

ICE ROAD TRUCKERS • When size matters • MAKING WAVES  
Real partners, virtual solutions • REFINING THE SUPPLY CHAIN  
TURBOCHARGER • Next generation of nuclear tubes • NEW CFO

# MEET #1-2016 SANDVIK

SANDVIK GROUP MAGAZINE

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## DEAR READERS,

**WE FACED A CHALLENGING** macro economy in 2015, with demand declining in a number of areas. As we continue into 2016, we are still being influenced by the downturn in the energy segment, as well as by unsteady growth in Asia in response to China's slowing economy. On the positive side, we secured two large orders for tunneling equipment in Australia during the fourth quarter 2015, totaling approximately 270 million SEK.

All in all, the result for 2015 was decent, but not good enough. It was, however, encouraging that our strong efforts and many activities to manage net working capital resulted in cash flow at an annual all time high.

Even though we do not see any major improvements in the market situation during 2016, we move forward with continued focus on our customers, sales and product development. We also need to drive efficiency and make sure our cost structure is in line with our sales performance. As you already know, I am a strong believer in decentralization and in moving accountability further down in our operations to make sure our decisions add value to our customers.

**I HAVE NOW STARTED TO GET** a good insight into the Sandvik world, based on several visits to prioritized markets. I am particularly enthusiastic about the dedication our co-workers have shown in providing service to our customers. It has also been a true pleasure to meet face to face with some of our customers and distributors, and to experience the strong and trustworthy relationships we have. This trust is built upon our passion for making high-quality products and sharing our application knowledge.

In this edition of Meet Sandvik we want to portray the central value of Sandvik that permeates our business and is the basis of our existence – that is, how and where we support our customers. Our aim is to be close to our customers wherever and whenever they need us. Starting on page 10, you'll meet six of my co-workers for whom this is everyday reality.

Customer focus is the guiding star also for two new appointments to the Group Executive Management team: Lars Engström, President of Sandvik Mining, and Tomas Eliasson, Executive Vice President and Chief Financial Officer. Both bring to Sandvik valuable experience and proven track records with global industries. I hope you will follow me on our exciting journey through 2016.

*Björn Rosengren, President and CEO*



# MAKING WAVES

For decades, scientists have been struggling to harness the power of the ocean in a commercially viable way. Oceans cover about 70 percent of the Earth's surface. If fully exploited, about 40 percent of the world's power demand could be supplied by this resource – equivalent to 800 nuclear power plants.

In November 2015, the Anglo-Italian start-up company 40South Energy installed its first H24 energy converter machine in front of Marina di Pisa beach in Italy at a depth of six meters. This unique wave energy conversion machine is designed to be placed below the sea's surface and is dimensioned to supply energy to 40 families.

Sandvik has provided 1,400 kilograms of hollow bars, pipes and fittings to this clean energy project. The materials were chosen because of their excellent corrosion resistance, high mechanical strength and good weldability, among other properties. ■



Read the full story about this potentially groundbreaking project on <http://sandvik.com/sandvikstories>

# NEWS



## THE SUSTAINABILITY YEARBOOK INCLUSION

For the seventh year in a row, Sandvik has been included in RobecoSAM's *The Sustainability Yearbook*, as one of only nine Swedish companies. Read the full news on [sandvik.com](http://sandvik.com).

# 10

**10th Quarry Academy™** was held in November 2015 in San Antonio, Texas, U.S., providing insights into the latest thinking in quarrying. See [sandvik.com](http://sandvik.com).



## SOUTH AMERICAN HUB STRENGTHENS OIL AND GAS POSITION

**SANDVIK HAS** announced the opening of a new service center for control lines in Brazil. The purpose is to strengthen its position in oil and gas, support the growing market for control lines and invest in delivering high-level services to its customers. Customer benefits include shorter delivery times and access to high-quality

products for the toughest well conditions.

"South America continues to be an important growth market for us, and we are very excited to be able to open this new hub in Rio de Janeiro to expand our regional capabilities and better serve our customers," says Nigel Haworth, Oil and Gas Business Unit Manager, Sandvik.

