

Schmidt + Clemens



Annual Report 2015



The DNA of a world-market leader

What characteristics must a business enterprise possess in order to be continually successful? In our view, one of the most essential is autonomy. We therefore attach great importance to our ability, as a family firm, to act independently – and have done so for almost 140 years.

For our customers in the petrochemicals, energy engineering and industrial furnace

sectors – among others – we invest in technologies, materials and services that set new standards.

Our products are designed so as to enable our customers to obtain the best possible performance from their application. We approach new challenges with an inquiring mind and all our expertise – a combination that regularly produces convincing practical results.

With one of the most modern research facilities in the industry, we are able to realistically mirror production steps, pursue the development of high alloy materials even more efficiently and significantly shorten the duration of development cycles.



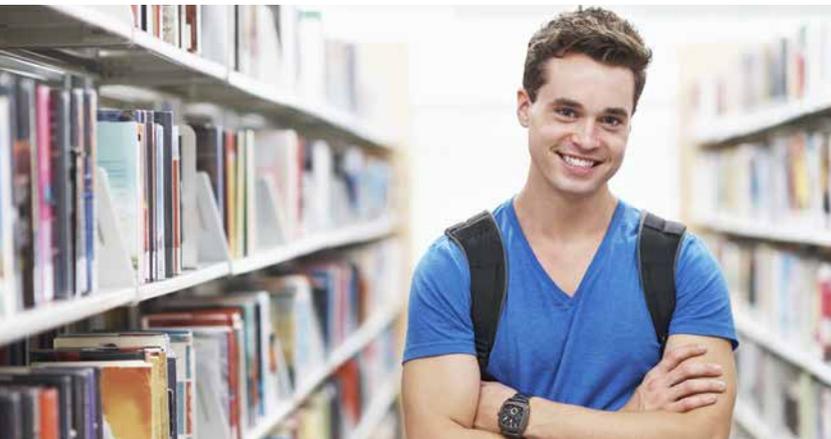
People are our driving force

We are strongly aware of the importance of our employees for the success of Schmidt + Clemens and so we invest heavily in their skills and motivation. Our proprietary S+C Academy offers completely new and very extensive basic and further training programmes. Our works kindergarten, a company fitness studio and our state-of-the-art canteen

are clear indications of the weight we also attach to the work environment. Flexible work time models and the possibility of sabbaticals for personnel in administration and management enable a good balance to be achieved between work and family.

Schmidt + Clemens is certified to OHSAS 18001:2007 and ISO 14001:2004.

Both certificates are a spur for us to sustain our efforts in the fields of environmental protection and occupational health and safety on a high level. At S+C, it is a matter of course for different cultures to work harmoniously together, as is the support we provide for social projects, educational initiatives, schools and sports clubs in our region.





“Despite the difficult operating environment, a highly satisfactory result was nevertheless achieved.”

It gives great pleasure to report that the S+C Group was once again able to close the financial year with a positive result. The result was indeed around 24 percent below budget. However, considering the difficult economic and political operating environment and in light of the high volume of orders on hand, it can nevertheless be seen as highly satisfactory.

Implementation of the investment strategy for process improvement and production expansion continued consistently and successfully in 2015. The enlargements in capacity at the plants in Spain and the Czech Republic are proceeding on schedule, all key figures for our Malaysia operation are above budget, and despite some delays, the parent plant in Kaiserau is registering improvements.

The Petro division was able to maintain its position as market leader in this segment and was once again the biggest contributor to the S+C Group's sales revenue. The strategic decision to place the focus on service applications proved very farsighted, as in addition to dismantling and fitting/installation contracts, the business now includes the organisation and service for the complete logistics and infrastructure at the plants. The good results achieved are massively supported and influenced by selective, extensive research projects.

Despite a strong focus on special applications, business in the Special Products division did not run optimally. The year 2016 will show whether the potential as analysed can also be fully exploited. B+J also failed to meet the expectations in the year under review. The movements in the exchange rate made selling in the euro area particularly difficult. The strategically important approach of S+C of requiring all plants to operate profitably will have to lead to changes in 2016.

Intense effort was devoted in 2015 to the measures for entering the market in the On/Offshore business. At the same time, the presence at conferences and trade shows was further expanded. However, the historically low oil price and the high barriers to market entry have so far prevented the placement of an initial contract in this area. Moreover, detailed market analyses have shown that the niches of interest to S+C in this market are considerably smaller than anticipated. In the current year, therefore, it will be necessary to follow the developments in this sector with close attention.

For 2016, the Advisory Board is expecting to see a rise in both sales and result – despite all the caution called for by the current political tensions. S+C's excellent technology, its outstanding know-how and its consistent implementation of strategic decisions give justified



grounds for this forecast. The efforts targeted at fostering the skills of the new generation are a further supporting factor.

