we remunerate on the basis of commissions. We may be exposed to the risk that our intermediaries, consultants, sales agents, employees, directors and officers receive or grant inappropriate benefits or generally use corrupt, fraudulent or other unfair business practices, and to legal sanctions, penalties and loss of orders as well as material harm to our reputation.

In addition, our operations, including the sale and distribution of our products and services, are subject to various laws, rules and regulations in the different countries in which we operate or sell our products and services. Due to the number and complexity of such provisions, we cannot ensure that we have always complied with all national, European or international rules and regulations applicable to our operations (including to labor, health and safety, competition and antitrust, criminal, anti-bribery and anti-corruption laws) or obtained all licenses and permits required to operate our business, or have complied at all times with the terms of such licenses and permits.

Certain of our products or sales are subject to U.S. and foreign export controls and sanctions laws and regulations, including the International Traffic in Arms Regulations ("**ITAR**"), the Export Administration

Regulations ("**EAR**"), and sanctions regulations administered by the U.S. Department of Treasury's Office of Foreign Assets Control ("**OFAC regulations**"). The ITAR generally requires export licenses from the U.S. Department of State for goods, technical data, and services sent outside the United States that have military or strategic applications. The EAR regulates the export of certain "dual use" goods, software, and technologies, and in some cases requires export licenses from the U.S. Department of Commerce. OFAC regulations implement various sanctions programs that include prohibitions or restrictions on dealings with certain sanctioned countries, governments, entities and individuals. Violations of these legal requirements are punishable by criminal fines and imprisonment, civil penalties, disgorgement of profits, injunctions, debarment from government contracts as well as other remedial measures. Our subsidiaries have established policies and procedures designed to assist us and our personnel to comply with applicable U.S. and international laws and regulations. However, there can be no assurance that our policies and procedures will effectively prevent us from violating these regulations in every transaction in which we may engage, and such a violation could adversely affect our reputation, business, financial condition and results of operations.

Furthermore, we may be affected by adverse changes in applicable laws and changes in the application of certain laws by authorities. In certain circumstances, such changes may apply retroactively. Any such claims, or any other failure in the past or future to fully comply with applicable laws, rules and regulations may materially adversely affect our business, financial condition and results of operations.

We are subject to varied tax and social security laws and regulations in the jurisdictions in which we operate

From time to time, Group companies are subject to tax and social security audits by the relevant authorities in the jurisdictions in which they operate. Such audits may result in additional claims for tax or social security contributions in any of the countries in which we do business, sell our products or offers our services. Moreover, tax authorities may raise claims against us for failure to comply with applicable tax laws, for example, as a result of insufficient documentation and record keeping, incorrect qualification and booking of certain transactions, or incorrect tax declarations or filings. We are regularly subject to tax audits by Swiss and foreign tax authorities. Any such audit could lead to demands for additional tax, interest on such tax, and penalties for noncompliance with tax laws.

The risk exists, in particular, with regard to transfer pricing rules and VAT statements. We are present or represented in over 30 countries. Like any group of companies which is internationally active, we are subject to a general tax liability risk in connection with transfer pricing issues. In Switzerland, value-added tax is reported to the Federal Tax Administration by way of self-assessment. In 2010, the Federal Tax Administration conducted a VAT audit with respect to our Swiss subsidiaries, which resulted in minor additional taxes due. We cannot assure you that future VAT audits would not lead to the incurrence of additional VAT payment obligations by us. If this were to occur, it could have a material adverse effect on our business, financial condition and result of operations.

The complexity of international fiscal systems and of (cross-border) VAT regulations as well as changes in the current practice of tax authorities and courts may lead to incomplete and inaccurate tax declarations which may result in additional tax or social security contribution payments. Therefore, any such change may materially adversely affect our business, financial condition and results of operations.

We may be unable to secure our intellectual property rights

Our business is partially dependent on our ability to protect our intellectual property and other proprietary rights. We rely primarily on trademarks, trade secrets, and know-how, as well as confidentiality and non-disclosure clauses and agreements and other contractual provisions to protect our intellectual and other proprietary rights. If we do not obtain sufficient protection for our intellectual property, or if we are unable to effectively enforce our intellectual property rights, our competitiveness could be impaired, which could limit our growth and future revenue.

Additionally, our trade secrets and know-how held by us and our employees are critical to our business. There can be no assurance that such employees will not breach their agreements with us and reveal our trade secrets or convey our know-how or other confidential information to competitors. In such cases, we may not have adequate remedies, if any, to compensate us for losses that we may suffer.

The name "SCHMOLZ+BICKENBACH", under which we operate, as well as the related trademark, are owned by one of our indirect shareholders, SCHMOLZ+BICKENBACH GmbH & Co. KG. We entered

into an agreement with the owner of this trademark in 2006 and have since acquired a revocable right of use of the name. The loss of the trademark under which we currently operate may have a material adverse effect on our business, financial condition and results of operations due to the goodwill which has accumulated with respect to our trade name. We have made our own trademark and patent applications, the loss of which could further impact our business. In addition, any claims to the effect that we have infringed third-party intellectual property rights or breached licenses, or the termination of license agreements by third parties, could significantly harm our business and reputation. This may materially adversely affect our business, financial condition and results of operations.

We may not be able to effectively manage our inventories and adapt our production facilities to customer demand

Our failure to successfully coordinate, source, sell and plan the distribution of products to our customers may result in a material adverse effect on our business, financial condition and results of operations. We have been able to partially mitigate this risk by implementing a reporting system for our distribution and processing subsidiaries that enables us to measure on a monthly basis whether certain internal benchmarks are met and to decrease working capital. Any disruption or mismanagement of the inventories may materially adversely affect our business, financial condition and results of operations.

In addition, we may be unable to align our operations with emerging customer demand in the markets within which we operate. Our strategy is to invest in production facilities on a long-term basis with the objective of improving the facilities by adjusting them to prevailing customer trends. This limits our operational flexibility as the facility may not be modified on a short-term basis to adapt to any new customer demands or trends. As a result, depending on the global and local market developments which are largely beyond our control, at any period of time our production plants may experience significant overcapacities or capacity shortages. Due to our exposure to strategic risk, market developments, inappropriate capacity and geographic planning for our production facilities may result in the loss of market share and position, damage to our reputation and reduced sales and margins, which may materially adversely affect our business, financial condition and results of operations.

We are constantly under pressure to research and develop new, higher quality products with specific mechanical properties. As we target customers and markets with advanced end-use applications, we must closely follow the emergence of new needs and demands for higher quality products and adapt promptly to these demands. Any failure by us to adapt to the market demands of customers, and our inability to continue to develop products which increase in quality rapidly, may materially adversely affect our business, financial condition and results of operations.

Because we maintain substantial inventories of special long steel products for which we do not have firm customer orders, there is a risk that we will be unable to sell our existing inventories at the volumes and prices we expect. For example, the value of our inventories could decline if the prices we are able to charge our customers decline. See "*–Our financial condition may be negatively affected by adverse trends in raw and other material prices*" above. In that case, we may experience reduced margins or losses as we dispose of higher-cost products at reduced market prices, which may materially adversely affect our business, financial condition and results of operations.

We have obligations to our employees relating to retirement and other obligations, the calculations of which are based on a number of assumptions, including discount rates, life expectancies and rates of return on plan assets, which may differ from actual rates in the future

We operate both funded and unfunded defined-benefit pension schemes for beneficiaries under arrangements that have been established in the various countries in which we offer employee pension benefits. As of December 31, 2016, the present value of defined benefit obligations from pension plans amounted to €636.9 million, of which €210.5 million (33.1%) were unfunded. Our defined benefit obligations are based on certain actuarial assumptions that can vary by country, including discount rates, life expectancies, long-term rates of return on invested plan assets and rates of increase in compensation levels. To the extent that the funded plans are not fully funded, a provision has been recognized in our consolidated financial statements. If actual results, especially discount rates, life expectancies or rates of return on plan assets were to differ from our assumptions, our pension obligations could be higher than expected and we could incur actuarial gains and losses. Changes in assumptions or underperformance of plan assets could also adversely affect our financial condition and results of operations. Under IAS 19R, actuarial gains and losses are not required to be posted to income until they exceed 10% of the higher of the present value of the pension obligation and the plan assets. Any amount in excess of 10% is amortized over the average remaining period of service of the workforce. Differences between estimated and actual returns on plan assets are to be recorded under

other comprehensive income. If invested pension plan assets perform negatively or below assumptions we would incur actuarial losses and we could have to revise our assumptions. Future declines in the value of plan assets or lower-than-expected returns may require us to make additional current cash payments to pension plans or non-cash charges to our income statement. Significantly increased contribution obligations could have adverse effects on our financial condition and results of operations. Moreover, local funding rules might require additional contributions to avoid underfunding. The contributions paid for private and statutory pension plans are recognised in personnel costs in the current year. In the years ended December 31, 2015 and 2016, these contributions amounted to €33.6 million and €33.4 million, respectively. In these years, we made employer contributions of €15.7 million and €15.6 million, respectively, to the plan assets of the existing defined benefit plans, including pension payments for unfunded plans of €6.4 million and €6.3 million, respectively.

Risks Related to Our Structure and Financial Position

If we are unable to comply with the restrictions and covenants included in our debt agreements, there could be a default under such agreements, which could result in an acceleration of repayment

Our existing debt agreements contain and any future debt agreements we enter into may contain, a number of customary financial and restrictive covenants. Our ability to comply with these covenants, including meeting financial ratios and tests, depends on a number of factors, some of which may be beyond our control, such as a deterioration of the industries and markets in which we operate, their inability to fully recover from the global financial and economic crisis, or a deviation from the assumptions contained in our business plan. As a result, we may be unable to comply with our financial covenants, and any failure may materially adversely affect our business, financial condition and results of operations.

The breach of a financial or other covenant, or failure to meet obligations under any of the agreements governing our debt may result in a default under such agreements, which may expose us to a significant increase in financing costs, an immediate requirement to repay the related debt in whole or in part, and/or the enforcement of any security granted to such lenders. In addition, any default may expose us to requests by our customers for advance payments for deliveries and a reduction or cancellation by credit insurers of their commitments, as well as the trigger of cross-default and cross-acceleration clauses contained in several other of our financing instruments. As a result, cross-default and cross-acceleration provisions under our other debt instruments, may be triggered and our liquid funds and short-term cash flow may be insufficient to service any of the debts in the circumstances described above. If any of these events occur, our assets may not be sufficient to repay in full all of our outstanding indebtedness and we may be unable to find alternative financing. Even if we could obtain alternative financing, it might not be on terms that are favorable or acceptable to us. Any failure by us to service our debts may have a materially adverse effect on our business, financial condition and results of operations.

Our debt agreements contain significant restrictive debt covenants that limit our operating flexibility

Our debt agreements contain covenants that limit our ability to take certain actions. These restrictions may limit our ability to operate our businesses and may prohibit or limit our ability to enhance our operations or take advantage of potential business opportunities as they arise. Our debt agreements Facility Agreement contain, covenants restricting our ability to, among other things:

- incur or guarantee additional indebtedness and issue certain preferred stock,
- make certain payments, including dividends or other distributions,
- create or incur liens,
- prepay or redeem subordinated debt or equity,
- make certain investments,
- engage in certain transactions with affiliates or subsidiaries,
- sell capital stock of subsidiaries, or
- consolidate or merge with other entities.

These covenants could limit our ability to finance our future operations and capital needs and our ability to pursue business opportunities and activities that may be in their interest.

In addition, certain of our debt agreements contain financial covenants which require us to maintain a minimum ratio of EBITDA to net interest expense, a ratio of net worth to total assets and to maintain a maximum ratio of net debt to EBITDA.

The requirement that we comply with these provisions may materially affect our ability to react to changes in market conditions, take advantage of business opportunities we believe to be desirable, obtain future financing, fund needed capital expenditures, or withstand a continuing or future downturn in our business.

Our incurrence of debt may make it difficult for us to operate our business

We expect to continue to require debt as part of our business and expect to incur significant debt service obligations. See *"Management's Discussion and Analysis of Financial Condition and Results of Operations"*.

Our leverage could have important consequences, including:

- making it more difficult for us to satisfy our obligations with respect to our debt and liabilities;
- increasing our vulnerability to, and reducing our flexibility to respond to, general adverse economic and industry conditions;
- requiring the dedication of a substantial portion of our cash flow from operating activities to the payment of principal of, and interest on, our indebtedness, thereby reducing the availability of such cash flow to fund working capital, capital expenditures, acquisitions, joint ventures, product research and development;
- restricting us from pursuing acquisitions or exploiting business opportunities;
- limiting our flexibility in planning for, or reacting to, changes in our business, the competitive environment and the industry in which we operate;
- negatively impacting credit terms with our suppliers and other creditors;
- exposing us to interest rate increases;
- placing us at a competitive disadvantage compared to our competitors that are not as highly leveraged; and
- limiting our ability to obtain additional financing to fund future operations, capital expenditures, business opportunities, acquisitions and increasing the cost of any future borrowings.

Any of these or other consequences or events could have a material adverse effect on our ability to satisfy our obligations.

We may be unable to realize any benefits from our ongoing or future cost savings and efficiency programs, such as our Performance Improvement Program (PIP)

For 2016 and 2017, we launched an extensive Performance Improvement Program (PIP) with the objective to achieve savings of €70 million fully in effect by the end of 2017. The PIP aims at boosting growth and earnings and improving operational earning power and the capital structure in a sustainable manner. Furthermore, we are currently engaged in the ongoing reorganization of DEW, which is a central element of our restructuring program. Along with the implemented cost-cutting measures and signing off a restructuring tariff agreement with DEW employees, a sustainable reorganization of the Business Unit was initiated. Our ability to compete successfully and remain profitable depends on us materially achieving the targets of our ongoing and future cost savings and efficiency programs and that the targets have the intended effect. We may are unable to meet one or more of these targets. It is also possible that measures are less effective in achieving the level of combined cost-savings or margin enhancement than we expect, or that we do not achieve such results as quickly as we expect. In any of these cases, our business, prospects, financial condition, cash flows and results of operations could be materially adversely impacted.

Borrowings under credit facilities will bear interest at floating rates that could increase significantly

A substantial part of our indebtedness, are at variable rates of interest and expose us to interest rate risk. As of December 31, 2016, we had total debt of €463.7 million, of which €265.6 million bore interest at variable rates generally linked to market benchmarks such as EURIBOR and LIBOR. If interest rates rise in the future, our interest expense associated with any variable rate obligations that are not hedged would increase, even though the amounts borrowed would remain the same, reducing cash flow available for capital expenditures and hindering our ability to make payments on our

obligations. See *"Management's Discussion and Analysis of Financial Condition and Results of Operations–Quantitative and Qualitative Disclosures about Market Risk–Interest rate risk".*

We require a significant amount of cash to service our debt, and our ability to generate sufficient cash depends on factors that may be beyond our control

Our ability to service and refinance our debt and to fund future operations and capital expenditures is highly dependent on our future operating performance and our ability to generate a sufficient cash flow. To a certain degree, this ability is connected to general economic, financial, competitive, market, legislative, regulatory and other factors which may be outside our control. We may not be able to generate sufficient cash flow from our operating activities, our currently anticipated sales growth and operating improvements may not be realized, and any future debt or equity financing may not be available to us in amounts which would enable us to pay the principal, premium and interest of our indebtedness.

We cannot assure that we will generate sufficient cash flow from our operating activities, that currently anticipated costs savings, sales growth and operating improvements will be realized or that future debt and equity financing will be available to us in amounts sufficient to enable us to pay the principal, premium, if any, and interest on our indebtedness or that future borrowings will be available to us in amounts sufficient to service and repay our indebtedness or to fund our liquidity needs.

Our inability to generate sufficient cash flow from our operating activities and capital resources in order to satisfy our obligations as they mature, or to fund our liquidity needs, may compel us to reduce or delay our business activities and capital expenditures, to sell our assets, to obtain further debt or equity capital, or restructure or refinance all or a portion of our debt on or before their maturity. Our failure to achieve the above may materially affect our ability to satisfy our debt obligations and consequently our obligation to service our debt. This in turn may trigger cross-default or cross-acceleration provisions in several others of our debt agreements and instruments, and we may be obliged to pay certain substantial amounts on demand. We may face the additional risk that in order to refinance our debt we would be required to agree to more onerous covenants, which would further restrict our business operations. The occurrence of any event described above may have a materially adverse effect on our business, financial condition and results of operations.

We may be unable to extend or refinance our debt on favorable terms or at all

Our ability to pay and refinance our debt or our ability to fund our working capital and capital expenditure is heavily reliant on our future operating performance and our ability to generate a sufficient cash flow. We face the risk that we will be unable to achieve any refinancing on a timely basis or on satisfactory terms. We may also be limited in our ability to pursue refinancing alternatives by the terms and conditions of our existing debts.

We may incur substantial additional indebtedness in the future, which may make it difficult for us to service our debt and impair our ability to operate our business

We may incur substantial additional indebtedness in the future, including in connection with any future acquisition or joint venture. The restrictions on our incurrence of additional indebtedness are subject to a number of significant qualifications and exceptions and, under certain circumstances, the amount of indebtedness that could be incurred in compliance with these restrictions could be substantial. If we incur new debt or other obligations, the related risks that we now face, as described above in *"–If we are unable to comply with the restrictions and covenants included in our existing or any future debt agreements, there could be a default under such agreements, which could result in an acceleration of repayment"* and elsewhere in these "Risk Factors" could intensify.

SELECTED FINANCIAL INFORMATION

The selected financial and operating information as of and for the years ended December 31, 2014, 2015 and 2016 shown below has been derived from our audited consolidated financial statements as of and for the years ended December 31, 2015 and 2016, unless otherwise indicated. The comparative financial information for the year ended December 31, 2014 in the consolidated income statement and the consolidated statement of cash flows of the consolidated financial statements as of and for the year ended December 31, 2015 were re-presented due to the reclassification of selected distribution entities in Germany, Belgium, the Netherlands and Austria as discontinued operations as at March 31, 2015 and deconsolidation at July 22, 2015. Our audited consolidated financial statements as of and for the years ended December 31, 2015 and 2016 were prepared in accordance with IFRS and comply with Swiss law. Some of the financial and operating information has been derived from our accounting records or our internal management reporting systems.

The financial and operating information summarized below should be read in particular in conjunction with "*Certain Definitions and Presentation of Financial and Certain Other Information*" and, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*".

Selected Consolidated Income Statement Data

	Year Ended December 31,		
	2014	**2015**	**2016**
		(€ in millions)	
Revenue	2,869.0	2,679.9	2,314.7
Change in semi-finished and finished goods	34.5	(75.7)	(30.6)
Cost of materials	(1,838.6)	(1,632.4)	(1,371.1)
Gross profit[1]	**1,064.9**	**971.8**	**913.0**
Other operating income	36.0	45.0	51.7
Personnel costs	(545.7)	(551.9)	(561.4)
Other operating expenses	(308.6)	(305.9)	(295.3)
Operating profit before depreciation and amortization and impairments[2]	**246.6**	**159.0**	**108.0**
Depreciation, amortization and impairments	(116.4)	(124.1)	(126.5)
Operating profit (loss)	**130.2**	**34.9**	**(18.5)**
Financial income	3.3	1.7	5.8
Financial expense	(53.9)	(47.6)	(46.9)
Financial result	**(50.6)**	**(45.9)**	**(41.1)**
Earnings before taxes	**79.6**	**(11.0)**	**(59.6)**
Income taxes	(27.6)	(24.4)	(15.9)
Earnings after taxes from continuing operations	52.0	(35.4)	(75.5)
Earnings after taxes from discontinued operations	(2.0)	(131.4)	(4.5)
Net income (loss)	**50.0**	**(166.8)**	**(80.0)**

(1) Referred to as gross margin in our consolidated financial statements as of and for the year ended December 31, 2015.
(2) Referred to as operating profit before depreciation and amortization in our consolidated financial statements as of and for the year ended December 31, 2015.

Selected Consolidated Statement of Financial Position Data

	As of December 31,		
	2014	**2015**	**2016**
		(€ in millions)	
Intangible assets	32.9	28.0	28.1
Property, plant and equipment	869.1	906.4	889.1
Miscellaneous non-current assets[1]	104.3	75.6	77.5
Total non-current assets	**1,006.3**	**1,010.0**	**994.7**
Inventories	918.5	664.0	630.2
Trade accounts receivable	440.2	331.5	333.1

Cash and cash equivalents	72.1	53.2	43.7
Miscellaneous current assets[2]	72.5	50.3	45.3
Total current assets	**1,503.3**	**1,099.0**	**1,052.3**
Total assets	**2,509.6**	**2,109.0**	**2,047.0**
Equity attributable to shareholders of SCHMOLZ+BICKENBACH AG	889.8	737.6	660.0
Non-controlling interests	11.1	13.0	7.5
Total shareholders' equity	**900.9**	**750.6**	**667.5**
Pension liabilities[3]	332.9	318.6	326.6
Non-current financial liabilities	440.2	323.3	281.9
Miscellaneous non-current liabilities[4]	74.6	73.3	88.4
Total non-current liabilities	**847.7**	**715.2**	**696.9**
Trade accounts payable	366.4	304.7	347.9
Current financial liabilities	219.1	201.0	181.7
Miscellaneous current liabilities[5]	175.5	137.5	153.0
Total current liabilities	**761.0**	**643.2**	**682.6**
Total liabilities	**1,608.7**	**1,358.4**	**1,379.5**
Total shareholders' equity and liabilities	**2,509.6**	**2,109.0**	**2,047.0**

(1) Aggregates the line items other non-current assets, non-current income tax assets, other non-current financial assets and deferred tax assets.
(2) Aggregates the line items current financial assets, current income tax assets, other current assets and assets held for sale.
(3) Referred to as provisions and similar obligations in our consolidated financial statements as of and for the year ended December 31, 2015.
(4) Aggregates the line items other non-current provisions, deferred tax liabilities and other non-current liabilities.
(5) Aggregates the line items current provisions, current income tax liabilities and other current liabilities.

Selected Consolidated Statement of Cash Flows Data

	Year Ended December 31,		
	2014	2015	2016
		(€ in millions)	
Cash flow from operating activities – Total	178.1	289.6	183.9
Cash flow from investing activities – Total	(95.2)	(113.1)	(92.3)
Free cash flow from continuing operations	65.2	179.0	92.0
Free cash flow – Total	82.9	176.5	91.6
Cash flow from financing activities – Total	(82.4)	(196.1)	(102.1)

Other Operating Information

	As of / Year Ended December 31,		
	2014	2015	2016
		(unaudited)	
Sales volume (in kt)	1,829	1,763	1,724
Revenue per ton (in €)	1,569	1,520	1,342
Order backlog[1] (in kt)	497	395	462
Employees (headcount) at year end	9,001	8,910	8,877

(1) Order backlog encompasses open firm customer orders (produce to order) and anticipated orders from frequent customers with continuous ordering (produce to stock) of the production division as at closing date. Order backlog, a non-IFRS measure, is presented in a non-consolidated manner. Therefore, double countings from intragroup transactions are contained in this figure. The double countings amounted to less than 5% over the period presented. The order backlog has been in a consistent and unchanged use as a metric throughout the period under review.

Segment Information

We report our business in two operating segments, which reflect our divisions: Production and Sales & Services.

	Year Ended December 31,		
	2014	2015	2016
		(€ in millions)	
Production			
Third-party revenue	2,372.2	2,136.4	1,858.3
Intersegment revenue	296.4	316.4	241.5
Total revenue	2,668.6	2,452.8	2,099.8
Adjusted EBITDA (unaudited)(1)	240.5	156.9	139.1
Adjusted EBITDA margin (in %) (unaudited)(2)	9.0	6.4	6.6
Operating profit before depreciation and amortization (EBITDA)	236.7	155.0	105.4
EBITDA margin (in %) (unaudited)(3)	8.9	6.3	5.0
Segment investments(4)	93.0	115.5	94.8
Sales & Services			
Third-party revenue	496.8	543.5	456.4
Intersegment revenue	0.1	0.0	0.1
Total revenue	496.9	543.5	456.5
Adjusted EBITDA(1) (unaudited)	23.7	19.6	18.5
Adjusted EBITDA margin (in %)(2) (unaudited)	4.8	3.6	4.1
Operating profit before depreciation and amortization EBITDA(1)	22.2	17.4	16.1
EBITDA margin (in %) (unaudited)(3)	4.5	3.2	3.5
Segment investments(4)	2.8	3.5	4.3

(1) Adjusted EBITDA is not a measure based on IFRS or any other internationally accepted accounting principles. The following table shows how we reconcile our Adjusted EBITDA to operating profit (loss) of the two segments for the periods indicated.
(2) Adjusted EBITDA as a percentage of total segment revenue.
(3) EBITDA as a percentage of total segment revenue.
(4) Segment investments equals additions to intangible assets (without goodwill) plus additions to property, plant and equipment (without reclassification from assets held for sale).

	Year Ended December 31,		
	2014	2015	2016
	(€ in millions, except percentages)		
Production			
Operating profit (loss) (EBIT)	126.9	39.2	(12.7)
Impairment of intangible assets, property, plant and equipment and assets held for sale	–	2.2	1.8
Depreciation and amortization of intangible assets, property, plant and equipment	109.8	113.6	116.3
Operating profit before depreciation and amortization (EBITDA)	236.7	155.0	105.4
Adjustments:			
Performance Improvement Program, other (unaudited)	n/a	n/a	3.0
Reorganization and transformation process (unaudited)	2.2	(0.8)	10.9
Restructuring and other personnel measures (unaudited)	1.6	2.7	19.8
Adjusted EBITDA (unaudited)	240.5	156.9	139.1
Sales & Services			
Operating profit (loss)	18.0	12.8	11.5
Impairment of intangible assets, property, plant and equipment and assets held for sale	–	–	–
Depreciation and amortization of intangible assets, property, plant and equipment	4.2	4.6	4.6
Operating profit before depreciation and amortization (EBITDA)	22.2	17.4	16.1
Adjustments:			
Performance Improvement Program, other (unaudited)	n/a	n/a	1.1
Reorganization and transformation process (unaudited)	0.6	0.6	n/a
Restructuring and other personnel measures (unaudited)	0.9	1.6	1.3
Adjusted EBITDA (unaudited)	23.7	19.6	18.5

Revenue by Geographic Region (based on the location of customer)

	Year ended December 31,					
	2014		2015		2016	
	(€ in millions)	*%*	*(€ in millions)*	*%*	*(€ in millions)*	*%*
Germany	1,170.8	40.8	1,041.0	38.9	919.2	39.7
Italy	295.4	10.3	295.7	11.0	260.5	11.3
France	210.9	7.4	190.0	7.1	162.1	7.0
Switzerland	56.7	2.0	45.7	1.7	42.3	1.8
Other Europe	522.8	18.2	499.2	18.6	456.7	19.7
USA	343.6	12.0	327.3	12.2	214.5	9.3
Canada	72.1	2.5	59.8	2.2	58.4	2.5
Other America	40.3	1.4	50.8	1.9	33.9	1.5
Africa, Asia and Australia	156.4	5.5	170.4	6.4	167.1	7.2
Total Revenue	**2,869.0**	**100.0**	**2,679.9**	**100.0**	**2,314.7**	**100.0**

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

The following discussion of our financial condition and results of operations should be read in conjunction with the section entitled "Selected Financial Information" and our consolidated financial statements as of and for the years ended December 31, 2015 and 2016 and the notes thereto, which have been prepared in accordance with IFRS. This discussion contains certain forward-looking statements that involve risks and uncertainties. Our actual performance and results, as well as the timing of certain future events described below, are based on assumptions about our business and may differ materially from those anticipated in the forward-looking statements as a result of certain factors, including those set forth in "Forward-Looking Statements" and "Risk Factors" and elsewhere in this supplemental report.

Overview

We are a leading independent and fully integrated special long steel producer with operations around the world. Our vertically integrated business model with operations across the entire value chain of special long steel, from production and processing to sales and services, allows us to offer one-stop shop solutions to our customers. According to SMR, we were the world's second largest producer of stainless long steel and tool steel and Europe's second largest producer of quality and engineering steel in 2015, in each case by volume.

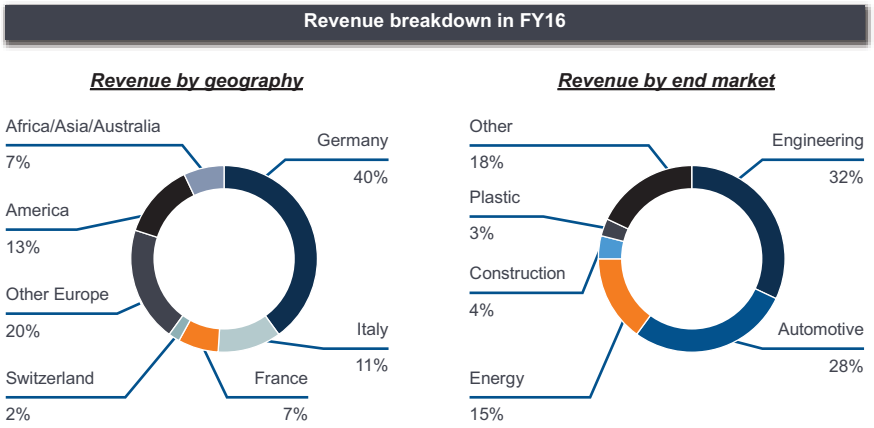
Special long steel is a niche market. Based on SMR data, we estimate that this market accounts for only around 8% of total steel production worldwide or approximately 115 mtpy as of 2015. Special long steel has specific properties, resulting from the chemical composition of the steel, a defined crystalline structure (achieved through forming operations and heat treatment), or a combination of the two. It differs significantly in a number of respects from the rest of the steel market, which tends to have more standard grades and products.

We have a broad product range covering the entire application spectrum of special long steel: quality and engineering steel, stainless steel and tool steel, as well as special materials. Quality and engineering steel is used in a multitude of applications. It is especially called for in applications with high mechanical loads and when components need to be both reliable and durable e.g. against shock or cyclical load. Stainless steel is resistant to corrosion, acids and extreme thermal stresses. It is strong but stretchable. These characteristics, paired with aesthetic optical design options, make stainless long steel an attractive material for many specialized applications. The tool steel product range spans cold-work steel, hot-work tool steel, high-speed steel (HSS) and mould steel, which is used in the automotive or the food packaging industry, among others.

Special long steel products can be tailored to customers' exact needs and specific application properties, enabling considerable product differentiation. Our smallest product is 0.013 millimetres in diameter, our largest weighs over 94 tons. Between these two extremes we have a broad portfolio consisting of more than 50,000 different products for the demanding application fields of our customers. In order to create customized solutions, players in the special long steel market need to keep up with the continuous technological advancement of their customers. Another success factor in the special long steel market is the ability to innovate while maintaining high standards of quality of products. Customers require a high degree of application expertise and process know-how, which have to be built up over a long period of time.

The high degree of product differentiation, application expertise and process know-how and the capital intensive nature of the business create natural barriers to entry to the special long steel market. This is confirmed by a relatively stable number and group of participants.

We have about 30,000 customers spread around the globe, primarily in Europe and North America, with a growing number based in emerging markets such as China and India. We supply a wide range of industries, including the engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace industries. For a description of the distribution of our revenue on these market segments, see "*Business–Overview*".



In 2016, our top 10 customers accounted for approximately 20% of our revenue. Our top 10 customers belong to, among others, the automotive, bearing, distribution and metal processing industry.

For the year ended December 31, 2016, we had revenue of €2,314.7 million, consisting of €950.4 million of revenue for quality and engineering steel, €884.7 million of revenue for stainless steel, €418.1 million of revenue for tool steel and €61.5 million of other revenue. For the year ended December 31, 2016, we had Adjusted EBITDA of €153.2 million. As at December 31, 2016, we had 8,877 employees worldwide.

We operate through two divisions: Production and Sales & Services. Our two divisions correspond to our reporting segments under IFRS shown as our operating segments in our consolidated financial statements, which we refer to as our divisions:

Production. Our Production division encompasses the Business Units Deutsche Edelstahlwerke ("**DEW**"), Ugitech, Swiss Steel, Finkl Steel and Steeltec. The Production division operates nine steelmaking and hot forming plants in Canada, Germany, France, Switzerland, and United States. Of these plants, six have their own melting furnaces as well as rolling and/or forging equipment and three operate rolling or forging equipment without on-site melting facilities. Our production division operates 10 of our 11 cold-processing facilities in Germany, Italy, France, Switzerland and Turkey focusing on bright bar and wire-production.

The division sells products directly to third parties (third-party revenue of €1,858.3 million accounted for 88.5% of the division's total revenue of €2,099.8 million for the year ended December 31, 2016) and through our Sales & Services division for distribution to our customers (inter-segment revenue of €241.5 million accounted for the remaining 11.5% of the division's total revenue for the year ended December 31, 2016). The Production division's third-party revenue of €1,858.3 million represented 80.3% of our revenue, and its EBITDA (reflecting also intersegment relationships) of €105.4 million represented 97.6% of our EBITDA, in each case, for the year ended December 31, 2016. As of December 31, 2016, the division's capital employed (segment assets less segment liabilities) was €1,353.7 million and it employed 7,526 people.

Sales & Services. Sales & Services provides a consistent and reliable supply of special long steel and end customer solutions worldwide with over 70 distribution and service branches in more than 30 countries. Our services include technical consulting and downstream processing such as sawing, milling and heat treatment as well as supply chain management. The product range is dominated by special long steel from our Production division, supplemented by a small selection of products from third-party providers.

Our goal is to offer our products and services globally – and we plan to extend our distribution network to achieve this goal. We focus on growth regions that we believe are well positioned to provide sustainable growth for the Group. In 2016, we opened new sales offices in Bangkok (Thailand), Taipeh (Taiwan) and Tokyo (Japan) as well as a warehouse in Chongqing (China). We plan to continue our regional growth strategy in the coming years.