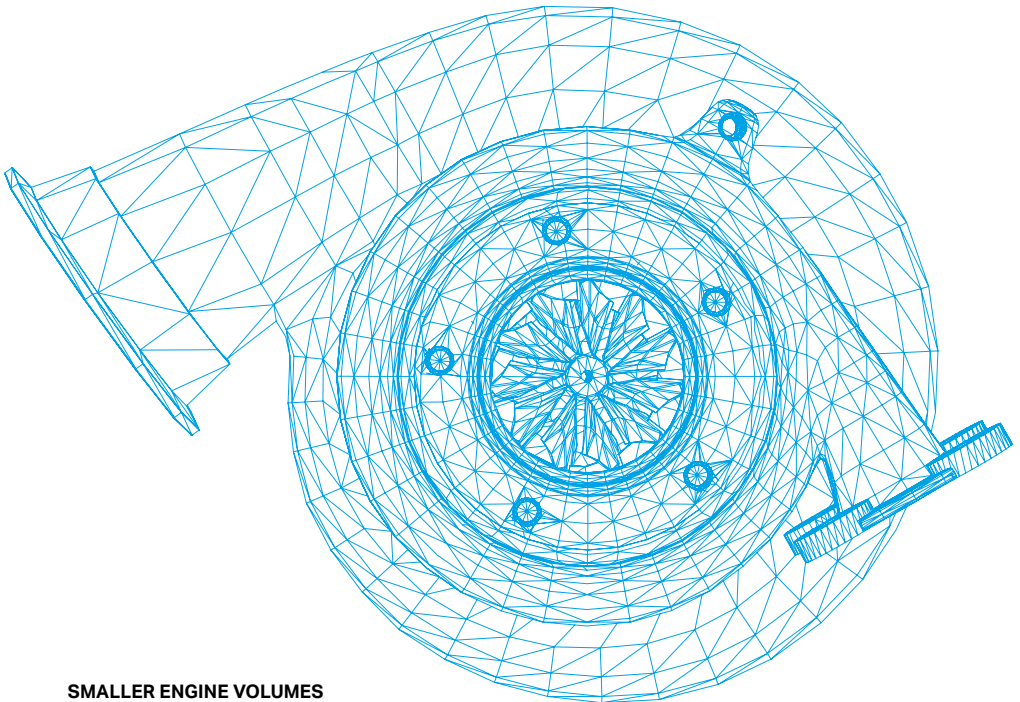


# MORE OUTPUT FROM SMALLER ENGINES

**THE TURBOCHARGER IS ESSENTIALLY** a gas-driven turbine, rotating at more than 300,000 rpm. By compressing a large volume of ambient air for combustion, it makes a vehicle's engine run cleaner and more efficiently.

The exhaust side housing in a turbocharger must be able to operate in temperatures ranging from 850 to more than 1,300 degrees Celsius (1,560 to 2,370 degrees Fahrenheit). The heat-resistant materials and other technologies, such as aerodynamics, rotor dynamics and testing procedures, are not unlike those used in the aerospace industry.

Turbocharging is a key enabler for increased vehicle power density or, in other words, getting more output from smaller engines. As demand for smaller, more efficient engines increases, some 85 percent of all new light vehicles in Europe are likely to be turbocharged by 2020.



## **SMALLER ENGINE VOLUMES**

A major manufacturer expects the average engine displacement to decrease during the next 10 years from 3.6 liters to 3.0 liters in the United States and from 1.7 liters to 1.5 liters in Europe.

## **FUEL EFFICIENCY**

A turbo diesel is up to 40 percent more fuel-efficient than a comparable free-breathing vehicle.



## ICE ROAD TRUCKERS

Working in some of the world's most inhospitable conditions may be nothing unusual for the Sandvik team, but some conditions are harsher than others.

**IN TERMS OF** logistical challenges few places rival Alaska, where reaching diamond mines and the abundant oil fields of the Arctic Ocean means crossing the notorious James Dalton Highway, one of the most dangerous "roads" in the world.

This treacherous highway, which stretches some 660 kilometers through the Alaskan tundra, is the sole route and supply line to the ocean. It can be ice-bound one month and immersed underwater the next. With journeys sometimes taking four days to get products and parts to the more remote areas, the conditions provide enormous logistical difficulties for the Sandvik team who have been

transporting equipment across the terrain for years.

They work closely with a local distributor, which provides much-needed experience and insight into Alaska's unique conditions. This enhances safety and helps to eliminate any costly long-term delays.

The team transports a wide range of equipment, including rock tools, drill bits, drilling equipment, mobile crushing equipment, loaders, trucks, and all the parts and accessories associated with them. "We typically fit our machines with 'Arctic' packages so that machines and components will function and live a long life in these environments," says Jeff Heinemann, Vice President

of Sandvik Construction in North America.

"Work may be completed in multiple shifts over a short period to eliminate equipment shutdowns in the harsh environment, as well as to take into account the human factors – working for longer periods of time within the same harsh environment to complete a project," he says.

This experience brings with it a vital competitive advantage, adds Heinemann. "Alongside our dealers, we have the skill and knowledge to support these sorts of projects," he says. "Due to this fact, only the most skilled suppliers will be asked to submit a bid. It is an opportunity for Sandvik to shine." ■



## NEW SYSTEM FACILITATES EXCAVATION PROCESS

**SANDVIK GEOSURE™** is a revolutionary rig-integrated, high-precision, online rock mass analysis and visualization system for tunneling process optimization. It is fully integrated to iSURE® tunneling project management software, and its unique features improve the overall tunneling process in terms of efficiency and quality.

Not only is it an easy way to fulfill the most advanced reporting requirements in the industry, but it also acts as an important tool for the assessment of rock reinforcement or injection requirements. Additionally it serves as an assisting tool for charging and blasting control, as well as a complementary tool for geological mapping.



## SWEDISH WORKPLACE HIV AND AIDS PREVENTION PROGRAM AWARD 2015

**SANDVIK ZIMBABWE** received the award in the category for Most Comprehensive Program.

"This program is an excellent example of how employers and employees can join hands for a common cause," said Lars Ronnås, Sweden's ambassador in Zimbabwe. "Swedish companies recognize that business is good for them when done with a sustainable approach."



Edith Maziofa-Tapfuma, Patricia Munetsi, Fortunate Munhuweyi, Ian Bagshaw, Annie Banda.

## TAPPING TOOL FOR CAST IRON

### **SANDVIK COROMANT**

has launched a tap for use with cast iron, Coro-Tap® 100 – KM, featuring a larger number of flutes to reduce the force on each cutting edge. The new tap provides outstanding machining results, as well as excellent wear resistance and ability to produce really thin, small chips. It allows for a secure process and a 70 percent longer tool life.