The thanks of all members of the Advisory Board go to the workforce and management who, with their outstanding commitment, have done an excellent job. Our thanks also go to the business partners of Schmidt + Clemens, whose loyalty and trust in us are what makes the success of the Group possible. And last but not least, they go to the shareholders for their continuing unified support for the family enterprise in its 136th year.

With best regards,

Lutz Werner,
Chairman of the Advisory Board



“Through investment in our production sites, we have succeeded in sharply improving our competitiveness.”

In the last financial year, our work focused on two major projects in particular: the start of production at our new plant in Malaysia, and continuation of the restructuring process at our parent site in Germany.

In January 2015, only 16 months after purchase of the land, we were able to transfer production from the former location at Shah Alam, Malaysia, to the new site at Seremban, Malaysia, without ever completely stopping work. This was only possible thanks to the outstanding cooperation between personnel at the sites in three countries, namely Germany, Spain and Malaysia itself. We managed to quickly overcome the usual teething troubles and also to significantly exceed the targets we had set ourselves for 2015.

We already started work in 2014 on restructuring the plant layout at our site in Lindlar-Kaiserau from the bottom up. With further extensive building measures in the past year, we altered the layout in such a way that it now mirrors the logical production steps. After completion of all the work in 2016 and investment on a level of some €14 million, we will be able to sharply improve our competitiveness in Kaiserau.

The debt crisis in the euro zone, the political situation in the Near East and the war in Ukraine all had an impact on the financial year 2015. Our consolidated sales of €291 million were around 5% over the previous year's figure, and thanks to a very good product mix, we succeeded in more or less achieving our profit expectations.

In the financial year under review, the Schmidt + Clemens Group presented itself at two major trade fairs, which took place at almost the same time in June: AICHEM in Frankfurt am Main and Thermprozess in Düsseldorf. Both events are of strategic importance for our group and are an absolute “must” for the industry. While the fair in Frankfurt was concerned with everything to do with chemistry and petrochemicals, the focus of the Düsseldorf event was on heat-resistant materials.

My thanks go at this point to all employees of the Schmidt + Clemens Group who have once again, through their motivation, their expertise and skill, and their outstanding commitment, contributed to the success of the business.

I also wish to thank the shareholders of our family enterprise and the Advisory Board for the confidence placed in us. Firm in the knowledge that we can rely on this strong foundation, we are looking forward to the challenges of the current financial year with confidence.

Good luck!

A blue ink handwritten signature, appearing to read 'Jan Schmidt-Krayer', written in a cursive style.

Jan Schmidt-Krayer,
Chief Executive Officer

Tradition and future



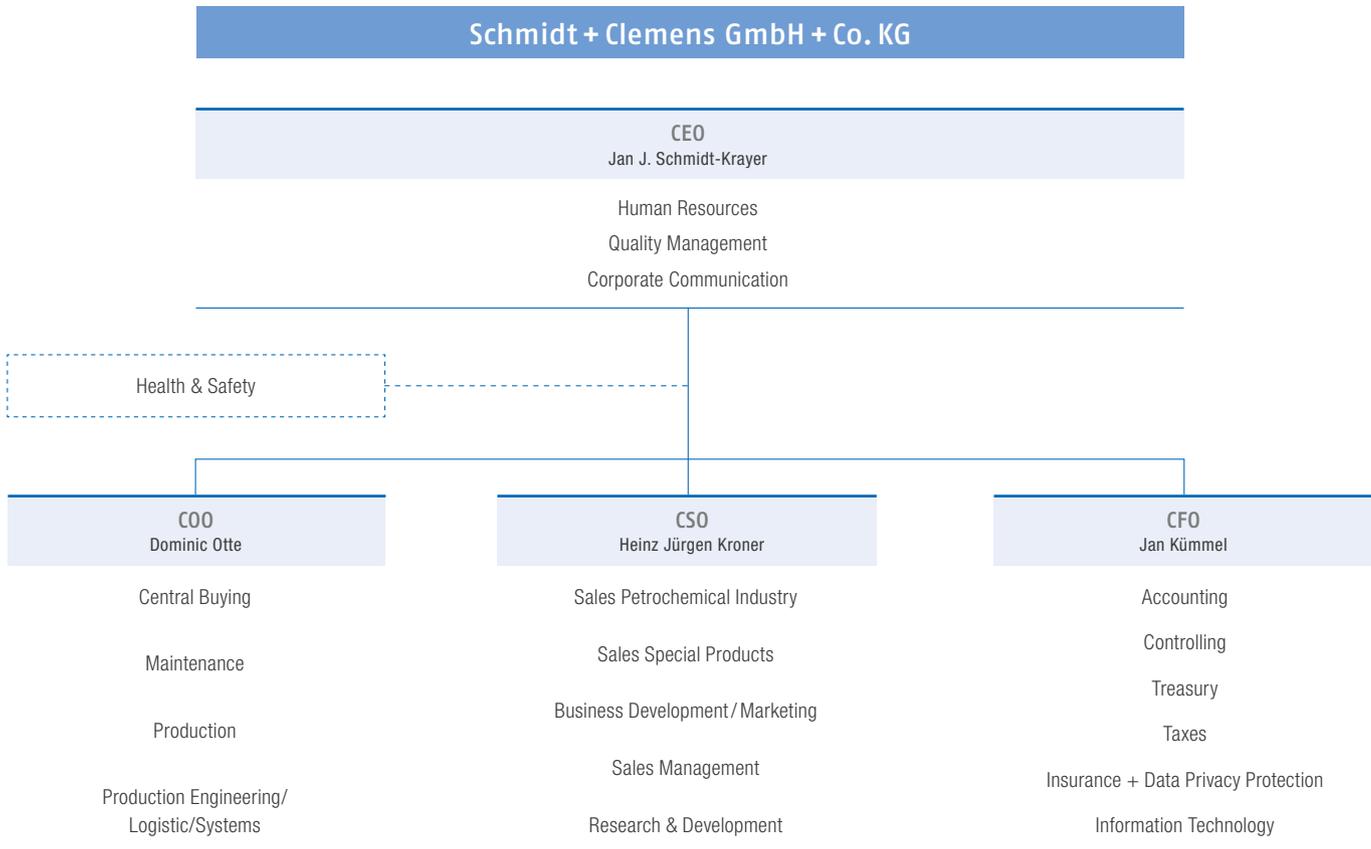
from left to right: Heinz Jürgen Kroner, Jan Kümmel, Jan J. Schmidt-Krayer and Dominic Otte