Our Sales & Services division's total revenue was €456.5 million (€456.4 million third-party revenue), its third-party revenue represented 19.7% of our revenue, and its EBITDA (reflecting also intersegment relationships) of €16.1 million represented 14.9% of our EBITDA, in each case, for the year ended December 31, 2016. As of December 31, 2016, the division's capital employed (segment assets less segment liabilities) was €141.7 million and it employed 1,239 people.

In addition, to support our growth strategy in China and to establish a local downstream production facility, in December 2016 we signed a joint venture agreement to operate a bar drawing plant with our partner Tsingshan Group in China. The closing of the joint venture agreement is expected to take place later this year.

Recent Developments

The information below regarding our operating and financial performance for the two months ended February 28, 2017 is based on internal management accounts and is in line with our IFRS accounting manual which was the base for our annual report 2016.

Our revenue for the month ended January 31, 2017 was €223.8 million, an increase of €31.0 million from €192.8 million for the month ended January 31, 2016. This year-on-year increase was mainly driven by a significantly higher sales volume at a significantly higher revenue per metric ton. Both sales volume and revenue per metric ton were above our expectations for that period. Our Adjusted EBITDA for the month ended January 31, 2017 was €16.4 million, an increase of €20.7 million from a loss of €4.3 million for the month ended January 31, 2016. This increase was mainly due to a higher gross profit margin, despite adverse effects from an increase of electricity prices in Germany. At the same time, personnel and other operating expenses remained on a comparable level regardless of the increase in sales volume.

Our revenue for the month ended February 28, 2017 was €222.6 million, an increase of €17.8 million from €204.8 million for the month ended February 29, 2016. This year-on-year increase was mainly driven by a significantly higher revenue per metric ton, while sales volume was slightly lower as compared to the same period in 2016, mainly due to one less working day. However, both sales volume and revenue per metric ton were above our expectations for the period. Our Adjusted EBITDA for the month ended February 28, 2017 was €24.5 million, an increase of €9.1 million from €15.4 million for the month ended February 29, 2016, and an increase of €8.1 million as compared with the previous month. The increase was again mainly due to an improved gross profit margin, partially offset by additional incurred cost. Furthermore, the increased production volume led to overtime related higher personnel costs.

For the two months ended February 28, 2017, our revenue was €446.4 million, an increase of €48.8 million or 12.3% from €397.6 million for the two months ended February 29, 2016. Our Adjusted EBITDA for the same period was €40.9 million, an increase of €29.8 million from €11.1 million for the two months ended February 29, 2016.

In addition, we recorded higher order intake (in volumes) in February 2017, as compared to January 2017 and December 2016, primarily driven by our production division. Our order intake in January and February 2017 was also significantly above the respective order intake for the same periods in the previous year. In line with this development, we recorded a significantly higher year-on-year order backlog of 556 kt by the end of February 28, 2017 compared to 430 kt as of February 29, 2016 and 462 kt by the end of 2016.

	Jan 2016	Feb 2016	Jan 2017	Feb 2017
	(unaudited)			
	(€ in millions, except percentages)			
Operating profit before depreciation and amortization (EBITDA)	**(4.3)**	**13.8**	**16.4**	**24.4**
Adjustments:				
Performance Improvement Program, other (unaudited)	0.0	1.6	0.0	0.0
Reorganization and transformation process(unaudited)	n/a	n/a	n/a	n/a
Restructuring and other personnel measures (unaudited)	n/a	n/a	n/a	0.1
Adjusted operating profit before depreciation and amortization (Adjusted EBITDA)	**(4.3)**	**15.4**	**16.4**	**24.5**

Key Factors Affecting Results of Operations

Set forth below are certain key factors which have historically affected our results of operations and may impact our results in the future.

General economic conditions and demand

The steel industry has historically been highly cyclical. It is affected by general economic conditions, as well as worldwide production capacity and fluctuations in international steel trade. Demand and price for special long steel products are affected to a significant degree by trends in the global economy and related industrial production. In particular, the cyclical nature of the automotive, automotive supply,

energy, engineering, construction, machinery and equipment, mining and transportation industries, which are the principal consumers of our steel, impact demand and pricing for our products.

The prices for our special long steel products were at historically high levels until mid-2008, primarily as a result of significant raw material cost inflation and increasing demand. Beginning in the third quarter of 2008 and for much of 2009, the disruption experienced by the global financial markets dramatically impacted industrial activity and consumer and government spending (including spending on infrastructure and energy initiatives). Demand for special long steel products and services declined precipitously on a global basis. Special long steel producers, which are at the beginning of the value chain, were in addition most affected by the reduction of stocks, as all parties along the value chain reduced their inventories. The global prices for steel products also decreased in response to market conditions. The downward trend continued until the second half of 2009. Demand and prices for our products then started gradually increasing. However, in the second half of 2011, the reappearance of turbulence in the financial markets and the sovereign debt issues in Europe, that continued in 2012, resulted in a decrease in orders by some of our customers.

The year 2013 was marked by slower growth in emerging markets, which coincided with a recovery in developed markets, led by the United States. The global GDP growth of around 3.3% in 2013 (source: IMF) was driven primarily by emerging markets. Although parts of Europe were on the path to recovery, some degree of uncertainty remained in other parts, particularly with regard to countries in southern Europe. Despite an environment that remained challenging for the global steel industry in 2013, global production increased by 5.8% to 1.7 billion tons. The automotive market in Western Europe contracted with a drop of 1.7% to around 12 million vehicles. The oil industry enjoyed another positive year, although the development was less dynamic compared to past years. With the exception of China, the global mechanical and plant engineering industry stagnated in 2013. According to Eurofer, this development in the end-use industry resulted in a reduction of the European crude steel market of around 1.5%. As a result of these challenges, our performance was negatively impacted in 2013.

The global economy had then been relatively robust in 2014 despite the economic uncertainty and political conflicts. In particular, our core markets in Europe and the United States exhibited stable GDP development. Following a period of recession and stagnation, the Eurozone saw GDP return to growth of 1.1%. Economic output in the United States increased by 2.4%. Our customers' industries exhibited robust development in 2014, although considerable regional differences were apparent. In particular, the oil and gas industry gained further momentum, especially in the American market, where the fracking boom continued. This positive global economic growth coupled with favorable developments in our end-industry sectors significantly improved our earning position in 2014.

However, 2015 was again a difficult year for the steel industry generally and also for us. Global crude steel production fell for the first time since 2009 by 3.3% and global demand for steel also dropped for the first time by 3.0% in 2015 following steady growth rates since 2009 according to the World Steel Association. The reduction of steel demand in the Chinese market by 5.4% was an important cause of this negative development. Some of the resulting excess capacity was exported abroad and directly affected the market environment in our core markets in Europe and the United States. While import pressure increased, particularly in the segment of standard grade steel, the focus on special long steel and high-quality grades supported us in this environment. Triggered by the excess supply on markets, commodity prices in 2015 experienced a substantial drop. Further, a collapse of the oil price led to decline in key oil and gas segments especially in North America. The number of active rigs in the United States and Canada declined significantly, resulting in a serious decline in orders from the oil and gas sector in the second half of 2015. As a consequence of the difficult market situation and structural market developments, both our volumes and profitability were adversely impacted.

2016 again proved to be a challenging year for the steel industry. Global economic growth weakened slightly for the second consecutive year in 2016. According to the IMF, the global GDP growth rate was 3.1% in 2016, down from 3.2% in 2015. The advanced economies, representing the biggest sales markets for our products, saw a year-on-year growth rate decrease, from 2.1% in 2015 to 1.6% in 2016. The emerging and developing countries recorded similar growth compared to the prior year. The global steel demand remained almost unchanged year-on-year with an increase of 0.2% to around 1.5 billion tons in 2016, after a decline of 3.0% in 2015. According to BMI Research, global sales of passenger cars grew to more than 69 million units equivalent to an increase of 4.4%.The mechanical engineering sector experienced zero growth, with growth in China being offset by declines in the US and Japan. Also, the Oil and Gas industry stagnated at a low level. The decline in active rigs in the oil and gas industry from 2015 continued in 2016 and reached its lowest point in May. Following the upward trend of oil prices, the number of active rigs for oil and gas started to slowly recover in the second half of the year, especially in

North America. Prices for our key commodities remained under significant pressure. For example, Nickel prices reached record-low levels in February with slight improvement in the second half of 2016. Against this backdrop, our business performance was adversely impacted in 2016.

Cyclicality

In North America and Europe, which are our principal markets, the special long steel industry is highly dependent on the level of activity in the sectors in which our customers operate, including the engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace industries. These industries tend to be cyclical in nature. We are dependent not only on general production volumes and the product mix of our customers (which impacts the amount and type of our products that go into the final product) but also on changes in product attributes and on the development of new products, the manufacture of which for example requires the use of new tools (which generally require tool steel). Furthermore, stocking and de-stocking effects particularly impact special long steel producers, as they are at the beginning of the production value chain. In times of economic weakness or uncertainty, we typically see a larger reduction in orders because our customers reduce their inventories. Similarly, in a period of recovery or expected recovery from an economic downturn, we typically experience a larger increase in demand for our products earlier than an increase in the underlying demand for our customers' products as our customers increase their inventories in anticipation of higher demand for their products. As a result, demand for our products may be reduced in times of economic weakness. Nevertheless, the company has proved to generate Free Cash Flow even in times of economic downturns. See also "*–Cash Flow*".

During 2014 through 2016, we have been affected by both generally lower levels of activity among our industrial customers and by low commodity prices, which tend to reduce our selling prices and revenue per ton. Nevertheless, after an initial decline of our Adjusted EBITDA margin from 2014 to 2015, we have been able to achieve an Adjusted EBITDA margin improvement from 2015 to 2016 and were able to generate positive free cash flow throughout the period under review despite an economic slowdown in our industry and our customers' industry due to restructuring efforts, flexible management of the cost base and network capital improvements. See also "*–Cash Flow*", and "*Business–Our Strategy–Further boost the Group's profitability*".

Surcharge mechanism and special long steel pricing

The main raw materials for special long steel are alloys (principally nickel and chromium, but also vanadium, molybdenum, manganese and others) and scrap. We are exposed to price volatility with respect to each of these raw materials, which we purchase both under long-term supply contracts (typically fixed volumes and agreed price mechanism in relation to an index) and in the spot market. In addition, since most of the raw materials we use are finite resources, their prices may also fluctuate in response to any scarcity or perceived scarcity of reserves and the evolution of the pipeline of new exploration projects to replace depleted reserves.

Special long steel is a small, niche sub-segment of the global steel market, and the pricing for special long steel products is different from commodity steel pricing. Prices for special long steel usually include several components, which applies to nearly all products sold by us, namely the base price and surcharges. In the case of engineering and tool steel, the surcharges consists of a scrap surcharge and an alloy surcharge while in the stainless segment there is only an alloy surcharge which also contains a scrap component. However, the principle remains the same in both cases:

- The base price is negotiated with the customer and depends mainly on market supply and demand.
- The scrap surcharge is a supplementary charge added by the producers of engineering or tool steel to the selling price of steel, passing on changes (whether increases or decreases) in the price for scrap directly to customers. The scrap surcharge is based on an index price system for scrap; the actual amount of the surcharge is determined on the final sale date and varies depending on the type of product and the country where the product is produced.
- The alloy surcharge is applied in the same manner as the scrap surcharge and allows special steel producers to pass on the changes (whether increases or decreases) in prices for alloys. The concept of the alloy surcharge, which is calculated using raw material prices quoted on certain accepted exchanges, such as the LME, or is determined on industry-wide accepted price publications, such as Metal Bulletin, Platts Metals, CRU/Ryan's Notes, etc.

The surcharge system was introduced in Europe, the United States and Canada in response to significant volatility in the price for these materials, which has historically been driven by fluctuations in

demand, increasing or decreasing inventory levels, changes in production capacity and speculation by metal traders. Like the scrap surcharge, the actual amount of the surcharge is determined on the final sale date and varies depending on the type of product and the country where the product is produced

In accordance with the practice in the European special long steel industry, we are exposed to fluctuations in raw material prices for the time delay between the raw material delivery and the subsequent invoicing to the customer (when the price of the raw materials is fixed and charged to the customer). We are therefore exposed to raw material price volatility for a certain period of time through a timing mismatch. In the United States and Canada, there is a similar market practice, but with the surcharge for our Production division calculated at the time of order (rather than time of sale), reducing exposure to a minimal level.

Furthermore, the formulas used for the calculation of the price surcharges may not fully conform to actual production. Therefore, not all of the raw material price fluctuations may be charged to our customers.

For a smaller part of our business and upon customer request we also enter into effective price contracts with base and surcharge prices fixed for a certain period of time. In those cases we usually fix the purchase price of alloys (especially Nickel) by entering into corresponding hedging agreements.

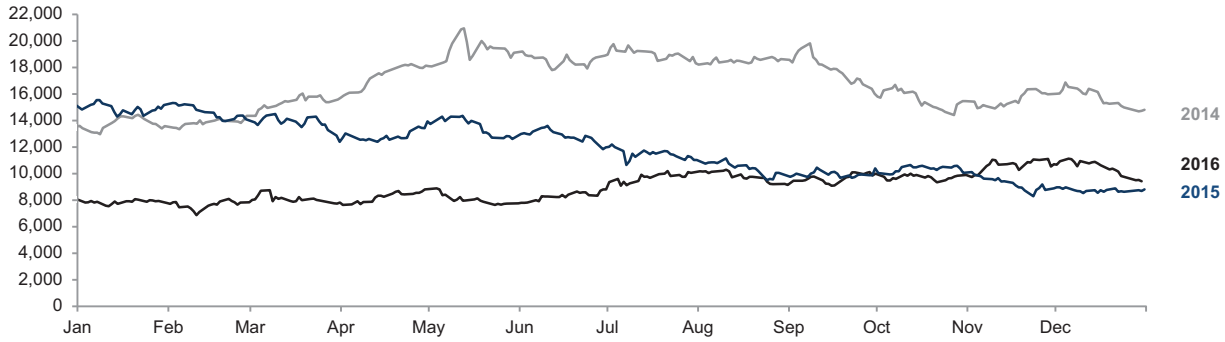
Due to application of scrap and alloy surcharges, our exposure to fluctuations in prices for raw materials is less pronounced than for producers of carbon steel. However, we are still affected by the changes in the prices for raw materials, in particular scrap and nickel. In addition, when the price of scrap and nickel is falling, purchasers of special long steel delay their orders to benefit from an expected decrease in prices, which reduces demand in the short term. By contrast, when scrap and nickel prices are rising, purchasers tend to acquire larger quantities of special long steel in order to avoid having to buy later at higher prices.

Commodity prices

As a key industrial metal and an essential component against corrosion, nickel is crucial for special steel production. The nickel price fluctuated considerably during 2014, starting the year at a price of $13,905 per ton, reaching a peak of $21,200 per ton in May before declining to $14,935 per ton at the end of the year. Among other major factors causing this volatility were the nickel export ban in Indonesia, Russian economic sanctions, disruption to various major mines worldwide, and speculation that Chinese buyers were purchasing nickel-containing pig iron. Similar price volatility was evident in the molybdenum market. At the start of the year 2014, the molybdenum oxide price was $21,385 per ton but this had increased to above $29,321 per ton by June before reversing this gain and finishing the year at $19,897 per ton. Prices for scrap metal and ferrochrome were more stable, showing only a relatively small decrease at year-end and trading within a relatively narrow band during the year 2014. The Shredded Scrap price (FOB Rotterdam) closed the year at €252 per ton, while the European ferrochrome price stabilized in a narrow corridor of $2,227 per ton to $2,403 per ton.

In 2015 commodity prices experienced a substantial decline. Due to overcapacity in the market, the price for nickel fell from $14,880 per ton at the start of the year to $8,665 per ton at the end of the year. The price for molybdenum oxide also fell drastically in 2015, from $19,897 per ton to $11,354 per ton. Shredded Scrap prices (FOB Rotterdam) started declining at the start of July and closed the year at €164 per ton, while European ferrochrome price closed the year at $1,808 per ton, equivalent to a decrease of 19% versus the beginning of the year.

Also in 2016 commodity prices were characterized by sustained market volatility, albeit to a lesser degree compared to 2015. A slight upward trend was observed again in the second half of 2016. In the first half of 2016, the nickel price moved between $7,700 per ton and $9,600 per ton. The second half recorded a slight, albeit volatile, upward trend, resulting in an increase in the nickel price by 18% from $8,515 per ton to $10,010 per ton during the year. While the molybdenum oxide price was relatively stable in the first quarter of 2016, it recorded a steep increase to $18,960 per ton in May, followed by a downward trend for the rest of the year. Eventually it closed the year at $14,881 per ton, equivalent to an increase of 31% versus January. The price of Shredded Scrap (FOB Rotterdam) stood at €168 per ton at the beginning of 2016 and saw a continuous increase to reach a record €282 per ton in May 2016. After major fluctuations in the third and fourth quarter, it closed at €263 per ton at the end of December, equivalent to a price increase of 57% over the year. The Price for European ferrochrome stood at $1,841 per ton at the beginning of 2016. It remained relatively stable in the first three quarters, before it started to rise sharply in the fourth quarter and the alloy closed at $3,197 per ton at year-end 2016, up 74%.



Energy expenses

In 2014, 2015 and 2016, our total energy expenses accounted for 7.1%, 7.1% and 7.6% of our net costs, respectively. In 2016, after cost of materials and personnel costs, which accounted for 62.1% and 25.4% of our net costs, respectively, energy expenses are our third largest cost item. Electricity and natural gas are the primary sources of energy used in the production process. Electricity is mainly used for running the electric arc furnaces to melt the scrap. Natural gas is used to heat the furnaces in subsequent production stages.

Energy expenses are affected by various factors, including the availability of supplies of particular sources of energy, energy prices and regulatory decisions and utility privatizations, which are beyond our control. See *"Risk Factors—Risks Related to Our Business and the Special Long Steel Industry—Any increase in the costs of energy resources or disruptions in energy supplies may materially adversely affect our business, financial condition and results of operations"*.

We attempt to limit our exposure to the volatility of electricity and natural gas prices by combining long-term supply contracts and purchasing energy at spot prices. These supply contracts are entered into by the various Group companies at a local level and have varying expiration dates, so we remain exposed to any future increases in energy prices after these contracts expire. In addition to electricity and natural gas, we also enter into long-term supply contracts for gases used in the production process such as, oxygen, nitrogen and argon to ensure that these gases are available at foreseeable prices in sufficient quantity.

In addition to electricity and natural gas, we also enter into long-term supply contracts for gases used in the production process such as, oxygen, nitrogen and argon to ensure that these gases are available at foreseeable prices in sufficient quantity.

We define net costs as the sum of changes in semi-finished goods, cost of materials, other operating income, personnel costs and other operating expenses. We calculate the share of energy expenses in our net costs as follows:

	Year Ended December 31,		
	2014	**2015**	**2016**
		(unaudited)	
	(€ in millions, except percentage)		
Energy expenses (in cost of materials)	185.6	175.7	164.3
Energy expenses (in other operating expenses)	1.8	3.2	3.0
Total energy expenses	**187.4**	**178.9**	**167.3**
Change in semi-finished goods	(34.5)	75.7	30.6
Cost of materials	1,838.6	1,632.4	1,371.1
Other operating income	(36.0)	(45.0)	(51.7)
Personnel costs	545.7	551.9	561.4
Other operating expenses	308.6	305.9	295.3
Net costs	**2,622.4**	**2.520.9**	**2,206.7**
Total energy expenses as a share of net costs (%)	**7.1**	**7.1**	**7.6**

Seasonality

Due to the slowdown in business activities of our customers during the summer holiday season in July and August and in the second half of December, the first half of our financial year is generally stronger than the second half, with a typical revenue split of approximately 55% of revenue reported in the first half of the financial year and 45% in the second half of the financial year. In addition due to reduced demand in the second half of the financial year, most of the maintenance and repair expenses are usually incurred during such period, as the summer and Christmas holiday seasons are generally the least disruptive time to have plants cease production while maintenance and repairs are undertaken.

Currency exchange rates

Our reporting currency is the euro. As a company with worldwide operations, our results of operations are affected by fluctuations in the exchange rates as follows:

- Transactions in currencies other than the functional currency of a group company are normally first measured at the exchange rate prevailing on the date of the transaction. Exchange gains and losses resulting from the subsequent measurement of foreign-currency receivables and liabilities at the spot rate at the balance sheet date are being reflected in our income statement.
- The annual financial statements of the group companies whose functional currency is not the euro are translated for purposes of preparing our consolidated financial statements. The balance sheet items are translated from the functional currency into presentation currency at the spot rate as of the date of the balance sheet and income statement items are translated at the average rate for the period. Gains and losses resulting from currency translations are included in "Other comprehensive income" without affecting profit and loss. If a subsidiary is sold or if we otherwise lose control over it, the accumulated exchange differences are released through profit and loss. The cash flow statement items are generally translated at the average rate for the period or at the rates at the date of cash flows.

To minimize our currency exposure, we may enter into hedging transactions in accordance with our risk management policies. See "–*Quantitative and Qualitative Disclosures about Market Risk*" below.

Developments in Environmental Laws and Regulations

Our results of operations are affected by environmental laws and regulations in most of the jurisdictions in which we operate.

Our results of operations are substantially dependent on demand for our special long steel products, which in turn depends on the industrial output of a number of industries, including the engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace industries. Environmental laws and regulations governing disposal, treatment and recycling of industrial waste, particularly in the European Union, have affected in the past and are expected to continue to affect these industries.

We also operate in a number of countries outside the European Union, particularly in the United States as well as in India and China. Environmental laws and regulations in these countries, and in other developed and emerging markets in which we may operate in the future, may become stricter over time.

We incur significant expenses related to compliance with environmental laws and regulations, and particularly with the conditions of our permits and authorizations. As environmental laws and regulations governing our business become stricter, both inside and outside the European Union, the cost of our environmental compliance may increase, which may lead to increased operating expenses and capital expenditures. We are also exposed, in particular in the European Union, to significant liabilities, fines and penalties if found responsible for releases of hazardous substances and pollution of the soil, water, underground water, air or other type of contamination. See "*Risk Factors–Risks Relating to our Business–We are subject to increasingly stringent environmental regulations*".

Inventories

Changes in inventories affect our results of operations and cash flows from operating activities. In line with the total cost method of accounting for costs associated with the manufacturing of our products, our costs (e.g. for raw materials, operating supplies, employees) are expensed through our income statement when the finished goods are sold. This means that in any year some of the costs associated with manufacturing our products will not flow through the income statement as an expense but will remain in our inventories accounts on our balance sheet. In periods of decreases in our sales volume as a result of decreasing demand for our products, we typically reduce our inventories, which has a positive impact on our cash flows from operating activities. During periods when we build up our inventories, for example in response to increases in demand for our products, our cash flow is negatively impacted but our results from operations are positively impacted. See also "*–Net Working Capital"*.

Overview of Improvement Programs

Performance Improvement Program (PIP). For 2016 and 2017, we launched an extensive Performance Improvement Program with the objective to achieve savings of €70 million by the end of 2017. The program is directed to all entities and Business Units. However, major parts of the PIP are

focused on achieving significant cost savings at DEW with an action program including more than 500 defined improvement actions. In addition to production oriented optimization, such as increasing efficiency (productivity and yield improvements) in our melt shops in Witten and Siegen and in the rolling / forging operations, we focus on the areas of purchasing (e.g. renegotiation of supply contracts), personnel and IT.

The PIP also includes a comprehensive set of production-related measures at Ugitech, Swiss-Steel, Steeltec and Finkl Steel aiming for yield improvements and general productivity improvements. Additionally we aim to increase our product quality, while improving scrap usage at the same time through better efficiencies in sorting and scrap handling. Within the PIP, we also introduced a group-wide purchasing initiative focusing on price renegotiation of material and operating supplies, lead-buyer concepts and (consumption) optimization of input materials. The material groups under review have a broad range from energy, scrap, alloys to refractories and electrodes. Another initiative of the PIP focusses on group-wide logistics optimization, focusing on lowering the overall freight cost per ton (e.g. bundling of volumes, joint tendering of freight contracts), as well as improving internal logistics (e.g. Swiss Steel increasing independence from local railway network).

The success of the PIP is tracked by a dedicated central project management office including state-of-the-art tracking of implementation success. For 2016, we have reached our objectives and achieved a significant cost reduction, and we see ourselves on track to reach the goals of the program.

Reorganization of DEW. In 2016, we further initiated a full reorganization of our Business Unit DEW. This comprised a legal reorganization into sales, production and shared services. The primary objective was to improve market orientation and customer service, increase performance focus in the production and leverage shared services, both within the Business Unit and outside the group. It also included the set-up of a new key account structure and managerial changes.

Restructuring collective bargain agreement for DEW. In 2016, we agreed a temporary restructuring collective bargain agreement for 2016 and 2017 for DEW. The agreement provides that the tariff-agreed year-end bonuses are temporarily reduced from 110% of a monthly wage to 27.5% of a monthly wage. The resulting cost savings directly improve our results at DEW within 2016 and 2017, which allows us to gain time to define and implement sustainable improvement measures. We expect the restructuring collective bargain agreement will result in savings of €15 million per year in 2016 and 2017.

Further restructuring measures. Additional measures to improve productivity were initated for our Business Units. These measures include the closure of our production in Boxholm, Sweden, scheduled for the second half of 2017, as well as further restructuring at our Business Units DEW, Steeltec (Düsseldorf), and within our global Sales & Services network. We expect these measures to reduce the workforce of the Group by up to 200 employees. The costs of these measures are reflected in the results of the year 2016. We target annual costs savings of up to €20 million per year in the medium term through these further restructuring measures.

Summary of Acquisitions and Disposals

From time to time we engage in strategic acquisitions and dispositions. No material acquisitions have been conducted within the period under review. However, we have in the past grown through acquisitions, and may engage in acquisitions in the future. In 2015 we sold our distribution entities in Germany, Belgium, the Netherlands and Austria by a transfer to Jacquet Metal Service. This was part of the planned streamlining of the portfolio with a view to concentrating on the core Production business. The distribution entities concerned were part of the Sales & Services division. Their business models were not consistent to our Group strategy as they mainly sold third-party products.

Discussion of Key Line Items

The composition of key individual items in our income statement in accordance with IFRS is presented below.

Revenue. Revenue comprises all income arising in the course of ordinary business activities as a result of the sale of special long steel products and the other goods and services provided by us. Revenue is reported net of value-added taxes, returns and price reductions.

Change in semi-finished and finished goods. Change in semi-finished and finished goods relates to the change of inventory of work in progress and finished products and work performed. The manufacturing costs include direct material and labor costs as well as material and production overheads allocated proportionally on the assumption of normal utilization of production capacity. In

addition the change in semi-finished and finished goods also encompasses impacts from revaluation of inventories as well as allowances and reversals in respect of semi-finished and finished goods.

Cost of materials. The expenses for raw materials, supplies and purchased services (including energy) for all products manufactured in the respective period are recorded in cost of materials. In addition to materials actually consumed, cost of materials also includes inventory and valuation differences, and valuation allowances and reversals in respect of raw materials, supplies, and consumables, and purchased goods. Furthermore, Cost of materials also includes cost of temporary employees.

Cost of materials net of change in semi-finished and finished goods. This number presents cost of materials net of change in semi-finished and finished goods and therefore is indicative of the cost of materials for goods sold in the respective period.

Other operating income. Other operating income not allocated to revenue is reported under this item. Other operating income includes, net exchange gains or losses; gains on disposal of intangible assets, property, plant and equipment and financial assets; income from reversal of provisions; own work capitalized; rent and lease income; insurance reimbursement; commission income and other miscellaneous income.

Personnel costs. Personnel costs include all expenses for wages and salaries for employees and other employment benefits, the service costs of company pension plans, and social security contributions. Personnel costs also include the costs of redundancy and partial retirement agreements.

Other operating expenses. Other operating expenses primarily consist of expenses for freight and commissions; maintenance and repairs; rent and lease expenses; advisory, audit and IT services; insurance fees; non-income taxes; net exchange losses; any change in the fair value of derivative financial instruments; losses on disposal of intangible assets, property, plant and equipment and financial assets and other miscellaneous operating expenses.

Depreciation/amortization and impairments. Depreciation/amortization and impairments includes all depreciation, amortization and impairments of property, plant and equipment and intangible assets, as well as impairments of assets held for sale. Depreciation and amortization are usually charged on a straight-line basis over the expected useful life of the assets.

Financial result. Financial result represents financial income less financial expenses. Financial income comprises interest and similar income, and income from financial assets, loans, and securities. Financial expenses are composed of interest and similar expenses and expenses from financial liabilities, loans, and securities. Furthermore, the interest costs of pension obligations as well as of finance lease are considered as financial expense.

Income taxes. Income taxes comprise the current income tax expense and deferred taxes.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

The following table sets forth our results of operations for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Revenue	2,679.9	2,314.7	-13.6
Change in semi-finished and finished goods	(75.7)	(30.6)	59.6
Cost of materials	(1,632.4)	(1,371.1)	-16.0
Gross profit[1]	**971.8**	**913.0**	**-6.1**
Other operating income	45.0	51.7	14.9
Personnel costs	(551.9)	(561.4)	1.7
Other operating expenses	(305.9)	(295.3)	-3.5
Operating profit before depreciation, amortization and impairments (EBITDA)[2]	**159.0**	**108.0**	**-32.1**
Depreciation, amortization and impairments	(124.1)	(126.5)	1.9
Operating profit (loss) (EBIT)	**34.9**	**(18.5)**	**n/a**
Financial income	1.7	5.8	241.2
Financial expense	(47.6)	(46.9)	-1.5
Financial result	**(45.9)**	**(41.1)**	**10.5**
Earnings before taxes (EBT)	**(11.0)**	**(59.6)**	**-441.8**
Income taxes	(24.4)	(15.9)	-34.8
Earnings after taxes from continuing operations	**(35.4)**	**(75.5)**	**-113.3**
Earnings after taxes from discontinued operations	(131.4)	(4.5)	96.6
Net income (loss) (EAT)	**(166.8)**	**(80.0)**	**52.0**
Adjusted operating profit before depreciation and amortization (Adjusted EBITDA) (unaudited)	**169.6**	**153.2**	**-9.7**

(1) Referred to as gross margin in our consolidated financial statements as of and for the year ended December 31, 2015.
(2) Referred to as operating profit before depreciation and amortization in our consolidated financial statements as of and for the year ended December 31, 2015.

The business climate remained challenging in 2016. The already subdued market environment in late 2015 became more challenging in the first few months of 2016. Demand remained depressed and raw material prices decreased further. For example, the price for nickel fell to levels that were below the ones seen during the financial crisis in 2008 to 2009, with prices for nickel ranging between $7,700 to $9,600 per ton in the first half of 2016, as compared with an average price of $21,050 per ton in 2008. Towards the end of the first half of 2016, raw material prices started to recover and the market sentiment became slightly better. In the second half of 2016, business conditions have markedly improved. The results for the full-year 2016 as well as the development of sales prices reflect these dynamics. Revenue per ton remained stable in the first two quarters, at €1,309 per ton and €1,314 per ton in the first and second quarter, respectively, and rose to €1,366 per ton in the third quarter with another increase to €1,392 per ton in the fourth quarter. However, revenue per ton for the full-year 2016 was €1,342 per ton, 11.7% lower compared to the €1,520 per ton recorded in full-year 2015.

The order backlog, a non-defined IFRS measure, followed the typical seasonal pattern over the course of the year and came to 462 kilotons as of December 31, 2016 (December 31, 2015: 395 kilotons). Our order backlog came to 444 kilotons, 454 kilotons, 420 kilotons and 462 kilotons at the end of the first, second, third and fourth quarter of 2016, respectively.

Revenue

The following table sets forth our revenue for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Quality and engineering steel (unaudited)	1,120.8	950.4	-15.2
Stainless long steel (unaudited)	1,019.2	884.7	-13.2
Tool steel (unaudited)	462.0	418.1	-9.5
Other (unaudited)	77.9	61.5	-21.1
Total	**2,679.9**	**2,314.7**	**-13.6**

Revenue decreased by 13.6% to €2,314.7 million in 2016 as compared to €2,679.9 million in 2015, on account of the decline in sales volume and lower prices. Revenue generated by all three product groups decreased, with quality and engineering steel dropping 15.2% to €950.4 million, stainless steel by 13.2% to €884.7 million and tool steel by 9.5% to €418.1 million. Quality and engineering steel sales in 2016 were affected by soft demand in the mechanical engineering and plant engineering industries, as well as by business interruptions at Swiss Steel & DEW in the second and third quarter due to delays in the ramp-up of the newly constructed hook conveyor at Swiss Steel and a production stop due to a fire incident at DEW. (See "*Risk Factors–Risks Related to Our Business and the Special Long Steel Industry–Interruptions in operations at our facilities may have a material adverse effect on our business, financial condition and results of operations*"). Similarly, tool steel was affected by continuing low industrial activity and by increased competition in Europe in 2016. We had a dynamic development in Stainless Products, in base prices as well as in surcharges, due to the strength of the automotive industry especially in Europe.

Nevertheless, sales began to improve by the end of 2016, with the decrease in revenue from quality and engineering steel and tool steel significantly smaller in the fourth quarter as compared to the corresponding period of the prior year, while revenue from stainless steel had reversed the decreasing trend, showing positive growth in the fourth quarter of 2016 as compared to the fourth quarter of 2015. The improvement in revenue from sales of stainless steel products in the later part of 2016 was driven primarily by the strength of the automotive industry, particularly in Europe. Although average sale prices were lower in 2016 than in 2015, average prices in 2016 increased each quarter. Revenue per ton amounted to €1,309, €1,314, €1,366 and €1,392 for the first, second, third and fourth quarter of 2016, respectively, as compared with revenue per ton of €1,585, €1,541, €1,513 and €1,426 for the first, second, third and fourth quarter of 2015, respectively.

