

“We want to generate half of our turnover in services”

Jochen Burg und **Alexander Heck** are responsible for the global service business at SMS group. In this interview with *heat processing*, they speak about the growing importance of services, changing customer requirements and new, performance-based business models.

How important is the service business for SMS group?

Heck: The service business has been playing an increasingly important role for SMS group for quite some time. We wish to support our customers during the entire life cycle of their plants, providing them with the best possible solutions at all times. As “Leading Partner”, we supply everything from a single source. This is what distinguishes us from our competitors. Today, service business entails much more than the simple supply of spare parts. We have developed a comprehensive service portfolio that we continuously align to the current needs of our customers

and which we have been and will be enhancing by digital solutions. Thanks to our global corporate set-up, we are very close to our customers in all regions of the world.

Burg: Historically, SMS group is a classical plant and mechanical engineering company. This is in our genes, and this used to determine our approach to handling – and completing – projects in the past. But we have been realising that the final acceptance by the customer does not mean that our job is done. The way we do our service business today means we have closed the gap between



Jochen Burg (left) and Alexander Heck see the service business as a key growth driver for SMS group. The target is to generate half of the group turnover in services in the future.

isolated projects by successively expanding the range and depth of our services up to and including full-line maintenance packages that we perform for our customers. We see that many customers wish to focus their recourses and attention increasingly on their core processes, resulting in maintenance and other services being to a growing extent handled by service partners. These customers will rely only on partners able to provide the service in the most efficient and cost-effective way while, of course, having the expertise needed to do the job properly. Here, SMS group is in a very strong position: We are the designers of the plants, we commission them, and we know how to service and maintain them. In short, we have a deep understanding of the plants and the underlying technology. On the other hand, we constantly gain new knowledge from our operative service business, which we use in the further development of our technologies and new plant designs.

When customers order new plants from us, the aspect of service seems to be playing an increasingly important part. More and more often, we get involved as early as in the planning phase of a project and receive the order because we can score with our service package in addition to the technology itself, which may compare with that of a competitor. Plant operators look more and more at the added value a plant can generate during its entire life cycle.

Investments in new plants have been declining on a global scale. How important is the service business for your total turnover?

Heck: On the one hand, the decline in investments in new plants is opening up new service opportunities as the plants become older before they are replaced, and with increasing age they require more service and repairs. On the other hand, we consider the rise of new multi-disciplined and digital service offers and the design of new business models as significant growth drivers for SMS group.

Our customised and cutting-edge technology enables us to compensate part of the slowdown in other business areas. Currently, our service segment, which is characterised by less volatile demand,

accounts for about a quarter of our corporate turnover, not including our modernisation projects. Our service segment mainly consists of maintenance, spare parts and repair service, and minor revamps.

Burg: As a matter of fact, we want to further increase the share of our service segment in the future. It is our vision to generate half of our turnover in services. In view of the basis of plants we have installed worldwide, the prospects are very good. A 50:50 ratio is an ambitious target, but it is realistic.

What classical service products does SMS group provide?

Burg: Our range of service products contains a perfect solution for every phase of a plant's life cycle. Thanks to our efficient spare parts and inventory services, our customers can rest assured that downtimes are always kept to the absolute minimum possible. Our solutions also cover logistics in order to make sure that a spare part gets as quickly as possible to where it is needed.

We are ready to support our customers 24/7 with our maintenance and repair service, guaranteeing maximum performance of their plants at all times. Repairs may be performed at the customer's site or in one of our workshops, of which we keep a world-spanning network.

With customised modernisation concepts, we are able to boost the performance of older facilities, providing our customers production increases, expanded product ranges and reduced operating costs.

Specialist knowledge and expertise are the keys to achieving optimum plant operation and maximum output. To us it is important that we share this knowledge with our customers. Therefore, we offer dedicated consulting projects and provide training courses for our customers' personnel and hands-on training experience, at our TECademy and via our Digital Classroom, for example. Many of our customers ask in particular for training courses held by those of our experts who will later be in charge of the commissioning of their plants, in other words by those who know the plants inside and out and are able to convey their knowledge in a practice-oriented way.