Corporate structure

Schmidt + Clemens is an independent family enterprise that is proud of its almost 140-year tradition and is looking with confidence into the future. We know our strengths, are continually building on them, and utilize them for the specific benefit of our customers.

Values are the basis for everything we do. This includes conducting our customer relationships in a spirit of partnership and pursuing a cooperative personnel management style, as well as other values such as honesty, responsibility, respect and tolerance.

Our ability to act and react with autonomy and on our own responsibility makes us a fast-responding and dependable partner for our customers.



Business development

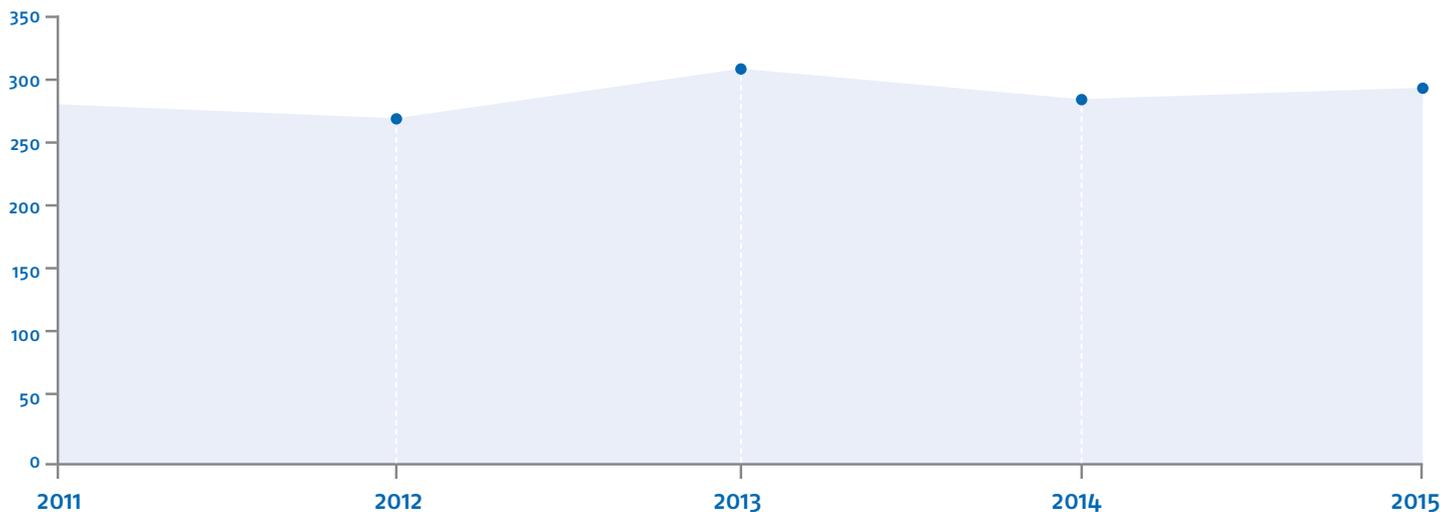
Despite lower raw material prices, the S+C Group succeeded in increasing its consolidated sales turnover in the financial year 2015. A major contribution to this was made by our new plant in Malaysia, housing new, state-of-the-art spun casting production facilities.