The table below sets forth our revenue by geographical region (based on the location of the customer) for the years ended December 31, 2015 and 2016.

	For the Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Germany	1,041.0	919.2	-11.7
Italy	295.7	260.5	-11.9
France	190.0	162.1	-14.7
Switzerland	45.7	42.3	-7.4
Other Europe	499.2	456.7	-8.5
United States	327.3	214.5	-34.5
Canada	59.8	58.4	-2.3
Other America	50.8	33.9	-33.3
Africa/Asia/Australia	170.4	167.1	-1.9
Total	**2,679.9**	**2,314.7**	**-13.6**

At regional level, the development of revenue in 2016 varied. Africa, Asia and Australia performed comparatively well with a decrease in revenue of 1.9% to €167.1 million. In the two growth markets China and India, revenue grew in 2016 by 34.3% and 11.9%, respectively, compared to 2015, albeit from a lower base line. In Europe, revenue decreased by 11.1% to €1,840.8 million in 2016 and in America by 29.9% to €306.8 million in 2016; especially in the United States, this was attributable to the ongoing slump in the oil and gas industry, which has led to persistently low levels of orders from the oil and gas industry.

The table below sets forth our revenue by division for the years ended December 31, 2015 and 2016:

	For the Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Production Division			
Third-party revenue	2,136.4	1,858.3	-13.0
Intersegment revenue	316.4	241.5	-23.7
Total revenue	**2,452.8**	**2,099.8**	**-14.4**
Sales & Services Division			
Third-party revenue	543.5	456.4	-16.0
Intersegment revenue	0.0	0.1	n/a
Total revenue	543.5	456.5	-16.0
Reconciliation (adjustments)	(316.4)	(241.6)	n/a
Total	**2,679.9**	**2,314.7**	**-13.6**

Production Division

Our Production division total revenue decreased by €353.0 million or 14.4% to €2,099.8 million in 2016, as compared with €2,452.8 million in 2015. This was primarily due to two factors: the fall in the annual average commodity prices, such as scrap and nickel, and the business downturn in the oil and gas industry, which dampened business activity particularly in North America.

Sales & Services Division

Our Sales & Services Division total revenue decreased by €87.0 million or 16.0% to €456.5 million in 2016, as compared with €543.5 million in 2015. This was primarily due to a strong decline in demand in our key markets, especially in the oil and gas industry, which had a negative effect on the volume generated in 2016. This decline was offset in part by positive growth in China and India, where the division expanded its market positions.

Cost of materials net of change in semi-finished and finished goods

The following table sets forth our cost of materials net of change in semi-finished and finished goods for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Cost of materials	1,632.4	1,371.1	-16.0
Change in semi-finished and finished goods	75.7	30.6	-59.6
Cost of materials net of change in semi-finished and finished goods (unaudited)	**1,708.1**	**1,401.7**	**-17.9**

After the changes in semi-finished and finished goods, the cost of materials decreased by 17.9% to €1,401.7 million in 2016 as compared with €1,708.1 million in 2015. In addition to the lower costs of commodities, measures to save costs and enhance efficiency in the procurement process had a positive impact on the cost of materials.

Gross profit

For the reasons described above, our gross profit decreased by €58.8 million or 6.1% to €913.0 million in 2016 as compared with €971.8 million in 2015. Despite the decrease on an annual basis, gross profit showed a positive trend over the course of the year as our efficiency measures began to yield benefits and the market condition and product mix became more favorable; gross profit for the fourth quarter of 2016 showed solid growth as compared to the fourth quarter of the previous year. The gross profit margin for the full year 2016 increased to 39.4%, as compared with 36.3% in 2015.

Other operating income

The table below sets forth our other operating income for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Income from recovery of previously written off receivables and reversal of allowances on receivables	3.1	1.9	-38.7
Rent and lease income	4.5	6.0	33.3
Grants and allowances	1.5	2.7	80.0
Income from reversal of provisions	5.9	7.9	33.9
Commission income	0.9	0.1	-88.9
Insurance reimbursement	1.3	6.0	361.5
Gains on disposal of intangible assets, property, plant and equipment, and financial assets	0.8	0.7	-12.5
Own work capitalized	3.1	3.4	9.7
Miscellaneous income	23.9	23.0	-3.8
Total	**45.0**	**51.7**	**14.9**

For the year as a whole, other operating income increased by €6.7 million or 14.9% to €51.7 million in 2016, as compared with €45.0 million in 2015. This includes non-recurring insurance indemnification for business interruption losses at two rolling mills in the second and third quarter of 2016. See "*–Revenue*" above. This covered a portion of the losses from the production downtime due to fire incidents in two rolling mills.

Personnel costs

The following table sets forth our personnel costs for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Personnel costs	551.9	561.4	1.7

Personnel costs increased by €9.5 million or 1.7% to €561.4 million in 2016, as compared with €551.9 million in 2015. The increase was primarily attributable to restructuring charges in the amount of €19.3 million, mainly at our DEW and Steeltec Business Units. Without these effects personnel costs would have been slightly lower year on year supported by the restructuring of the collective bargain agreement for DEW. See "*Business–Our Strategy–Further boost the Group's profitability*". Employees were scaled back slightly to 8,877 as of December 31, 2016 from 8,910 as of December 31, 2015. The table below sets forth our employees (headcount) by division as of December 31, 2015 and 2016:

Employees (headcount)	December 31,		Percentage Change (unaudited)
	2015	2016	
Production	7,546	7,526	-0.3
Sales & Services	1,252	1,239	-1.0
Total for operating segments	**8,798**	**8,765**	**-0.4**
Holdings[(1)]	112	112	–
Total	**8,910**	**8,877**	**-0.4**

(1) Referred to as other in the segment reporting of the consolidated financial statements as of and for the year ended December 31, 2015.

Other operating expenses

The following table sets forth our other operating expenses for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
		(€ in millions)	
Freight, commissions	86.9	76.9	-11.5
Maintenance, repairs	69.0	62.3	-9.7
Holding and administration expenses	27.6	25.9	-6.2
Fees and charges	18.9	19.4	2.6
Rent and lease expenses	20.0	18.1	-9.5
Consultancy and audit services	16.3	22.9	40.5
IT expenses	15.4	15.6	1.3
Losses on disposal of intangible assets, property, plant and equipment, and financial assets	0.3	0.6	100.0
Non-income taxes	8.4	20.3	141.7
Net exchange gains/losses	10.3	3.2	-68.9
Miscellaneous expense	32.8	30.1	-8.2
Total	**305.9**	**295.3**	**-3.5**

Other operating expenses decreased by €10.6 million or 3.5% to €295.3 million for 2016, as compared with €305.9 million in 2015. The year-on-year decrease was offset in part by an increase in other operating expenses in the fourth quarter of 2016, primarily due to one-off expenses related to our reorganization and transformation process (in 2016 largely related to the reorganization of DEW), in particular €9.6 million of non-income taxes and costs for late-year maintenance in preparation for 2017. We continued to implement scheduled measures to save costs and enhance efficiency in 2016.

Adjusted EBITDA and EBITDA

Our adjusted operating profit before depreciation and amortization (Adjusted EBITDA) decreased by €16.4 million or 9.7% to €153.2 million in 2016, as compared with €169.6 million in 2015. The decrease in Adjusted EBITDA was primarily driven by a weak economic environment in the first half of 2016. The major negative impact came from lower margins, while lower volumes further negatively affected our Adjusted EBITDA. These decreases were partially offset by lower operating expenses and a positive impact on costs from our PIP in 2016. While the first half-year was largely negative, we saw

an increase of Adjusted EBITDA during the second half of 2016. The Adjusted EBITDA margin rose to 6.6% for the full year, as compared with 6.3% in 2015, reflecting the implementation of efficiency measures in 2016. These positive impacts were partially offset by a weakness in our tool steel segment (primarily at DEW), margin effects related to the Nickel price movements and the impact from a weakened demand from the oil and gas industry.

The adjustments to EBITDA in 2016 related mainly to expenses in connection with our Performance Improvement Program ("**PIP**") (€10.3 million, including other items), the reorganization and transformation process (mainly regarding DEW) (€14 million), and the restructuring and other personnel-related measures in our German and Scandinavian operations (€20.9 million) to progress further and assure long term competitiveness. See "*Business–Our Strategy–Further boost the Group's profitability*". We expensed a total of €45.2 million for the one-time cost of this PIP, additional restructuring and reorganization in 2016, as compared with €10.6 million in 2015. As a result, the EBITDA margin for 2016 fell to 4.7% as compared with 5.9% in 2015.

The table below sets forth Adjusted EBITDA, operating profit before depreciation and amortization (EBITDA), Adjusted EBITDA margin and EBITDA margin by division for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change
	2015	2016	
	(€ in millions, except percentages)		
Adjusted EBITDA			
Production (unaudited)	156.9	139.1	-11.3
Sales & Services (unaudited)	19.6	18.5	-5.6
Reconciliation (unaudited)	(6.9)	(4.4)	n/a
Total (unaudited)	**169.6**	**153.2**	**-9.7**
EBITDA			
Production	155.0	105.4	-32.0
Sales & Services	17.4	16.1	-7.5
Reconciliation	(13.4)	(13.5)	n/a
Total	**159.0**	**108.0**	**-32.1**
Total Revenue			
Production	2,452.8	2,099.8	-14.4
Sales & Services	543.5	456.5	-16.0
Adjusted EBITDA margin(1) (%)			
Production (unaudited)	6.4	6.6	0.2 pts
Sales & Services (unaudited)	3.6	4.1	0.5 pts
EBITDA margin(2) (%)			
Production (unaudited)	6.3	5.0	-1.3 pts
Sales & Services (unaudited)	3.2	3.5	0.3 pts

(1) Adjusted EBITDA margin is calculated by dividing the division's adjusted operating profit (loss) before depreciation and amortization (EBITDA) by the division's total revenue.

(2) EBITDA margin is calculated by dividing the division's operating profit (loss) before depreciation and amortization (EBITDA) by the division's total revenue.

Adjusted EBITDA in the Production division decreased by €17.8 million or 11.3% to €139.1 million in 2016, as compared with €156.9 million in 2015, although it began to increase in the fourth quarter as compared to the fourth quarter of the previous year. Our Adjusted EBITDA margin increased to 6.6% for the year as compared with 6.4% for 2015. The adjustments mainly related to provisions for consulting fees as well as restructuring and led to extraordinary expenses in the Production division of €33.7 million (which were eliminated from EBITDA), as compared with €1.9 million for 2015.

EBITDA in the Production division decreased by €49.6 million or 32.0% to €105.4 million in 2016 from €155.0 million in 2015. This decrease was primarily a consequence from €33.7 million in extraordinary expenses relating to PIP and other, the reorganization and transformation process (in 2016 largely related to the reorganization of DEW) and restructuring and other personnel measures, in the year 2016, as compared with respective net expenses of €1.9 million for 2015. Our EBITDA margin in the Production division was 5.0% for 2016, as compared with 6.3% for 2015.

Adjusted EBITDA in the Sales & Services division decreased by €1.1 million or 5.6% to €18.5 million in 2016, as compared to €19.6 million in 2015. As with the Production division, however, Sales & Service's Adjusted EBITDA began to grow during the fourth quarter. This development reflected the generally weak demand over 2016 as a whole, which was offset in part by a sharp upturn towards the end of 2016. Adjusted EBITDA margin increased to 4.1% in 2016, as compared with 3.6% in 2015. The

net extraordinary expenses for restructuring measures allocable to the Sales & Services division came to a total of €2.4 million for the year, as compared with €2.2 million in 2015.

EBITDA in the Sales & Services division decreased by €1.3 million or 7.5% to €16.1 million for 2016 as compared with €17.4 million for 2015. This decrease was primarily a result of extraordinary expenses for restructuring measures and other special projects allocable to the Sales & Services division totaling €2.4 million, as compared with €2.2 million for 2015. The division's EBITDA margin for 2016 was 3.5%, as compared with 3.2% for 2015.

Depreciation, amortization and impairments

Depreciation, amortization and impairments increased slightly to €126.5 million in 2016, as compared with €124.1 million in 2015.

Operating profit (loss) (EBIT)

Due to the reasons described above, our operating profit (EBIT) decreased by €53.4 million to a loss of €18.5 million in 2016, as compared with a profit of €34.9 million in 2015.

Financial result

The following table sets forth our financial result for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Financial income	1.7	5.8	241.2
Financial expense	(47.6)	(46.9)	1.5
Financial result	**(45.9)**	**(41.1)**	**10.5**

Our financial expense decreased by €0.7 million or 1.5% to €46.9 million in 2016, as compared with €47.6 million in 2015. Financial income increased by €4.1 million to €5.8 million in 2016, as compared with €1.7 million in 2015. In sum, the financial result improved by €4.8 million or 10.5% to a net financial expense of €41.1 million, as compared with a net financial expense of €45.9 million in 2015.

Earnings before taxes (EBT)

As a result of the developments described above, EBT deteriorated to a loss of €59.6 million in 2016, as compared with a loss of €11.0 million in 2015.

Income taxes

Income tax expenses for 2016 were €15.9 million, as compared with €24.4 million for 2015.

Net income (loss)

The following table sets forth our net income (earnings after taxes) for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Percentage Change (unaudited)
	2015	2016	
	(€ in millions)		
Earnings after taxes from continuing operations	(35.4)	(75.5)	-113.3
Earnings after taxes from discontinued operations	(131.4)	(4.5)	96.6
Net income (loss) (EAT)	**(166.8)**	**(80.0)**	**52.0**

As a result of the developments described above, earnings after taxes from continuing operations in 2016 showed a loss of €75.5 million, as compared with a loss of €35.4 million in 2015.

Over the course of 2016 we incurred a further loss of €4.5 million in relation to the sale of our non-strategic distribution entities in Germany, Belgium, the Netherlands and Austria to Jacquet Metal Services, which took place in 2015, as a result of a purchase price reduction of €3.5 million from the final agreement of the purchase price. The outstanding installment has since been paid. A disposal loss of €131.4 million was reported in the prior-year period.

As a result of the foregoing, the Group result for 2016 was a net loss of €80.0 million, a significant reduction from a net loss of €166.8 million in 2015.

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

The following table sets forth our results of operations for the years ended December 31, 2014 and 2015:

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Revenue	2,869.0	2,679.9	-6.6
Change in semi-finished and finished goods	34.5	(75.7)	n/a
Cost of materials	(1,838.6)	(1,632.4)	-11.2
Gross profit[1]	**1,064.9**	**971.8**	**-8.7**
Other operating income	36.0	45.0	25.0
Personnel costs	(545.7)	(551.9)	1.1
Other operating expenses	(308.6)	(305.9)	-0.9
Operating profit before depreciation and amortization (EBITDA)	**246.6**	**159.0**	**-35.5**
Depreciation, amortization and impairments	(116.4)	(124.1)	6.6
Operating profit (EBIT)	**130.2**	**34.9**	**-73.2**
Financial income	3.3	1.7	-48.5
Financial expense	(53.9)	(47.6)	-11.7
Financial result	**(50.6)**	**(45.9)**	**9.3**
Earnings before taxes (EBT)	**79.6**	**(11.0)**	**n/a**
Income taxes	(27.6)	(24.4)	-11.6
Earnings after taxes from continuing operations	52.0	(35.4)	n/a
Earnings after taxes from discontinued operations	(2.0)	(131.4)	n/a
Net income (loss) (EAT)	**50.0**	**(166.8)**	**n/a**
Adjusted operating profit before depreciation and amortization (Adjusted EBITDA) (unaudited)	**256.6**	**169.6**	**-33.9**

(1) Referred to as gross margin in the consolidated financial statements as of and for the year ended December 31, 2015.

2015 was a difficult year for the steel industry generally and also for us. Crude steel production fell for the first time since 2009 by 3.3% and global demand for steel also dropped for the first time by 3.0% to 1,499 million tons in 2015 following steady growth rates since 2009 according to World Steel Association. The reduction of steel demand in the Chinese market by 5.4% was an important cause for this negative development. Some of the resulting excess capacity was exported abroad and directly affected the market environment in our core markets in Europe and the United States; overcapacities put pressure on base prices globally. While import pressure increased, particularly in the segment of standard grade steel, the focus on special long steel and high-quality grades helped us in this environment.

In addition to the difficult market situation, our business was also negatively impacted by further structural market developments in 2015:

- Commodity prices in 2015 experienced a substantial drop. Triggered by the excess supply on markets, prices for nickel fell by 42%, for molybdenum oxide by 43%, for European ferrochrome by 19% and for Shredded Scrap by 37% over the course of the year. As a result, inventories had to be written down. On the sales side, pressure on prices increased, negatively impacting the gross profit margin
- In North America, the key oil and gas sales segment experienced a dramatic collapse. The number of active rigs in the United States and Canada declined significantly, triggered by the drop in the price of oil. While prior-year orders were still being processed at the beginning of the year, a serious decline in orders from the oil and gas sector was seen in the second half of 2015.
- Due to our activities in Switzerland – Swiss Steel and Steeltec – we were significantly and negatively affected by the unpegging of the minimum EUR/CHF exchange rate by the Swiss

National Bank in January 2015. Within a day, the exchange rate had collapsed from EUR/CHF 1.20 to EUR/CHF 0.99, with corresponding effects on the competitiveness of Swiss companies. We were able to counter this effect thanks to concessions made by employees and key customers as well as accompanying cost-cutting measures.

By contrast, the automotive sector developed well in 2015. According to BMI Research, global sales of passenger cars reached almost 66.5 million units, equivalent to an increase of 1%. Another important customer segment, mechanical engineering, was stable in 2015, remaining substantially at its 2014 level.

Due to the weak market environment, which became even more pronounced in the second half of the year, we recorded a decrease in sales volume of 66 kilotons, or 3.6%, to 1,763 kilotons in 2015, as compared with 1,829 kilotons in 2014.

Our order backlog came to 569 kilotons, 476 kilotons, 395 kilotons and 395 kilotons at the end of the first, second, third and fourth quarter of 2015, respectively.

Revenue

The continuing fall in prices for scrap and alloying elements in 2015, particularly in the second half of the year, and further pressure on base prices resulted in lower revenue. Compared to the prior year, revenue in 2015 decreased by €189.1 million or 6.6% to €2,679.9 million as compared with €2,869.0 million in 2014. Due to the sharp decrease in commodity prices, the decrease in revenue in 2015 was larger than the decrease in sales volume.

The table below sets forth our revenue by geographical region (based on the location of the customer) for the years ended December 31, 2014 and 2015.

	For the Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Germany	1,170.8	1,041.0	-11.1
Italy	295.4	295.7	0.1
France	210.9	190.0	-9.9
Switzerland	56.7	45.7	-19.4
Other Europe	522.8	499.2	-4.5
United States	343.6	327.3	-4.7
Canada	72.1	59.8	-17.1
Other America	40.3	50.8	26.1
Africa/Asia/Australia	156.4	170.4	9.0
Total	**2,869.0**	**2,679.9**	**-6.6**

Revenue declined in nearly all regions in 2015. In 2015 as a whole, we had to contend with a year-on-year decrease in revenue of 8.2% in Europe, while revenue in the Americas (the United States, Canada, Other America) region saw a decline of just 4.0%, with appreciation of the U.S. dollar against the euro offsetting in part the decrease in U.S. revenue due to lower sales. In Asia, Africa and Australia, by contrast, revenue growth of 9.0% was achieved from a comparatively low level, although this revenue increase primarily stemmed from South Korea and India.

Although both sales and revenue decreased in all significant product groups, there was a slight overall shift towards higher-margin products such as tool steel and stainless steel.

The table below sets forth our revenue by division for the years ended December 31, 2014 and 2015:

	For the Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Production Division			
Third-party revenue	2,372.2	2,136.4	-9.9
Intersegment revenue	296.4	316.4	6.7
Total Revenue	**2,668.6**	**2,452.8**	**-8.1**
Sales & Services Division			
Third-party revenue	496.8	543.5	9.4
Intersegment revenue	0.1	0.0	-100.0
Total Revenue	**496.9**	**543.5**	**9.4**
Reconciliation (adjustments)	(296.5)	(316.4)	n/a
Total	2,869.0	2,679.9	-6.6

Production Division

Revenue in the Production Division fell by €215.8 million or 8.1% to €2,452.8 million in 2015, as compared with €2,668.6 million in 2014. Revenue decreased similarly in the Europe and Americas regions in 2015. The main drivers of this development in 2015 were the declining prices for scrap and nickel as well as decreases in the oil and gas business on account of the sharp drop in crude oil prices, which adversely affected our business in North America after stronger year in 2014. The primary cause of this decline was a decrease in quality and engineering steel, offset in part by smaller decreases in tool steel and stainless steel. The fall in scrap and alloy prices in 2015 caused a disproportionately large decrease in revenue from the lower-priced quality and engineering steel products.

Sales & Services Division

Revenue in the Sales & Services Division increased by €46.6 million or 9.4% to €543.5 million in 2015 compared to €496.9 million in 2014. Slightly more than half of the revenue growth in 2015 resulted from the transfer of business activities from the Production Division to the Sales & Services Division. This especially concerned France and Italy. The Sales & Services Division increased its sales volumes and revenue (partly due to exchange rates) in all significant product groups in 2015, with the product mix shifting slightly towards quality and engineering steel compared to the prior year due to the distribution activities transferred from the Production Division.

Cost of materials net of change in semi-finished and finished goods

The following table sets forth our cost of materials net of change in semi-finished and finished goods for the years ended December 31, 2014 and 2015:

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Cost of materials	1,838.6	1,632.4	-11.2
Change in semi-finished and finished goods	(34.5)	75.7	n/a
Cost of materials net of change in semi-finished and finished goods	**1,804.1**	**1,708.1**	**-5.3**

Cost of materials net of change in semi-finished and finished products fell by €96.0 million or 5.3% to €1,708.1 million in 2015, as compared with €1,804.1 million in 2014. This decline was mainly attributable to generally lower commodity prices.

Gross profit

For the reasons described above, our gross profit decreased 8.7% over 2015 to €971.8 million, as compared with €1,064.9 million in 2014.

Other operating income

The table below sets forth our other operating income for the years ended December 31, 2014 and 2015:

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Income from recovery of previously written off receivables and reversal of allowances on receivables	2.2	3.1	40.9
Rent and lease income	2.6	4.5	73.1
Grants and allowances	1.4	1.5	7.1
Income from reversal of provisions	5.4	5.9	9.3
Commission income	0.9	0.9	–
Insurance reimbursement	1.7	1.3	-23.5
Gains on disposal of intangible assets, property, plant and equipment, and financial assets	1.3	0.8	-38.5
Own work capitalized	0.6	3.1	416.7
Miscellaneous income	19.9	23.9	20.1
Total	**36.0**	**45.0**	**25.0**

Other operating income increased by €9.0 million or 25.0% to €45.0 million in 2015, as compared with €36.0 million in 2014. This is mainly attributable to higher rental income due to the property purchased from SCHMOLZ+BICKENBACH GmbH & Co. KG and own work capitalized due to in-house insourcing of maintenance work.

Personnel costs

The following table sets forth our personnel costs for the years ended December 31, 2014 and 2015:

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Personnel costs	545.7	551.9	1.1

Personnel costs increased by €6.2 million or 1.1% to €551.9 million for 2015, as compared with €545.7 million in 2014. The increase in personnel costs in 2015 is largely attributable to collectively bargained pay rises and higher costs in the United States and Switzerland due to exchange rates. At the same time, the number of employees at year-end 2015 decreased by 91 to 8,910, as compared with 9,001 as at December 31, 2014.

	December 31,		Percentage Change
Employees	2014	2015	(unaudited)
Production	7,720	7,546	-2.3
Sales & Services	1,179	1,252	6.2
Total for operating segments	8,899	8,798	-1.1
Holdings[(1)]	102	112	9.8
Total	**9,001**	**8,910**	**-1.0**

(1) Referred to as other in the segment reporting of the consolidated financial statements as of and for the year ended December 31, 2015.

Other operating expenses

The following table sets forth our other operating expenses for the years ended December 31, 2014 and 2015:

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015[1]	
	(€ in millions)		
Freight, commission	91.0[2]	86.9	-4.5
Maintenance, repairs	71.8[2]	69.0	-3.9
Holding and administrative expenses	25.7[2]	27.6	7.4
Fees and charges	22.7[2]	18.9	-16.7
Rent and lease expenses	24.1	20.0	-17.0
Consultancy and audit services	11.5[2]	16.3	41.7
IT expenses	14.0[2]	15.4	10.0
Losses on disposal of intangible assets, property, plant and equipment, and financial assets	0.4	0.3	-25.0
Non-income taxes	9.1	8.4	-7.7
Net exchange gains/losses	3.2	10.3	221.9
Miscellaneous expense	35.1[2]	32.8	-6.6
Total	**308.6**	**305.9**	**-0.9**

(1) For comparative purposes data taken from the consolidated financial statements as of and for the year ended December 31, 2016.

Other operating expenses decreased by €2.7 million or 0.9% to €305.9 million in 2015, as compared with €308.6 million in 2014.

Adjusted EBITDA and EBITDA

EBITDA decreased by €87.6 million or 35.5% to €159.0 million in 2015, as compared with €246.6 million in 2014. EBITDA margin decreased to 5.9% for 2015, as compared with 8.6% for 2014. Individual reorganizational and transformation measures, the implementation of our new strategy and other special effects resulted in net extraordinary expenses of €10.6 million, as compared with €10.0 million for 2014, which reduced EBITDA. This resulted in a decrease of Adjusted EBITDA by €87.0 million or 33.9% to €169.6 million in 2015, as compared with €256.6 million in 2014.

The table below sets forth Adjusted operating profit before depreciation and amortization (Adjusted EBITDA) operating profit before depreciation and amortization (EBITDA), Adjusted EBITDA margin and EBITDA margin by division for the years ended December 31, 2014 and 2015.

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions, except percentages)		
Adjusted EBITDA			
Production (unaudited)	240.5	156.9	-34.8
Sales & Services (unaudited)	23.7	19.6	-17.3
Reconciliation (unaudited)	(7.6)	(6.9)	n/a
Total (unaudited)	**256.6**	**169.6**	**-33.9**
EBITDA			
Production	236.7	155.0	-34.5
Sales & Services	22.2	17.4	-21.6
Reconciliation	(12.3)	(13.4)	n/a
Total	**246.6**	**159.0**	**-35.5**
Total Revenue			
Production	2,668.6	2,452.8	-8.1
Sales & Services	496.9	543.5	9.4
Adjusted EBITDA margin[1] (%)			
Production (unaudited)	9.0	6.4	-2.6 pts
Sales & Services (unaudited)	4.8	3.6	-1.2 pts
EBITDA margin[2] (%)			
Production (unaudited)	8.9	6.3	-2.6 pts
Sales & Services (unaudited)	4.5	3.2	-1.3 pts

(1) Adjusted EBITDA margin is calculated by dividing the division's Adjusted EBITDA by the division's total revenue.
(2) EBITDA margin is calculated by dividing the division's EBITDA by the division's total revenue.

Adjusted EBITDA in our Production division decreased by €83.6 million or 34.8% to €156.9 million in 2015, as compared with €240.5 million in 2014. EBITDA margin decreased accordingly compared to the prior year to 6.4% in 2015 from 9.0% in 2014. The significant deterioration of earnings in 2015 stems from decreases in volumes, in particular in the oil and gas business, as well as the substantial drop in commodity prices.

As a result, EBITDA, further affected by net extraordinary expenses of €1.9 million in 2015 (2014: €3.8 million) relating to reorganization, transformation, restructuring and other personnel measures, decreased by €81.7 million to €155.0 million in 2015, compared to €236.7 million in 2014.

Adjusted EBITDA in our Sales & Services division decreased by €4.1 million or 17.3% to €19.6 million for 2015, as compared with €23.7 million in 2014. This decrease was primarily due to exchange rate losses realized and lower replacement costs of our inventories stemming from the overall drop of commodity prices triggering valuation impacts. The cost-cutting programs we initiated were unable to fully compensate for these extraordinary effects. EBITDA margin thus also decreased to 3.6% (2014: 4.8%).

As a result, EBITDA, further affected by net extraordinary expenses of €2.2 million in 2015 (2014: €1.5 million) relating to reorganization, transformation, restructuring and other personnel measures, decreased by €4.8 million to €17.4 million in 2015, compared to €22.2 million in 2014.

Depreciation, amortization and impairments

Depreciation, amortization and impairment increased by €7.7 million or 6.6% to €124.1 million in 2015, as compared with €116.4 million in 2014. This development is mainly attributable to higher investments. This item includes non-recurring impairment losses on trademarks of €2.2 million in 2015.

Operating profit (EBIT)

Due to the reasons described above, our operating profit (EBIT) decreased by 73.2% from €130.2 million in 2014 to €34.9 million in 2015.

Financial result

The following table sets forth our financial result for the years ended December 31, 2014 and 2015:

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Financial income	3.3	1.7	-48.5
Financial expense	(53.9)	(47.6)	-11.7
Financial result	**(50.6)**	**(45.9)**	**9.3**

The improved interest terms for the refinancing concluded in June 2014 are reflected in interest expenses on financial liabilities, which decreased by €8.8 million or 18.8% compared to the same period of the prior year to €38.0 million in 2015, as compared with €46.8 million in 2014. As a result, it was possible to compensate for the negative effects from marking derivatives to market and reduce the net financial expense by €4.7 million or 9.3% to €45.9 million in 2015, as compared with €50.6 million in 2014.

Earnings before taxes (EBT)

As a consequence of the matters presented above, earnings before taxes (EBT) decreased by €90.6 million to a loss of €11.0 million in 2015 from a profit of €79.6 million in 2014.

Income taxes

Income tax expense decreased by €3.2 million or 11.6% to €24.4 million in 2015 from €27.6 million in 2014.

Net income/(loss)

The following table sets forth our net income (earnings after taxes) for the years ended December 31, 2014 and 2015:

	Year Ended December 31,		Percentage Change (unaudited)
	2014	2015	
	(€ in millions)		
Earnings after taxes from continuing operations	52.0	(35.4)	n/a
Earnings after taxes from discontinued operations	(2.0)	(131.4)	n/a
Net income (loss) (EAT)	**50.0**	**(166.8)**	**n/a**

As a result of the developments described above, earnings after taxes from continuing operations decreased by €87.4 million to a loss of €35.4 million in 2015 from a profit of €52.0 million in 2014.

In 2015, earnings after taxes from ordinary activities from discontinued operations generated prior to disposal of selected distribution entities in Germany, Belgium, the Netherlands and Austria were a loss of €3.1 million, a decrease of €1.1 million from the €2.0 million loss recorded in this position for 2014. As part of the first-time classification as discontinued operations, the disposal group was measured in its entirety at fair value less costs to sell as at March 31, 2015 and thereafter as at June 30, 2015. The loss on disposal resulting from deconsolidation came to €128.3 million as of December 31, 2015. As a result, overall earnings after taxes from discontinued operations were a loss of €131.4 million, compared to a loss of €2.0 million the previous year.

As a result of the foregoing, the Group result for 2015 changed to a net loss of €166.8 million from net income of €50.0 million in 2014.

Liquidity and Capital Resources

Our principal sources of liquidity are cash generated from our operations, loan facilities and credit lines, the issuance of debt securities, and bank loans of individual subsidiaries.

Net working capital

Adequate working capital enables good customer service and efficient production. It is driven by activity and price levels. However, changes in net working capital significantly affect cash flow from operations. Accordingly, effective management of net working capital is a key component of our strategy. In spring 2015, we launched a group-wide net working capital optimization program enabling us to manage our resources more efficiently. By the end of 2016, we had achieved a significant reduction in our net working capital exposure, through structural reduction of our stock levels (semi-finished/finished goods), supplier-management and improved receivables collect processes.

The following table sets forth our net working capital as of the dates indicated:

	As of December 31,		
	2014	2015	2016
	(€ in millions, except percentages)		
Trade accounts receivable	440.2	331.5	333.1
Inventories	918.5	664.0	630.2
Raw materials, consumables and supplies	125.1	93.8	103.6
Semi-finished goods and work in progress	313.7	251.4	250.2
Finished products and merchandise	479.7	318.8	276.4
Trade accounts payable	(366.4)	(304.7)	(347.9)
Net working capital[1] (unaudited)	**992.3**	**690.8**	**615.4**
As percentage of revenue[2] (unaudited)	36.6	30.2	27.6

(1) Net working capital represents trade accounts receivable plus inventories minus trade accounts payable. This measure is not a defined financial indicator under IFRS and may not be comparable to similarly titled measures as presented by other companies due to differences in the way our non-IFRS measures are calculated.

(2) Net working capital as percentage of revenue of last three months times four.

Net working capital decreased by €75.4 million, or 10.9%, from €690.8 million as of December 31, 2015 to €615.4 million as of December 31, 2016. The decrease reflected ongoing improvements in the course of our net working capital optimization program and the market effect of continuing low commodity prices. The decrease also reflected an increase in trade accounts payable driven by stricter management of our suppliers. Overall, net working capital as percentage of revenue (of last three month times four) decreased from 30.2% as of December 31, 2015 to 27.6% as of December 31, 2016 highlighting our continuous effort to reduce net working capital.

Net working capital decreased by €301.5 million, or 30.4%, from €992.3 million as of December 31, 2014 to €690.8 million as of December 31, 2015. Discontinued operations contributed €149.0 million to this decrease. The remainder was primarily driven by the decline in commodity prices, resulting in lower recorded inventory, and the net working capital optimization program we launched in spring 2015 leading to improved inventory management. The decrease also reflected the decrease in trade accounts receivable driven by lower levels of sales in 2015 than in 2014. As a result, net working capital as percentage of revenue dropped significantly from 36.6% as of December 31, 2014 to 30.2% as of December 31, 2015.