## NEW GLOBAL DISTRIBUTION AGREEMENT WITH GETMAN

**SANDVIK** and Getman Corporation have entered into a distribution agreement under which Sandvik will be

the exclusive global distributor of Getman's products, with the exception of a few locations. U.S.-based Getman is a leading

supplier of production and production-support equipment to the underground mining industry.

# FOCUS

A photograph of a worker in a blue uniform and white hard hat operating machinery in a factory setting. The worker is standing on a platform, looking towards the right. The machinery is complex, with various rollers, belts, and structural elements. The background shows more industrial equipment and a staircase. The overall scene is brightly lit, typical of a modern manufacturing facility.

THE CUSTOMER  
– AT THE HEART  
OF THE BUSINESS



History, innovative force, mission, vision, purpose, values and behaviors are ingredients that are blended into that unique mix that we sometimes call the soul of the company. So what are the elusive characteristics that make Sandvik unique?

**CAN YOU DESCRIBE SANDVIK?** Anyone who has tried to answer that question recognizes the complexity. The numbers provide an easy and unquestionable start: 46,000 employees, five business areas and 150 countries. Follow up with the products and services each business area provides, and the person asking might be satisfied.

But honestly, even if all products and services are described correctly, you've only just begun the story. The true nature of the company lies beyond these facts and figures, which are fairly easy to capture. Any product or service can be copied; it does not make a company unique. To get the real answer, we need to dig into the deeper layers of the company.

**THE AMBITION TO** set industry standards based on a profound understanding of customer demands is the backbone of the Sandvik value chain – from R&D and raw material supply to delivery and aftermarket services.

Supply chains within the business areas vary in their design, due to their different businesses. Size of customer investment is one such difference. While the mining and construction industries call for large customer investment, Sandvik Machining Solutions' customers mainly buy inserts and tools that by comparison cost very little. This also brings a considerable difference in the number of customers and order lines.

**WITH MORE THAN** 150 years in business, Sandvik is well known for its competence in metallurgy and machining. Sandvik PhDs are adjunct professors at several universities, and many Sandvik experts are frequent speakers at conferences around the world.

However, this unique competence has not been offered as a separate service, it has been an integrated part of the product offering. Jonas Rosén, Manager, Stainless Service at Sandvik Materials Technology, works with a dedicated team of 15 colleagues to change this way of working for stainless steel. In addition, there is a service organization that focuses on furnace solutions, headed by Jakub Sartowski.

"Embedding services into a product is problematic," says Rosén. "First of all, customers who don't want the service still have to pay for it. If we give the customers the chance to choose, some won't buy it, but others will buy more service than we would normally include. Furthermore, they will get a firm commitment from us regarding deliverables and time."

Jason Purcell, Global Services Manager at Sandvik Coromant agrees.

"Our services are really growing in importance," Purcell says. "We aim at helping our customers to cut costs as well as increase productivity, and by presenting a strong service offering we can give our customers added value."

**SANDVIK MINING** and Sandvik Construction is on a similar journey, experiencing an increased demand for services that can help customers work more safely and productively. Bringing innovative technology into the mines opens up opportunities for a number of new services. AutoMine® is just one example that enables drill rig operators to supervise the work from a control room several kilometers away, instead of being in the mine.

“Maintenance, testing and problem-solving are some of the services that our customers ask for,” says Henrik Paues, Product Management at Sandvik Construction.

“The initial investment of our equipment might be higher than others, but it is the total cost of ownership that is important. Our crushers can be out there for 20 years, making money for the customer.”

Sandvik continues to utilize all its expertise, close customer relationships and experience to serve customers in the best possible way. Capturing the essence of the company is still complex, and it should be! It is all the aspects combined that makes Sandvik unique and valuable to customers, employees, shareholders and the community. ■

“Maintenance, testing and problem-solving are other services that our customers ask for.”

Henrik Paues, Product Management at Sandvik Construction.





## .....ADDING VALUE THROUGH A COMPREHENSIVE SERVICE OFFERING.....

In striving to continually find better ways to service its customers, Sandvik Materials Technology started structuring its service offering two years ago. Today it is an established way of working, with several exciting discussions under way with a number of customers.

### **HAVEN'T YOU ALWAYS OFFERED SERVICES?**

Yes, but with a more structured approach, it is easier for our customers to understand the value of each service. They know what services we offer and what they can expect. A commercial agreement also means a commitment from us regarding deliverables and time.

### **SO WHAT IS THE ADDED VALUE?**

We have always helped customers when they needed support, but now we can be more proactive. Many industrial

companies are heading in this direction, which means that the service share of their invoicing is increasing.

### **WHAT KIND OF SERVICES DO YOU OFFER?**

We typically help our customers use our material more efficiently, through our competence in materials, manufacturing and scientific methods and processes. The offering is comprehensive right through the supply chain – from application know-how and training to metallurgy, nondestructive testing and failure assessments. ■

#### **Jonas Rosén**

**Position:** Manager, Stainless Services, Sandvik Materials Technology,  
**With Sandvik since:** 1988



## SERVICES HELP TO GROW CUSTOMER BUSINESS

High-quality products and skilled manufacturing experts are normally the two factors that describe Sandvik Coromant. However, in addition to products and solutions, Sandvik Coromant provides a comprehensive list of services. Since 2013, Jason Purcell has been assigned to build a structure for this growing area.