The targeted expansion of the production capacities at our Spanish subsidiary and the ongoing restructuring of the layout of the plant in Kaiserau, Germany, helped to increase the turnover figures. Thanks to the aforesaid investments and the growth

in the business volume, the balance sheet total also increased. The increase in the cash position compared to the previous year underscores the outstanding financial strength of our company.

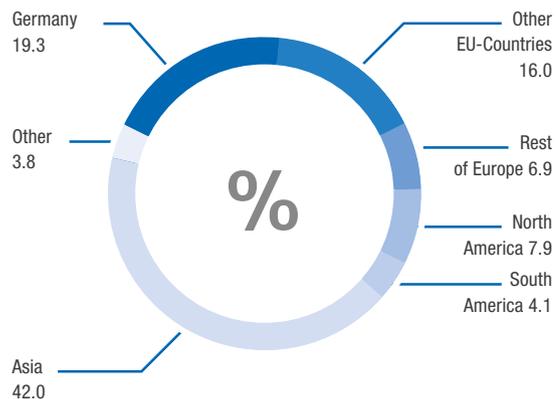
Revenue development in recent years

(in Mio. €)

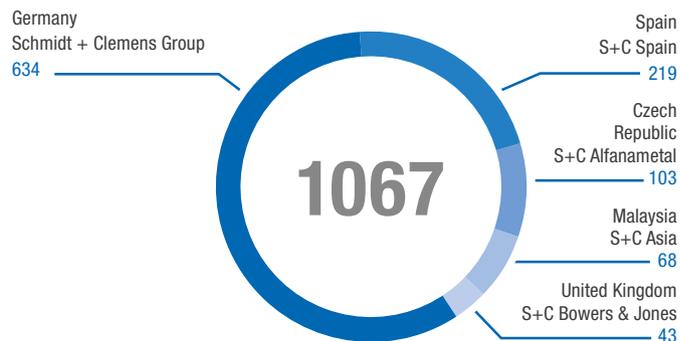


Revenue distribution by region 31.12.2015

(data shown as %)



Number of employees on 31.12.2015



Consolidated financial statements in brief

ASSETS	169,996 (T €)	LIABILITIES	169,996 (T €)
Fixed Assets	56,520	Capital Resources	81,533
Inventories	15,274	Provisions	34,941
Accounts Receivable	66,958	Liabilities due to Banks	35,910
Liquid Assets	30,168	Accounts Payable	17,612
Other Assets	1,076		

Our finger on the pulse of the markets



Sales activities

Petrochemicals

In the course of the financial year 2015, we succeeded in concluding multiple-year framework agreements with several plant operators.

In the steam cracker segment, there is growing demand for radiation zone coils made from Centralloy® HT E, our aluminium oxide-forming material. Within a period of one year, almost 180 furnace applications will be equipped with this material. This is a clear signal from the market, confirming that with our strategy of distinguishing ourselves from our competitors, we are on the right track.

In the sector of reformer furnaces, we achieved considerable growth over the previous year in terms of new order intake. Especially in the field of methanol plants, a number of major revamp projects were booked. But also replacement projects in the field of fertilizers and hydrogen were above the previous year's level. In the hydrogen segment, we succeeded, among other things, in winning orders for three complete furnaces for use in a new refinery in the Far East.

Especially given the continuing low oil price and the resulting uncertainty and reluctance to invest on the part of our customers, we can view these multiple-year framework agreements as a success. They are helping to make up for the loss of new plant construction or plant alteration projects representing a significant investment volume that have been deferred into the future.

The slump in investment that had dogged the direct reduction market segment for the previous few years was partially overcome in 2015. With an intake of new orders worth almost €50 million, S+C was able to present a gratifying result for the year.



Heinz Jürgen Kroner, Chief Sales Officer

“Through numerous sales successes and targeted research, we have been able to crucially strengthen our market position and security for the future.”

Our Centralloy® 60 HT D material was responsible for much of this success; moreover, the list of references is constantly growing.

At the end of 2015, we managed to secure a major project for a new cracker in the convection zones market segment, and are

currently in the engineering phase for it. Because of the size and production depth of this project, the deliveries will continue right into the year 2017. Offers have been submitted for further projects in this segment and are now in the evaluation stage. We confidently expect to see this business field grow further in future.

The financial year 2016 started with a comfortable volume of orders on the books. The established and driving segments for ethylene and reformers are homogeneously distributed. New negotiations for framework agreements are scheduled with a number of customers, especially plant operators. This once again offers us an opportunity to score with our technologies and so secure market shares.

Special Products

The market for our Special Products presented a fragmented picture. While there was strong demand in the regions Asia, America and Middle East, the volume of inquiries from Europe was rather muted. However, despite difficult operating conditions, we succeeded in tapping into further potential, allowing a positive outlook for the year 2016.