We believe there is still room for further improvements. However, because we have already achieved a significant improvement, we expect any further improvements to be moderate. Order backlog and raw material prices began to increase in the latter part of 2016. Increasing orders require us to increase our stocks. Rising raw material prices increase the carrying value of our inventory. These factors may have an offsetting effect against further incremental improvements in our net working capital efficiency. See "*Risk Factors–Our financial condition may be negatively affected by adverse trends in raw and other material prices.*"

Capital expenditures

We maintain a disciplined approach for capital expenditures and our average annual capital expenditures historically were around €100 million throughout the economic cycle (in the absence of extraordinary impacts described below for 2015).

In recent years, roughly three quarters of our capital expenditures have been for modernization or replacement of existing equipment, as well as for measures required to comply with various legal and regulatory requirements, such as environmental standards and occupational safety and health measures. As a result, we maintain state-of-the-art facilities and equipment that allow us to grow our business without significant additional spending needs.

In line with our innovation strategy, we invest around one quarter of our annual investment volume in product and process innovation, rationalization and market-driven capacity expansion projects. These investments include development of cutting-edge technologies such as our recently launched XTP technology. See "*Business–Our Strategy–Sustain a leading technology and innovation position*". Moreover, a multitude of projects has been realized to streamline our production processes enabling us to become more cost-efficient.

The following table sets forth our capital expenditures by division for the years ended December 31, 2014, 2015 and 2016 (excluding payments for acquisitions, none of which we regard as material during the period under review):

	Year Ended December 31,		
	2014	**2015**	**2016**
	(€ in millions, except percentages)		
Capital expenditures[1]			
Production division	93.0	115.5	94.8
Sales & Services division	2.8	3.5	4.3
Holdings[2]	1.5	42.9	1.7
Total	**97.3**	**161.9**	**100.8**

(1) In our consolidated financial statements, capital expenditures of the segments are shown as segment investments (additions to intangible assets (without goodwill) plus additions to property, plant and equipment (without reclassification from assets held to sale)).

(2) Referred to as other in our consolidated financial statements as of and for the year ended December 31, 2015.

Capital expenditures decreased by €61.1 million, or 37.7%, from €161.9 million in 2015 to €100.8 million in 2016. Our higher levels of capital expenditure in 2015 reflected several extraordinary investments in an aggregate amount of €61 million, primarily for the purchase of real estate in Düsseldorf, Germany, in an amount of €42.4 million.

Capital expenditures increased by €64.6 million, or 66.4%, from €97.3 million in 2014 to €161.9 million in 2015 as a result of the extraordinary investments discussed above.

As of the date of this supplemental report, our investment pipeline contains two major strategic investment projects:

- *New Walking Beam Furnace at Swiss Steel*. Swiss Steel currently invests in a new walking beam furnace plus Garrett coilers. With this new furnace, we aim to achieve better heat treatment performance, reduction of billet handling times, optimized quality and reduced scrap rates and a significant reduction of energy consumption. Moreover, the improved product quality should allow us to expand into new product segments. Work on this project is scheduled to run from 2017 through 2020, with new coilers becoming operational in 2019. We have budgeted approximately CHF 49 million for this investment. We expect to receive certain Swiss-franc payments as a state-sponsored cost reimbursement under applicable Swiss energy regulation (*kostendeckende Einspeisevergütung*). We intend to allocate CHF 11 million of these reimbursements towards the amounts budgeted towards this investment. We expect to begin recording expenditures for this project in 2017.
- *New Heat Treatment Furnace and Bar Shipping Deck at Ugitech*. Our goal in this project is to qualify Ugitech's heat treatment facilities for Nadcap certification, the relevant quality benchmark for aerospace and related industries. We also aim to reduce quality costs, to shift our product mix towards higher margin products, and to debottleneck the bar shipping decks. The project began in 2016 and is scheduled to run through 2019, with the new stacker crane expected to be operational in 2018 and the Nadcap furnace expected to come on line in 2019. The budget for this project is approximately €17 million; we began incurring expenditures in connection with this project in 2016.

As in the past, we plan to maintain disciplined investment spending and do not expect these two projects to significantly increase our investment spending over historic levels.

Cash flows

The following table sets forth our cash flows for the years ended December 31, 2014, 2015 and 2016:

	For the year ended December 31		
	2014	**2015**	**2016**
EBITDA	246.6	159.0	108.0
Changes in other assets and liabilities and other[(1)] (unaudited)	(34.2)	(34.1)	8.9
Income taxes paid	(13.5)	(8.7)	(12.1)
Cash flow before changes in net working capital from continuing operations[(2)]	**198.9**	**116.2**	**104.8**
Changes in net working capital[(3)] (unaudited)	(41.3)	174.5	79.5
Cash flow from operating activities from continuing operations	**157.6**	**290.7**	**184.3**
Investments in tangible and intangible assets[(4)] (unaudited)	(95.8)	(161.2)	(98.7)
Proceeds from disposals of tangible and intangible assets and other[(5)] (unaudited)	3.4	3.3	1.9
Proceeds from disposals of discontinued operations	0.0	46.2	4.5
Cash flow from investing activities from continuing operations	**(92.4)**	**(111.7)**	**(92.3)**
Free cash flow from continuing operations[(6)]	**65.2**	**179.0**	**92.0**
Interests paid	(48.2)	(34.7)	(38.1)
Proceeds and repayments of syndicated loan[(7)] (unaudited)	15.3	0.0	–
Increase and decrease of other financial liabilities and other[(8)] (unaudited)	(32.0)	(123.7)	(64.0)
Cash flow from financing activities from continuing operations	**(64.9)**	**(158.4)**	**(102.1)**
Cash flow from continuing operations – Total (unaudited)	**0.3**	**20.6**	**(10.1)**
Cash flow from discontinuing operations – Total (unaudited)	0.2	(40.2)	(0.4)
Cash flow – Total (unaudited)	**0.5**	**(19.6)**	**(10.5)**

(1) Sum of gain/loss on disposal of intangible assets, property plant and equipment and financial assets, increase/decrease in other assets and liabilities and reversal of impairment, each as shown in the corresponding consolidated financial statements.

(2) Referred to as cash flow before changes in net working capital in the consolidated financial statements as of and for the year ended December 31, 2015.

(3) Sum of change in inventories, change in trade accounts receivable and change in trade accounts payable, each as shown in the corresponding consolidated financial statements.

(4) Sum of investments in property, plant and equipment and investments in intangible assets, each as shown in the corresponding consolidated financial statements.

(5) Sum of proceeds from disposals of property, plant and equipment, proceeds from disposals of intangible assets, proceeds from disposals of financial assets and interest received, each as shown in the corresponding consolidated financial statements.

(6) For purposes of cash flow statement, free cash flow comprises the cash flow from operations plus the cash flow from investing activities. This measure is not a defined financial indicator under IFRS and may not be comparable to similarly titled measures as presented by other companies due to differences in the way our non-IFRS measures are calculated.
(7) Sum of proceeds from the new syndicated loan and repayment of the syndicated loan, each as shown in the consolidated financial statements as of and for the year ended December 31, 2015.
(8) Sum of increase in other financial liabilities, repayment of other financial liabilities, transaction costs from capital increase, investment in treasury shares and dividends to non-controlling interests, each as shown in the consolidated financial statements as of and for the year ended December 31, 2015 as well as sum of decrease in financial liabilities, investment in treasury shares and dividends to non-controlling interests, each as shown in the consolidated financial statements as of and for the year ended December 31, 2016.

Cash flow before changes in net working capital from continuing operations

Cash flow before changes in net working capital from continuing operations decreased by €11.4 million, or 9.8%, from €116.2 million in 2015 to €104.8 million in 2016. This decrease was primarily the result of the lower EBITDA of €108.0 million compared to €159.0 million in 2015 due to the extraordinary expenses of €45.2 million in connection with our Performance Improvement Program, the reorganization and transformation process, and the restructuring and other personnel-related measures. As the majority of these expenses was provisioned for and remains to be paid out, this impact is mostly offset in the position changes in other assets and liabilities and other.

Cash flow before changes in net working capital from continuing operations decreased by €82.7 million, or 41.6%, from €198.9 million in 2014 to €116.2 million in 2015. This decrease primarily reflected the lower EBITDA of €87.6 million from €246.6 million in 2014 to €159.0 million in 2015 due to the overall difficult business environment.

Cash flow from operating activities from continuing operations

Cash flow from operating activities from continuing operations is determined by the cash flow before changes in net working capital (from continuing operations) and additionally considers any cash flow resulting from the change in net working capital from continuing operations.

As outlined in the table below, cash flows from operating activities from continuing operations in 2014 and in particular in 2015 were materially affected by discontinued operations. The following table sets forth the reconciliation of the change in net working capital as disclosed in our statement of financial position and the change in net working capital as disclosed in our statement of cash flow for the years ended December 31, 2014, 2015 and 2016:

	For the year ended December 31		
	2014	**2015**	**2016**
Change in net working capital disclosed in statement of financial position (unaudited)	**(42.8)**	**301.5**	**75.4**
Effect of discontinuing operations (unaudited)	(13.2)	(149.0)	n/a
Effect of foreign currency translation and other (unaudited)	14.7	22.0	4.1
Change in net working capital disclosed in statement of cash flow (unaudited)	**(41.3)**	**174.5**	**79.5**

In addition to these discontinued operations, the cash flow from operations from continuing operations can furthermore be significantly affected by changes in commodity prices and an increase or decrease of sales volumes. During the period under review, the generally downward development of commodity prices had a strong effect on our inventories, and hence on our cash flow from operations from continuing operations. Only at the very end of 2016, a slight uptick of commodity prices was observable.

Cash flow from operating activities of continuing operations decreased by €106.4 million, or 36.7%, from €290.7 million in 2015 to €184.3 million in 2016. Despite our continued efforts through our net working capital program, the stabilized commodity price levels resulted in a less significant improvement in comparison to prior year. The build-up of safety stocks in connection with our transfer of operations from our facility in Boxholm, Sweden to Germany also mitigated the efforts.

Cash flow from operating activities of continuing operations increased by €133.1 million, or 84.5%, from €157.6 million in 2014 to €290.7 million in 2015. The primary factor driving the increase in operating cash flow was the reduction in inventories of €114.1 million in 2015, as compared with an increase in inventories of €71.6 million in 2014, each shown as change in inventories in the respective statements of cash flows as shown in the Group's audited consolidated financial statements. This development was triggered by a downturn in commodity prices and supported by our net working capital improvement program.

Cash flow from investing activities from continuing operations

Cash flow from investing activities is generally assumed to be negative as cash outflows for investments in tangible and intangible assets are necessary during the business cycle. Therefore, in the following discussion, higher negative cash flows from investing activities are explained as an increase and vice versa.

Cash outflow from investing activities from continuing operations decreased by €19.4 million, or 17.4%, from €111.7 million in 2015 to €92.3 million in 2016. The decrease primarily reflects the several extraordinary investments in 2015 with an aggregate amount of €61 million, mainly for the purchase of real estate in Düsseldorf, Germany in an amount of €42.4 million. The effect of lower levels of investment was compensated for in part by the significantly smaller amount of proceeds from the disposal of discontinued operations in 2016 with €4.5 million as the large majority of the sales proceeds were recorded in 2015 with €46.2 million.

Cash outflow from investing activities from continuing operations increased by €19.3 million, or 20.9%, from €92.4 million in 2014 to €111.7 million in 2015. The primary reason for this increase was the significantly higher levels of investments in 2015 due to several extraordinary investments in an aggregate amount of €61 million as described above. See "–Capital expenditures". The effect of higher level of investment was compensated for in part by the sales proceeds from the disposal of discontinued operations in 2015 in the amount of €46.2 million. We recorded no such proceeds in 2014.

Our investments in tangible and intangible assets do not necessarily tie to capital expenditures primarily due to the time lag of the cash spent as opposed to the recognition of the liability.

Free cash flow from continuing operations

Free cash flow represents the total of cash flow from operating activities from continuing operations and cash flow from investing activities from continuing operations. Free cash flow comprises the cash surplus or deficit after expenditure on investments and taxes but before net interests paid, net cash used in/provided by financing activities, and before taking into account cash proceeds and payments relating to shareholders' equity and financial liabilities. The reasons for the changes in our free cash flow are the same as those discussed above under "–Cash flow from operations from continuing operations" and "–Cash flow from investing activities from continuing operations".

Free cash flow from continuing operations decreased by €87.0 million, or 48.6%, from €179.0 million in 2015 to €92.0 million in 2016.

Free cash flow from continuing operations increased by €113.8 million, or 174.5%, from €65.2 million in 2014 to €179.0 million in 2015.

Cash flow from financing activities from continuing operations

Cash flow used in financing activities from continuing operations decreased by €56.3 million, or 35.5%, from €158.4 million in 2015 to €102.1 million in 2016. This decrease reflects the higher amounts of cash used in 2015 to reduce our financial liabilities as part of our ambition to reduce net debt. In 2015 we used on a net basis €160.4 million to reduce financial liabilities. Of this amount, €37.7 million reflected financial liabilities relating to discontinued operations. In 2016 we used €63.3 million to reduce financial liabilities, none of them relating to discontinued operations.

Cash flow used in financing activities from continuing operations increased by €93.5 million, or 144.1%, from €64.9 million in 2014 to €158.4 million in 2015. The primary reason for the increase was the significantly higher level of cash used to repay financial liabilities other than the 2011 syndicated loan discussed below. In 2015 we used €138.9 million to repay such liabilities, as compared with €30.7 million in 2014. In 2014 we generated €236.7 million in financing cash flow through a new syndicated loan. We used €221.4 million in cash to repay an earlier syndicated loan from 2011 being refinanced through the new loan.

Cash flow from financing activities of continuing operations

Cash flow used in financing activities decreased by €56.3 million, or 35.5%, from €158.4 million in 2015 to €102.1 million in 2016. This decrease reflects the higher amounts of cash we used in 2015 to reduce our financial liabilities as part of our strategic program to reduce net debt. In 2015 we used on a net basis €160.4 million to reduce financial liabilities. Of this amount, €37.7 million reflected financial liabilities relating to discontinued operations. In 2016 we used €63.3 million to reduce financial liabilities, none of them relating to discontinued operations.

Cash flow used in financing activities increased by €93.5 million, or 144.1%, from €64.9 million in 2014 to €158.4 million in 2015. The primary reason for the increase was the significantly higher level of cash used to repay financial liabilities other than the 2011 syndicated loan discussed below. In 2015 we used €138.9 million to repay such liabilities, as compared with €30.7 million in 2014. In 2014 we generated €236.7 million in financing cash flow through a new syndicated loan. We used €221.4 million in cash to repay an earlier syndicated loan from 2011 being refinanced through the new loan.

Sources of liquidity

Our principal sources of liquidity have been cash generated from our operations, the issuance of equity (including through rights offerings), our loan facilities and credit lines. Our ability to generate cash from our operations depends on our future operating performance, which is in turn dependent, to some extent, on general economic, financial, competitive, market, regulatory and other factors, many of which are beyond our control, as well as other factors discussed under "*Risk Factors*".

From time to time we increase capital through the issuance of new shares. Through such issuances we raised net cash of €208.3 million in 2010. In the year ended December 31, 2011, we replaced an existing hybrid capital instrument with a nominal value of €80.0 million and accrued interest of €16.2 million as part of a capital increase through the issue of 13,125,000 new shares. We received €30.5 million from shareholders who were not holders of the hybrid capital, of which €25.3 million was used in partial repayment of the hybrid capital, including accumulated interest. The remaining hybrid capital was converted into shares as part of the capital increase. As a result of such repayment and conversion, the hybrid capital component in our shareholders' equity was replaced in full. In the year ended December 31, 2013, we increased our share capital by the issuance of 826,875,000 shares, whereas we reduced the nominal value of the shares from CHF 3.50 to CHF 0.50 each and simultaneously re-increased the share capital. Through this issuance, we received net cash of €330.4 million.

Our total debt, which composes of non-current and current financial liabilities, was €659.3 million, €524.4 million and €463.7 million as of December 31, 2014, 2015 and 2016 respectively. Net debt (defined as total debt less cash and cash equivalents) was €587.2 million, €471.1 million and €420.0 million as of December 31, 2014, 2015 and 2016, respectively.

As of December 31, 2016, our borrowing facilities (including subsidiary facilities and other forms of financing) represent an aggregate amount of approximately €908 million, with available borrowing capacity of approximately €483.9 million (unused financing lines).

Liquidity management and cash pooling

To manage our liquidity, we maintain several zero balancing cash pools with multiple banks in several currencies, whereby balances are cleared (zero balanced) on a daily basis. This includes in particularly our material subsidiaries. All accounts are managed actively on a daily basis. The balances resulting from the daily settlement of accounts are subject to customary interest rates.

Forecasts are regularly prepared as a basis for our liquidity management. In addition, we maintain liquidity reserves in the form of bank balances and committed bank overdraft facilities. We also have substantial undrawn facilities in order to bridge (if necessary) any short-term cash needs.

The general policy on subsidiary cash balances is to transfer these to the accounts of either SCHMOLZ+BICKENBACH AG or SCHMOLZ+BICKENBACH Edelstahl GmbH. This is monitored daily (through our treasury management system ITS) with an additional weekly reporting and on an ad hoc basis (via a manual cash-pool solution) in the case of operating subsidiaries, except for subsidiaries with local currency restrictions, such as Brazil and Malaysia. As of the date of this supplemental report, nearly all of the annual revenue is included in the cash management on financial holding level. We plan to integrate further operating subsidiaries into our zero balancing cash pools.

Lease Commitments

As of December 31, 2016, the future minimum lease payments from finance leases were as follows:

	As of December 31, 2016		
	< 1 year	**1 to 5 years**	**> 5 years**
		(€ in millions)	
Minimum lease payments	1.3	3.1	0.1
Interest	(0.2)	(0.3)	(0.0)
Present value of minimum lease payments	**1.1**	**2.8**	**0.1**

As of December 31, 2016, the minimum lease payments in connection with operating leases were as follows:

	As of December 31, 2016		
	< 1 year	1 to 5 years	> 5 years
		(€ in millions)	
Minimum lease payments	**7.5**	**14.6**	**1.1**

In 2003, DEW entered into a hereditary lease with a total lease term of 99 years for properties at Siegen and Hagen with an annual lease payment of €1.6 million. This amount is not included in the table above.

Pension obligations

In principle, the Group contributes to the plans based on the legal and/or minimum funding requirements stipulated by collective agreement in the respective country of each fund. In 2016, employer contributions totalling €15.6 million (2015: €15.7 million) were made to the plan assets of the existing defined benefit plans, including pension payments of €6.3 million for unfunded plans (2015: €6.4 million).

The present value of the defined benefit obligations amounts to €636.9 million consisting of a funded defined benefit obligations of €426.4 million (plan assets of €311.6 million) and an unfunded defined benefit obligations of €210.5 million. The total amount of the defined benefit obligations sums up to €638.2 million including an obligation similar to pension of €1.3 million.

Deferred tax assets

The underlying of the total unrecognized deferred tax assets to be used relating to temporary differences, tax-loss carry-forwards and interest carry-forwards as well as tax credits amounted to €424.8 million as per December 31, 2016 (December 31, 2015: €290.9 million; December 31, 2014 €250.3 million). Recognized deferred tax assets from tax-loss carry-forwards and interest carry-forwards amount to €39.1 million as per December 31, 2016 (December 31, 2015: €47.0 million; December 31, 2014: €49.5 million). The major amount of unrecognized deferred tax assets as well as the recognized deferred tax assets result from tax-loss carry forwards and interest carry-forwards for Germany.

Off-balance sheet items

As of December 31, 2016, pledges and guarantees amounted to €2.0 million. Additionally, a factoring agreement is in place with a third party factor to sell trade account receivables. This agreement constitutes non recourse factoring where the risk is fully transferred to the factor. As of December 31, 2016, receivables amounting to €4.9 million had been sold. The amount of trade receivables sold may have considerable fluctuations, but has never reached materiality throughought the period under review. We do not otherwise have off-balance-sheet arrangements that we regard as material.

Purchase Commitments

We have various purchase commitments for items of permanent investments incidental to the ordinary course of business. As of December 31, 2016 these purchase commitments totaled to €19.2 million.

Tabular Disclosure of Contractual Obligations

The following table sets forth our contractually agreed undiscounted cash outflows from primary financial liabilities and from derivative financial instruments as of December 31, 2016.

	Total cash outflows	Cash outflows 2017	Cash outflows 2018 to 2021	Cashflows after 2021
		(€ in millions)		
Syndicated loan	105.5	3.5	102.0	0.0
Other bank loans	33.2	9.3	23.9	0.0
Bond	207.1	16.6	190.5	0.0
Liabilities from finance leasing	4.5	1.3	3.1	0.1
Other financial liabilities	172.8	172.8	0.0	0.0
Trade accounts payable	347.9	347.9	0.0	0.0
Total derivative financial instruments	(2.7)	(2.5)	(0.2)	0.0
Total	**868.3**	**548.9**	**319.3**	**0.1**

The above table includes all financial liabilities on an undiscounted basis which existed at December 31, 2016. Amounts designated in foreign currencies were translated into euro using the current exchange rates; interest payments at variable rates were determined on the basis of the current fixing. The payments are shown in those periods in which payment can first be demanded according to the contractual conditions.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to a number of different market risks arising from our normal business activities.

In view of our assets, liabilities, pending transactions, and planned transactions, we are particularly exposed to risks arising from changes in exchange rates, interest rates and commodity prices, as well as credit risks, such as the risk of default by counterparties. Furthermore, solvency must be assured at all times (liquidity risk). The objective of risk management is to use appropriate measures to control these risks where they affect our cash flows. Derivative financial instruments are used only for hedging purposes. They are not used for trading or speculative purposes. Exchange effects resulting from the translation of financial statements in foreign currencies into our reporting currency are not hedged. The guidelines for risk hedging and their implementation are defined and continuously monitored by Group Management. The sensitivity analyses required by IFRS 7 relate exclusively to hypothetical changes in market prices and interest rates for derivative and non-derivative financial instruments. The corresponding effects of the opposite movements of any underlying non-financial transaction are not all considered in the sensitivity analyses and would substantially reduce the effects that are presented. All of the effects on equity that are presented in the sensitivity analyses are direct effects on equity.

Currency risk

Foreign currency risks arise mainly when trade accounts receivable and payable are settled in foreign currencies, future revenue is planned in a foreign currency, or existing or planned fixed-price commodity supply contracts are in a foreign currency. Currency management is country-specific, with foreign currency amounts being translated regularly into the respective functional currency, mainly by means of spot or forward exchange contracts.

Currency risks as defined by IFRS 7 arise from financial instruments that are denominated in a currency other than the functional currency. Fluctuations in the value of non-monetary financial instruments do not represent an exchange risk in the meaning of IFRS 7 and nor do the effects of translating financial statements denominated in foreign currencies into the Group's reporting currency (euro).

Currency risks mainly related to the US dollar, Swiss franc, pound sterling and Canadian dollar relative to the euro as at the reporting date and throughout the reporting period.

The following table sets forth the changes in U.S. dollars and Swiss francs resulting from a 10% upward or downward revaluation of the euro.

		2015	2016
	Change in €	Effect on net income/(loss)	Effect on net income/(loss)
		(€ in millions)	
Currency U.S. dollar	**+10%**	**1.9**	**1.9**
	-10%	**(2.4)**	**(2.3)**
Currency CHF	**+10%**	**(0.7)**	**(1.0)**
	-10%	**0.8**	**1.3**
Currency CAD	**+10%**	**0.4**	**0.3**
	-10%	**(0.5)**	**(0.3)**

The sensitivities were calculated based on the values that would have resulted if the closing exchange rate of the euro against the other currencies had been 10% higher or lower on the reporting date.

For the calculation, a time value of money of 5.0% per annum was assumed. Given the average life of six months for currency derivatives, the amounts were discounted at 2.5% per annum.

Interest rate risk

Interest rate risks for liabilities mainly arise from changing interest components like the reference interest rates (Euribor, Libor) in their respective currencies or from premiums on credit rating of the Company as well as substitution risk of fixed-interest financial instruments. Our Executive Board stipulates an appropriate target ratio of fixed and floating-rate liabilities and monitors compliance with

the target on an ongoing basis. Interest effects are primarily managed through the composition of financial instruments. If required, additional interest rate derivatives can be used.

The calculation of the interest rate sensitivities is based on the following assumptions:

1. Interest rate risks of non-derivative floating-rate financial instruments normally only affect net income (loss).
2. a) Interest rate risks of derivative financial instruments which are part of a hedging relationship in a cash flow hedge pursuant to IAS 39 affect equity. As at December 31, 2015 and 2016, there were no interest rate derivatives designated to hedging relationships.

   b) Interest rate risks of derivative financial instruments which are not part of a hedging relationship in a cash flow hedge pursuant to IAS 39 have an effect on net income (loss).

If at December 31, 2015 and 2016 euro interest rates had been 100 basis points higher/(lower), the effects on our net income (loss) and equity would have been as follows:

		2015	2016
	Change in €	Effect on net income/(loss)	Effect on net income/(loss)
		(€ in millions)	
Euro interest rates	+100 basis points	(2.0)	(2.0)
	- 100 basis points	2.0	2.0

Commodity price risks

Commodity price risks result from fluctuations in the prices of raw materials required for steel production. Fluctuations in commodity prices can usually be passed on to customers in the form of alloy surcharges. If this is not possible, hedging is undertaken with marketable instruments in some cases. Currently, these instruments mainly comprise forward exchange contracts for nickel. We receive payments depending on the development of the nickel price, and are therefore protected against price hikes.

There would have been no significant impact on the Group's net income/loss or shareholders' equity if the price of nickel had been 10% higher (lower) as at the reporting date.

Credit risks

Credit risks are mainly linked to trade accounts receivable, bank balances, guarantees and derivative financial instruments. In view of the broadly diversified customer base, which spans a variety of regions and industries, the credit risk on trade accounts receivable is limited.

Moreover some of the trade accounts receivable are covered by credit insurance with varying deductibles. As of December 31, 2016 approximately 55% (December 31, 2015: 55%) of our trade accounts receivable were credit insured.

To mitigate credit risks from operating activities, transactions with external business partners are safeguarded either by trade credit insurance or by conducting internal credit checks and a credit approval process. A credit risk limit is set for each contractual partner based on the internal credit check. Each subsidiary is essentially responsible for setting and monitoring their own limits under observation of the various approval processes that apply depending on the credit limit. In addition, the credit and collection policies of the local entities are captured by the internal control system.

Where possible, and particularly in the case of new business relationships, external business partners are required to provide collateral to minimize the credit risk. Bank guarantees, assignment of receivables, assignment of collateral and personal guarantees are all acceptable forms of security. Default risks are monitored continuously by the individual Group companies and are taken into account through allowance accounts if necessary. Impairments of trade accounts receivable are recognized in part on special allowance accounts. However, if the probability of default is assessed to be very high, the respective accounts receivable are immediately derecognized.

All banks with which we maintain business relationships have good credit ratings considering the prevailing market conditions and are in most cases members of deposit guarantee funds. Derivative financial instruments are only entered into with these banks.

The carrying amount represents the maximum credit risk for all classes of recognized financial assets.

As at each reporting date, the financial assets that are not measured at fair value through profit or loss are assessed for any objective evidence of impairment. Objective evidence includes significant financial difficulty of the debtor, actual breach of contract by the debtor, the disappearance of an active

market for the financial asset, a prolonged decline in the fair value of a financial asset below amortized cost and significant changes in the technological, economic or legal environment in which the debtor operates. If impairment has occurred, the difference between the carrying amount and the expected future cash flows discounted at the original effective interest rate is recognized in profit or loss, while changes in value that were recognized in other comprehensive income are released through profit or loss. If the fair value of financial assets other than those categorized as “available for sale” objectively increases over time, a reversal of the impairment is recognized through profit or loss provided that the original amortized costs are not exceeded.

Liquidity risk

We ensure solvency at all times through a largely centralized cash management system. In particular, this involves preparing liquidity plans in which the expected cash receipts and payments for a specified time period are offset against each other. In addition, balances and irrevocable credit facilities are held with banks as liquidity reserves.

The tables below present the contractually agreed undiscounted cash outflows from primary financial liabilities and cash flows from derivative financial instruments:

	Carrying amount 31.12.2016	Cash outflows 2017	Cash outflows 2018 to 2021	Cash outflows after 2021	Total cash outflows
			(in million €)		
Primary financial instruments					
Syndicated loan	93.1	3.5	102.0	0.0	105.5
Other bank loans	29.1	9.3	23.9	0.0	33.2
Bond	164.6	16.6	190.5	0.0	207.1
Liabilities from finance leasing	4.0	1.3	3.1	0.1	4.5
Other financial liabilities	172.8	172.8	0.0	0.0	172.8
Trade accounts payable	347.9	347.9	0.0	0.0	347.9
Total primary financial instruments	**811.5**	**551.4**	**319.5**	**0.1**	**871.0**
Derivative financial instruments					
Derivatives with hedging relationship (hedge accounting)	-0.1	-0.1	0.0	0.0	-0.1
– thereof outflow		-1.0	0.0	0.0	-1.0
– thereof inflow		0.9	0.0	0.0	0.9
Derivatives without hedging relationship (no hedge accounting)	2.3	-2.4	-0.2	0.0	-2.6
– thereof outflow		-256.9	-3.1	0.0	-260.0
– thereof inflow		254.5	2.9	0.0	257.4
Total derivative financial instruments	**2.2**	**-2.5**	**-0.2**	**0.0**	**-2.7**
Total 31.12.2016	**813.7**	**548.9**	**319.3**	**0.1**	**868.3**

	Carrying amount 31.12.2015	Cash outflows 2016	Cash outflows 2017 to 2020	Cash outflows after 2020	Total cash outflows
			(in million €)		
Primary financial instruments					
Syndicated loan	130.4	4.4	145.7	0.0	150.1
Other bank loans	35.4	10.4	25.2	5.5	41.1
Bond	162.5	16.6	189.8	0.0	206.4
Liabilities from finance leasing	4.8	1.5	3.6	0.5	5.6
Other financial liabilities	191.2	191.2	0.1	0.0	191.3
Trade accounts payable	304.7	304.7	0.0	0.0	304.7
Total primary financial instruments	**829.0**	**528.8**	**364.4**	**6.0**	**899.2**
Derivative financial instruments					
Derivatives with hedging relationship (hedge accounting)	-0.3	-0.3	0.0	0.0	-0.3
– thereof outflow		-0.3	0.0	0.0	-0.3
– thereof inflow		0.0	0.0	0.0	0.0
Derivatives without hedging relationship (no hedge accounting)	-1.6	-1.9	0.0	0.0	-1.9
– thereof outflow		-164.4	-0.5	0.0	-164.9
– thereof inflow		162.5	0.5	0.0	163.0
Total derivative financial instruments	**-1.9**	**-2.2**	**0.0**	**0.0**	**-2.2**
Total 31.12.2015	**827.1**	**526.6**	**364.4**	**6.0**	**897.0**

The overview above includes all financial liabilities carried as at December 31, 2016. Amounts denominated in foreign currencies were translated into euro using the exchange rates as at December 31, 2016; floating-rate interest payments were determined on the basis of the current rate. Payments are shown in the periods in which payment can first be demanded according to the contractual arrangements. The amounts of derivative financial instruments shown above represent the net balance of undiscounted payments and receipts.

Critical Accounting Policies

Significant accounting judgments, estimates and assumptions

In preparing our audited consolidated financial statements, assumptions and estimates have been made which affect the carrying amounts and disclosure of the recognized assets and liabilities, income and expenses, and contingent liabilities.

All assumptions and estimates are made according to the best of our management's knowledge and belief in order to present a true and fair view of the net assets, financial position and results of operations of the Group. Since the actual values may, in some cases, differ from the assumptions and estimates that were made, these are continuously reviewed. Adjustments to estimates that are relevant for financial reporting are considered in the period in which the change occurs, provided that the change relates only to this period. If the change relates not only to the reporting period but also to subsequent periods, the change is taken into account both in the period of the change and in all subsequent periods affected.

Recoverability of deferred tax assets

Future tax relief in the form of deferred tax assets should only be recognized to the extent that it is considered probable that these will be realized on the basis of future taxable income. At the end of each reporting period, deferred tax assets are assessed for recoverability based on multi-year tax plans. These plans are based on the Group companies' medium-term planning, which is approved by our Board of Directors.

The estimate of future taxable income is also affected by our Group's strategic tax planning.

Depreciation and amortization of non-current assets with finite useful lives.

Assets with finite useful lives are subject to depreciation and amortization. For this purpose, the useful life of each asset is estimated upon initial recognition, reviewed at each reporting date and adjusted when necessary.

Impairment testing of non-current non-financial assets

Goodwill and other intangible assets with indefinite useful lives are subject to an impairment test at least annually as at November 30. In addition, all assets are tested for indications of possible impairment at each reporting date.

Impairment testing uses the discounted cash flow method to determine the recoverable amount of a cash-generating unit. This is then compared to the carrying amount of the net assets. Cash flows are measured based on the Group companies' medium-term plans, which are prepared for a five-year detailed planning period and have been approved by our Board of Directors. A uniform Group-wide growth rate is used to determine the cash flows beyond the detailed planning period. The cash flows are discounted using an appropriate discount rate.

Measurement of provisions

Provisions are generally measured on the basis of the best estimate of the expenditure required to settle the present obligation upon recognition, taking into account all risks and uncertainties affecting the estimate.

Provisions for pensions and similar obligations in particular are based on estimates and assumptions with respect to the discount rate, expected salary and pension increases and mortality rates.

In addition, the corresponding guidelines for restructuring were assessed in the context of local circumstances for the purpose of recognizing provisions and considered accordingly.

Accounting for business combinations

In accounting for acquisitions, the consideration transferred for the business combination is offset against our share in the fair values of the identifiable assets, liabilities, and contingent liabilities as of the date on which we obtain control. Significant estimates are made in determining the fair values of the identifiable assets, liabilities, and contingent liabilities as of the time of the acquisition.