### HOW DO THE SERVICES BRING VALUE?

In a number of different ways. Let's take recycling as an example. The customer returns used carbide to us and receives cash in return. We get usable carbide to produce new tools and our environmental impact becomes lower – a win-win service in all its simplicity. Engineering, manufacturing and logistics services all contribute to better use of resources, while training creates competent people. Those are just a few examples, but all our services are designed to increase efficiency, profitability, sustainability and knowledge for the customer.

### WHAT'S YOUR BIGGEST CHALLENGE?

We have been offering services for many years, for example productivity improvement programs, machine investment support and training. Right now we are working hard to list the different services we offer around the world, evaluate and package them. We must communicate more effectively with our customers about how we can help them grow their businesses. ■



**Jason Purcell**

**Position:** Global Services Manager, Sandvik Coromant  
**With Sandvik since:** 2004

# FINANCING SOLUTIONS HELP GROW CUSTOMERS' BUSINESS

New mining and construction equipment is a big investment. Even though a customer is convinced that high-quality machines will pay off in the long run, a tight budget may enforce a decision to choose a lower-quality competitive solution. Angelica Adamski, Head of Sandvik Credit, has built an organization aimed at winning these customers through beneficial financing solutions.

## HOW DOES SANDVIK CREDIT BRING VALUE TO CUSTOMERS?

We help our customers to become more productive and profitable by enabling them to invest in Sandvik equipment. Thanks to our deep understanding of the industry, in combination with great collaboration with banks and financial institutions around the world, we can provide financing solutions for everything from small to large projects. Sandvik

also has seven finance companies around the world that can assist.

## ISN'T THAT A BIT RISKY?

Every project is reviewed carefully with the customer and Sandvik sales representatives. Risk evaluation is an important part of the job, and we obviously only approve projects with an acceptable expected repayment capacity. Sandvik should never lose a customer because of financing issues. Let Sandvik Credit evaluate the project, the type of equipment required and the timing. Most of the time we can help out. ■

**Angelica Adamski**  
**Position:** Head of Sandvik Credit at Sandvik AB  
**With Sandvik since:** 2007



New mining and construction equipment is a big investment.





## A MISSION TO CUT COSTS AND INCREASE PRODUCTIVITY.....

Sandvik Construction is a business area that serves more than 50,000 customers in a wide variety of application areas, such as tunneling, quarrying, well drilling, civil engineering, dimensional stone, demolition and recycling. Having held several positions at other mining and construction businesses, Henrik Paues knows what it's like to be a Sandvik customer.

### WHAT DO YOU THINK THE CUSTOMER VALUES THE MOST WHEN PARTNERING WITH SANDVIK?

It's almost impossible to define just one thing. It is our total offering that helps our customers increase their productivity while cutting costs. If I had to choose, I would say presence – standing by the customers whenever they need us. To be competitive, we obviously need to provide high-quality, off-the-shelf

products as well, in combination with skilled support close at hand.

### HOW DO YOU WORK WITH THE DEVELOPMENT OF NEW TOOLS?

I work as a link between the customer and our research and development department, to ensure that we develop the tools that our customers need to improve their performance and safety in a cost-efficient way. Sometimes this means solving a specific customer challenge with a tool, and sometimes it is a market intelligence development where we identify and fill critical gaps in our offering. ■

#### Henrik Paues

**Position:** Product Management, Rock Tools, Sandvik Construction  
**With Sandvik since:** 2006





## CHALLENGING BUSINESS CLIMATE PUTS EXTRA PRESSURE ON KEY ACCOUNT MANAGEMENT

With unique material competence and world-class material that can withstand challenging environments thousands of meters below sea level, Sandvik Materials Technology is a perfect match for an industry that faced a challenging 2015. Cecilia Hägglöf works closely with important customers in the oil and gas industry, supporting them in the best possible way through difficult times.

### WHAT IS THE MOST IMPORTANT PART OF YOUR JOB?

To ensure that the Sandvik key account relationships run smoothly and efficiently. I organize customer meetings, coordinate development projects for new products and applications and manage cross-product initiatives, to mention just a few aspects of my job. Right now, when the oil and gas industry struggles, we work extremely closely with our customers to forecast the timing of large upcoming projects.

### WHAT IS SANDVIK'S MOST IMPORTANT COMPETITIVE ADVANTAGE?

Our oil and gas customers see Sandvik as a natural part of their supply chain, and they don't accept any safety risks in the complete chain. Our safety work is therefore crucial. Product quality is of course an important factor, as well as our ability to provide advanced technical support. The fact that we are physically present where our customers run their businesses is also a huge advantage. This means that we are always close by, ready to assist when they need us. ■

### Cecilia Hägglöf

**Position:** Key Account Manager, Oil and Gas, Sandvik Materials Technology

**With Sandvik since:** 2006



# NEW WAY OF WORKING ALLOWS FOR PROACTIVITY

With a new super-modern system and a completely new way of working, all Sandvik Mining Customer Sales and Support Representatives will soon have a global, consistent and efficient way of serving their customers. Debbie Kemp is one of the coordinators behind the change.

### WHY ARE YOU ROLLING THIS OUT NOW?

We have listened to our customers and to our order desk staff around the globe to understand how we can best serve our customers. With this new system in place, the sales and support representatives will have all customer details available when the phone rings. This will save us a lot of time, which means that we can be more proactive and follow up on quotes and activities more frequently, instead of merely taking incoming calls.