The intense sale & marketing activities in the field of industrial furnaces enabled us to gain further reference projects, especially for rotary kilns and pusher tubes, using our Centralloy® 60 HT R material. The high level of satisfaction on the part of our customers in this market segment gives grounds to anticipate constant growth for 2016.

Power Technology

This area can also boast a positive outcome for 2015. As well as the satisfactory level of new orders obtained in the field of fossil fuel systems, we also succeeded in gaining significant new market share for alternative energies.

Special mention should be made in this context of the positive development in e-burner nozzles for coal-fired power stations. Following successful qualification in the course of the year, the first power plant operator placed an order for re-equipment of the plant with this technology. We see Special Products as developing into a further important pillar of the S+C Group's business.

On- and Offshore

Huge unconventional oil and gas reserves are waiting to be tapped into. But producing from them is a technically challenging task and, in particular, makes heavy demands on the material. We have picked up this challenge and are using the time of the low oil price to undertake further certification, registration, optimization and testing of our materials. This investment allows a positive outlook for the future, even if an early recovery in the oil price is not in sight at the present time.



Due to the sharp fall in the oil price, projects for which S+C had submitted offers in 2014 and 2015 have been deferred for an indefinite period. The planned investment volume of some 200 billion dollars has been put on ice. Investments in oil fields have been cancelled and trial drillings postponed. We will make use of this phase to position S+C even more strongly in this segment and also to perfect our technologies.

Research & Development Services

S+C succeeded once again in 2015 in maintaining its innovation leadership, especially in the fields of petrochemicals and direct reduction of iron ore. We were also able to further expand the close cooperation with our customers: Statistical analysis of operating data, combined with inspections and metallurgical examination of materials in practical use, were used for the purpose of process optimization of the individual units and at the same time expanding the know-how of the RDS team.

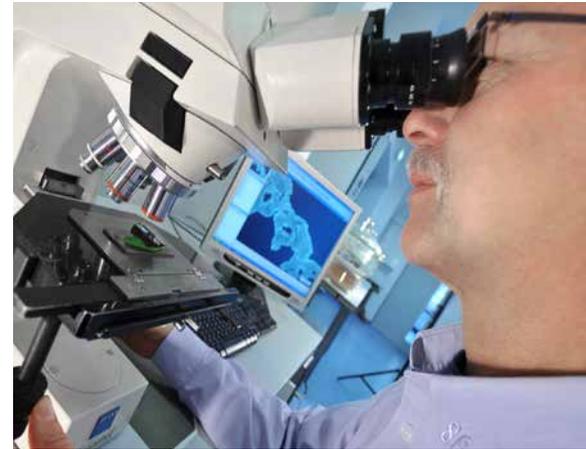
The optimization of S+C static casting and spun casting alloys was successfully completed and the relevant data sheets updated and published. This applied in particular to high-temperature corrosion resistance (material: Centralloy® G 4868 Micro) as well as

creep resistance and improved ductility after ageing (materials: Centralloy® G 4859 Micro and Centralloy® H 101 Micro).

In 2015, the Research & Development Services division intensified its production-near R&D activities. Among other things, this included investment in a software product that enables simulation of the spun casting process. This means that depending on the relevant parameters, the processes that occur during the casting and solidification process can be simulated. Once it is running successfully, this software will help to continuously improve the production process and product quality and to convert new material developments rapidly and efficiently into marketable products.

In 2015, we were granted a large number of patents for various materials and applications worldwide. One major breakthrough in this context was the granting of a patent on our high-aluminium material Centralloy® HT E in the USA.

The outstanding technical competence of S+C was demonstrated through presentations at conferences. These included, for example, the NACE Corrosion Conference in



Dallas (the biggest conference for corrosion experts worldwide), the NACE UAE Corrosion Conference in Abu Dhabi, and the EUROCORR (European Corrosion Congress) in Graz, Austria. Two further publications were written for the NACE Corrosion Conference in Vancouver – including one in cooperation with corrosion experts in the field of sour gas applications, the SINTEF Institute in Trondheim, Norway, and the Norwegian University of Science and Technology (NTNU) in Trondheim.

Participation in these conferences enabled us to continuously expand the RDS network with universities, research institutes and potential R&D partners; technological trends – both inside and outside the S+C core segments – were observed and followed up.

Successful restructuring



Production

At the half-way point in the restructuring measures being undertaken at the Kaiser-au site, with the associated increase in capacities within the S+C-Group, the year under review saw some initial successes. The restructuring project, which was started in mid-2014, is now moving into a new phase, the "optimization of the Petro division". Through the ongoing restructuring measures, we are in the process of reorganizing the piecemeal structures that have developed over the decades in order to make them fit to deal with the new market and customer requirements.

The speedy and professional handling of restructuring the Mechanical Workshops is now largely completed. In the course of the period under review, over 25 machining units were repositioned on schedule and within budget. Having been formerly scattered over three different shops, all the lathes and milling machines are now housed together. Arranging the machines in a U-layout means that multi-machine operation is now possible and is being gradually implemented.