If intangible assets are identified, their fair values are determined, depending on the nature of the intangible asset and the complexity of the measurement, either by reference to independent valuations or by using an appropriate valuation method, which will normally be based on a forecast of the aggregate cash flows expected in the future. These valuations are closely related to the assumptions of our Executive Board as to the future development of the values of the respective assets and the rate used for the discounting of the future cash flows.

INDUSTRY AND COMPETITION

Global Steel and Special Long Steel Overview

Steel is one of the most important, multi-functional and adaptable materials in use today, and is generally considered to be one of the backbones of industrial development. Steel is highly versatile, as it is hot and cold formable, weldable, hard, recyclable and can be designed to resist corrosion, water and heat. The industries in which steel is used include construction (including infrastructural construction such as bridges and roads), industrial construction (factory buildings, office and residential), transportation (including automotive, shipbuilding, railways), engineering (including energy, oil and gas, mining and yellow goods), and consumer goods (including domestic appliances).

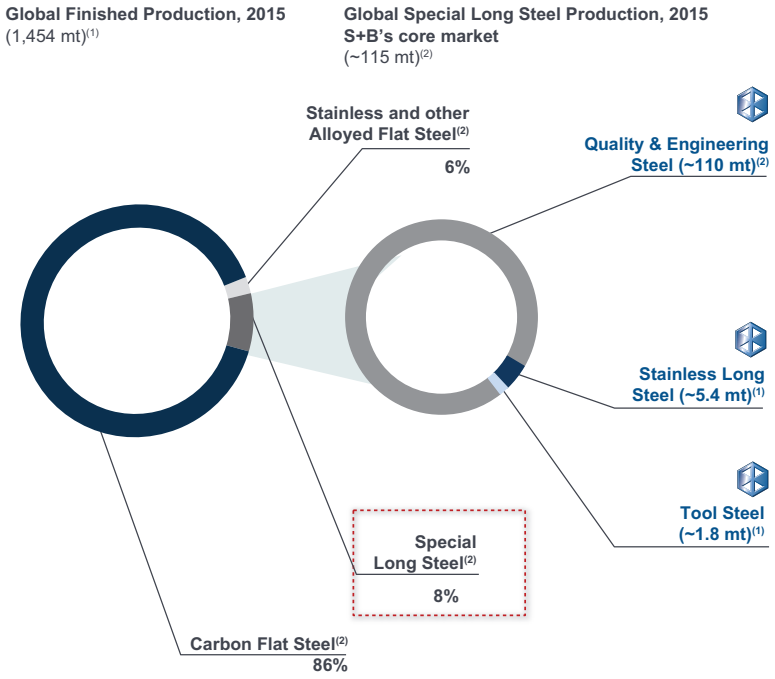
According to SMR, global finished steel production in 2015 was approximately 1,454. The market is generally divided into three categories: global carbon steel, stainless and other alloyed flat steel and special long steel. Based on SMR data, we estimate the breakdown for the global steel market in 2015 to be as follows: global carbon flat steel and global carbon long steel, often referred to commodity steel, accounted for approximately 86% of production; global stainless and other alloyed flat steel accounted for approximately 6% of production; special long steel, the market in which we operate, accounted for approximately 115 mt or approximately 8% of production.

Special long steel is generally defined as long steel that is combined with alloying elements, such as nickel, chromium, vanadium, molybdenum, tungsten and manganese, and processed, for example, by means of heat treatment, to create a steel product with special material properties, such as a particular chemical composition, a defined crystalline structure or a combination thereof. There are three sub-segments of the specialty long steel market: tool steel, stainless long steel and quality and engineering steel.

The tool steel product range, which accounts for 1.8 mt of global production according to SMR, spans cold-work steel, hot-work tool steel, high-speed steel (HSS) and mould steel, which are used in the automotive or the food packaging industry, among others. Stainless steel, which accounts for 5.4 mt of global production according to SMR, is resistant to corrosion, acids and extreme thermal stresses. It is strong but stretchable. These characteristics, paired with aesthetic optical design options, make stainless long steel an attractive material for many specialized applications. Quality and engineering steel, which accounts for approximately 110 mt of global production (estimate based on SMR data), is used in a multitude of application. It is especially called for in applications with high mechanical loads and when components need to be both reliable and durable e.g. against shock or cyclical load.

While there is general agreement that all alloyed long steel grades (tool steel, stainless long steel and high alloy “engineering” steel (including bearing steel)) constitute special long steel, certain other low alloyed long steel products can be classified as either special long steel or more carbon long steel and thus are difficult to precisely define. However, the more alloys are contained in a particular steel product, the more likely it is that it will be classified as special long steel. In forming its view of the overall special long steel market, our management builds upon figures published by SMR. SMR does not publish specific figures on the quality and engineering steel sub-segment. In analyzing our markets, we use the category “Other Alloyed Steel”, as published by SMR, to estimate the size of the quality and engineering long steel market. This SMR category includes flat steel products that we do not include under quality and engineering long steel, but excludes certain long carbon steel products, such as steel grades 22MnB5, C45 mod. and C56, that we do classify in that category. Based on SMR data, as adjusted for this additional information, we estimate the total quality and engineering long steel segment to be about 110 mt.

The following charts set out the estimated market percentage and production volumes of the global finished steel market and the special long steel market in 2015.



1) Source SMR.
2) Management estimate based on original SMR data.

We operate exclusively in the special long steel industry, which is characterized by a number of favorable attributes and benefits from a number of global trends which differentiate this industry from other parts of the steel industry. In essence, special long steel shares basic production processes but is different in certain respects as summarized in the following table:

	Special long steel	*Carbon flat steel*	*Stainless and other alloyed flat steel*
Share of global production (2015)	**8%**	86%	6%
Key success factors	✓ **Quality & innovation** ✓ **Technological expertise** ✓ **Close customer relationship** ✓ **Capture growth in mature and emerging markets** ✓ **Service** ✓ **Flexible cost basis** ✓ **Broad product portfolio with smaller lot sizes (grades, dimensions, mechanical and thermal refining)**	▪ Price ▪ Scale ▪ Captive iron ore / coking coal ▪ Capture growth in emerging markets ▪ Service	▪ Price ▪ Assets utilisation ▪ Capture growth in emerging markets ▪ Service

Source: SMR, management estimates

Main Characteristics of the Special Long Steel Market

Limited exposure to raw material price volatility

Special long steel is a small, niche sub-segment of the global steel market, and the pricing for special long steel products is different compared to other steel segments. Prices for special long steel usually include several components, namely the base price and surcharges. In the case of engineering and tool steel the surcharges consists of a scrap surcharge and an alloy surcharge while in the stainless segment there is only an alloy surcharge which contains also a scrap component. However, the principle remains the same in both cases:

- The base price is negotiated with the customer which depends mainly on market supply and demand.
- The scrap surcharge is a supplementary charge added by the producers of engineering or tool steel to the selling price of steel, passing on changes (whether increases or decreases) in the price for scrap directly to customers. The scrap surcharge is based on an index price system for scrap; the actual amount of the surcharge is determined on the final sale date and varies depending on the type of product and the country where the product is produced.
- The alloy surcharge is applied in the same manner as the scrap surcharge and allows special steel producers to pass on the changes (whether increases or decreases) in prices for alloys. The concept of the alloy surcharge, which is calculated using raw material prices quoted on certain accepted exchanges, such as the LME, or is determined on industry-wide accepted price publications, such as Metal Bulletin, Platts Metals, CRU/Ryan's notes etc.

The alloy surcharge was introduced in Europe, the United States and Canada in response to significant volatility in the price for these materials, which has historically been driven by fluctuations in demand, increasing or decreasing inventory levels, changes in production capacity and speculation by metal traders. Like the scrap surcharge, the actual amount of the surcharge is determined on the final sale date and varies depending on the type of product and the country where the product is produced.

Due to application of scrap and alloy surcharges, the exposure to fluctuations in prices for raw materials is less pronounced than for producers of carbon steel. However, we are still affected by the changes in the prices for raw materials, in particular scrap and nickel. In addition, when the price of scrap and nickel is falling, purchasers of special long steel delay their orders to benefit from an expected decrease in prices, which has an effect of reducing demand in the short term. By contrast, when scrap and nickel prices are rising, purchasers tend to acquire larger quantities of special long steel in order to avoid having to buy later at higher prices.

This surcharge mechanism is a feature for a large extent of our business, especially when managing multi-year, yearly or quarterly contracts. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Results of Operations—Surcharge mechanism and special long steel pricing*" for a more detailed description of the surcharge mechanism.

Potential for product differentiation

Special long steel products are usually customized, depending on the specific function or application of the end product in which the special long steel product will be embedded or the manufacturing process in which the special long steel product will be used. Therefore, the key distinctive feature of the special long steel market is the capability of a special long steel producer to differentiate and target the products to its customers' demand. For example, special steel is very often used by our customers in complicated, technical and critical applications with a large impact on product safety and reliability, such as in the automotive, aerospace or medical industries. Therefore, special technical consultations to customers are required, often including development of new products or services in collaboration with our customers. In addition, many of our products require significant testing, homologation and certification for use by customers. As a result of these factors and our tailored approach, switching to a different supplier is often costly for our customers, helping to foster long-term customer relationships.

In special long steel, differentiation is primarily based on customizing a product to a customer's application requirements (strength, corrosion resistance, ductility, weldability, etc.) and having the ability to consistently supply high quality products. Due to the broad range of customer demand, the special long steel market offers considerable product differentiation opportunities, and the ability to deliver solutions to increasingly demanding customer requirements is a key success criterion in the special long steel market.

Drivers of growth

Based on SMR and industry data, we estimate that the special long steel industry has positive long term growth prospects. The increase in volumes produced is expected to stem from application industries that are anticipated to expand as a result of population and wealth growth. As well, an increase in value of the products sold is expected to be mainly driven by the need of more and more sophisticated special steel products for increasingly demanding applications. In addition, increased resource scarcity and energy efficiency are trends that require specialized materials that can perform in harsh media and environments, or that have other special features, which require complex, higher value special long steel products. This development is expected to be given further impetus by demographic and social change. According to the United Nations 2015 Revision of World Population Prospects, global population is expected to reach 8 billion by 2025 and the demographics of the population are anticipated to show greater ageing and urbanisation. Those trends, among others, are expected to positively influence the development in our end-use industries.

As living standards and population numbers around the world increase, demand for automobiles and other vehicles is expected to increase. The global automotive market, particularly in emerging markets and Europe, is expected to continue to grow attributable to both positive economic development and replacement demand. In recent years, the corresponding increase in vehicle production led to higher demand for special long steel. In addition, the production of a more diversified range of vehicles has led to an increase in demand for tool steel. At the same time, vehicle manufacturers are looking to develop cars that are more fuel efficient, leading to higher temperatures and pressure in the internal combustion engine that require the use of pressure and thermal resistant engine components made of special long steel.

Special long steel products are also favored in the production of medical equipment due to their hygienic and other material characteristics. The increasing health spend per capita is expected to positively impact the overall growth of the medical industry and the demand for special long steel products such as surgical instruments, implants, and dental alloys. The increase in hygiene requirements in emerging markets for packaged foods and beverages also drives special steel demand (e.g. stainless) for new processing and treatment systems. Demand is further driven by product differentiation in mature economies by different packaging, which requires different molds, leading to additional demand for stainless and tool steel. As a result, the food processing industry is expected to provide growth in both volume and value.

In addition, stricter regulations relating to carbon dioxide emissions as a response to climate change, progressive energy demand in emerging nations due to increasing industrialization, and the growth of renewable energies are leading to additional demand for special long steel, which is used, for example, in the construction of new wind energy parks. These technologies require more advanced and sophisticated materials that can withstand higher pressures and are corrosion resistant. Also, due the scarcity of its resources, and despite the slowdown in production in the last couple of years, the oil and gas industry requires more special steel applications. As oil and gas needs to be extracted in increasingly challenging environments it is necessary to e.g. drill deeper to exploit raw material deposits in either harsher environments (such as the arctic), or in the presence of harsher media (such as sour gas). Growth in volume in the oil and gas industry has led to higher demand for special long steel products with e.g. the need for drilling heads with better pressure and thermal resistance. Similar developments are occurring in the mining industry where difficulties in ore extraction can require the use of special long steel products.

These trends, and others, are expected to provide growth opportunities for special long steel suppliers, both in terms of volume and the value. Demand for special long steel products is expected to be driven by the need for sophisticated products in both developed and emerging countries. Growth in emerging countries is underlined by their superior growth performance from 2010 to 2015 relative to the United States and European Union. According to the IMF, over this period the economies of China, India and Latin America grew at annualised GDP growth rates of 8.3%, 7.3% and 2.9% respectively. This compared to annualised GDP growth rates of 2.2% in the United States and 1.3% in the European Union over the same period. At the same time, however, absolute GDP growth in developed markets remains significant and there is often greater demand for more sophisticated products since customers can be demanding in terms of their specification requirements e.g. strength, heat resistance. Producers operating in the special long steel market therefore adopt a staggered regional approach in order to capture growth opportunities for special long steel products by supporting the trend towards sophisticated material requirements in mature markets while helping to develop emerging markets,

such as the Middle East, Russia and South America. Special long steel producers also support their established customers that enter emerging markets, for example in China, India and South America by providing optimised material supply for each market.

Recent Industry developments

2014 was a successful year for the special long steel industry. The industry benefited from the 0.7% growth in global steel demand in 2014 (reported by the World Steel Association). Steel demand in the developed markets of North America and Europe both rebounded, slightly in Europe and more strongly in the US. This was fueled by the strength of underlying demand but also by the inventory cycle. In comparison, growth in China slowed as a result of a weaker real estate sector and a decline in new construction activity.

Demand was strong across most key sectors in 2014, particularly in the oil and gas and automotive sectors. The oil and gas sector benefited from an exploration boom as energy production from fracking continued to increase. The strength of this production increase was demonstrated in the US active rig count which at certain points during the year exceeded 1,900, and by the fact that the Brent crude oil price which had been relatively stable in mid-2014 at $114/barrel decreased to less than $60/barrel by December 2014. According to BMI Research, the automotive sector also saw global growth of 3.5% in 2014, with global sales of passenger cars of almost 66 million units. The mechanical engineering sector improved in 2014, after a weak performance in 2013.

As a key industrial metal and an essential component against corrosion, nickel is crucial for special steel production. The nickel price fluctuated considerably during 2014, starting the year at a price of $13,905 per ton, reaching a peak of $21,200 per ton in May before declining to $14,935 per ton at the end of the year. Major factors causing this volatility were the nickel export ban in Indonesia, Russian economic sanctions, disruption to various major mines worldwide, and speculation that Chinese buyers were purchasing nickel-containing pig iron. Similar price volatility was evident in the molybdenum oxide market. At the start of the year, the molybdenum oxide price was $21,385 per ton but this had increased to above $29,321 per ton by June before reversing this gain and finishing the year at $19,897 per ton. Prices for scrap metal and ferrochrome were more stable, showing only a relatively small decrease at year-end and trading within a relatively narrow band during the year. However, as mentioned above the special long steel industry benefits from an established surcharge pricing mechanism that offsets to a large extent increases of the price of scrap and alloys by passing them on to customers. For a more detailed description of this surcharge mechanism see "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Results of Operations—Surcharge mechanism and special long steel pricing*".

2015 was a more difficult year for the steel industry and, by extension, the special long steel industry. Crude steel production decreased by 3.3%, which represented the first decline since 2009, and at the same time global steel demand decreased by 3.0%. The main reason for this was the decrease of the steel industry in China where demand declined by 5.4% due to a slowing economy. China, which accounts for approximately half of global steel production, was forced to deal with the resulting excess capacity for example by exporting which in turn affected steel markets in Europe and the US.

Since special long steel producers are at the start of the supply and value chain they were also affected by the decrease in steel demand. For special long steel producers the difficult industry conditions were compounded by pressure on the oil and gas sector and unfavourable commodity prices. In North America, the oil and gas sector shrunk significantly with the US active rig count declining by 62% to 698 according to Baker Hughes. This was due to a sharp fall in the price of oil which made production less attractive and fracking less competitive. The Brent crude oil price was $56/barrel at the start of the year but this had declined to $38/barrel at the end of the year. As a result, the volume of steel deliveries to this sector decreased noticeably. There was a modest increase in automotive production in 2015. According to BMI Research, in 2015 global sales of passenger cars reached almost 66.5 million units, equivalent to an increase of 1%.The mechanical engineering sector showed stable development.

Commodity prices in 2015 also experienced a substantial decline. Due to overcapacity in the market price for nickel fell from $14,880 per ton at the start of the year to $8,665 per ton at the end of the year. The price for molybdenum oxide also fell, from $19,897 per ton to $11,354 per ton. Shredded Scrap prices (FOB Rotterdam) started declining at the start of July and closed the year at €164 per ton, while European ferrochrome price closed the year at $1,808 per ton, equivalent to a decrease of 19% versus the beginning of the year.

The steel industry remained challenging in 2016 and this fed through to the special long steel industry. Overcapacity continued to be an issue, partly due to excess supply coming from the Chinese market, although global steel demand began to stabilise with an increase of 0.2% compared to 2015. During this period special long steel producers continued to differentiate themselves through tailored products and value-added services. However, at all times producers require production of more commodity-like products in order to achieve adequate capacity utilization levels.

The oil and gas sector showed signs of stability as oil prices began to increase at the beginning of the year although the recovery in production activity had to wait until the second half of the year. Baker Hughes reports that the US active rig count increased from 421 at Q2 2016 to 522 at Q3 2016 and 658 at Q4 2016 (quarter end figures). According to BMI Research, in 2016 global sales of passenger cars grew to more than 69 million units, equivalent to an increase of 4.4%. The mechanical engineering sector experienced slight decline, with growth in China being offset by declines in the US and Japan.

Also in 2016 commodity prices were characterized by sustained market volatility, albeit to a lesser degree compared to 2015. In the second half of 2016. In the first half of 2016, the nickel price moved between $7,700 per ton and $9,600 per ton. The second half recorded a slight, albeit volatile, upward trend, resulting in an increase in the nickel price by 17.6% from $8,515 per ton to $10,010 per ton during the year. While the molybdenum oxide price was relatively stable in the first quarter of 2016, it recorded a steep increase to $18,960 per ton in May, followed by a downward trend for the rest of the year. Eventually it closed the year at $14,881 per ton, equivalent to an increase of 31% versus January. The price of Shredded Scrap (FOB Rotterdam) stood at €168 per ton at the beginning of 2016 and saw a continuous increase to reach a record €282 per ton in May 2016. After major fluctuations in the third and fourth quarter, it closed at €263 per ton at the end of December, equivalent to a price increase of 57% over the year. The European price for ferrochrome stood at $1,841 per ton at the beginning of 2016. It remained relatively stable in the first three quarters, before it started to rise sharply in the fourth quarter and the alloy closed at $3,197 per ton at year-end 2016, up 74%.

Industry outlook

The current outlook for our three special steel market segments is positive. According to SMR, over the period from 2015 to 2020, stainless long steel market is expected to grow at a CAGR of 3.0% and tool steel market is expected to grow at 2.3%. For quality and engineering steel, no externally sourced market development forecast is available. However, over the previous five to six years, the segment Other Alloyed Steels defined by SMR, which we regard as proxy for our quality and engineering steel segment, has grown each year at roughly the same rate as the global crude steel market, with a tendency over time to grow at a slightly higher rate. Accordingly, we expect the engineering and quality segment to grow in line with the global crude steel market, which is estimated by BMI Research to grow with a CAGR of approximately 0.7% from 2015-2020. Such growth is expected to be fuelled by improved global economic conditions as well as by the growth outlook for our key end markets.

According to the IMF, global GDP is expected to increase at an average growth rate of 2.7% between 2015 and 2019. As well, the global population is expected to increase and the demographics of the population are anticipated to show greater ageing and urbanisation. These trends, among others, positively influence the development in our end-use markets. According to BMI Research, global production of passenger cars will reach 76 million units by 2019, equivalent to a 14.5% increase versus 2015. Other end-markets show positive, albeit lower, growth forecasts. At EU level, Eurofer expects the following largely positive year-on-year growth trends for the main steel using sectors, namely:

	2016e	2017f	2018f
Automotive	5.5%	3.2%	1.0%
Mechanical engineering	0.7%	0.7%	1.8%
Metal goods	2.5%	1.9%	2.3%
Other transport	1.6%	1.4%	3.8%
Construction	-0.2%	2.1%	2.8%

Development of the key steel using sectors - % year-on-year change in the Steel Weighted Industrial Production index

Market segments within the special long steel market

The special long steel market is divided into three sub-segments: tool steel, stainless long steel and quality and engineering steel.

	Tool steel	Stainless long steel	Quality and engineering steel
Production volume (2015)	1.8 mt	5.4 mt	approx. 110 mt
Selected application examples	Plastic processing Cutting/die cutting Tool bits Die casting Forging Flanges	Combustion engines (automotive) Fasteners Consumer goods Aerospace industry Liquid supply Kitchen utensils Oil drilling	Fittings Forgings Chain steel Ball bearings Cold headed steels Gears Turbine components

Source: SMR, management

Tool steel

The tool steel market is a global market with an aggregate production volume of 1.8 mt, or approximately 0.1% of the global finished steel production by volume in 2015 (SMR).

According to SMR, we were the second largest tool steel producer by volume globally in 2015. Due to the high degree of consolidation the top ten market participants accounted for approximately 59% of the total production volume. The combined market share (based on production) of ourselves and the largest tool steel producer was approximately 26%, according to SMR.

Companies active in the field typically sell steel and offer complex technical expertise, with highly qualified and experienced application engineers guiding customers through the processes of selection and design of the tool or mold. This technical production knowledge and application engineering expertise is difficult to replicate.

The table below sets forth the information on the ten largest tool steel producers for 2015 according to SMR:

Name	Production Volume, kt	Market Share, %
Voestalpine	265	15
SCHMOLZ+BICKENBACH	201	11
Dongbei	140	8
Tiangong	120	7
Qilu	60	3
SeAH SS	60	3
Daido	60	3
Baosteel	51	3
Metal Ravne	51	3
Hebei Wenfeng	50	3
Others	731	41
Total	**1,789**	**100**

Source: SMR

The European market for tool steel is consolidated to an even higher degree, as the top two global producers operate their main facilities in Europe.

The tool steel market is sub-divided into various different products including steel for plastic molding, cold-work/high speed steel and hot-work steel. The properties and characteristics of tool steel are tailored to their intended application. These characteristics comprise cost-efficient machinability, high wear resistance, favorable thermal conductivity, reliable hardenability, polishability and etching ability. Tool steel is used in a broad range of industries and applications, including:

- *Plastic processing.* Tool steel is used for plastic molding. By increasing the solidification rate, the plastic gains improved product properties.
- *Cutting/die cutting.* The cutting/die cutting industry regularly uses high-speed steels, such as power saw blades, to withstand high temperatures without losing temper during production.
- *Tool bits.* High-speed steel is frequently used in the tool bit industry to ensure that parts, such as drill bits, withstand high temperatures without losing their temper.

- *Die casting.* In the die casting sector, cold work steels are frequently used because of their hardness, toughness, compressive strength and high wear resistance.
- *Forging.* Hot-work steel is used in the forging industry to withstand high thermal stress resulting from the contact between the tools and hot forging materials.
- *Flanges.* The various mechanical properties of cold-work steel grades match the requirements of different types of flanges, creating demand for cold-work steel by producers of flanges.

Tool steel products are typically sold to tool manufacturers and mold makers who are suppliers to automotive or engineering companies. These tool manufacturers and mold makers act as service providers to component manufacturers.

Tool steel is sold in lot sizes that vary significantly, as do the degree of customer processing requests. Methods of tool steel processing include cutting, heat treatment, and even rough machining (up to near net shape). In order to be able to remain a relevant producer of tool steel, producers must have a global distribution and services network that allows them to provide services like cutting and heat treatment locally and to deliver small lot sizes on a just-in-time basis. Processing and distribution are integrated because of customer demand for individual processing (as it requires in-depth materials expertise that is not part of the customers' core competencies), or the ability to offer one-stop-shop solutions (because sourcing these specialties also requires materials expertise). Therefore, we believe producers such as ourselves, who operate along the entire value chain (production, processing, and services and distribution), with a strong global network have a competitive advantage.

Stainless long steel

The stainless long steel production reached 5.4 mt, or approximately 0.4%, of global finished steel production by volume in 2015 (SMR).

According to SMR, we were the second largest stainless long steel producer by volume globally in 2015. Due to the high degree of consolidation the top ten market participants accounted for approximately 68% of the total production volume.

Stainless long steel products have a gleaming surface and meet technical requirements such as corrosion resistance, high strength and elongation, as well as high thermal stability. Because of their outstanding resistance to corrosion and mechanical properties, they are used in mechanical engineering, the food, energy, medical and automotive industries, as well as in the offshore windpark industry. Stainless long steel is also used in the chemical industry, especially in the pharmaceutical and the petrochemical industries, due to its resistance to chemical corrosion. It is applied for fittings and for components of vessels and apparatus in which chemical reactions at elevated temperatures and under pressure take place. In addition, stainless long steel is characterized by its perfect hygienic surfaces, allowing it to be used for production and filling plants, such as dairies, breweries and meat processing plants.

Stainless long steel is the preferred type of steel for processes combining high temperatures and chemical corrosion stress. It resists hot gases and combustion products at temperatures above 500°C for both short- and long-term periods. This type of steel is resistant to corrosion caused by steam, gases or liquids. As a result, it is particularly suitable for use at temperatures above 550°C in power generation plants, such as cogeneration stations, and the reactor industry, systems for distributing superheated steams, control fitting, heat exchangers, or steam and gas turbines. Non-magnetic stainless long steels are used as a tool in the drilling business for oil and gas. Stainless steel products include a diverse range of applications:

- *Combustion engines (automotive).* In the increasingly efficient combustion engines of today, the heat resistance of stainless long products is used for applications such as valves, common rail diesel systems and turbocharging devices.
- *Fasteners.* The mechanical properties of austenitic and ferritic steel grades match the requirements of different applications such as screws and bolts.
- *Consumer goods.* Visual appearance is extremely important in the consumer goods industry due to different consumer preferences. Stainless long steel products are used in a broad range of consumer goods, such as feedstock for cutlery, hand rails and furniture applications.
- *Aerospace industry.* The usage of heat resistant and creep-resistant aerospace steel is widely used in the aerospace sector due to the special requirements of that industry.
- *Liquid supply.* The liquid supply industry uses acid resistant steel grades, such as in the chemicals industry, food/beverage processing, or in desalination plants.

- *Kitchen utensils.* The kitchen utensils industry uses austenitic steel to guarantee corrosion resistance and extend the lifetime of kitchen utensils.
- *Oil drilling.* Maritime oil drilling requires special steels, such as non-magnetic steel used in drill collars.

The market for stainless long steel has both regional and global characteristics. In 2015, the top ten market participants produced approximately 68% of the aggregate production volume for stainless long steel. In the same period, the combined global market share of us and of Tsingshan Group (the world's largest producer, located in China and operating predominantly in the domestic market) was approximately 25%, according to SMR. The European market for stainless long steel is more consolidated than the global market and there are only three European companies in the top 10 producers worldwide.

The table below sets forth the information on the ten largest stainless long steel producers for 2015 according to SMR:

Name	Production Volume, kt	Market share, %
Tsingshan	870	16%
SCHMOLZ+BICKENBACH	**460**	**9%**
Viraj	420	8%
Walsin Lihwa	400	7%
NSSMC	320	6%
Dongbei	290	5%
Roldan + NAS	250	5%
SeAH SS	250	5%
Valbruna	200	4%
Daido Steel	200	4%
Others	1,737	32%
Total	**5,397**	**100**

Source: SMR

Major products in the stainless long steel include bar steel and wire/wire rod. Traditionally, stainless bars are used by customers that do not buy in large lot sizes and who buy many different products, such as specialized engineering companies. These customers prefer producers who have stockholding distribution capabilities globally, thus giving a competitive advantage to integrated producers/ distributors. Demand for wire (especially ferritic) is driven largely by automotive applications and customers generally buy directly from mills. Drawn wire is a small scale, often local, manufacturing business.

Quality and engineering steel

Based on SMR data, we estimate that the quality and engineering steel market had an aggregate production volume of approximately 110 mt, or approximately 7.6% of the global finished steel production by volume in 2015.

The market for quality and engineering steel is more regional in nature due to the substantial long distance transportation costs in relation to typical margins. The global market segment is very fragmented and is in terms of volume dominated by producers located in Asia. Europe (especially France, Germany and Italy) is a more regional market for quality and engineering steel products and is more consolidated than the global market

According to SMR, we were the second largest quality and engineering steel producer in Europe by volume in 2015. Quality and engineering steel is used in a vast array of applications defined by grade, format and diameter, ranging from forging parts for the automotive sector (small diameter) to turbine shafts or cold rolls (large diameter), and from "simple" case hardened or heat treated steel to micro-alloyed, nitrated and bearing steel characterized by extreme hardness and cleanliness. Quality and engineering steel, particularly small diameter engineering steel, is mainly used in the automotive sector. Large diameter engineering steel is used in the engineering and equipment manufacturing sectors as well as the heavy trucks sector.

Typical quality and engineering steel products include:

- *Fittings.* Fittings are used in varied industries, including the chemicals industry, sugar mills, distilleries, pumps, and petrochemicals.

- *Forgings*. Feedstock for closed die forging operations, with end use in diverse industries such as crank shafts in the automotive industry.
- *Chain steel.* High temperature constructional weldable steel is used for forgings and pipes of boiler plants and the construction of vessels.
- *Ball bearings.* The use of anti-friction bearing steel is widespread in the automotive and the mechanical engineering sectors.
- *Cold headed steel.* The mechanical engineering and automotive component industries use plain carbon steel for cold extrusion of screws and bolts.
- *Gears.* Ball and roller bearing steel for heavy rings and rollers with high thickness are used in the production of gearing components.
- *Turbine components.* Alloyed heat treatable steel with a tensile strength range is used in the wind energy, gearing and automotive parts industries.

The table below sets forth the information on the top ten largest quality and engineering steel producers in 2015:

Name	Production Volume, kt
CITIC Group	4,880
Gerdau	1,710
Saarstahl	1,580
NSSMC	1,400
SeAH Besteel	1,250
Dongbei	1,240
Shigang	1,080
SCHMOLZ+BICKENBACH	**1,070**
Grupo Simec	1,010
Xining Special Steel	920
Total	**16,140**

Source: SMR

In the quality and engineering steel market, the proportion of direct mill customers is the highest in special long steel, largely driven by the substantial demand from customers in the automotive industry. Stockholding distribution and services also play a major role, since most customers are highly specialized engineering and processing companies (such as turneries) that do not process enough material to afford high performance service equipment (such as saws) nor have sufficient scale to have a complex in-house steel sourcing department. Our production portfolio and our global sales and services network permits us to provide a broad range of products and services to the customer. Going forward we expect especially from our automotive customers demand for even more customized solutions and additional processing requirements which will allow suppiers to closely link to their customers.

We are able to provide the full spectrum of products, including large diameter, and are focused on high alloy material.

Competitive environment

The competitive environment is characterized by a relatively stable number of industry participants. To act successfully in the market producers of special long steel need in-depth knowledge of customers' application processes and end market expertise. A large portion of the products is used in critical and highly specialized applications. Therefore customers look for proven expertise and quality products, which are often certified with regard to application suitability (e.g. in the aviation industry), as well as reliable just-in-time delivery. In addition, establishing a market presence requires substantial initial capital investments in physical plants and technology as well as continuous product and process innovation, which require ongoing investments in research and development. Sophisticated application expertise and the ability to further customize products are essential for a high level of customer retention. However, we observe an increasing trend of imports especially in our core markets Europe and North America. In Europe this competition from e.g. Eastern Europe, India and China has reached an import share of approximately 18% for tool steels and approximately 24% for stainless long steels according to Eurofer import statistics in 2016. While those imports used to focus primarily on the more commodity-oriented special steel products we observe an increasing competition also against more technical and special products.

There is limited product substitution pressure in the special long steel industry, as there is currently no other product available that has the unique combination of characteristics required by special long steel applications. For example, special long steel is characterized by temperature resistance, machinability, shock resistance as well as hardness, torsion stiffness and other mechanical properties. This makes steel unique in its ability to be produced or mixed for customized application requirements.

In addition, applications for special long steel products are broad and special long steel products are not standardized, but instead are characterized by customized mechanical specifications, such as wear resistance and tensile strength, tailored corrosion and temperature resistance and tailored processing, such as near net shape. Certain industries that use special long steel in their products, including the aviation, automotive and nuclear industries, where defective materials or operational interruptions could result in high costs for the customer, have particularly high quality and reliability requirements, including approval processes and certifications.

Against this background we believe that the set-up of SCHMOLZ+BICKENBACH group with our strong positioning as the second largest tool steel and stainless long steel producer globally as well as the second largest producer of quality and engineering steel in Europe, in each case by volume, in 2015 (according to SMR) gives us a strong competitive advantage.

Together with Dongbei, we believe that we are the only special long steel producer active in all three special long steel markets, providing the full range of products from ultra-fine wire to large forged applications and across the entire value chain.

Most of our direct competitors are active in only one of the special long steel market segments. For example, Valbruna, Cogne, Ascometal, Acciaierie Bertoli Safu, Lechstahl or Ovako provide either stainless or quality and engineering steel to their customers. Through our positioning across the special steel segment, we have know-how and transparency on ongoing technical developments and trends across all relevant end-use segments and are able to react accordingly. Our integrated group and our critical size allow us to capture group synergies, for example through leveraging R&D and innovation capabilities, centralizing purchasing, shared services and optimizing sales approaches. We believe that this gives us a distinct competitive advantage against competition.