### HOW DOES THE CHANGE AFFECT THE ORGANIZATION?

Most importantly, they will be able to provide our customers with even more

value-adding service than they do today. We are working hard to ensure that our employees have the tools they need to do a good job through training and support.

### WHEN WILL IT BE ROLLED OUT GLOBALLY?

Four markets have already started: Australia, South Africa, Mexico and Canada. The plan is to have all markets onboard by the middle of 2017. However, we continually analyze, learn and develop our way of working. There are also a number of other programs under way to find new ways of improving the customer experience. ■



**Debbie Kemp**  
**Position:** Global Customer Support Center Standards Coordinator, Sandvik Mining  
**With Sandvik since:** 1988



# REFINING THE SUPPLY CHAIN

During her almost 30 years with Sandvik, Annika Roos has held a number of positions in several business areas. For the past four years she's been head of Sandvik Machining Solution's supply chain management.



**Annika Roos**

**Position:** Vice President  
Supply Chain Management,  
Sandvik Machining Solutions  
**With Sandvik since:** 1986

**IN 2015**, Annika Roos was nominated for the prestigious Supply Chain Professional of the Year award, along with managers from five other companies. The nominees are selected through a thorough screening of Sweden's 100 largest logistics-intensive companies, based on improvements they have implemented in a number of supply-chain-related aspects during the previous year.

## WHAT DOES THE NOMINATION MEAN FOR YOU PERSONALLY?

I am very proud, but I don't see the nomination as a personal achievement. It recognizes the hard and dedicated work done by the complete supply chain organization.

## WHY DO YOU THINK SANDVIK MACHINING SOLUTIONS WAS NOMINATED?

It's probably a combination of a number of things. Over the years, we have put a lot of effort into ensuring that we can provide excellence in every step of the supply chain. In addition, we are continually focusing on net working capital and the delicate balance between stock availability and cost. All these aspects make a difference for us internally, but they also give our customers a better experience.

## WHAT IS YOUR AMBITION FOR THE SUPPLY CHAIN PROCESS AHEAD?

Our distribution centers around the world provide more than 100,000 customers with around 20,000 orders every day. We continually develop our operational excellence to stay competitive and to live up to the Sandvik goal of setting industry standards. This year, we are also upgrading our systems to a modern platform. Supply chain management is a truly continuous process! ■

## THE AWARD

The Supply Chain Professional of the Year award is a cooperation between the competence development company Silf and the consultancy company Accenture. This year's winner was Göran Mathiasson, VP Operations, Alfa Laval Corporate AB.

## THE SIX NOMINEES WERE:

**WOLFGANG LAURES**, Executive  
Vice President Global Supply Chain,  
Perstorp AB

**PER ÄDELROTH**, Chief Supply Chain  
Officer, Axis Communications AB

**ANNIKA ROOS**, Vice President  
Supply Chain Management,  
Sandvik Machining Solutions

**GÖRAN MATHIASSEN**,  
VP Operations,  
Alfa Laval Corporate AB

**KARIN SVÄRDH**, Manufacturing  
Director, Cloetta AB

**MARTIN LIDÉN**, Vice President  
Direct Material & Program  
Purchasing, Volvo Car Group

# CREATING THE NEXT GENERATION OF NUCLEAR FUEL TUBES

With a unique competence in materials technology, Sandvik partners up with General Electric in a research project aimed at developing failure-safe nuclear tubes in the wake of the Fukushima disaster in Japan.

**AFTER THE FUKUSHIMA** Daiichi disaster (one of the strongest earthquakes ever recorded), the U.S. Department of Energy, together with General Electric (GE), initiated a project in the GE research and development center in Schenectady, New York, U.S., aimed at developing failure-safe nuclear tubes. The researchers evaluated a number of different existing alloys. An advanced Sandvik powder metallurgical alloy proved best in test and met all safety-critical requirements. To ensure the ability to design thin-walled tubes in this material, GE turned to Sandvik.

"Manufacturing of thin-walled tubes in the Sandvik powder metallurgical alloy is a challenge, and requires advanced specialist knowledge in cold working and materials. GE needs a partner who can take part in the research stage," says Jonas Rosén, Manager, Stainless Services, Sandvik. They do not have the resources to develop a full-scale production route themselves."

Working together, Rosén's team and Sandvik's tube manufacturing unit in Germany have performed a feasibility assessment and a number of manu-



facturing studies to find out whether it is possible to produce thin-walled tubes with the Sandvik material. The results have been presented in a technical report. The next step is to produce a prototype of the tube.

"The customer is really satisfied with our collaboration," says Rosén. "The case truly proves the value of our service offering." ■



The Zeebrugge terminal is one of several such terminals in Europe, North America and Asia.

## WHEN SIZE MATTERS

**THE GIANT SHIP** *Parsifal* plows through the water, destined for the port of Zeebrugge in Belgium. The fully loaded vessel is impressive: 265 meters long with a weight of 74,622 metric tons, equaling the height of the Eiffel Tower and the weight of more than seven such towers. With nine decks, the vessel can accommodate more than 6,000 cars, or a mix of cars and heavy equipment such as trucks, drill rigs and crushers from Sandvik.

**WHEN THE SHIP** arrives at the roll-on/roll-off (RoRo) terminal, a super-efficient set of services is activated, from security and processing of customs documents to washing, emptying, storing and forwarding of the goods to inland transportation. Then the process of filling the giant begins again. On any given day, an average of 150 trucks and three trains pass through the gates of the terminal, with about 1,200 tons of cargo.