The next major step in the restructuring process is the planned relocation and expansion in the capacities of the deep hole drilling activities. The machines will be installed in an optimized material flow direction so that tubes will in future be able to be transported on roller conveyors, i.e. without the need for cranes. At the same time, the automated welding and assembly processes will be optimized.

The necessary changes to the SAP structure and the introduction of the Hydra system throughout the company have



Dominic Otte, Chief Operation Officer

"The structural measures mean that S+C is efficiently organized and ready for the challenges of the future."

started. The comprehensive introduction of SAP/Hydra will enable us to reach the next level of process optimization at the Kaiserau site. The definition of key indi-

cators and their active optimization will enable us to further enhance our delivery performance in particular.

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Expansion in our international production capacities

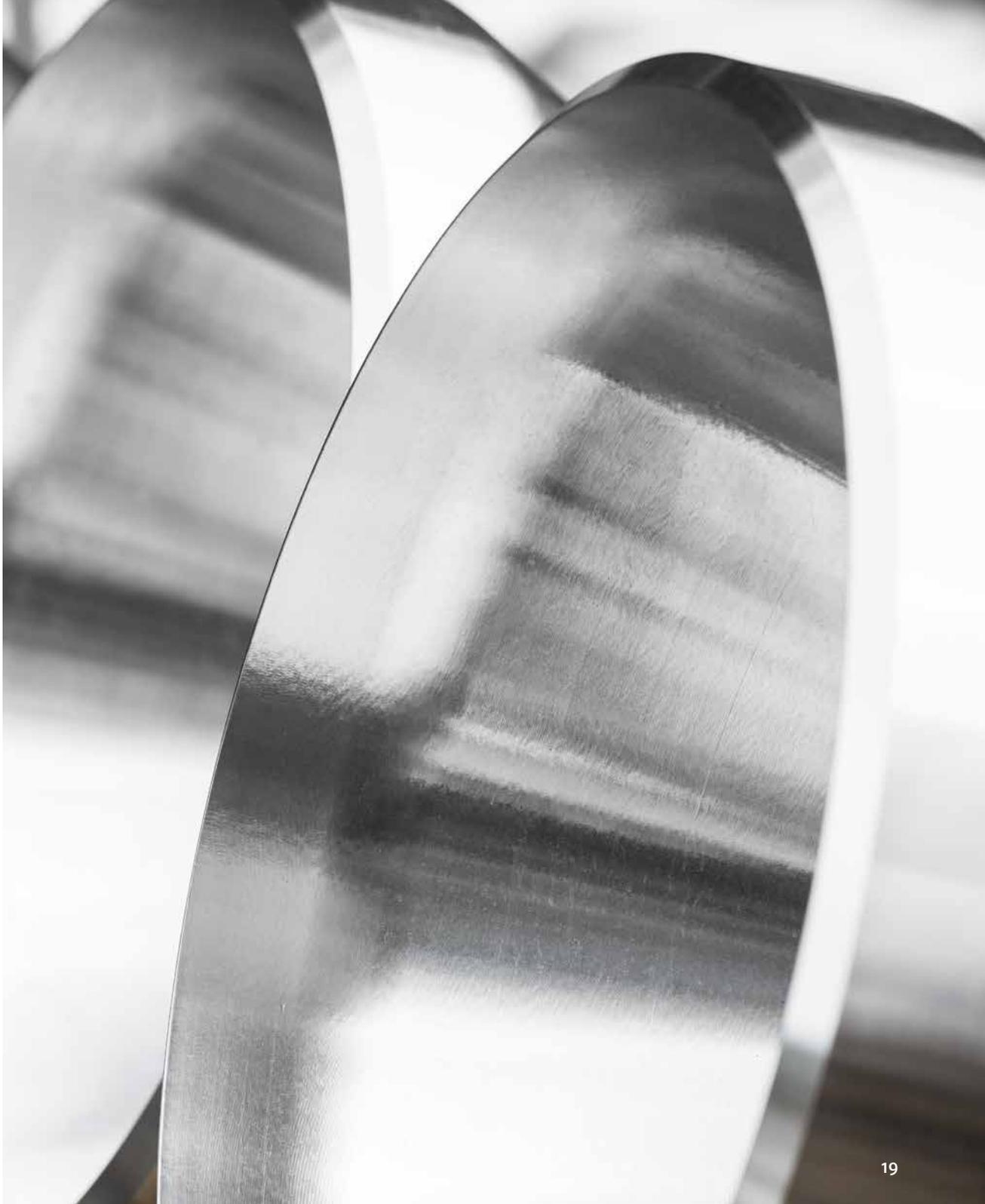
The period under review also saw the start of integration of Mechanical Production at S+C Alfanametal. Through appropriate building alteration measures, the conditions have now been put in place for increasing the depth of production. Our Czech subsidiary S+C Alfanametal will in future be able to supply ready-for-installation fittings and so contribute to enhancing the process complexity.