While most of our key competitors have a very regional production focus (e.g. in Europe) we have a broader international footprint with production and meltshops in Europe, US and Canada helping to balance risks and diversifying our production portfolio. In addition, we benefit fromour global sales and distribution network with over 70 distribution and service branches in more than 30 countries.

This fully integrated and global business model has allowed us to build a strong market position in an attractive niche market with growth opportunities.

BUSINESS

Overview

We are a leading independent and fully integrated special long steel producer with operations around the world. Our vertically integrated business model with operations across the entire value chain of special long steel, from production and processing to sales and services, allows us to offer one-stop shop solutions to our customers. According to SMR, we were the world's second largest producer of stainless long steel and tool steel and Europe's second largest producer of quality and engineering steel in 2015, in each case by volume.

Special long steel is a niche market. Based on SMR data, we estimate that this market accounts for only around 8% of total steel production worldwide or approximately 115 mtpy as of 2015. Special long steel has specific properties, resulting from the chemical composition of the steel, a defined crystalline structure (achieved through forming operations and heat treatment), or a combination of the two. It differs significantly in a number of respects from the rest of the steel market, which tends to have more standard grades and products.

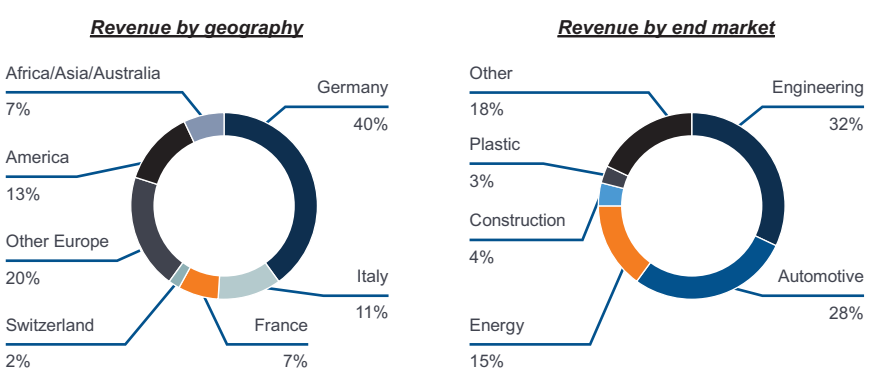
We have a broad product range covering the entire application spectrum of special long steel: quality and engineering steel, stainless steel and tool steel, as well as special materials. Quality and engineering steel is used in a multitude of applications. It is especially called for in applications with high mechanical loads and when components need to be both reliable and durable e.g. against shock or cyclical load. Stainless steel is resistant to corrosion, acids and extreme thermal stresses. It is strong but stretchable. These characteristics, paired with aesthetic optical design options, make stainless long steel an attractive material for many specialized applications. The tool steel product range spans cold-work steel, hot-work tool steel, high-speed steel (HSS) and mould steel, which is used in the automotive or the food packaging industry, among others.

Special long steel products can be tailored to customers' exact needs and specific application properties, enabling considerable product differentiation. Our smallest product is 0.013 millimetres in diameter, our largest weighs over 94 tons. Between these two extremes we have a broad portfolio consisting of more than 50,000 different products for the demanding application fields of our customers. In order to create customized solutions, players in the special long steel market need to keep up with the continuous technological advancement of their customers. Another success factor in the special long steel market is the ability to innovate while maintaining high standards of quality of products. Customers require a high degree of application expertise and process know-how, which have to be built up over a long period of time.

The high degree of product differentiation, application expertise and process know-how and the capital intensive nature of the business create natural barriers to entry to the special long steel market. This is confirmed by a relatively stable number and group of participants.

We have about 30,000 customers spread around the globe, primarily in Europe and North America, with a growing number based in emerging markets such as China and India. We supply a wide range of industries, including the engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace industries. For a description of the distribution of our revenue on these market segments.

Revenue breakdown in FY16



In 2016, our top 10 customers accounted for approximately 20% of our revenue. Our top 10 customers belong to, among others, the automotive, bearing, distribution and metal processing industry.

For the year ended December 31, 2016, we had revenue of €2,314.7 million, consisting of €950.4 million of revenue for quality and engineering steel, €884.7 million of revenue for stainless steel, €418.1 million of revenue for tool steel and €61.5 million of other revenue. For the year ended December 31, 2016, we had Adjusted EBITDA of €153.2 million. As at December 31, 2016, we had 8,877 employees worldwide.

We operate through two divisions: Production and Sales & Services. Our two divisions correspond to our reporting segments under IFRS shown as our operating segments in our consolidated financial statements, which we refer to as our divisions:

Production. Our Production division encompasses the Business Units Deutsche Edelstahlwerke ("**DEW**"), Ugitech, Swiss Steel, Finkl Steel and Steeltec. The Production division operates nine steelmaking and hot forming plants in Canada, Germany, France, Switzerland, and United States. Of these plants, six have their own melting furnaces as well as rolling and/or forging equipment and three operate rolling or forging equipment without on-site melting facilities. Our production division operates 10 of our 11 cold-processing facilities in Germany, Italy, France, Switzerland and Turkey focusing on bright bar and wire-production.

The division sells products directly to third parties (third-party revenue of €1,858.3 million accounted for 88.5% of the division's total revenue of €2,099.8 million for the year ended December 31, 2016) and through our Sales & Services division for distribution to our customers (inter-segment revenue of €241.5 million accounted for the remaining 11.5% of the division's total revenue for the year ended December 31, 2016). The Production division's third-party revenue of €1,858.3 million represented 80.3% of our revenue, and its EBITDA (reflecting also intersegment relationships) of €105.4 million represented 97.6% of our EBITDA, in each case, for the year ended December 31, 2016. As of December 31, 2016, the division's capital employed (segment assets less segment liabilities) was €1,353.7 million and it employed 7,526 people.

Sales & Services. Sales & Services provides a consistent and reliable supply of special long steel and end customer solutions worldwide with over 70 distribution and service branches in more than 30 countries. Our services include technical consulting and downstream processing such as sawing, milling and heat treatment as well as supply chain management. The product range is dominated by special long steel from our Production division, supplemented by a small selection of products from third-party providers.

Our goal is to offer our products and services globally – and we plan to extend our distribution network to achieve this goal. We focus on growth regions that we believe are well positioned to provide sustainable growth for the Group. In 2016, we opened new sales offices in Bangkok (Thailand), Taipeh (Taiwan) and Tokyo (Japan) as well as a warehouse in Chongqing (China). We plan to continue our regional growth strategy in the coming years.

Our Sales & Services division's total revenue was €456.5 million (€456.4 million third-party revenue), its third-party revenue represented 19.7% of our revenue, and its EBITDA (reflecting also intersegment relationships) of €16.1 million represented 14.9% of our EBITDA, in each case, for the year ended December 31, 2016. As of December 31, 2016, the division's capital employed (segment assets less segment liabilities) was €141.7 million and it employed 1,239 people.

In addition, to support our growth strategy in China and to establish a local downstream production facility, in December 2016 we signed a joint venture agreement to operate a bar drawing plant with our partner Tsingshan Group in China. The closing of the joint venture agreement is expected to take place later this year.

Our Key Competitive Strengths

We believe that the following are among our key competitive strengths:

A leading global special long steel player with a fully integrated business model.

According to SMR, in 2015 we were the world's second largest producer of stainless long steel, and tool steel as well as Europe's second largest producer of quality and engineering steel, in each case as measured by volume. In 2016, stainless long steel accounted for 38% of our revenue, quality and engineering steel accounted for 41%, and tool steel accounted for 18%. We have operated in the special long steel industry for more than 150 years. This has allowed us to develop a deep expertise in the segment and a reputation for high-quality products. We have built well-known brands such as SCHMOLZ+BICKENBACH, Deutsche Edelstahlwerke, Ugitech, Steeltec, Swiss Steel and Finkl Steel, which further differentiate us from competitors.

We believe we are well positioned in that we operate in all three segments of the special long steel market and along the entire special long steel value chain, from production and processing to sales and distribution. Our vertically integrated business model combined with our global presence enables us to capture synergies and to achieve significant economies of scale. Our ability to operate as a combined group and the associated size advantages and synergies particularly support us in areas such as R&D, product innovation, shared services, and purchasing. Our business model enables us to provide our customers with technologically advanced and tailor-made solutions designed to their highly specific end-use requirements as well as supply chain solutions such as stock handling and just-in-time delivery.

We focus our global production and distribution platform on the sale of mill-own products. In 2015, we completed the process of divesting various non-strategic business entities and distribution centers that mainly sold third-party products. We believe that this approach frees us from the need to tie up working capital in other producers' products.

Operating in attractive niche market segments with significant growth prospects

Based on SMR data, we estimate that special long steel represented only around 8% of total steel production worldwide. The competitive environment of special long steel is characterized by a relatively stable number of industry participants due to the high barriers of entry. In fact, establishing a market presence requires substantial initial capital investments in physical plants, as well as a high degree of application expertise and process know-how, which have to be built up over a long period of time. In addition, we often provide materials for highly critical customer applications with a large impact on product safety and reliability, such as in the aerospace or medical industries. Our history of reliable deliveries and our brand reputation are key for those highly advanced customer applications. Such customers also value our quick response times and the availability of immediate technical support, which makes it difficult for market entrants and suppliers from low-cost countries to compete in our industry.

Finally, we believe, there is limited product substitution pressure in the special long steel industry, as there are few other products available that have the unique combination of characteristics required by special long steel applications.

Expected economic improvement and positive development of key steel end-markets support growth of our market. According to the IMF, global GDP is expected to increase at an average growth rate of 2.7% between 2015 and 2019. As well, the global population is expected to increase and the demographics of the population are anticipated to show greater ageing and urbanisation. These trends, among others, positively influence the development in our end-use markets. We anticipate that the automotive sector, our second largest market after engineering, will continue to improve. According to BMI Research, global production of passenger cars will reach 76 million units by 2019, equivalent to a 14.5% increase versus 2015. Other end-markets such as mechanical engineering and metal goods show positive, albeit lower, growth forecasts. At EU level, Eurofer expects the following largely positive year-on-year growth trends for the main steel using sectors:

	2016e	2017f	2018f
Automotive	5.5%	3.2%	1.0%
Mechanical engineering	0.7%	0.7%	1.8%
Metal goods	2.5%	1.9%	2.3%
Other transport	1.6%	1.4%	3.8%
Construction	-0.2%	2.1%	2.8%

Development of the key steel using sectors - % year-on-year change in the Steel Weighted Industrial Production index

The current outlook for our three special steel market segments is positive. According to SMR, over the period from 2015 to 2020, stainless long steel market is expected to grow at a CAGR of 3.0 % and tool steel market is expected to grow at 2.3%. For quality and engineering steel, no externally sourced market development forecast is available. However, over the previous five years, the segment Other Alloyed Steels defined by SMR, which we regard as proxy for our quality and engineering steel segment, has grown at roughly the same rate as the global crude steel market, with a tendency over time to grow at a slightly higher rate. Accordingly, we expect the quality and engineering segment to grow in line with the global crude steel market, which is estimated by BMI Research to grow with a CAGR of approximately 0.7% from 2015 to 2020. Such growth is expected to be fuelled by improved global economic conditions as well as by the growth outlook for our key end markets.

Strong and diverse customer base with close relationships

We benefit from strong and longstanding customer relationships. We operate in over 30 countries and have about 30,000 customers worldwide. Building on our historical core markets in Europe and North America, we are now present worldwide and expanding into growth markets like China and India. In December 2016, we signed a joint venture agreement with Tsingshan Group to support our growth in China. Germany and America (which includes the United States, Canada and Other America) are our most important geographic regions and accounted for 39.7% and 13.3%, respectively, of our revenue in 2016. Italy, France, Switzerland and Other Europe accounted for 11.3%, 7.0%, 1.8% and 19.7%, respectively, in the same period. Africa/Asia/Australia accounted for the remainder of 7.2% of our revenue in 2016. Whilst Germany accounted for 39.7% of our revenue in 2016, we estimate that a significant share of our products is exported by our German customers to end-markets outside of Germany, making the ultimate geographical split more diverse.

Our global presence and strong sector expertise enables us to serve a highly demanding customer base across a broad range of applications, including engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace. There is limited concentration within our customer base, in 2016, our top 10 customers by revenue accounted for approximately 20% of our sales. The engineering, automotive and energy industries are our largest end markets, accounting for 31.5%, 27.9% and 15.1%, respectively in 2016. Our presence across the value chain enables us to work closely with our customers to develop customized products with superior product and service features that are tailored to their needs and their specific applications. This, in turn, fosters close customer relationships, and in fact, the majority of our revenue are derived from customers that have been with us for many years.

We closely interact with our customers, trying not only to improve the quality and service for our steel, but to develop in joint R&D projects the optimal steel solution according to the individual end-use requirement. For example, we developed new material for underwater pelletizing units for and with our customers. Plastic granulate–raw material in the form of fine, brightly colored pellets–is produced in underwater pelletizing units. At the heart of these units are perforated plates through which molten plastic is pressed. These plates are exposed to many factors of wear and tear. The trend in the industry is to require ever smaller, higher-quality plates. In close cooperation with customers in Germany and the United States, we developed new plate material with 50% higher resistance to wear and tear, more than a third higher corrosion resistance and one fifth less thermal conductivity than conventional material.

We believe that the geographic diversity of our customer base, the broad range of application industries in which our customers operate, and our strong customer relationships allow us to mitigate some of the risks and cyclicality inherent in certain markets in which we operate.

State-of-the-art production facilities and equipment

We have invested substantially in our facilities worldwide through the cycle and we believe we have state-of-the-art production equipment across our business divisions. In recent years we have incurred capital expenditures primarily to maintain our existing equipment, to expand our product spectrum and to further integrate our production capabilities. We believe that we can successfully grow our business without any significant increase of capital expenditures, and that our current facilities will be able to cover increased demand.

Experienced and successful senior management team

We benefit from a strong and experienced senior management team with more than 40 years of combined industry experience. Our senior management is led by chief executive officer Clemens Iller and chief financial officer Matthias Wellhausen, who both have more than 20 years of experience in the steel sector; our board of directors is chaired by Edwin Eichler, who also has extensive experience in the industry having served as a board member of ThyssenKrupp.

Other members of our senior management team, in particular our Business Unit managers, have an average of 22 years of experience in the steel industry. Our management team has demonstrated its ability to manage our business, adapt to volatile and challenging market conditions and successfully execute and integrate major acquisitions. We believe that our senior management's leadership and industry knowledge is a key asset to our business.

Flexible cost structure with the ability to pass on raw material prices volatility

Our cost base is largely flexible, for example due to the industry-wide acceptance of surcharges for certain raw material costs, our use of electric arc furnaces in our production and the effects of our personnel management, which to some extent uses flexible working time arrangements and temporary workers.

The pricing system in our industry uses surcharges for alloy and scrap costs. Although this surcharge system does not entirely eliminate our exposure to raw material price volatility, we believe our exposure to fluctuations in prices for raw materials is less pronounced and we are able to mitigate the price volatility risk inherent in the steel industry generally.

In addition, we believe that a significant part of our cost base is variable. Key variable cost items include cost of materials, energy cost and transportation for goods dispatched. Our personnel management also contributes to the flexibility of our cost structure by partially allowing us to adjust to variations in demand by implementing flexible working time arrangements and using temporary workers.

We believe that our electric arc furnace (EAF) production technology enhances the flexibility of our cost structure, as compared to competitors using basic oxygen furnace (BOF) production. EAF consumes less energy than BOF, and its short start-up time enables us to better adjust production to actual demand levels. BOF, by contrast, is relatively more difficult to scale back, adding to time and costs. Our EAF production also enables us to comply with applicable environmental regulations at a relatively low capex level.

To further improve our cost structure and to increase our results we have initiated a number of improvement programs. See *"—Our Performance Improvement Program*".

Attractive financial profile with strong momentum on deleveraging

We have continuously generated positive free cash flow from continuing operations with €65.2 million, €179.0 million and €92.0 million in 2014, 2015 and 2016, respectively. The key elements to achieve this were our improvement programs, the flexible management of our cost base, our initiatives on working capital reduction and management of our capital expenditures that helped us generate positive cash flow despite a challenging business environment with declining revenue and EBITDA. In addition, our deleveraging has been facilitated by our disposal of selected distribution entities in 2015. Our effective management of net working capital is contributing to our cash flow generation. We reduced our net working capital from €992.3 million as of December 31, 2014 to €615.4 million as of December 31, 2016. Over the same period, we have kept capital expenditures relatively stable except for an extraordinary investment in 2015. As a result of our cash flow generation, our net debt figure has decreased from €587.2 million as of December 31, 2014 to €420.0 million as of December 31, 2016. We continue focus on reducing net debt and leverage.

Our Strategy

Our business strategy is to expand our leadership position in the special long steel market through the following measures:

Sustain a leading technology and innovation position

We strive to constantly refine our range of products and technologies and develop new special steel products to support better solutions for our customers. New and innovative products constituted a 12% share of our revenue in 2016. We intend to continue expanding our product innovation and research and development efforts in-house as well as with a broad number of partnerships, including an increased number of collaborations with customers, universities and technical institutions and other industry players. Examples of our recently developed products and applications include new stainless reinforcing steel, materials for additive manufacturing and our new XTP technology. Leveraging the close cooperation with our customers, we aim at continuing to apply and further our advanced application expertise and processing know-how in projects with our customers to thereby sustain a leading technology and innovation position. See "*–Research and Development*."

Strengthen our product and application leadership to deepen customer relationships

We intend to invest further in state-of-the art facilities and equipment with the goal of improving performance, efficiency and margins. As an important component of this strategy, we will continue to focus on tailor-made solutions for our customers' needs. We aim to understand our customers' needs and develop partnerships with them. This includes joint R&D-projects with customers to develop a

tailor-made steel suitable for specific applications. As steel requirements become increasingly sophisticated and challenging, we aim at being at the forefront of new developments. We have long-lasting relationships with customers (homologated routes) that we can build on. We also aim at increasing services to our customers, which includes global supply chain solutions through our Sales & Services network and value added services.

Leverage synergies from our positioning as an integrated group

In addition to continuously improving our operating performance in the Business Units, we aim to fully leverage our strengths as an integrated group. This means focusing consistently on realizing synergies from our integrated business model and international footprint. We benefit from our full integration along the value chain for special long steel, being active from the production stage of special long steel to processing of its derivative products. This high degree of integration, coupled with our global scale, allows for cost synergies, sharing of know-how and process innovation at Group level. At the production and processing stages, we capture economies of scale by optimizing capacity and product mix.

Our strategy is anchored in our vision "We are the benchmark for special steel solutions". The creation of a shared identity is an important step for the future and lays the foundation for a shared market presence and exploitation of synergies. We have initiated a wide set of action to exploit synergies especially in the areas of sales, R&D, support functions, procurement, logistics, personnel planning, as well as health and industrial safety.

For example in research and development we have developed a Group-wide innovation management, in order to align and manage all global R&D projects, share know-how, establish exchange among R&D experts and further drive our R&D innovation capabilities. We also coordinate our sales activities. We have established a Group-wide committee whose members include the CEOs of the Business Units to coordinate market development strategies. Also, the bundling of essential central functions of the Group headquarters in Lucerne led to a considerable reinforcement of the Group´s identity.

Further boost the Group's profitability

In recent years, we have launched a number of initiatives to improve profitability. For 2016 and 2017, we launched an extensive Performance Improvement Program ("**PIP**") to increase the overall profitability by means of efficiency improvements and cost reductions across all entities and Business Units, supported by various initiatives to improve operational processes. In addition, we initiated a full reorganization of our Business Unit DEW, agreed a temporary restructuring collective bargaining agreement for DEW and initiated additional measures to improve productivity, including the closure of our operations in Boxholm, Sweden and a further restructuring at DEW, Steeltec and our global Sales & Services network. For 2016, we have reached our objectives and achieved a significant cost reduction. We aim at realizing further cost reductions by the continued implementation of the PIP and other cost efficiency programs. See "*—Our Performance Improvement Program*."

History

Arthur Schmolz and Oswald Bickenbach founded SCHMOLZ+BICKENBACH in 1919 in Düsseldorf, Germany as a steel trading and distribution company. Our roots date even further back, as some of our subsidiaries were founded prior to that date, which is why we have operated in the special long steel industry for more than 150 years. SCHMOLZ+BICKENBACH subsequently expanded into steel processing over the next few decades. Swiss Steel was founded in 1996 in Emmenbrücke, Switzerland as a holding group after its acquisition of von Moos Stahl AG (founded in 1842) and von Roll Stahl AG (founded in 1804), which were primarily producers of engineering and free-cutting (lead allowed) steel. In 2003, SCHMOLZ+BICKENBACH acquired the majority of the shares in Swiss Steel, combining Swiss Steel's production capabilities its steel trading and processing business.

There are a number of key milestones in our development since 2003. The first milestone was the acquisitions of Edelstahlwerke Südwestfalen GmbH in 2004 and Edelstahl Witten-Krefeld GmbH in 2005. We later merged the two acquired companies and renamed the combined entity Deutsche Edelstahlwerke, or DEW, a long-established brand name. A second important step was the acquisition of the French stainless long steel producer Ugitech in 2006. A further milestone was the acquisition of the A. Finkl & Sons group (including Finkl, Sorel and Composite Forgings) in the United States and Canada in 2007. Since April 2015, we have managed the Finkl group as an integrated entity under the Finkl Steel name.

In addition to our acquisitions, we also invested throughout the value chain to improve process efficiency, reduce bottlenecks and expand our product spectrum. As a result, by the end of 2007, we

had successfully expanded from a traditional steel distributor operating mainly in Germany to a leading global producer, processor and distributor operating along the entire value chain of the special long steel market.

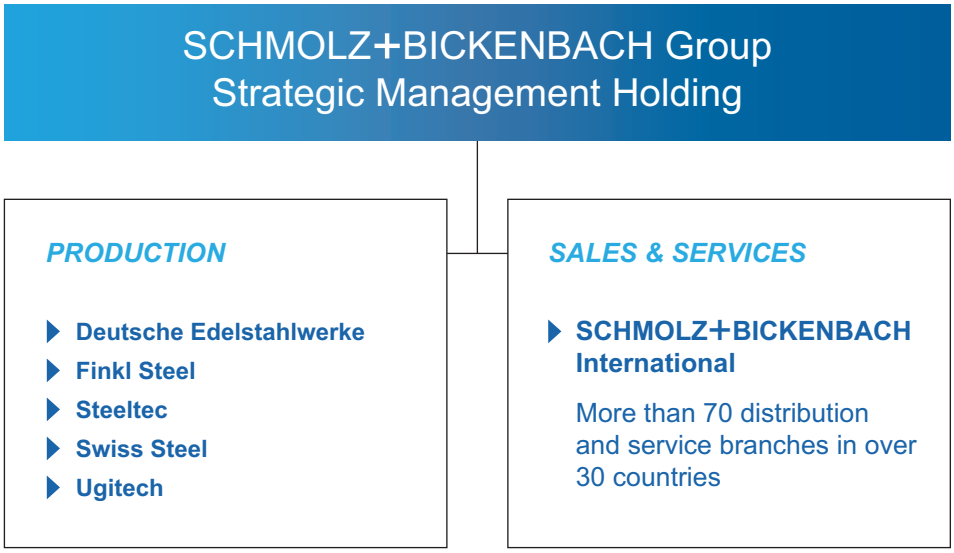
The recession caused by the global financial and economic crisis in 2008 and 2009 had a major impact on the development of the demand for special long steel products. In response, we adopted and implemented a comprehensive crisis reaction program focused on reducing net working capital needs and reducing costs. As a result of continued adaptation of our workforce and capacities, rigorous cost controlling, and strict working capital management, we were able to limit our losses in 2009 and to benefit from the business recovery in 2010 and 2011 as demand for our products increased.

In 2015, we completed further major steps in implementing our new corporate philosophy, establishing a uniform, Group-wide corporate identity. In July 2015, we streamlined our portfolio by selling certain distribution entities of our Sales & Service division in Germany, Belgium, the Netherlands and Austria with a view to concentrating on the core production business. As these entities mainly sold third-party products, they no longer reflected our strategic focus on production and sale of our own mills' products. In the second half of 2015 we completed the relocation of our headquarters to Lucerne, where we now pool all Group holding activities.

In 2016 we continued to move towards our goal of offering all our products and services globally. In that year we opened new distribution branches in Bangkok (Thailand), Taipeh (Taiwan) and Tokyo (Japan) as well as a storage location in Chongqing (China). We also signed a joint venture agreement with Tsingshan Group, a Chinese global market leader in the field of stainless steel, in December 2016. The closing of the joint venture agreement is expected to take place later this year.

Business Operations

The Company, a Swiss public limited company (*Aktiengesellschaft*) that is listed on the SIX Swiss Exchange, is a holding company with no business operations of its own. All of our significant operating subsidiaries are owned directly or indirectly through intermediate holding companies. The following chart shows our current operating structure.



We believe we are uniquely positioned in that we operate in all three sub-segments of the special long steel market and along the entire special long steel value chain, from production and processing to sales and services. Our fully integrated business model provides for cost synergies and a number of strategic advantages in our ability to serve customers. We also benefit from synergies arising across and within our business divisions, including by sharing production processes and basic equipment, process innovation and know-how pertaining to certain applications. Our business model also enables us to provide customized services such as stock handling and just-in-time delivery of components along our customers' global supply chain.

Production Division

We operate nine steelmaking and hot forming plants in Canada, Germany, France, Switzerland, and United States. Of these plants, six have their own melting furnaces as well as rolling and/or forging equipment and three operate rolling or forging equipment without on-site melting facilities. The steel

plants complement each other in terms of formats and qualities, covering the entire spectrum for special long steel. Besides the three main product groups–quality and engineering steel, stainless long steel and tool steel–the range includes special steel products.

In our production division we operate 10 out of 11 cold-processing facilities in Germany, Italy, France, Switzerland and Turkey focusing on bright bar and wire-production. In those plants we process high-grade steel to our customer's exact specifications matching characteristics such as close dimensional tolerance, strength and surface quality.

The Business Units in the Production division sell their products through the Sales & Services division as well as directly to their customers.

Key Financial Performance of the Production Division is set forth in the table below.

	Year Ended December 31,		
	2014	2015	2016
	(€ in millions, except percentages)		
Production			
Third-party revenue	2,372.2	2,136.4	1,858.3
Intersegment revenue	296.4	316.4	241.5
Total revenue	2,668.6	2,452.8	2,099.8
Adjusted EBITDA (unaudited)[1]	240.5	156.9	139.1
Adjusted EBITDA margin (in %)[2] (unaudited)	9.0	6.4	6.6
Operating profit before depreciation and amortization (EBITDA)[1]	236.7	155.0	105.4
EBITDA margin (in %)[3](unaudited)	8.9	6.3	5.0

(1) Adjusted EBITDA is not a recognized measure under IFRS.
(2) Adjusted EBITDA as a percentage of segment total revenue.
(3) EBITDA as a percentage of segment total revenue.

Sales & Services Division

We combine our sales activities within the Sales & Services division to provide a consistent and reliable supply of special long steel and end-to-end customer solutions worldwide, with over 70 distribution and service branches in more than 30 countries. These include technical consulting and downstream processes such as sawing, milling and heat treatment as well as supply chain management. The product range is dominated by special long steel from the Production division, supplemented by a selection of products from third-party providers. We pursue the goal of offering our products and services globally–with excellent quality and first-class service. We have consciously and continuously extended our distribution network to achieve this goal.

We focus on attractive growth regions that will continue to ensure sustainable growth for the Group. In 2016, our activities as part of this growth strategy included opening new distribution branches in Bangkok (Thailand), Taipeh (Taiwan) and Tokyo (Japan) as well as a storage location in Chongqing (China). Furthermore, we plan to continue with our regional growth strategy in the coming years.

Key Financial Performance of the Sales & Services Division is set forth in the table below.

	Year Ended December 31,		
	2014	2015	2016
	(€ in millions, except percentages)		
Sales & Services			
Third-party revenue	496.8	543.5	456.4
Intersegment revenue	0.1	0.0	0.1
Total revenue	**496.9**	**543.5**	**456.5**
Adjusted EBITDA[1](unaudited)	23.7	19.6	18.5
Adjusted EBITDA margin (in %)[2] (unaudited)	4.8	3.6	4.1
Segment EBITDA[1]	22.2	17.4	16.1
EBITDA margin (in %)[3](unaudited)	4.5	3.2	3.5

(1) Adjusted EBITDA is not a recognized measure under IFRS.
(2) Adjusted EBITDA as a percentage of segment total revenue.
(3) EBITDA as a percentage of segment total revenue.

In addition, in December 2016 we signed a joint venture contract to operate a bar drawing plant with our partner Tsingshan Group in China. The closing of the joint venture agreement is expected to take place later this year.

Our Products

We are a provider of special long steel solutions, delivering customized products and services to our customers from our own production supplemented by selected other more standard/commodity products from third-party suppliers that complement our product offering. In the special long steel industry, often customers do not order standard products. Rather, they require highly detailed and specific products, based on their individual uses and applications. Because we supply approximately 50,000 types of products tailored to the needs of our customers, products can only generally be categorized by steel grade, format, and in more detail by heat treatment and surface conditions, among others.

We produce a broad product range from scrap plus alloys, covering the entire application spectrum of special long steel. With our comprehensive range of steel grades, dimensions heat treatment and cold finishing as well as sawing and logistical options, we offer our partners solutions tailored to their needs. Within our three product groups, quality and engineering steel, stainless long steel and tool steel, we provide our international customers with a wide variety of dimensions, from drawn ultra-fine wire with a diameter of 0.013 mm to open-die forgings weighing more than 69 tons, and from semi-finished materials to customized, prefabricated forms.

Steel grades vary both by chemical compositionamount, type, and combination of Fe and alloying elements and by microstructure (for example, an amagnetic crystalline structure). We supply 800 to 900 steel grades. Depending on the format and size of the actual end use, customers can buy a particular steel grade in different product formats (for example, as block/ingot, wire rod, bar or wire ranging from a diameter of 0.013 millimeters to 3.045 millimeters). Driven by the additional processing and further value addition, the material we produce for our customers can be black, peeled, drawn, chamfered, centered, ground, polished (with varying surface properties and different precision levels applied) or machined (in which the steel is processed using machine tools to a particular shape or form, for example, near net shape, finished cold rolls or oil tools). The highly specific combination of these features defines a particular product.

Steel grades

We delivered the following steel grades in the relevant periods, in revenue, for the year ended December 31, 2016:

	Revenue	
	(€ in millions)	*%*
Quality and engineering steel	950.4	41.1
Stainless long steel	884.7	38.2
Tool steel	418.1	18.1
Other	61.5	2.6
Total	**2,314.7**	**100.0**

Quality and engineering steel

We are Europe's second largest producer of quality and engineering steel in 2015 by volume (SMR). Quality and engineering steel is used in a multitude of applications. It is especially called for in applications with high mechanical loads and when components need to be both reliable and durable, e.g. against shock or cyclical loads. Examples include drive, engine and chassis components for the automotive industry, turbine parts for power generation, and gear components for wind-energy systems.

Stainless steel

We are the world's second largest producer of stainless long steel in 2015 by volume (SMR). Stainless steel is resistant to corrosion, acids and extreme thermal stresses. It is strong but stretchable. These characteristics, paired with aesthetic optical design options, make stainless long steel an attractive material for many specialized applications. Key application areas include the automotive, mechanical engineering, food and chemical industries as well as medical engineering, the oil and gas industry and aviation.

In September 2016, after three years of preparation, we introduced our new stainless reinforcing steel in the German market. This new material has enhanced durability and corrosion resistance five times

greater than that of conventional reinforcing steel. Use of our new reinforcing steel increases the protections of infrastructure such as bridges and tunnels from the risk of rust, reducing life cycle costs in the process. This new steel has been used in over 1,000 building construction and civil engineering projects in Switzerland. In Germany, the Etterschlag and Eching tunnels on the A96 autobahn near Munich are two construction projects pioneering the use of our non-corrosive reinforcing steel. The motorway authorities in southern Bavaria use this material specifically to extend the life of components exposed to chloride.

Tool steel

We are the world's second largest producer of tool steel in 2015 by volume (SMR). The product range spans cold-work steel, hot-work tool steel, high-speed steel (HSS) and mould steel, which is used in the automotive or the food packaging industry, for example. We have many years of extensive expertise in customers' specific application areas. This enables us to advise our customers on the technical aspects of their products. We work closely with them to find the best special steel solutions for their individual requirements. Furthermore, we have significant processing capacities, e.g. heat treatment and machining capacitites both at our mills and in our Sales & Services warehouses.

Special materials

In addition to our three main product groups–engineering steel, stainless long steel and tool steel–as an expert technical partner, we develop innovative and customized special steel solutions for complex high-tech applications. The product range includes metallurgically produced powders, highly alloyed metal-matrix composites and steels, special alloys for the dental sector as well as metal powder and continuous cast rods for deposition welding, coatings and 3D printing. The fields of application for our special materials are diverse and constantly growing.

Additive manufacturing–a form of 3D printing–is being used increasingly, from heavy industry to private households. The additive manufacture of metal products requires the metals to be in powder form. We produce these powders at DEW's Krefeld plant. Our cobalt-based powder, for instance, is used by the dental industry. Our powder materials and production methods meet the stringent standards of the medical technology industry, for which we are certified.