Global shipping and logistics company Wallenius Wilhelmsen Logistics (WWL) operates the terminal, along with several other terminals in Europe, North America and Asia. With headquarters

in Oslo, Norway, and 3,300 employees around the globe, WWL is one of the world's largest logistics companies for rolling equipment.

**SANDVIK AND WWL** have a long history of working together.

"For decades, WWL has transported Sandvik's sophisticated products on many different ocean routes around the world," says Robert Sandberg, WWL's Account Manager for Sandvik at the company offices in Finland. "Regardless of the size or volume, we will always do our best to find the optimal solution for Sandvik and its customers."

And for Sandvik, WWL's efficiency and capacity is vital. Providing world-class supply management around the clock puts high demands on partners in every step of the process. For Sandvik Mining, efficient transportation of bulky, heavy equipment is one such step, and WWL has the muscles to support it.

"In most cases, WWL can find a transportation solution with a competitive price to our customer destinations," explains Pia Virtanen, Purchasing, Sandvik Mining and Construction in Finland.



*Parsifal is impressive.*

"They can accommodate our machines into their vessels even with rapidly changing customer delivery schedules."

**WWL'S FLEET OF** vessels offers a high degree of flexibility, which is welcomed when you need to transport complete drill rigs or crushing stations to mines across the sea. In addition, WWL also provides related services such as disassembling and assembling of advanced equipment, storage, technical services and maintenance.

"WWL is a truly reliable partner, which is key when shipping our machines to remote places all over the world," Virtanen says. "It's crucial for us to have a partner we can trust in delivering the equipment to our customers." ■

# REAL PARTNERS, VIRTUAL SOLUTIONS

In an industry where change is happening at a faster pace than ever, Sandvik is presenting an opportunity to set up projects in a state-of-the-art facility and forge collaborations that can then be developed further.

**A NEW GROWING NETWORK** will allow Sandvik to cooperate around customer needs and reuse know-how from other countries by providing online access to local experts.

“You don’t have the time to sit and wait for the customers to come to you – you need to be proactive,” says Björn Ring, who is responsible for the virtual collaboration project at the new 4,500-square-meter Sandvik Coromant Center.

Addressing this issue and finding the most efficient ways to meet the customers, both virtually and in person, were key elements in the development of the center.

“Our customers are keen to access novel ways and methods of metal cutting, and the design of the center enables us to hold multiple visits simultaneously,” he says. “We have to deliver what we promise, maintain our relationships and retain focus on the capabilities of our solutions.”

**WHILE THE FOCUS** for now is on the center in Sandviken, the next step will be to take it further.

“We are looking in the future toward rolling out the concept internationally,” Ring says. “It enables customers to have faster access to relevant knowledge and all of our expertise that is scattered around the world.” ■



Björn Ring, connected to local experts from all over the world.





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“It enables customers to have faster access to relevant knowledge and all of our expertise.”

Björn Ring, responsible for the virtual collaboration project.

# REPORT

Figures from the Interim Report

- Trends and tendencies
- Key figures and news
- Meet the new President of Sandvik Mining

			-0,06	-0,14%
	17,12	17,19	+0,56	1,91%
	25,96	42,14	+0,17	3,52%
	25,98	27,87	+0,26	0,89%
	22,73	21,18	-1,14	-4,08%
	25,18	27,33	+13,53	3,32%
	27,17	31,58	+0,82	0,54%
	9,73	9,51	+0,41	1,62%
	25,78	25,32	+0,28	
	27,18	29,81		

# TRENDS AND TENDENCIES

## MATS BACKMAN, CFO

### HOW WOULD YOU SUM UP SANDVIK'S FINANCIAL YEAR 2015?

Sandvik's 2015 was a quite a challenging year as we experienced a tough business climate; hence invoiced sales declined by 5 percent for comparable units at fixed exchange rates. We experienced particularly challenging conditions within the energy segment, which had an indirect adverse impact on demand in the general engineering segment. Uncertainty remained high in the mining segment. We continued to focus on cost reduction measures to mitigate the effects from lower volumes; however, the negative impact from lower volumes was larger than the positive impact from efficiency measures and changed exchange rates.

Cash flow from operations was record-high in 2015 – very much a consequence of the persistent focus to structurally reduce the net working capital, particularly inventories. Within our business area Sandvik Machining Solutions we

launched a record number of new products, which are important for our future competitive advantage.

### HOW WOULD YOU DESCRIBE YOUR NINE YEARS WITH SANDVIK?

Sandvik is a large company, and I've had the opportunity to work in different areas with a lot of fantastic people. I started at Sandvik Machining Solutions, where I spent six years, and then I've spent the last three years as CFO. I have experienced an all-time high before the financial crisis, and an all-time low during the financial crisis. Sandvik has been a great workplace, and the key contributor is all the people I have been privileged to work with. I have also appreciated the culture and the values, which I hope will remain. I would like to express my best wishes to Tomas Eliasson, and I hope he will have as great a Sandvik experience as I have had. ■



**TOMAS ELIASSON** has been appointed Executive Vice President and CFO of Sandvik, effective from April 1, 2016. He currently holds the position as CFO with Electrolux. Mats Backman will leave Sandvik to take on the position of CFO for Autoliv.