Dipl. Wirtsch.-Ing. Jochen Burg (born in 1980, married, 2 children)

- **2017 to date** Executive Vice President BU Technical Service, SMS group
Member of the Executive Management Board
- **2013–2017** Vice President Procurement and Service, Paul Wurth S.A.
- **2008–2012** General Manager Corporate Development, SMS Siemag

The Coronavirus pandemic is a catalyst for digitalisation. What effects does this momentum have on the service business?

Heck: We have been developing digital products and solutions for many years – solutions that are becoming more and more important every time now. This gives us a strong position in the time of Covid-19 and after. Currently in the focus are predominantly those digital solutions that enable cooperation and communication over distances. Via our remote assistance tools, for example, a customer can concede us remote access to their plant data for troubleshooting or process optimisation.

In addition, we use augmented reality to support our customers. This enables us to render remote support to our service technicians physically present at the customer's site or to our customer's personnel via video and audio signal. In a sense, our experts see through the eyes of the person at the customer's facilities to provide targeted support. Only thanks to this option it was possible under the Covid-19 conditions to implement certain revamping measures, for example.

We have also been intensifying our activities in the field of predictive systems which enable us to see how things will develop in the future and which can be used to indicate what would be the optimal time to replace a component. Even today, our condition monitoring system has already many more capabilities than just monitoring tasks. We have been linking processes and data to an increasing degree in order to get more and more insight into the condition of the complete plant. We are well underway in this terrain, but there is still a long way to go.

Digitalisation will bring fundamental changes to the service business and to maintenance practice. As a matter of course, our vision of the learning steel mill also includes service as a core element. We set out on the journey to augmented and virtual reality well before the Coronavirus crisis, actually 15 years ago. The fact that we have had the

corresponding technologies in place for such a long time has helped us a lot in the current situation. We are able, for example, to guide colleagues in China, India or Germany through the digital twin of a plant, switch ourselves in on virtual goggles worn by customer personnel to provide support, without having to be at their facilities physically. We owe our capability of making extensive practical use of these technologies today to the fact that the underlying developments had taken place long in advance.

What kind of service products do you offer within the digital context?

Burg: Talking in concrete terms, our smart maintenance solutions include a wide range of products: eDoc, for example, our electronic documentation service, and IMMS, our integrated maintenance management system, and, last but not least, Genius CM®, our condition monitoring system with Smart Alarm, and our Data Factory. The way we use artificial intelligence helps increase plant availability and reduce costs.

Another digital product in our portfolio is the intelligent spindle, a digital drive spindle which, based on condition monitoring, and the measurement of torsion and vibration characteristics, indicates at a very early stage when service and maintenance measures should be performed. This is only one of the numerous digitalisation products we have developed during the last few years.

SMS digital, which was founded in 2015, focuses exclusively on the development of digital products. During the five years of its existence, the SMS digital team has accumulated vast knowledge, entered into partnerships with many universities and start-ups, and set up a proficient and efficient network. Actually, most ideas evolve while working with the customer.

“Multi-disciplined and digital service solutions and new business models will become significant growth drivers for SMS group”

Dipl. Kfm. Alexander Heck (born in 1982, married, 3 children)

- **2020 to date** Executive Vice President BU Technical Service, SMS group
- **2017–2020** Senior Vice President Integrated Plants / Central Project Management
- **2015–2017** Dep. Vice President Sales and Operations, SMS group USA
- **2012–2015** General Manager Corporate Development, SMS group



We have moved on from sitting quietly in the study conceiving new products. Now we are working closely with our customers on solutions that help them optimise their processes.

In order to support our customers in becoming digital also in managing their maintenance programs, we have developed the Digital Fact Finding Audit. Based on the results of this audit, we get a clear and comprehensive picture of the plant and can offer specific, target-oriented digital solutions to the issues brought up by the customer.

At the end of 2018, you launched the Digital Classroom. What opportunities does this new training environment provide?

Burg: The Digital Classroom offers a great diversity of individual forms of training. The use of integrated touch screens, 3D shutter glasses, tablets and VR goggles creates an entirely new learning experience and makes the training more effective. Maintenance routines, for examples, can be trained on the virtual replica of a plant, even before the real plant has been set up. Thus, employees going through the training will already be familiar with the processes when the new plant is started up. This is an enormous advantage for the commissioning phase, as it will speed up the commissioning activities and make the overall process safer.