Format range and processing capabilities

We operate nine steelmaking and hot forming plants in Canada, Germany, France, Switzerland, and the United States. Of these plants, six have their own melting furnaces as well as rolling and/or forging equipment and three operate rolling or forging equipment without on-site melting facilities. In addition, we own 11 cold-processing facilities in Germany, Italy, France, Switzerland, the United States and Turkey focusing on bright bar and wire-production. These plants allow us to cover a huge format range. We can therefore provide all formats common to special long steel, including:

- Ingots (varying from 1t to 94t, in varying geometries), blooms and billets (from 138x138mm up to 340x475mm) and semis (from 50mm to 320mm square);
- Bars, whether round, square or rectangular, and ranging from 7mm to 300mm diameter (round);
- Wire rod (round and hexagonal), ranging from 5.0mm to 44mm;
- Forgings (open die custom forgings, round, rectangular, up to 69t), ranging from 65mm to 3,045mm (maximum. diameter ring/disc) and 1,900mm (maximum diameter round bar);
- Bright steel bars ranging from 12mm to 250mm diameter;
- Drawn wire from 0.013mm to 18mm;
- Machined forged steel components, including rotation symmetric (cold rolls, machined, and other custom forgings) and rectangular parts (up to near net shape), mandrel bars (up to 280mm x 28m) and drill collars (up to 280mm x 10m); and
- Powder metallurgy products (for example, cladding powder to shield temperature and corrosion), Ferrotitanite© and dental alloys (in very small quantities).

Distribution and service capabilities

We conduct our special long steel distribution business, including stocking, reselling, distributing, refining and finishing steel products as well as technical consultation and post-processing services, primarily through over 70 branches, which are organized under our Sales & Services division. Our

Sales & Services division handles approximately 50,000 different stock-keeping units. Our services include:

- technical consulting (for example, meeting with a particular plastic mold maker to discuss the desired attributes of the final molded product and what tool steel is therefore best suited);
- processing services, such as sawing, beveling, centering, drilling, milling, heat-treatment, machining, shearing, edging, grinding, as well as services on tubes (for example, cut-to-length) or coils (cut-to-length, polishing); and
- delivery to our customers worldwide and global supply chain solutions.

Geographical Markets

We provide a consistent and reliable supply of special long steel and end-to-end customer solutions worldwide, with over 70 distribution and service branches in more than 30 countries. We believe the mature markets of Europe and North America continue to be the most attractive markets for advanced steel materials, and this is reflected in our sales. However, we see increasing demand from emerging markets such as China or India, as these regions are moving to more high value-add production. Further, the special nature of our products (especially for stainless and tool steels) combine small volumes and high material value (and margins), which allows the transport of our products over large distances, allowing us to serve a global market from our production base in our traditional core markets. See "*–Our Facilities*". However, although Europe and the Americas accounted for 92.8% of our revenue (based on the location of the customer) in 2016, we believe demand for our products is stimulated by the broader global economy. For example, whilst Germany accounted for 39.7% of our revenue in 2016, a significant share of our products is exported by our German customers to end-markets outside of Germany, making the ultimate geographical split much more diverse.

The following table shows a breakdown of our major geographic markets (based on the location of the customer) as a percentage of our revenue for the periods indicated:

	Year ended December 31,					
	2014[1]		**2015**		**2016**	
	(€ in millions)	%	*(€ in millions)*	%	*(€ in millions)*	%
Germany	1,170.8	40.8	1,041.0	38.9	919.2	39.7
Italy	295.4	10.3	295.7	11.0	260.5	11.3
France	210.9	7.4	190.0	7.1	162.1	7.0
Switzerland	56.7	2.0	45.7	1.7	42.3	1.8
Other Europe	522.8	18.2	499.2	18.6	456.7	19.7
United States	343.6	12.0	327.3	12.2	214.5	9.3
Canada	72.1	2.5	59.8	2.2	58.4	2.5
Other America	40.3	1.4	50.8	1.9	33.9	1.5
Africa/Asia/Australia	156.4	5.4	170.4	6.4	167.1	7.2
Total	**2,869.0**	**100**	**2,679.9**	**100**	**2,314.7**	**100**

(1) Following reclassification of the discontinued operations as at March 31, 2015 and deconsolidation of the respective entities as at July 22, 2015, the figures refer only to continuing operations.

Customers

We have about 30,000 customers spread around the globe, primarily in Europe and North America, with a growing number based in growth markets such as China, and India. We have a highly fragmented and diverse customer base from a broad range of industries, including the engineering, automotive, energy, construction, plastic, food and beverage, mining, other vehicle manufacturer, chemistry and aerospace industry. Our customers in the automotive sector include automotive original equipment manufacturers ("**OEMs**") as well as suppliers to OEMs. Our customers in engineering and equipment manufacturing sector include amongst others, machine tool manufacturers, medical engineering companies, glass processors, engine and turbine manufacturers plastic mold manufacturers and construction companies. Our customers in the energy and mining sector include forging companies, wind energy companies, water industry companies and defense companies.

The following table shows a breakdown of our major end-user industries as a percentage of our revenue for the periods indicated based on standard industrial classification of customers and company assessment:

	Year ended December 31,		
	2014	2015	2016
	(%)	(%)	(%)
Engineering (unaudited)	30.9	32.2	31.5
Automotive (unaudited)	28.8	27.3	27.9
Energy (unaudited)	9.7	14.9	15.1
Construction (unaudited)	5.1	3.8	4.2
Plastic (unaudited)	2.5	3.0	2.9
Food and beverage (unaudited)	1.3	1.8	1.8
Other vehicle manufacturer (unaudited)	3.0	1.6	1.7
Mining (unaudited)	1.0	0.9	1.0
Chemistry (unaudited)	1.4	0.8	0.8
Aerospace (unaudited)	0.6	0.6	0.4
Other (unaudited)	15.8	13.1	12.7

In 2016, our top 10 customers accounted for approximately 20% of our revenue. Our top 10 customers belong, among others, to the automotive, bearing, distribution and metal processing industry. Typically, we enter into multi-year or yearly contracts with our larger customers, especially in the automotive and automotive supplier industry. The respective contract terms relate to the agreed volume corridors (the approximate timing of individual orders including a rough estimated product mix) and the base price (subject to adjustments based on scrap and alloy surcharge agreements at delivery).

Our products are very often used by our customers in complicated, technical and critical applications. Therefore, we often provide special technical consultations to our customers and regularly develop new products or services in collaboration with our customers. Many of our products require significant testing, homologation and certification for use by customers. As a result of these factors and our tailored approach, switching to a different supplier is often costly for our customers, helping to foster long-term customer relationships.

Our Facilities

We operate nine production facilities (of which six have their own melting furnaces as well as rolling and/or forging equipment and three operate rolling or forging equipment without on-site melting facilities) in Canada, France, Germany, Switzerland and the United States. In addition, we operate eleven modern processing plants in Germany, Italy, France, Switzerland, the United States and Turkey, and more than 70 distribution branches across five continents.

Production Facilities

The product range (defined by grade, format, and processing capabilities) of each of our nine steel production facilities is distinct but together their combined product range covers the entire product range of the special long steel market.

Production Process

Modern special long steel production can be broadly broken down into various process steps: metallurgy (melting and refining), casting, hot forming (rolling or forging), and further heat treatment, cold finishing, and cutting/commissioning.

Metallurgy. Metallurgy/melting is the production of a basic melt, in our case using an electric arc furnace. After oxidation of carbon and phosphorus in a furnace, this melted steel is tapped directly into a ladle.

Secondary metallurgy/refining takes place directly in the ladle or in special converters (in which the liquid metal is poured from the ladle into a converter) and comprises all further measures required to refine the chemical composition of the varying grades of steel; for example, by removing gases (degassing) or removing carbon (decarburizing), or adding alloying elements.

Treatment of the molten steel occurs in a ladle furnace (for temperature and adding alloying elements) while reducing of gases (degassing) or further carbon reduction (decarburizing) happens in special treatment units, including Ruhrstahl-Heraeus recirculation degassing ("**RH**"), vacuum-oxygen decarburizing ("**VOD**") and vacuum degassing ("**VD**").

Similarly, there are various treatment processes in converters. One process we use is argon oxygen decarburizing ("**AOD**") for stainless steel refining. These varying refining steps and processes are used to produce differing product attributes, driven by the chemical composition of the melt.

Casting. After refining, the steel is solidified, either through continuous casting of the liquid content of the ladle into billets or blooms or into ingots. After casting, it may then be remelted for further refinement to increase its purity through processes such as electro-slag remelting ("**ESR**"), vacuum induction melting ("**VIM**"), and vacuum arc remelting ("**VAR**").

Hot Forming. Solid steel, whether in the form of billets, blooms or ingots, then undergoes hot forming as a next step, either by rolling in a rolling mill or forging in a forging shop.

Special microstructures (varying by chemical composition) can be flexibly adjusted during thermo-mechanically controlled rolling/forging by subsequent or subsequent heat treatment of various kinds (under different atmospheres, at different temperature regimes, and time).

Adjusting and Processing. Finally, the steel may be further adjusted and processed (for example, via cold forming, peeling, grinding, polishing or straightening).

Our production facilities often operate processing facilities like peeling, machining, drawing and grinding to add further value.

The following describes the business focus of our business units and their respective production assets.

Deutsche Edelstahlwerke (DEW), our largest business unit, is a fully-integrated manufacturer of special long steel producing tool, stainless and engineering steel. It is one of the largest producers of tool steel in Europe and globally. DEW's key products are: wire rods, bars, open-die forgings, bright steel, flat bars and machined tool steel. Apart from these products DEW is also manufacturing ingots, blooms, semi-finished products and billets**.** DEW produces material from 0.8mm diameter drawn wire to 1,100mm diameter forged bars. Such a large range of formats combined with the variety of steel grades enables DEW to produce a broad product portfolio. DEW develops innovative and individual special steel solutions for complex high-tech applications. Services range from steelmaking to extensive steel processing and finishing. DEW has a wide range of OEM and sub-contractor approvals as well as numerous approvals from the automotive and aerospace industry. DEW is certificated in the standards ISO TS 16949, ISO 14001, ISO 9001 and QS 9000.

DEW operates four main plants in Germany, including two scrap-based melt shops in Siegen and Witten and full downstream operations. The melt shop in Witten supplies the rolling mill and forging shop in Witten and the forging shop in Krefeld while the Siegen melt shop supplies the on-site rolling mill as well as the Hagen wire mill. In addition, DEW operates a special material unit, which produces materials such as metal powder, Ferro-Titanit® and dental alloys at its facilities in Krefeld.

- *Hagen*: The site is dedicated to wire production in the range of 0.8mm (drawn) to 30mm (hot rolled). It operates suitable pickling lines for surface oxide removals for engineering steel, tool steel and also for all kind of stainless long steels, austenitic, ferritic, martensitic and duplex steel. Bright steel in coils and bars is produced with a broad portfolio of drawing, peeling and grinding machines.
- *Siegen:* The production is focused on engineering and stainless long steel. It is also producing a small quantity of tool steel. All products are 22mm to 80mm diameter bars. We are operating a 120/140t electric arc furnace, two ladle furnaces, a RH degasser and a two basket VOD system, a six strand billet caster (capable of producing the different formats for supply to Hagen and Siegen), ingot casting facilities, a bar rolling mill, four ESR furnaces of different formats, eight different heat treatment furnaces, and a portfolio of processing and machining facilities mainly based on three peeling-lines. Another peeling line is currently under construction.
- *Witten:* The production is focused on tool, stainless and engineering steel in a range of 55mm to 250mm diameter. It is one of the largest tool steel production facilities in Europe and globally. It operates a 130t electric arc furnace; two ladle furnaces; two VD/VOD systems, a two-strand vertical 340mm x 475mm bloom caster (competitive advantage of large format and ability to cast a wide range of grades), ingot casting facilities, a blooming mill for rolling, a diverse portfolio of 17 different heat treatment facilities, a small diameter rotary forging machine for bar forging, and a portfolio of 45 machining / processing equipment (including mandrel bar manufacturing and a rectangular machining shop (near net shape capability)).
- *Krefeld:* The production is focused on forged products, using ingots and blooms mainly from Witten, covering a production range of 63mm to 800mm, and in cooperation with an external forge (owned by VDM Metals, located in Unna, Germany) up to 1,100mm. It operates a 33MN open die forging press and a large diameter rotary forging machine, remelting facilities (three VAR, three ESR including a multi ESR/VAR), a portfolio of twelve heat treatment facilities and an extensive portfolio of machining equipment suitable e.g. for machining of rotary symmetric parts

(e.g. cold rolls) and deep hole drilling. In addition we operate special material facilities e.g. for powder metallurgy, Ferro-Titanit® and dental alloys.

Material for DEW facilities is transported by truck as DEW is well connected to the road infrastructure in Germany. Further, DEW has rail connections at all four plants in place.

While we own the property in Witten, our facility in Krefeld is partly leased and partly owned by us. In addition, we are a party to a hereditary lease agreement with a remaining term of more than 80 years for the property in Siegen and Hagen. DEW owns the deposit for slag at Siegen.

In addition, DEW has three subsidiaries for specific purposes: DEW Karrierewerkstatt- qualification and vocational training, DEW Härtereitechnik- annealing/hardening/coating of machined parts and dhi Rohstoffmanagement- handling/buying unalloyed scrap.

Ugitech. Ugitech primarily produces stainless long steel in the form of semis, wire rods, drawn wires, round, hexagonal, square bars and chromium plated bars. Formats range from 1.5mm to 130mm diameter (bars), 5mm to 32mm (wire rods), and 13 microns to 15 mm (drawn wires). To round off this complete stainless long product portfolio which include more than 250 different grades, Ugitech has also an activity based on alloys (mainly wires) with external raw material sourcing.

Ugitech operates both an on-site melting, rolling and pickling shops in Ugine, France, as well as processing facilities in Milano, Venezia, Bourg, Imphy, Brionne, Reichshof, and Saint Etienne, all supplied mainly from Ugine. Ugitech operates a central mill stock facility in Grigny near Lyon.

- *Ugine.* The Ugine plant is completely dedicated to stainless long steel. The Ugine plant operates two 45t electric arc furnaces and a 45t AOD converter; a three strand vertical billet caster, a combined rolling mill (three exits, billets, bars, wire rods), an ESR line, diverse coils furnaces and bars heat treatment furnaces, a coil pickling and shot blasting facility for both austenitic and ferritic/martensitic grades, and a portfolio of processing facilities (including coil-to-bar drawing, bar peeling and bar grinding).
- *Milano, Venezia, Bourg, Imphy, Brionne, Reichshof.* These plants are satellite drawing facilities, focused on different end products: bar drawing and grinding including round & hexagonal bars (Milano), wire drawing for springs and welding (Bourg, Imphy and Venezia), drawing shaped wire (Brionne) and medium, fine and ultra fine wire (Reichshof).
- *Saint Etienne*. This is a specialized processing plant dedicated to bar grinding and chromium plating. Chromium plating is required for certain critical applications, including in nuclear power plants.

Ugine is well connected to roads for truck transport, but also has access to the rail system (including for scrap intake via train). The processing facilities are supplied by truck. We own all properties used at Ugitech except Venezia and Saint Etienne.

Swiss Steel. Swiss Steel is a leading free-cutting steel producer in Europe. The scope of products also includes cold heading steel grades, carbon and low-alloyed engineering steel, as well as special construction steel. Formats include billets, bar and wire rod ranging from 5.5mm to 66mm diameter.

It operates an 80t electric arc furnace, secondary metallurgy (twin-ladle furnace (80t) and VD facilities (75t)), a four-strand bow-type continuous casting facility (billet format 150mmx150mm), a combined rolling mill (three production lines: bars, bar-in-coil, and wire rod) and a bar conditioning plant, all located at its Emmenbrücke plant.

For inbound and outbound logistics the Emmenbrücke facility is accessible by truck and railway transportation. All property rights used for the business are owned by Swiss Steel.

Finkl Steel. Finkl Steel is the leading supplier of forging die steels, plastic mold steels and custom open-die forgings in North America.

Finkl's primary products are custom forgings, cold work, forging dies and mold materials.

Finkl operates the following facilities:

- *Chicago, Illinois (USA).* Finkl has operated in Chicago since 1879. It operates on the south side of Chicago one 90t electric arc furnace, a 90t ladle furnace and vacuum tank, ingot casting, VAR furnaces, three open die presses (1,500t, 4,500t and 8,000t), diverse heat treatment furnaces and machining facilities.
- *St. Joseph-de-Sorel (Canada).* Sorel Forge operates a 45t electric arc furnace and secondary metallurgy, a 2,000t and a 5,000t open die forging press, plus heat treatment and machining equipment.
- *Detroit, Michigan (USA).* Composite Forgings operates two smaller open die forging presses (750t and 1,400t), and accordingly heat treatment and processing facilities.

All of the Finkl facilities are connected to roads for truck transport and have access to the rail system. We own all properties used by Finkl. The most significant recent investment in Finkl has been the construction of the new greenfield steel and forging mill in south Chicago, which became fully operational in 2012.

Steeltec

Steeltec specializes in processing special, high strength free-cutting steel, with proprietary grades like HSX©, ETG©, ESP©, in the range of 4mm to 40mm diameter, round and hexagonal, mainly for automotive applications. It consists of one processing facility, co-located with Swiss Steel in Emmenbrücke, Switzerland. Steeltec operates nine drawing lines, one turning machine, three heat treatment furnaces (stress relieving), several in- and off-line crack detection and ultrasonic testing systems, as well as several grinding machines.

In addition, Steeltec operates a two processing facilities, one distribution center and one sales office across Europe which formerly belonged to SCHMOLZ+BICKENBACH Blankstahl GmbH. The processing facilities are located in Düsseldorf, Germany and Gebze, Turkey, the distribution center is located in Boxholm, Sweden and the sales office is located in Nørresundby, Denmark. Based on these facilities, we offer a comprehensive product portfolio of all suitable format ranges, mainly focusing on engineering steel (free-cutting). Other processing facilities, for example, for stainless, are consolidated in the production division (for example, the facilities of Ugitech focus on processing stainless).

- *Düsseldorf.* The Düsseldorf facility, our largest, operates 12 drawing and 3 peeling lines of various dimensions (with multiple in- and off-line testing facilities), a hot rolling mill for profiles, single bar heat treatment facilities, 9 grinding lines, and 5 high performance, fully automated sawing cells.
- *Gebze.* The Gebze facility's format range covers 6mm to 40mm in round, square, hexagonal, supplying the domestic Turkish market with bright steel and processed tool steel. The facility operates three drawing lines with in- and off-line testing devices, a grinding machine, heat treatment facilities and equipment for machining tool steel.

Sales & Services division

The Sales & Services division is the field sales force and the distribution unit of the SCHMOLZ+BICKENBACH Group. Under the banner of SCHMOLZ+BICKENBACH International GmbH, the Sales & Services division is present in 32 countries with more than 70 warehouses and sales offices. It employs about 1,250 persons. The activity of the entities of the Sales & Services division has two components:

- The agent business, where the local entities act as sales agent for the SCHMOLZ+BICKENBACH mills. In this business scheme, the mills deliver and invoice directly the customers and the local Sales & Services entities receive commissions.
- The distribution business, where the local entities take ownership of the steel products, add services to them and sell to local customers. Services include amongst other various type of processing (cutting, milling, grinding, machining, heat treatment), technical support, supply chain management and currency hedging. This distribution activity is also focused on steel products manufactured by our own mills.

Currently, the Sales & Services division operates in Germany, France, Italy, the United Kingdom, Spain, Portugal, Romania, Hungary, Slovakia, the Czech Republic, Poland, Lithuania, Latvia, Estonia, Finland, Russia, the Middle East, India, Singapore, Thailand, Malaysia, Vietnam, China, Hong Kong, Taiwan, Japan, Australia, Canada, the United States, Mexico, Brazil and South Africa.

Raw Materials and Energy

The most important raw materials required for the production of our special long steel are scrap as well as metals and alloys (principally nickel and chromium, but also vanadium, molybdenum, tungsten and manganese). We also use electricity and various gases (principally natural gas, but also oxygen, nitrogen and argon) in our production processes.

Scrap

Given the comparatively high weight and low value of scrap, scrap sourcing is typically done locally. Access to a liquid scrap market is therefore important to our business. However, we believe there is limited supply risk for scrap, as the main production facilities are located in liquid markets for both unalloyed and alloyed scrap.

Germany: Germany is a highly developed market for scrap collection. The high industrial output of Germany creates availability of alloyed scrap flowing back into the material cycle. DEW is a major buyer of carbon steel scrap as well as stainless steel scrap in Germany and thus has good access to the market.

France: Ugine, located in southern France, benefits from the availability of stainless steel scrap grades (from French and German scrap markets), and therefore the more expensive use of primary nickel and chromium required for the production of stainless steel grades can be reduced to the minimum practicable.

The United States and Canada: Both production facilities are located in the North American steel belt. Compared to the local scrap base, the production volumes are very small. Scrap markets are liquid, and the scrap market in North America is a net export market.

Switzerland: As a highly developed economy (with a particularly steel intense construction sector), Switzerland has a very high per capita steel consumption and thus, scrap availability resulting Switzerland being a net exporter of scrap. There are only two major domestic consumers: Stahl Gerlafingen and Swiss Steel. Negotiation power is therefore weighted strongly towards steel producers.

Alloys

The supply of alloying elements is in the hands of a few global mining conglomerates. As a result, all special long steel competitors are equally exposed to alloy availability.

Scrap and alloy pricing

Unlike the broader steel industry's exposure to highly volatile raw materials markets driven by hard-to-predict emerging markets development, the special long steel segment is exposed to comparatively less price volatility.

We are exposed to price volatility with respect to raw materials, which we purchase largely under long-term supply contracts with market related pricing mechanisms and occasionally in the spot market. Prices for these raw materials are strongly correlated with demand predominantly from special and stainless steel and to lesser extent from carbon steel and accordingly tend to fluctuate in response to changes in supply and demand dynamics in the industry. In addition, since most of the raw materials we use are finite resources, their prices may also fluctuate in response to any actual or perceived scarcity of reserves and the evolution of the pipeline of new exploration projects to replace depleted reserves. As the special long steel industry uses an established surcharge system for scrap and alloying elements, the impact on our profit and loss of changes in raw materials prices is generally limited under normal circumstances as the price risk can predominately be passed on to the customers without negotiation.

Energy

Steel production is generally considered an energy-intensive industry. Although less of a cost driver than raw materials (scrap and alloys) our total energy expenses accounted for 7.6% of our net costs in 2016. Electricity and natural gas are the primary sources of energy we use in the production process. Electricity is mainly used for running the electric arc furnaces to melt the scrap. Natural gas is used to heat the furnaces in subsequent production stages.

We attempt to optimize our cost of energy and therefore have a mix of fixed price contracts supplemented by short-term flexible sourcing to grasp the typical advantage of the spot market. These supply contracts are entered into by the Group companies at a local level and have varying expiration dates, and we remain exposed to any future increase of energy prices after these contracts expire.

Our efforts regarding energy efficiency were intensified in 2016, in which all of our production units participate. The goal of this initiative is to exchange on energy saving best practices and discuss the latest technologies for energy efficiency.

Innovative production processes. At the Witten rolling mill of DEW quenching lines were put into operation downstream from the hot rolling process. This effectively combines the processes of rolling and heat treatment. The project involved the construction and operation of a furnace to precisely heat the steel stock exploiting the heat remaining in the material after the rolling process followed by a quenching line consisting of a number of zones in which the bars are precisely cooled by quenching in water. Swiss Steel was able to reduce the power consumed by the central hydraulics of the continuous casting plant at the steel works in 2016. At the rolling mill, energy savings were made by using regenerative drives in the new ring-handing system.

Heat recovery. The "Energy for Geisweid" project was initiated by DEW at its Siegen facility a number of years ago. The objective of this project is to recover the waste heat from the Siegen steelworks, especially from the cooling system of the electric arc furnace to power a district heat network for the neighbourhood, providing both heating and warm water. In a first step, approximately 4 MW in thermal energy will be tapped from the steelworks. Swiss Steel has entered into a license agreement with the Lucerne district heating to feed waste heat into the Emmen Lucerne district heating network. The contract allowing Fernwärme Luzern AG to establish a control room on the premises of Swiss Steel now allows an additional 7.5 GWh of waste heat from the rolling mill to be exploited.

- *Further initiatives.* In addition to the larger projects mentioned above a number of smaller measures were implemented in 2016 (selection only): The thermal properties of two aging bogie hearth furnaces were optimised at the foundry in Krefeld;
- The walking beam system in the interim furnace at the rolling mill in Witten was reinsulated;
- The lighting system was renovated at two halls at the Hagen facility and converted to LEDs Consumption of natural gas by the protective gas generator was scaled back by optimising its controls;
- A new lighting system triggered by motion sensors was installed at Finkl Steel along with smart thermostats;
- Two training courses for employees were carried out at Swiss Steel in environmental protection and fire prevention;
- At the Bourg-en-Bresse facility of Ugitech, a new type of lubricant was used to draw wire to reduce the amount of phosphorous run-off into the ground water; and
- A number of smaller measures were undertaken at Ugitech to convert the lighting to LED technology, insulate the buildings, reduce the consumption of compressed air and cut water consumption with specific water absorption.

Research and Development

We consider research and development to be among the key factors for the further development of our product offerings and brands. We coordinate R&D management on a Group-wide basis and have approximately 75 employees focusing on R&D across the Group. In 2016, our corporate Technical Development function launched a new initiative to coordinate innovation activity in the producing Business Units (BU) and to plan strategically. Under this initiative we accord a key role to cross-BU collaboration. We have established four competence centers (CC). Our competence centers allow product and process development experts in the BUs to share concepts and project progress with each other and with representatives from Sales & Services. The CCs report to Technical Development.

Nearly every single plant, works closely with one or more of our customers, often at the same time with specialist research institutions, such as universities. We believe that the scale and depth of our operations, in which we are in continuous contact with customers across all three special long steel segments, and with customers of all values-added steps from ingot or bloom to machined complex shapes, bright bar, and drawn wire, gives us a specific advantage in product and process development. Although the product range at our various facilities is distinct, in general the production processes are shared. Therefore our corporate Technical Development team coordinates our research and development activities through well structured research committees, in order to ensure a lively and increasing transfer of know-how and close technological cooperation between our various group companies. Promising innovations go through a six-step development process which, if successful, leads to marketability.

We focus on delivering the highest quality products that improve our customers' competitive position, and on applying and furthering our advanced application expertise and processing know-how in projects with our customers. We have developed deep application expertise in multiple areas, which we believe provides us with a competitive advantage. For example, mold makers often consult with us regarding the most appropriate tool steel to use for a given molding process. Where commercially reasonable, we protect our product and brand names, such as bullet proof steel (ULTRAFORT©) or amagnetic steels for oil/gas exploration to steel with superior free-cutting properties (ETG©, Ugima©).

Employees

The following table shows the number of employees (headcount) as of the end of the respective period per division:

	December 31,		
	2014	2015	2016
Production	7,720	7,546	7,526
Sales & Services	1,179	1,252	1,239
Holdings[1]	102	112	112
Total	9,001	8,910	8,877

(1) Referred to as other in the segment reporting of the consolidated financial statements as of and for the year ended December 31, 2015.

Because we believe a well trained and motivated work force is as important for sustained strategic success in special long steel as technological leadership and state-of-the-art production facilities, we regard the personal and functional development of our employees as being as important as process and product innovation. We therefore view employee development as an important investment in our future. We continuously train and educate our employees and encourage and support career progression within the Group. At year-end 2016, further training had notched up 14,700 participant days. More than 100 training courses, amongst others in the fields of technology, occupational safety, IT, communication, and quality management are offered.

As a result of the foregoing, we consider relations with our employees, works councils and unions to be good. Our work force is heavily unionized. However, as German and Swiss law prohibit asking employees whether they are members of unions, we do not know how many of our employees are unionized. We are subject to mandatory collective bargaining agreements with most of our employees in our German, French, US, Canadian, and Swiss production facilities, and strikes may therefore occur. We have suffered warn strikes in Germany and France. However, these strikes did not have any material adverse effects on our production.

A certain number of our employees in Germany is protected against termination for operational reasons (*aus betriebsbedingten Gründen*) until end of 2017: In a collective bargaining agreement, it was agreed for Deutsche Edelstahlwerke Services GmbH that until 31 December 2017 notices of termination for operational reasons may only be issued with the trade union's prior consent.

We believe we are in compliance with all applicable employment law, including laws relating to employment termination and employment discrimination.

Pension Plans

We offer both defined contribution plans and defined benefit plans at individual Group companies.

Defined contribution plans. Some of the post-employment benefit plans in the Group are simple defined contribution plans where a company has an obligation to transfer a contractually defined amount to an external pension institution. Beyond the payment of these contributions, the company does not enter into any obligations in relation to post-employment benefits. The contributions paid for private and statutory pension plans are recognised in personnel costs in the current year. In 2016, the Group's pension contributions amounted to €33.4 million (2015: €33.6 million).

Defined benefit plans. Most of the Group's occupational pension schemes are defined benefit plans in which the employer undertakes to deliver the agreed pension benefits.

Employees of the Swiss Group companies are members of the pension fund of Swiss Steel AG, an independent pension institution. Employees of the Company are covered by an external collective foundation. This direct defined benefit obligation is financed by contributions to the fund from the respective companies. The contributions are based on a certain percentage of the insured salary as defined in the plan regulations. If a deficit emerges, various measures can be taken (increase contributions, adjust benefits). The deduction and investment of contributions are audited regularly by independent auditors.

For some schemes, mainly those operated in Germany, the agreed pension benefits are financed by the companies themselves through pension provisions. Benefits are paid on the basis of voluntary commitments, but are subject to Germany's Occupational Pensions Act (*Betriebsrentengesetz*). There are also direct benefit obligations to employees, primarily in the United States, in Canada and in France, which are funded to varying degrees. Pension provisions have been recognised in the statement of financial position for obligations that exceed the plan assets.

The defined benefit plans in the United States are subject to US rules regarding closure of coverage gaps, which have to be closed within seven years. In some European countries there are also limited obligations to make one-off payments to employees upon termination of employment. The amount due is linked to the employee's length of service. These benefits are recognised in the statement of financial position as provisions for pensions and similar obligations.

Sales and Marketing

We maintain a network of around 70 sales and service branches in over 30 countries, serving about 30,000 customers. Each of our divisions sells directly to third parties. For the year ended December 31, 2016, 88.5% of the Production division's revenue and virtually all of the Sales & Services division's revenue were to third parties. We have experienced sales forces in our production units and in our Sales and Services network which are supported by technical support and/or research & development.

The nature of the processing and service demanded by customers (for example, just-in-time and overnight delivery) for our Production and especially Sales & Services divisions requires local presence in the targeted markets, and favors proximity to customers. We usually establish customer proximity using a staggered approach, starting with a sales office, later adding stock keeping functions, servicing (including sawing and chamfering), to full processing capacity (whereby local requirements define the setup, including drawing, peeling and polishing). Therefore, investment needs and commitment to a certain location can increase incrementally with the knowledge we gain on customers and their requirements, limiting the risk of investments as customer loyalty increases significantly.

Trade fairs and other events with the participation of more than one Business Unit are coordinated at the Group level, and corporate design is consistently maintained. We maintain and develop customer relations systematically across the Group using a group-wide customer interaction model (supported by a consistent, group-wide customer relationship management system). For key customers, we strive for a strong alignment of Business Units and a coordinated sales approach.

The SCHMOLZ+BICKENBACH Group pursues an umbrella brand strategy. The SCHMOLZ+BICKENBACH Group umbrella brand stands for both the SCHMOLZ+BICKENBACH Group and for SCHMOLZ+BICKENBACH AG. The Group has six independent Business Units. The wordmark of the Business Unit "Sales & Services" is given the appendage "International". Except for the introduced brand "Finkl Steel", all Business Units use their wordmark and the logo of the umbrella brand. The slogan "*We are the benchmark for special steel solutions*" is utilized separately from the trademark. The name "SCHMOLZ+BICKENBACH" as well as the related trademarks, are owned by one of our indirect shareholders. See "*Risk Factors–We may be unable to secure our intellectual property rights*."

Health and Safety

We are subject to laws and regulations that protect employees against occupational injuries in all jurisdictions in which we operate. Under such laws and regulations, employers are required to organize the workspace in a manner that effectively prevents dangers to employees. In particular, employers must observe certain medical and hygienic standards and comply with applicable occupational health and safety requirements, such as permissible maximum levels for noise at the work place, the use of protective clothing and requirements relating to maximum temperatures and air ventilation.

Products are heavy, and the processes involve heat, dust, and other risks to all workers. We are committed to reducing the operational risk for workers to a minimum, and have shown significant improvement over recent years. We have suffered no fatalities since 2013, and our lost time injury frequency rates measured in incidents per millions of hours worked (24.0, 15.5 and 10.2 in 2014, 2015 and 2016, respectively) are declining as a result of our continuing focus on the safety of our employees. The health and safety of our employees is one of our main concerns and strategic priorities and we strive to further reduce incident rates.

Environment

Environmental regulation

Our operations are subject to a broad range of laws and regulations relating to air emissions, wastewater storage, treatment and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination and other aspects of the protection of the environment at our facilities. Compliance with environmental laws and regulations is

currently handled by each facility but we are currently in the process of revising our environmental compliance structure on the corporate level. As these laws and regulations continue to become more stringent, we expect that we will continue to expend sufficient amounts to achieve or maintain ongoing compliance. See "*–Legal Proceedings*".