The enlargement of a complete production line, which has been in operation since 2015, has expanded the production capacity at our Spanish subsidiary by 20%. An increase in the production floor space by altogether 1500 m² to optimize the welding department is planned for the first quarter of 2016.

The start of operation at our newly built plant in Malaysia exceeded all expectations, with the turnover and output figures all above our

planning figures. The flexibility of the site will be still further enhanced in future through targeted investment in additional production facilities.





Continuing on the growth path

Alongside the parent company, Schmidt + Clemens GmbH + Co. KG, the group of companies included in consolidation numbers thirteen further domestic and foreign entities in which S+C holds a capital majority. The consolidated financial statements have been drawn up in accordance with the rules of the German Commercial Code ("Handelsgesetzbuch") in the version contained in the German Accounting Law Modernisation Act ("BilMoG").

In the financial year 2015, despite the considerable drop in raw material prices, the S+C Group succeeded in growing its consolidated sales by 5% to €291 million. Among the principal reasons for this were the start of operation by a new, state-of-the-art spun casting production plant in Malaysia and the targeted expansion in production capacities at our Spanish subsidiary.

Thanks to the investment undertaken and the growth in the business volume, the balance sheet total increased to €170 million. The fixed assets of the S+C Group grew by 11% to €57 million and the current assets by 13% to €112 million. The increase in cash in hand to €30 million from €15 million in the previ-

ous year is an indication of the outstanding financial strength of the company.

S+C continues to have freely available credit and guarantee lines to the tune of €93 million at its disposal, a large part of which are contractually assured for three years. Additionally, pension provisions in a volume of €9 million are available for long-term borrowing purposes. Moreover, advantage was taken in 2015 of the historically low level of interest rates to obtain long-term loans as a means of assuring the Group's future growth path. The sound, long-term financing base, paired with an equity

ratio of almost 50%, means that also in future we will be able to implement even the biggest projects swiftly, flexibly and without problems.

For the financial year 2016, the S+C Group is looking forward to a continuation of its growth trend, and alongside a continuing high return,



Jan Kümmel, Chief Financial Officer

“Despite the considerable drop in raw material prices, the S+C Group was still able to increase its consolidated sales.”

has also set itself business goals which are demanding in qualitative terms. As well as a further advance in our market and technological leadership in the field of spun casting, our focus is in particular on fulfilling the highest quality aspirations and achieving a high level of customer satisfaction.

Consolidated financial statements of the S+C Group on 31.12.2015 (in thousand €)

	31.12.2014	31.12.2015
FIXED ASSETS	50,854	56,520
Intangible Assets	876	1,496
Fixed Assets	49,977	55,023
Financial Assets	1	1
CURRENT ASSETS	99,074	112,400
Inventories	25,994	15,274
Accounts Receivable and other Assets	57,598	66,958
Securities, Bank, Cash	15,482	30,168
DEFERRED EXPENSES	1,197	1,076
ASSETS	151,125	169,996
CAPITAL RESOURCES*	78,541	81,533
PROVISIONS	32,188	34,941
LIABILITIES	40,396	53,522
Liabilities due to Banks	22,348	35,910
thereof due within 1 year	2,035	5,138
thereof due between 1 and 5 years	14,063	18,305
thereof due after 5 years	6,250	12,467
Accounts Payable	13,675	9,720
Other Liabilities	4,373	7,892
DEFERRED INCOME	0	0
LIABILITIES	151,125	169,996

* including shareholders' accounts

Wide-ranging activities



HR Management

In the financial year 2015, there were altogether 1,067 men and women employed throughout the world within the S+C Group, including 634 at the parent site in Lindlar-Kaiserau (figure valid for 31.12.2015). 17 apprentices/trainees (including one taken over from an insolvent external company) and BA students embarked on their professional careers at our site in Germany in 2015. Personnel in training therefore accounted for a very high 7.89% share of the total workforce. In 2016, 11 new apprentices/trainees and three students will begin their working lives at S+C. In total, S+C is currently providing training for 50 apprentices/trainees and students.

HR strategy and HR policy

In 2015, our HR policy had two main focuses: firstly, developing measures aimed at improving the future results situation in Kaiserau, and secondly, putting all the prerequisites in place to enable the continuous growth of the S+C Group.