Heck: In production facilities, numerous critical incidents may happen – but fortunately they very seldom do. Nevertheless, it is important to regularly train how to react to such incidents. Unfortunately, this is very often not possible on the running plant itself, especially in case of such safety-critical plants that we supply. You easily forget what you do not repeat on a regular basis. Therefore, we use a realistic virtual environment to simulate potential risk situations and prepare our customers just in case they may be confronted with such a situation. The customers’ personnel may even wear 3D goggles, for example, to enter a virtual space with a digital twin of their plant to train on. Just imagine a pump station set up in a virtual space, and virtual tools that you can actually grab and use to simulate the measures to be performed on the various components of the pump station in case of an unexpected incident.

“We are also eager to develop new business fields and to endeavour on new exciting disruptive technologies. Exactly for this we need an intensive exchange with our customers – which is synonymous with good service”

What kind of new business and billing models do you offer your customers?

Heck: We have been observing a growing demand for full-line maintenance services on the plants themselves and in the customers’ own workshops. We have responded to this trend with our Technical Outsourcing Services. Under this business model we take over comprehensive services, including full-line maintenance activities on plants right on the customer’s premises. Our service teams ensure with their know-how that the customers’ plants are at all times in an optimum state, while boosting availability and reducing maintenance costs – and while our customers can focus on the production process and the quality of their products. Our service offer also includes performance-dependent billing models.

Customers have been looking increasingly for options to reduce tied-up capital and for ways to concentrate their assets on their core value-adding activities. For these customer requirements, we offer models under which the customers no longer buy the components, machinery, or ancillary plants from us, but use of the equipment is part of a service package. Our “Software as a Service” (SaaS) and “Equipment as a Service” (EaaS) models have become well accepted in the market and the number of corresponding agreements with customers has been growing continuously. For these service packages too, we offer performance-based billing models.

How do performance-based models work and what do you think of them?

Burg: With our performance-based subscription or “Equipment as a Service” agreements, the amounts payable by the customer depend on how efficiently the agreed KPIs are achieved. Possible performance indicators are production volumes and plant availability, for example. We define the KPIs of the plant jointly with the customer and take all service measures necessary to take or keep the plant at that performance level. This provides the customer added value in the form of higher yield and quality – and in that added value we take our share. Without performance there will be no payment. Our packages integrate mechanics, electronics, services, and digitalisation. Availability, analysis and interpretation of data play a key role in the fulfillment of our performance pledge.

As we guarantee the attainment of the agreed performance indicators, our customers can concentrate fully on their

core activities, while we take a share in the risk of the plant operation. This gives our customers the security that they have a partner at their side who is definitely willing to support them in being successful. Such partnerships are based on mutual trust, transparency and frankness. Numerous references prove our proficiency in successfully implementing this model.

How is the service business integrated within the SMS group organisation?

Burg: Our Technical Service comprises more than 3,500 employees at more than 50 service centres around the world. We have set up our service network with a focus on a strong – where possible, autarchic-regional presence. In this way, we can guarantee that we are close to our customers whenever they need support.

Our service is highly product-specific. That makes it a bit of a challenge. Our regional teams cover specific product areas. We have experts in metallurgy, forging, and flat and long products, for example, and even experts for specific product groups in our teams. The set-up is different from region to region and depending on the type of installed plants and equipment. We do not have the full range of product-specific expertise physically present in every region, but our comprehensive network enables us to draw on specific expert know-how whenever and wherever needed.

3D printing, hydrogen, logistics – what role does service play in the context of new business fields?

Burg: The future is likely to bring major technological change in many areas. Technological change means entering new territory. This provides us the opportunity to break new ground in cooperation with the various areas and departments of our group and with external partners. This will also mean entering into a learning process, as every new technology provides not only opportunities, but also risks.

Under its New Horizon strategy, SMS group has become active in a wide range of different fields – from Additive Manufacturing to battery recycling, from hydrogen production to port logistics. And in all these areas we can bring to bear our full innovative power. We are excited about these topics and look forward to them becoming reality.

Heck: We are also eager to develop new business fields and to endeavour on exciting disruptive technologies. Exactly for this we need partnerships and an intensive exchange with our customers – which is synonymous with good service.

Thank you very much for the interview!



PREVIEW ■ ■ ■



In another interview with SMS group, Dr. Markus Reifferscheid, Vice President Research & Development, talks about the future growth strategy of the company. Interested? Scan the **QR code** and read more about the different growth areas such as hydrogen production, 3D printing, port logistics or recycling.