# TOUGH MARKET SITUATION OPENS UP NEW OPPORTUNITIES

## WHAT IS YOUR FOCUS RIGHT NOW?

When I was appointed in December 2015, I decided to visit our production units first, to meet our people and understand our offering. My next focus is customers. I had the opportunity to meet many of our customers at the Indaba exhibition and also our sales area managers in South Africa in early February,



**Lars Engström**

**Position:** President, Sandvik Mining  
**Time with Sandvik:** Started on December 14, 2015

## YOU HAVE EXTENSIVE EXPERIENCE IN THE MINING INDUSTRY. WHAT INSIGHTS DO YOU BRING TO YOUR NEW POSITION?

We have seen a fast development of product performance during my time in the industry. Digital solutions and intelligent products that we considered visionary 15 years ago are starting to become a reality today. Another trend is that solution providers such as ourselves are taking a greater responsibility for our customers. We don't just provide them with a machine and drill bits anymore. Performance contracts are becoming more common, which means that attractive aftermarket solutions are critical.

## WHAT ARE THE MAIN CHALLENGES FOR SANDVIK MINING TODAY?

Mineral and metal prices are low right now, and our customers are facing a tough market situation. Projects are delayed, or even canceled, and some mines are put on care and maintenance. Our customers

have an intense focus on productivity, cost savings and cash flow. This is the world we are living in as a supplier, but this opens up opportunities. By working closely with our customers, supporting them through the economic downturn, we can actually advance our position in the market.

## WHAT ARE SANDVIK MINING'S MAIN STRENGTHS FOR THE FUTURE?

Firstly, we have really good products, good people and a good position on the market, particularly with our intelligent products. In recent years we have intensified the development of future key products, which has been a successful approach. We will be introducing some innovative products and solutions which recognize the importance of EHS as a business advantage. By working hard to meet aftermarket demands, we can become a strong partner throughout our customers' product lifecycles. However, we must be humble and realize that there is always room for improvement. ■



## NEW PILOT BITS FOR THE MINING INDUSTRY

Sandvik RR880 is a new range of pilot bits for the mining industry and raise boring, featuring a new design to increase bit life and productivity and reduce cost per meter.

"With the new pilot bits, you can drill longer between bit changes," says Göran Strand, Product Line Manager, Sandvik Mining. "Fewer bit changes mean shorter project times and increased profit at the end of the day."

## FINAL PHASE OF OPTIMIZATION

Sandvik implements the final phase of a three-step supply chain optimization program in which additional structural efficiency measures have been identified. These measures will generate annual savings of about 600 million Swedish kronor, including this final phase.

Results for the fourth quarter of 2015 was impacted by nonrecurring charges totaling SEK 1,5 billion SEK, out of which about SEK 500 million impacted cash flow.

"The total supply chain optimization program will reduce the number of production units by 23, in line with the original target for continuing operations," says Sandvik President and CEO Björn Rosengren. "We will achieve significant efficiency improvements as a result of the reduction in the cost base over time."

## IMPORTANT INVESTMENT IN A NEW PICKLING LINE

The decision to invest in a new pickling line in Sandviken, Sweden, is important in securing stability, capability and quality within the hot production process for tubes. Since almost all tubes produced in Sweden go through this pickling process, this will add great customer value. The process means that the tubes are put in a tank and soaked in different acids to be cleaned and to create the specific surface that customers require. The new pickling line will be equipped with



the latest technology and will improve the work environment from a safety point of view, with, for example, a substantially improved handling of acids. The process will also be more environmentally friendly.

## FIGURES from the Interim Report Q4 2015

### INVOICED SALES BY BUSINESS AREA

MSEK	Q4 2015	Q4 2014	Change	% Change % <sup>1)</sup>
Sandvik Machining Solutions	8,039	8,122	-1	-5
Sandvik Mining	5,509	5,349	+3	+3
Sandvik Materials Technology	3,398	3,758	-10	-12
Sandvik Construction	2,087	2,169	-4	-7
Sandvik Venture	1,901	2,301	-17	-22
Group Activities	6	5		
<b>Continuing operations</b>	<b>20,940</b>	<b>21,704</b>	<b>-4</b>	<b>-6</b>

1) Change compared with preceding year at fixed exchange rates for comparable units.

### OPERATING PROFIT BY BUSINESS AREA

MSEK	Q4 2015	Q4 2014	Change %
Sandvik Machining Solutions	981	1,622	-40
Sandvik Mining	663	705	-6
Sandvik Materials Technology	-427	330	N/M
Sandvik Construction	-128	4	N/M
Sandvik Venture	36	335	-89
Group Activities	-355	-312	
<b>Continuing operations<sup>2)</sup></b>	<b>770</b>	<b>2,684</b>	<b>-71</b>

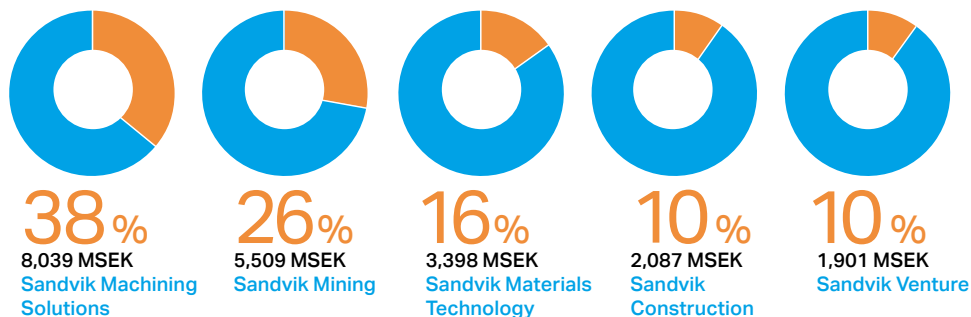
Operating profit adjusted for nonrecurring charges of 1.5 billion SEK for the fourth quarter 2015.