With the aim of improving the results at our Kaiserau site, measures were undertaken to optimize processes in the administration, including active involvement in the SAP project in relation to the requirements of change management. Discussions were held with the works council to identify ways of reducing costs in all areas of the business, also extending to the optimization of bonus payments and fixed payments granted hitherto under former company agreements. A review of our recruitment strategy relating to apprentices, students and trainees has the aim of ensuring even more detailed planning of our needs in both qualitative (training vocations) and



Ralf Welters, Director Human Resources S+C Group

“Our activities were principally geared to improving the results situation and enabling continuous growth.”

quantitative terms. To enable our blue-collar personnel to be deployed in a more adaptable manner as needs require, a flexibilization

process has been initiated involving additional and multiple qualifications within the framework of so-called “job families”. →

Our further qualification activities at a glance:

PERSONNEL DEVELOPMENT

Training in necessary qualifications and skills, including potential assessment and manager/ talent development

FURTHER TRAINING

Employee training; provision of specialist knowledge; skills upgrading measures in the current activity and for the future, e.g.

- Specialist courses/seminars
- Language courses
- IT user training

BASIC TRAINING

Apprenticeship/traineeship or study (Bachelor) in a recognized vocation, e.g.

- Machine and plant operator
- Plant Mechanic Field: Welding Engineering

Selection is usually carried out through and extensive assessment centre and intensive interviews

Personnel development and further training initiatives

The measures planned in 2014 for fostering the further development and skills of our personnel and management staff were implemented in the year under review.

These included an extensive further training programme conducted exclusively by speakers/instructors from within the company and aimed at both imparting new know-how and strengthening the identification of the employees with the company. Our Young Talent Programme (YTP) for junior management employees met with an excellent reception, with the result that participants for a second round were selected and were able to start on the programme in September 2015.

Many participants in the first course have already been promoted to higher positions within the company or are earmarked for promotion. To intensify our feedback culture and optimize our further training and personnel development measures, we have started on the introduction of an employee feedback/assessment system (Top Down = Starting with the senior management).

Corresponding interview training for management staff and senior management has already taken place, so the initial intensive employee interviews can already be held in early 2016.



Outlook

The year 2016 will be largely dominated by measures to improve the results at Kaiserau as well as a process of even more intensified internationalization of our HR activities. This will involve taking the personnel development measures that are already in place in Germany

– such as the Young Talent Programme, the employee assessment system, manager seminars and the Trainee Programme – and also introducing them at our international companies. In doing so, attention will be paid to observing local cultural aspects. We hope that our international Trainee Programme for

University Graduates will make a substantial contribution to the formation of international networks, and wish to actively promote the closer integration of our group of companies.



Global presence



Outlook

The year 2016 will see a wide range of measures designed to ensure the further growth of the S+C Group. One main aim is to fill the enlarged capacities at our plants outside Germany with orders. We will play a proactive role in important trade fairs, such as the Nace Corrosion event in Vancouver.

In Germany, the new, optimized plant layout will be completed in summer. The introduction of a new Manufacturing Execution System (MES) will assist and simplify our complex work processes.

The construction of the third production shop at our Czech subsidiary S+C Alfanametal will be completed on schedule in March 2016. This will enable S+C Alfanametal to supply ready-to-fit components in future. As a preliminary step, the smelting and casting capacities have already been increased.

As in the Czech Republic, the capacities at our plant in Spain have also been increased by around 20%. This is being accompanied by the construction of a new building for the assembly (welding) of our tube systems, which will go into operation in summer.

In the course of the current financial year, we will further strengthen our profile as a top employer. Our aim is to position Schmidt + Clemens more clearly as an employer brand. The highly successful further training programme "2015+" is being continued, and together with our junior management training programme, will also contribute in future to covering our skilled and management personnel requirements internally.

It remains to be seen what impact the low oil price – and the resulting low level of investment in this area – and the high barriers to market entry will have on the planned start to our new On- and Offshore business field. We will nevertheless continue to work on the certifications for our Duplex and Superduplex alloys and on the registrations with customers and databases.

PRODUCTION LOCATIONS

Germany

Schmidt + Clemens GmbH + Co. KG

Spain

Schmidt - Clemens Spain S.A.U

Czech Republic

S+C ALFANAMETAL s.r.o. koncern

Malaysia

Schmidt + Clemens (Asia) Sdn. Bhd.

Saudi-Arabia

Schmidt + Clemens Saudi Arabia Ltd.

United Kingdom

S+C Bowers & Jones Ltd.

SALES LOCATIONS

Brazil

Schmidt + Clemens Brasil Ltda.

India

Schmidt + Clemens GmbH + Co. KG

USA

Schmidt & Clemens Inc.

Industries

- Petrochemical industry
- Iron-ore direct reduction

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Services

- Metallurgy and material engineering
- Material analysis and examinations
- Metallurgical defect analysis
- Process and material consulting
- Design of tubes and tube systems
- Material welding services
- Mechanical machining
- Heat treatment
- Convection zones
- Site services and logistics

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Industries

- Power technology
- Industrial furnace construction
- Separation technology
- Pump manufacturing
- Machine and plant construction

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Production locations

- Germany
- Spain
- United Kingdom
- Czech Republic
- Malaysia
- Saudi-Arabia