European Union

Significant EU Directives and Regulations (each as amended) are relevant to our production facilities in the European Union, including the following:

- Directive 2012/27/EU of October 25, 2012 concerning energy efficiency (the "**EED**") established a set of binding measures to contribute to achieving the European Union's energy efficiency target of 20% by 2020 (when compared to the projected use of energy in 2020). Under the EED, all EU Member States are required to use energy more efficiently at all stages of the energy chain from production to final consumption. To achieve this target by 2020, individual EU Member States have set their own indicative national energy efficiency targets. Depending on preferences, these targets can be based on primary or final energy consumption, primary or final energy savings, or energy intensity. Recently, on November 30, 2016, the EU Commission published a proposal for a directive amending the EED ("**Draft EED**"). The Draft EED sets a binding energy efficiency target for 2030 of 30% at EU level (when compared to the projected use of energy in 2020). The reason is that EU energy system projections indicate that the current national and European energy efficiency framework will likely not allow for meeting the energy efficiency targets. According to the Draft EED, major parts of cost-effective investments in energy efficiency in all sectors will likely not be made without a 2030 energy efficiency framework.
- Directive 2010/75/EU of November 24, 2010 on industrial emissions (integrated pollution prevention and control) ("**IED**") requires EU Member States to control and reduce the impact of industrial emissions on the environment. The IED integrates seven former directives related to industrial emissions, including Directive 2008/1/EC of January 15, 2008 concerning integrated pollution prevention and control (the "**IPPC**"). A major difference to the former IPPC is that the IED stipulates generally binding emission requirements, inter alia, for the iron and steel production, which is based on the publication of Revised Best Available Techniques ("BAT") Reference Documents. These requirements are complemented by the European Pollutant Release and Transfer Register (E-PRTR) regulation (EC) N° 166/2006 of January 18, 2006, which implemented a yearly reporting obligation on release of pollutants and off-site transfer of waste.
- Directive 2008/105/EC of December 16, 2008 and Directive 2013/39/EU, which establish new water quality standards for priority pollutants in support of Directive 2000/60/EC of October 23, 2000, which established a framework for action in the field of water policy.
- Directive 2008/98/EC of November 19, 2008 (the "**EU Waste Directive**") which establishes the legislative framework for the handling and management of waste in the EU and Regulation (EC) No. 10 13/2006 of June 14, 2006, which regulates the shipment of waste from and to the European Union.
- Directive 2003/87/EC of October 13, 2003, as amended by Directive 2004/101/EC (the "**Emissions Trading Directive**"), which establishes a program under which Member States are allowed to trade greenhouse gas ("**GHG**") emission allowances ("**EUA**") within the EU subject to certain conditions.

The following EU Directives (each as amended) are also significant:

- Directive 2008/50/EC of May 21, 2008, dealing with ambient air quality and cleaner air for Europe.
- Directive 2004/107/EC of December 15, 2004, which sets forth target values for pollutants in ambient air, including thresholds on very fine particulates.
- Directive 2001/81/EC of October 23, 2001, which introduced national emission ceilings for certain pollutants.
- Directive 2012/18/EU of July 4, 2012, which relates to the control of major-accidents hazards involving dangerous substances (also known as the "**SEVESO III**").

Environmental damages and violations of the EU legislation are subject to environmental liability under Directive 2004/35/EC of April 21, 2004, and criminal liability under Directive 2008/99/EC of November 19, 2008.

EU Directives applicable to our products include those relating to waste electrical and electronic equipments (Directive 2012/19/EU of July 4, 2012), end-of-life vehicles (Directive 2000/53/EC of September 18, 2000) and packaging and packaging waste (Directive 2004/12/EC of February 11, 2004).

We are subject to Regulation (EC) No 1907/2006 of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals ("**REACH Regulation**"), which controls the chemical substances manufactured in or imported into the EU in volumes of over one ton per year and to the "CLP" regulation (EC) N° 1272/2008 of December 16, 2008 on classification, labelling and packaging of substances and mixtures, which implements the United Nations Globally Harmonized System (GHS) of classification and labelling. We have to pre-register our imported and manufactured substances in the European Union with the European Chemical Agency ("**ECHA**") to be compliant with the REACH Regulation. Our subsidiaries will not obtain the required license for continued production of a subject chemical if we fail to (i) submit a registration file for the subject chemical in due time, (ii) submit a complete registration file or (iii) make any required payment in connection with the registration file. In addition, the designation of additional chemicals of "high concern" under the REACH Regulation could increase the costs of compliance with other EU Directives, including those relating to waste and water and SEVESO III.

We anticipate that our capital expenditure with respect to environmental matters in the European Union over the next several years will relate primarily to installations of additional air emission controls and to requirements imposed in the course of renewal of permits and authorizations, including those pursuant to the IED. In particular, since 2005, our operations in the European Union are subject to the Emissions Trading Directive, the EU's central instrument for achieving the Member States' commitments under the Kyoto Protocol by providing a European emissions trading system ("**ETS**") for carbon dioxide emissions. The ETS covers more than 12,000 installations across the EU, including combustion plants, oil refineries, coke ovens, iron and steel plants and factories making cement, glass, lime, brick, ceramics and pulp and paper. ETS's key provisions relate to the common trading currency of EUAs. One allowance gives the holder the right to emit one ton of carbon dioxide. Companies that keep their emissions below the level of their allowances can sell their excess allowances. Companies that do not keep their emissions below the level of their allowances must either reduce their emissions, such as by investing in more efficient technology or using less carbon-intensive energy sources, or purchase the extra allowances that they need on the open market. In the past, the Member States drew up national allocation plans determining how many EUAs each installation received free of charge. In the current third trading period (2013 to 2020), the allocation of free EUAs has generally become the exception and companies have to procure EUAs in tender procedures. Exceptions apply to industries that may for reasons of costs related to climate policies transfer their production to other countries (so called carbon leakage). Sectors deemed to be exposed to a significant risk of carbon leakage receive a higher share of free allowances in phase 3 of the ETS compared to the other industrial installations. However, the amount of EUAs available to the market is generally in decline. The European Commission is currently preparing a structural reform of the ETS and presented draft legislation on 15 July 2015. The reform efforts aim at a further reduction of emission levels until 2030 by at least 40% compared to 1990. In the upcoming fourth trading period (between 2021-2030), the total volume of EUAs is to be reduced by 2.2% annually compared to the currently applicable degression rate of 1.74%.

France

Our production and processing facilities in France are subject to significant French environmental regulations, including the following:

- French environmental code (articles L. 511-1, R. 511-9 and seq.; Ministerial order dated February 2, 1998). In France, the environmental code governs the operation of "classified facilities" ("*installations classées pour la protection de l'environnement*"), which may represent a nuisance or a danger for their neighbourhood or for general public health and safety. These facilities are listed in a nomenclature that defines the rules applicable to each activity and the level of operating permit required.

  These facilities operate pursuant to an operating permit. Classified activities can be divided into three categories: declared facilities (presenting the lowest risk level); registered facilities; and authorized facilities (for which the risk level is higher and which must submit an application for an operating permit before beginning operations). For the most hazardous facilities, specific easements will apply pursuant to the SEVESO Directives. Applicable operating permits govern all environmental issues that may affect the site activities, including waste, water, air emissions, pollution risk, safety issues and others.

If a facility does not comply with all applicable requirements or if a facility is erected or operated without the required operating permit, environmental authorities may order administrative and criminal sanctions as follows:

- Administrative sanctions. The environmental authority will first issue a formal notice ("*mise en demeure*") requiring the facility to implement the compliance measures within a specified timeframe. If the facility does not comply with the notice, environmental authorities may: (i) fine the facility in the amount necessary to carry out the compliance measures; (ii) order the compliance measures to be undertaken by a third party at the facility operator's expense; or (iii) shut down the facility.
- Criminal sanctions. Under French law, both a company and its managers are subject to criminal liability. Minor offenses such as noncompliance with administrative orders may result in fines of €1,500 for individuals and €7,500 for corporations. Major offenses such as operating a facility without the required operating permit or not complying with a formal notice may result in fines of €750,000 for corporations and €150,000 for individuals, who may also be subject to prison sentences of up to two years.

- Water protection (articles L. 511-1, R. 511-9 and seq. of the environmental code; Ministerial order dated February 2, 1998). This body of law sets forth, among others, the obligation to clean contaminated water, the authorization requirement for river water abstraction, the flooding protection measures and the protection of ground water. These general requirements are detailed in the operating permit applicable to each operating site.
- Waste regulation (article L. 541-1-1 and seq. of the environmental code; Decree dated April 18, 2002 relative to waste classification; Decree 2005-625 dated May 30, 2005 on the monitoring of waste treatment channels; Decree 2002-540 dated April 18, 2002 on waste classification). The "extended producer responsibility" principle applies to any person who professionally develops, manufactures, processes, treats, sells or imports products. Facility operators are therefore responsible for the waste they produce. Facility operators must avoid generating waste, ensure recycling of waste that could not be avoided and ensure that waste which cannot be recycled is disposed of without detriment to the public good. These general requirements are detailed in the operating permit applicable to each operating site.
- Soil contamination (Book V, Title 1 of the environmental code; Circular dated February 8, 2007 relating to classified installations). Facility operators are responsible for soil contamination and the environmental authorities will require the facility operator to remediate the site. Following the closure of a facility, the last operator of such facility retains this liability for 30 years (Conseil d'Etat, July 8, 2005, n°247976, *Société Alusuisse Lonza France*). Before a facility can be shut down, a site diagnostic must be performed and, if necessary, remediation works.
- Air emissions (articles L.224-1 and seq. R. 224-1 to R.224-6 of the environmental code). In order to limit air pollution, facility operators must measure emission quality and establish a self monitoring plan; decrease emission quantities and potential hazards; and ensure that emissions are appropriate for the local environment. Facility operators must then disclose the monitoring results to the environmental authorities. The operating permit also determines the threshold limit values and the mandatory measurement and control devices, in compliance with the Ministerial order dated February 2, 1998.
- Carbon dioxide emissions (articles L. 229-5 to 229-19 Book II, title II, chapter IX of the environmental code), implementing the EU Directives governing the ETS.

Germany

The production of steel products at our sites, in some cases for decades, bears environmental risks resulting from the production process such as metal working and metal surface treatment, the operation of foundries and paint shops and the use of hazardous materials and preparations such as coatings and solvents. Moreover, production activities generate emissions of various pollutants (including noise) into the air and waste water. Our business operations are subject to extensive environmental provisions, which among others limit air and noise pollution, the discharge of pollutants into water, other emissions into the environment, plant and operational safety, and govern the handling and storage of potentially water polluting substances and the recycling and disposal of waste. These environmental regulations may result, for example, from German federal and state laws *(Gesetzen)*, ordinances (*Rechtsverordnungen*) or administrative provisions (*Verwaltungsvorschriften*) adopted pursuant thereto, from provisions of the European Union law and by rules of professional associations (*Berufsgenossenschaft*) and from applicable industry standards. The operation of certain installations

may require environmental permits (*umweltrechtliche Genehmigungen*). Environmental laws are subject to change and requirements may become stricter over time, which may require us to upgrade and retrofit our sites and facilities. Environmental standards may require us to investigate, eliminate, or limit impurities, debris or other impacts on the environment, which could result in significant costs. If contamination of soil and/or groundwater is discovered on property currently or formerly owned and/or used by us, we could be required by the authorities to carry out investigations or remedial action.

Our production and processing facilities in Germany are subject to significant German and European environmental regulations, including the following:

- *Energy Law.* The German Renewable Energies Act (*Erneuerbare Energiengesetz*, "**EEG**") provides for certain promotion mechanisms to the producers of electricity generated from renewable energy sources. The overall costs of this promotion scheme are balanced by an energy surcharge, the so-called EEG-levy, which is imposed on energy consumers. The EEG provides for certain exemptions from the EEG-levy for certain enumerated electricity intensive industry sectors. However, in recent years the legislator has increased the requirements for electricity intensive industries to benefit from these exemptions, in particular in light of the European Commission's guidelines on environmental and energy state aid rules of June 28, 2014. Currently, all electricity intensive industries have to pay the full amount of EEG-levy attributable to the first gigawatt-hour of electricity consumption. Following this deductible, certain energy-intensive industries are required to pay a reduced amount of 15% of the EEG-levy, however at a maximum 4% of the gross value added ("**GVA**"). Industries with an electro intensity of at least 20% are limited to 0.5% of the GVA. A limitation to 20% of the EEG-levy has recently been introduced for energy intensive industries falling short of the regularly applicable levels of energy intensity, i.e. between 14 to 17% instead of at least 17 to 20%, in order to not discourage the implementation of energy efficiency measures. Exemptions are granted annually and are subject to strict application proceedings. According to the current regulation our EEG-levy would have amounted to €189,739,239.60 in the years 2012 to 2015. However, the granted limitations reduced this overall amount to €8,591,008.98.
- *Emissions Control Law.* Our plants cause emissions that fall within the scope of the emissions control law (*Immissionsschutzrecht*). Main applicable provisions are the German Federal Emissions Control Act (*Bundes-Immissionsschutzgesetz*) and implementing ordinances in connection with technical instructions on air and noise (*Technische Anleitung Luft, Technische Anleitung Lärm)* or guidelines on odor emissions *(Geruchsimmissionsrichtlinie)*. The setup and operation of installations that generate emissions mentioned in the Annex to the 4th Ordinance on the Implementation of the German Federal Emissions Control Act ("**4. BImSchV**") are subject to administrative review and authorization. Authorities may impose under certain conditions, at any time, additional requirements to improve the environmental performance of an installation subject to BImSchG. Even if the operation of an installation at one of our sites is not subject to a permit under BImSchG, BImSchG nevertheless establishes certain criteria with regard to environmental performance.
- *Waste Legislation.* As a generator of waste, we are responsible for waste prevention, recovery and disposal in accordance with the waste management regime in the Waste Management Act (*Kreislaufwirtschaftsgesetz* or "**KrWG**") implementing the EU Waste Directive into German Law. Contrary to the former Closed Substance Cycle and Waste Management Act (*Kreislaufwirtschafts- und Abfallgesetz*), the KrWG is based on a multi-level waste hierarchy consisting of waste prevention, reuse, recycling, recovery (for example, for energy generation purposes) and waste disposal. KrWG aims to strengthen the impact of recycling and imposes fixed recycling quotas. Under the KrWG the installation and operation of waste dumps and landfills is subject to prior planning procedures. We have to notify the competent authority of our activities relating to non-hazardous waste. Further, for all activities in connection with the disposal of hazardous waste we will have to comply with documentation requirements.
- *Legislation governing Water Use and Soil Protection.* The generation and discharge of wastewater arising from our operations is regulated by a number of laws. Among other things, the production process must ensure that best available technique (BAT) is used to reduce wastewater generation as far as possible, and ensuing wastewater must be treated. For the discharge of wastewater, a permit is required which will only be granted if applicable legal requirements of the German Water Resources Act (*Wasserhaushaltsgesetz*) are met. The German Waste Water Ordinance (*Abwasserverordnung*) governs, among other things, the discharge of waste water from industry–for example, from metalworking. In order to protect water

from the accidental discharge of pollutants, facilities for storing, handling and transport of substances hazardous to water must be built, operated and maintained in a way to prevent such contamination of waters. This applies, for example, to tanks for the storage of gasoline or heating oil. We may be required to undertake investigations into the quality of soil and/or ground water and remediation of contaminated land or ground water especially in our capacity as owner and/or lessee of contaminated land, as a (potential) polluter of land, as the universal successor of the polluter of land, or as the former owner of contaminated land. Such legal responsibility is governed, inter alia, by the German Federal Soil Protection Act (*Bundes-Bodenschutzgesetz*) and accompanying ordinance, as well as by state soil protection laws and water protection laws. Further, we may be held liable for damages caused by detrimental changes of water that are caused by waste water or other substances from our facilities. Also, under soil protection legislation, we have the obligation to avoid harmful changes to soil. Where necessary, the sites must undertake precautionary measures and take action to avert the threat of harmful changes to soil.

- *Environmental Damages Act.* In 2007, the German Environmental Damages Act (*Umweltschadensgesetz* or "**USchG**") came into effect. Its purpose is to implement the European Directive 2004/35/EC on environmental liability. Under USchG, companies may have to restore environmental damages, which includes damage to waters, soil and nature. The USchG applies to environmental damages caused by a responsible party within the framework of his or her professional activity (including, for example, the operation of an installation that requires a permit). Both natural and legal persons who carry out an activity covered by the USchG may be held responsible under the USchG. A company may be required to prevent certain dangers (*Gefahrenabwehr*) and/or to restore environmental damage. This responsibility extends to individuals active within such company (such as managers with decision-making power). The USchG applies to environmental damage caused on or after April 30, 2007. As a consequence, our German sites and the employees working there carry a higher liability risk for environmental damage or hazards.

- *Legislation governing Chemicals and Hazardous Materials.* The European Union has passed extensive legislation governing chemicals and hazardous substances. If these legal provisions are violated, the competent authorities may impose administrative fines and require that measures be undertaken to eliminate such violation; under certain circumstances, serious infringements may even result in criminal prosecution. In connection with the legislation governing chemicals and hazardous substances, we are subject, in particular, to the REACH Regulation, which is the core regulation for chemicals. It aims to ensure that chemical substances placed on the Community market do not adversely impact human health or the environment by imposing certain requirements on the manufacturing, import, distribution and use of chemical substances in mixtures and products. A key requirement of the REACH Regulation is the registration of chemical substances with the European Chemicals Agency (ECHA); registration requirements are subject to a transitional period from 2010 to 2018, subject to hazardousness and volumes of chemicals placed on the market.. Without prior registration in accordance with the REACH Regulation, it is generally prohibited to place chemical substances on the market in the European Union. The type and amount of data to be made available (for example, concerning toxicity, environmental properties, physical properties, use and safe handling) depend on the quantity and hazardousness of the respective substance. Particularly hazardous chemical substances are subject to a licensing procedure, or bans or restrictions may be issued against them with respect to their production, import, sale and/or use. Certain information on chemical substances and mixtures must be passed along the value chain, including the provisioning of a safety data sheet, as the case may be. Particular information obligations apply with regard to products containing substances "of very high concern". As a Regulation, REACH Regulation applies directly in all Member States. In addition, existing German legislation has been amended to fit with the new REACH legislation, e.g. by adopting the REACH Adaptation Act (*REACH-Anpassungsgesetz*). The requirements of the REACH Regulation may apply to chemicals used during our production processes and to the products we manufacture. As a result of the REACH Regulation, we may have to change the substances which we use during our production processes.

Switzerland

Our production and processing facilities in Switzerland are subject to significant Swiss environmental regulations, including the following:

- Swiss Federal Act on Environmental Protection dated October 7, 1983, as amended (*Umweltschutzgesetz*), and the related cantonal acts and ordinances. These statutes form the legal framework for the general protection of the environment in Switzerland stipulating basic principles such as, for example, the cost-by-cause principle (*Verursacherprinzip*) and the principle of sustainability.
- Swiss Federal Act on the Protection of Water dated January 24, 1991, as amended (*Gewässerschutzgesetz*), its implementing ordinance dated October 28, 1998, as amended (*Gewässerschutzverordnung*), and the related cantonal acts and ordinances. This body of law sets forth, among others, the obligation to clean contaminated water, the authorization requirement for river water abstraction, the flooding protection measures, the protection of ground water and the revitalisation of waterways.
- Swiss Federal Ordinance on the Review of the Environmental Tolerance dated October 19, 1988, as amended (*Verordnung über die Umweltverträglichkeitsprüfung*). This ordinance and the related cantonal acts and ordinances set forth the requirement that we obtain prior approval in the form of an environmental tolerance review before setting up or significantly amending steel factories or workshops in Switzerland. This approval procedure combines an integral review of a large number of environmentally relevant provisions into one single review, thus involving many stakeholders.
- Swiss Federal Ordinance on the Prevention of Air Pollution dated December 16, 1985, as amended (*Luftreinhalte-Verordnung*). This federal ordinance, in combination with the related cantonal acts and ordinances, establishes several air pollution thresholds for new and existing facilities as well as the obligation to remediate facilities which are in breach of these thresholds.
- Swiss Federal Ordinance on the Prevention of Noise Pollution dated December 15, 1986, as amended (*Lärmschutz-Verordnung*), and the related cantonal acts and ordinances for the cantonal implementation and execution of the federal law. Similar to the system for the prevention of air pollution, this legislation sets forth several noise pollution thresholds for new and existing facilities as well as the obligation to remediate facilities which are in breach of these thresholds.
- Swiss Federal Ordinance on the Prevention and the Disposal of Waste dated December 4, 2015, as amended (*Verordnung über die Vermeidung und die Entsorgung von Abfällen*), Swiss Federal Ordinance on the Transportation of Waste dated June 22, 2005, as amended (*Verordnung über den Verkehr mit Abfällen*) and the related cantonal acts and ordinances. These provisions apply to our waste disposal sites in Switzerland and the transportation of waste in Switzerland and abroad.
- Swiss Federal Ordinance on the Decontamination of Land dated August 26, 1998, as amended (*Altlasten-Verordnung*), and the related cantonal acts and ordinances. Together with the applicable land use planning instruments, this set of laws provides the basis for the cantonal registers of contaminated sites and specifies the conditions under which clean-up measures are required.

Other Swiss environmental provisions relevant to us include the following:

- Swiss Federal Act on the Protection of the Environment and Cultural Heritage dated July 1, 1966, as amended (*Bundesgesetz über den Natur- und Heimatschutz*), and the related cantonal acts and ordinances.
- Swiss Federal Act on the Protection against Harmful Substances and Compositions dated December 15, 2000, as amended (*Bundesgesetz über den Schutz vor gefährlichen Stoffen und Zubereitungen, Chemikaliengesetz*), Swiss Federal Ordinance on the Protection against Harmful Substances and Compositions dated June 5, 2015 (Verordnung über den Schutz vor gefährlichen Stoffen und Zubereitungen (*Chemikalienverordnung*), and the related federal and cantonal acts and ordinances.
- Swiss Federal Ordinance on the Protection against Hazardous Incidents dated February 27, 1991, as amended (*Störfallverordnung*) and the related cantonal acts and ordinances.
- Swiss Federal Ordinance on Pollutant Release and Transfer Register dated December 15, 2006, as amended (*Verordnung zum Register über die Freisetzung von Schadstoffen sowie den Transfer von Abfällen und von Schadstoffen in Abwasser*) and the related cantonal acts and ordinances.

- Swiss Federal Act on Radiation Protection dated March 22, 1991, as amended (*Strahlenschutzgesetz*), Swiss Federal Ordinance on Radiation Protection dated June 22, 1994, as amended (*Strahlenschutzverordung*) and the related cantonal acts and ordinances.

The violation of Swiss environmental regulations, in particular those mentioned above, is subject to environmental, civil and criminal liability.

In order to achieve its goals under the Kyoto Protocol to the United Nations Framework Convention on Climate Change, Switzerland imposes a carbon dioxide emissions duty on imported fossil fuels. Companies with a high usage of fossil fuels, such as Swiss Steel, can be exempt from the carbon dioxide emissions duty if they assume a legally binding commitment to reduce their energy-related carbon dioxide emissions. These companies are then allocated emission allowance units free of charge allowing them to emit carbon dioxide in accordance with their reduction commitment. For each ton of carbon dioxide emitted, one emission allowance unit has to be surrendered. If a company successfully reduces its carbon dioxide emissions and exceeds its reduction commitment, it can sell the remaining emission allowance units through the emission trading system. On the other hand, if a company does not achieve its reduction commitment it will either have to purchase emission allowance units trough the emission trading system or limit its carbon dioxide emitting production. We have been sufficiently successful in reducing our carbon dioxide emissions and thus have sufficient emissions allowance units for our Swiss operations until the end of the current reduction commitment period in 2020.

The Swiss carbon dioxide emission regulations relevant to us include the following:

- Swiss Federal Act on the Reduction of CO2 Emissions dated December 23, 2011, as amended (CO2-Gesetz), Swiss Federal Ordinance on the Reduction of CO2 Emission dated November 30, 2012, as amended (CO2-Verordnung) and the related cantonal acts and ordinances.

United States

Our operations in the United States are subject to a variety of environmental laws and regulations, including, among a myriad of others, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act ("**RCRA**"), the Comprehensive Environmental Response, Compensation and Liability Act ("**CERCLA**"), the Safe Drinking Water Act and the Toxic Substances Control Act, as well as a host of state and local environmental rules.

- *Clean Air Act.* Regulations promulgated under Title I of this Act at 40 CFR §60 establish National Ambient Air Quality Standards ("**NAAQS**"), as well as air pollution control standards for new stationary sources falling within particular industrial categories. The standards applicable to steel operations include, among others, the New Source Performance Standard ("**NSPS**") for electric arc furnaces at 40 CFR 60 Subpart AAa, which addresses particulate emissions.

  Steel operations must also comply with applicable National Emission Standards for Hazardous Air Pollutants ("**NESHAPs**"). NESHAP standards for electric arc furnaces are promulgated at 40 CFR 63 Subpart YYYYY. These standards require a facility to implement a scrap management plan to minimize contamination in its scrap supply that could lead to increased emissions of hazardous air pollutants. These standards also establish limits for emissions of particulate matter that are similar to the applicable limits under the NSPS. Other NESHAPs may apply to operations ancillary to or supporting primary steel production processes.

  Steel manufacturing facilities may also be subject to Prevention of Significant Deterioration ("**PSD**") requirements under the Act's New Source Review program in connection with new construction, physical facility modifications, or expansion activities. PSD requirements are triggered where a facility emits certain "criteria" pollutants, including particulate matter, sulfur dioxide, nitrogen oxides, and carbon monoxide, in excess of a given threshold. The substantive requirements of the PSD rules for major projects are: (i) a case-by-case determination of Best Available Control Technology ("BACT"); (ii) an ambient air quality impact analysis to confirm that the project would not cause or contribute to a violation of any NAAQS or applicable PSD restrictions; and (iii) an analysis of impacts on soils, vegetation and visibility.

- *Clean Water Act*. Regulations promulgated under this Act establish a National Pollutant Discharge Elimination System ("**NPDES**") permit program, which regulates both point source and storm water discharges from a facility in order to protect local surface waters. 40 CFR 420 establishes Effluent Limitations Guidelines and Standards for the Iron and Steel Manufacturing Point Source Category. These are implemented through the NPDES permit program and through state and local pretreatment programs. The Storm Water Rule (40 CFR 122.26(b)(14) subparts (i, ii)) also requires capture and treatment of storm water at steel manufacturing facilities.

- *RCRA. Regulations promulgated pursuant to Subtitle C of RCRA (40 CFR Parts 260-299)*. These regulations establish a "cradle-to-grave" system governing hazardous waste from the point of generation to disposal. RCRA hazardous wastes include the specific materials listed in these regulations. Several RCRA-listed wastes can be produced from steel operations, creating waste accumulation, manifesting, and record keeping obligations for a facility, as well as obligations with respect to treatment, storage and disposal.
- *CERCLA. Commonly known as "Superfund".* This act authorizes the Environmental Protection Agency ("**EPA**") to respond to releases, or threatened releases, of hazardous substances that may endanger public health, welfare, or the environment. CERCLA also enables the EPA to require parties deemed responsible for environmental contamination to clean it up or to reimburse the Superfund for response costs incurred by the EPA.
- *Safe Drinking Water Act.* Regulations promulgated under this Act establish drinking water standards and protect underground sources of drinking water.
- *Toxic Substances Control Act.* Regulations promulgated under this Act establish a framework to collect data on chemicals in order to evaluate, assess, mitigate, and control risks which may be posed by their manufacture, processing, and use. The EPA has the authority under Section 6 of this Act to ban the manufacture or distribution in commerce, limit the use, require labeling, or place other restrictions on chemicals that pose unreasonable risks.

The violation of United States environmental laws and regulations and the release and disposal of hazardous substances may subject the Group to potential fines and penalties, including possible criminal sanctions, and wide ranging liability for the remediation of impacts to human health and the environment.

Environmental protection and sustainable production

We make sustainable production and protection of the environment a priority. This applies to both our products and the production process itself. We believe that our production processes materially comply with environmental regulations. In addition, our materials are applied in a variety of environmentally friendly end-use technologies that require advanced material properties. One example for those applications is special steel for large gear boxes and roller bearings in the wind power industry

We actively use to decrease our energy consumption. See *"–Raw Materials and Energy–Energy"*.

Most of our production facilities have a long industrial tradition and are situated in city neighborhoods. As a result, emission thresholds have been in the past and continue to be critical to maintain.

Our operations are subject to a broad range of laws and regulations relating to air emissions, wastewater storage, treatment and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination and other aspects of the protection of the environment at our multiple locations and operating subsidiaries non-compliance with these regulations may resulting significant fines or penalties or limitations on our operations. Many of the countries in which we operate have laws that may impose liability for the investigation and clean-up of releases of regulated materials and the remediation of related environmental damage without regard to negligence or fault. These laws may also expose us to liability for the conduct of, or conditions caused by, others, such as historic spills of regulated materials at our facilities, for acts that were in compliance with all applicable environmental laws at the time such acts were performed and for contamination at third-party sites where substances were sent for off-site treatment or disposal. Additionally, any failure by us to comply with applicable environmental laws and that ensuring compliance has not, to date, had a material adverse effect upon our financial position. We cannot, however, predict the likelihood of change to these laws or in their enforcement nor the impact that any such change, or any discovery of previously unknown conditions, may have on our costs and financial position.

Compliance with existing, new or future regulations governing greenhouse gas emissions ("GHG") may require a reduction of GHG, purchase of emission certificates from third parties, or other changes to our business or capital investments, any of which could result in significant additional costs or could reduce the demand for our products. Under the currently applicable ETS, only a certain amount of emission rights is allocated free of charge to companies until the end of 2020, thereby providing a no-cost cap on the carbon dioxide emissions of their production facilities. It is likely that the number of emissions certificates available on the markets will further decline in the future. The post-2020 carbon market is very uncertain, and we are closely monitoring international negotiations, regulatory and legislative developments and are endeavoring to reduce our own emissions.

Further, Directive 2010/75/EU of November 24, 2010 on industrial emissions ("IED") requires EU Member States to control and reduce the impact of industrial emissions on the environment. The major difference to the former regulation frame is that the IED stipulates generally binding emission requirements, inter alia, for the iron and steel production, which are based on the publication of Re-vised Best Available Techniques ("BAT") Reference Documents. It is likely that our installations will have to comply with higher environmental standards in the future, such as more stringent limit values for emissions."

As of December 31, 2016, we had established provisions of €4.7 million for environmental and remedial activities and liabilities.

Legal Proceedings

From time to time, we are involved in lawsuits, claims, disputes with customers, suppliers or employees, as well as investigations, arbitrations and other proceedings (also administrative proceedings), which are handled in the ordinary course of business.

We are not aware of any material pending or threatened proceedings other than the following:

- The German Federal Cartel Office is investigating alleged price-fixing in the stainless steel industry. In November 2015, as part of the industry-wide investigation, a non-compliance procedure was initiated against the former subsidiary of the Company, Deutsche Edelstahlwerke GmbH. The German Federal Cartel Office has subsequently extended the investigation with the same reference number to include the Company as well as another of our subsidiaries, SCHMOLZ+BICKENBACH Edelstahl GmbH. According to a procedural statement of the German Federal Cartel Office from November 2016, representatives of these companies are under suspicion of violating the applicable German competition laws by fixing prices and price components as well as production restrictions and exchanging sensitive competition information through an association of iron and metal-processing industries in Düsseldorf. We are cooperating with the investigation, and are conducting an internal investigation of the matter. The investigations are still ongoing see *"Risk Factors–We are currently subject to, and may in the future become subject to, legal and administrative proceedings brought by competition authorities; adverse outcomes in such proceedings could result in significant costs and other negative consequences"*.
- As of March 2017, 639 legal proceedings have been initiated against Ugitech by employees or former employees for being indemnified for the loss triggered by the anxiety resulting from their possible exposure to asbestos in the workplace. Under French law, there is a presumption of loss of anxiety for people having worked in an asbestos environment without the appropriate protection measures. The French environmental authorities have ruled that the asbestos protection measures implemented on the Ugitech site between 1966 and 1996 were not appropriate. The aggregate amount of the claims is €17,269,000. Provisions recorded in respect of these claims totaled €1 million as of December 31, 2016.

Licenses

Like all industrial companies operating in developed nations, we must obtain licenses from a variety of regulatory authorities, including licenses relating to the environment, health and safety. Obtaining and maintaining these licenses generally subjects us to various conditions (for example, the maintenance of insurance) and the payment of various duties. Our various licenses have various renewal dates. Extensions may be refused if we do not satisfy the conditions of the license, including as to compliance with environmental, health and safety regulations. We believe we currently have, and are in compliance with, all required licenses.

Insurance

We maintain insurance in such amounts and with such coverage and deductibles as we believe to be reasonable and prudent. It is our policy to maintain a general liability insurance, property damage insurance and additional insurance covering our main insurable risks if and to the extent that the insurance coverage is available on reasonable market terms and conditions. Therefore, selected risks are not covered by insurance or insurance coverage is significantly limited in terms of covered risks and/or covered amounts. As a general matter, we maintain our insurance for the group as a whole centrally, covering the material part of our international operations.

Information Technology

We maintain IT departments in every Business Unit coordinated by one global IT organization. We currently use COGNOS for group financial consolidation, SAP BI on HANA for business intelligence.

SAP ERP 6.0 has been successfully implemented in every production Business Unit and most of sales entities for accounting, controlling, sales, distribution, supply chain, purchasing and production control supported by interfaced sub systems. We are in the process to migrate towards group wide CRM platform also based on SAP Cloud solution.

Intellectual Property

The name "SCHMOLZ+BICKENBACH" as well as the related trademark are owned by SCHMOLZ+BICKENBACH GmbH & Co. KG. Since 2006, we have had the revocable right to use them without payment of consideration, but beared all trademark application costs. Certain Group companies hold trademarks for specific products (for example, "HSX" used by Steeltec, "Ugima" used by Ugitech). With respect to the trademark "Ugima" (and, more generally, any trademark with the root word "UGI"), Ugitech has the right (pursuant to a coexistence agreement with Ugine & ALZ, a subsidiary of Arcelor France (now Aperam Stainless France) to use the trademark for stainless long steel products only. It would therefore have to seek Aperam Stainless France's consent if it wants to use the trademark for other products. Steeltec also uses the trademark "ETG" based on a license agreement with Lasalle Steel.

We do not believe our business is dependent upon any patents. Although certain Group companies hold patents concerning their own technical developments, the special long steel industry is not heavily reliant on patents, but rather know-how, often developed in collaboration with the purchasers of a particular product.