2) Internal transactions had negligible effect on business area profits.

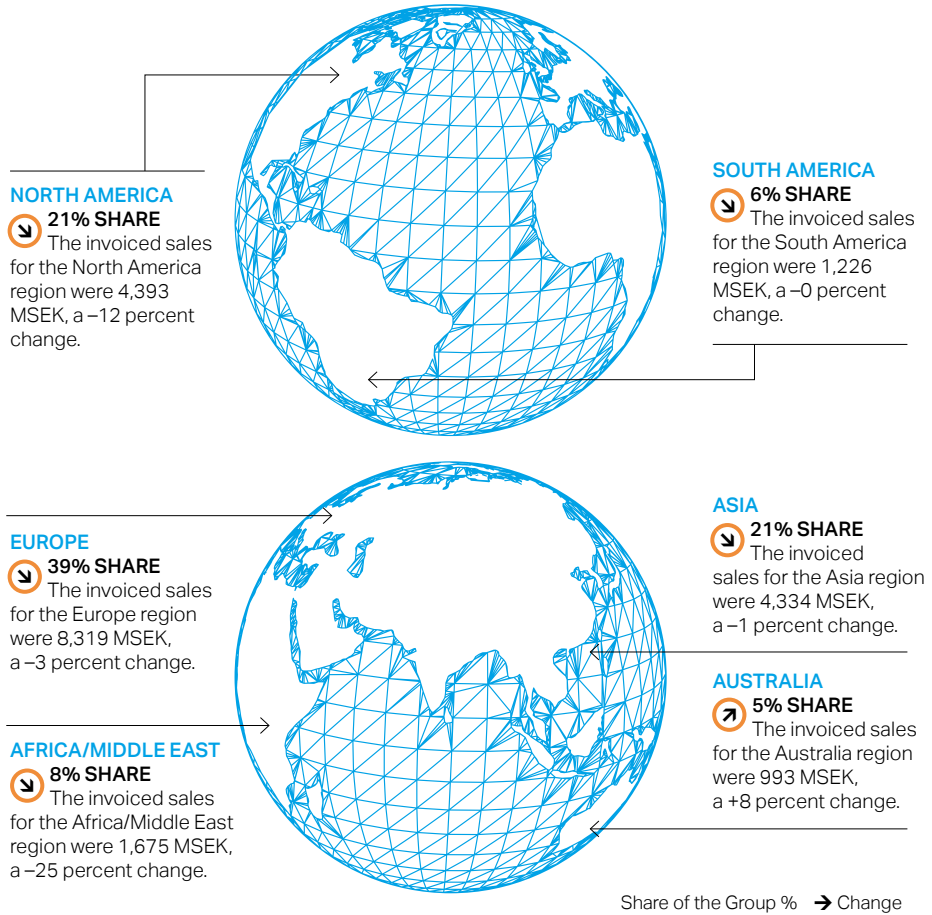
### OPERATING MARGIN BY BUSINESS AREA

% OF INVOICING	Q4 2015	Q4 2014
Sandvik Machining Solutions	12.2	20.0
Sandvik Mining	12.0	13.2
Sandvik Materials Technology	-12.6	8.8
Sandvik Construction	-6.1	0.2
Sandvik Venture	1.9	14.6
<b>Continuing operations</b>	<b>3.7</b>	<b>12.4</b>

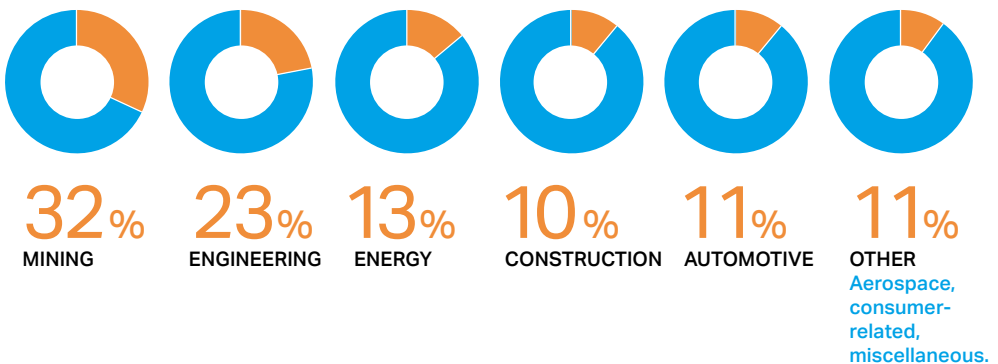
### INVOICED SALES Business area share of Group's total invoiced sales



## INVOICED SALES BY MARKET AREA Share of Group invoicing



## INVOICED SALES by segment





**THE OBJECT** | Bits for any rock condition

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**Whatever the conditions, Sandvik's drill bits make the job easier.**

They are fitted with our proprietary cemented carbide buttons, which are designed to drill further. The drill bit bodies are made from precision hardened nickel molybdenum steel, with a compound curve shape for faster and smoother cutting and easier removal of cuttings. The bits in the new range have an optimized head length with maximized steel support for the cemented carbide buttons, deep face grooves for excellent flushing and an aggressive cutting structure.