

**RECORD-BREAKING LAUNCH** • New board members • **AWARDS X 3**  
An elephant's tale • **WORLD'S FIRST 3D PRINTED CAR** • The girl and  
the robot • **TRENDS AND TENDENCIES** • Safety from the ground up

# MEET #2-2015 SANDVIK

SANDVIK GROUP MAGAZINE

## BUILDING A CULTURE OF SAFETY

Sandvik creates a safer environment for its customers through its products, methods and expertise. **PAGE 10.**

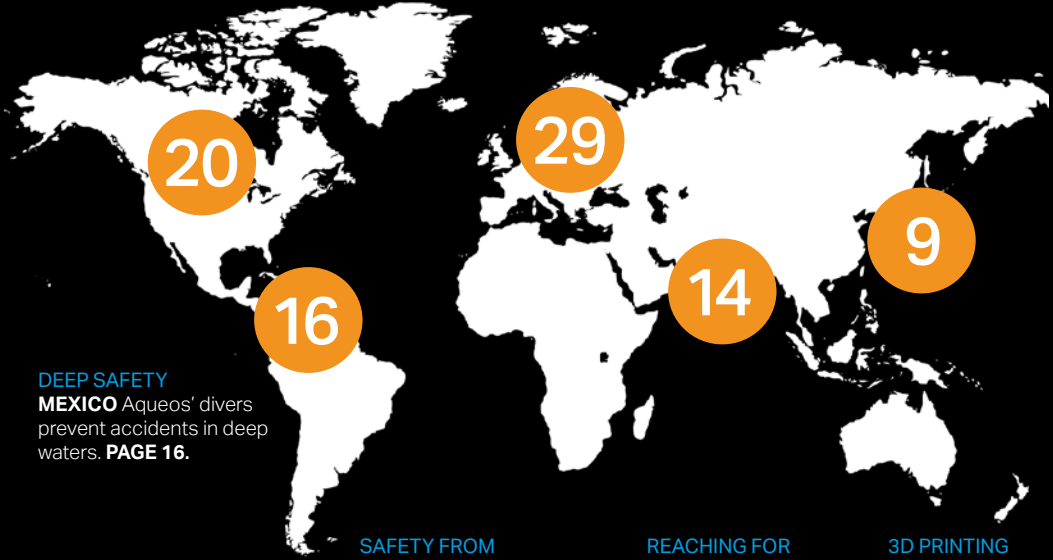


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**SWEDEN** Artist Robyn wants to see more girls in technology. **PAGE 29.**



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**MEET SANDVIK:** The Sandvik Group magazine

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## A SAFE AND STEADY COURSE

**SANDVIK HAS HAD A STRONG START TO 2015.** Our first quarterly result showed positive development in terms of earnings growth. We actually delivered the best first-quarter cash flow we have ever delivered; SEK 2.4 billion. It is encouraging to see that our efficiency measures are showing results and that we are progressing toward a more efficient and focused Sandvik.

Still we need to continuously set the bar higher to be the industry leader. We are in the midst of ever-changing global market dynamics and business needs. To stay ahead we need to remain focused and adaptable. We must take advantage of the opportunities change usually offers and build on our success: our close collaboration with our customers. Our competitiveness lies in helping our customers strengthen their competitiveness.

The Haglund Medal is one way of recognizing Sandvik employees and their significant product development. The 2015 Haglund medal was awarded to Anders Digernes for his development of a new generation of Silent Tools®. It was presented at the Annual General Meeting, where we also welcomed our new chairman, Johan Molin, as well as two newly elected board members, Jennifer Allerton and Claes Boustedt.

**ON A MORE SOMBER NOTE,** two recent occurrences have affected me greatly. We lost one of our employees in a tragic airplane crash in the French Alps, and, in an equally tragic accident, one of our subcontractors was fatally injured during maintenance work at our site in Zhenjiang, China. This is beyond comprehension, and it is not acceptable. Even though we can be pleased with the significant improvement to the Group's lost-time injury frequency rate in recent years – the lowest in Sandvik's history – we cannot be satisfied. I want to underline that our vision is zero accidents.

Safety is a never-ending journey, not a destination. Our goal is to create an industry-leading safety culture and work together with our customers and suppliers to provide a safe working environment. Read more on page 10.

*Olof Faxander, President and CEO, Sandvik AB*



# WORLD'S FIRST 3D PRINTED CAR

Strati is the first 3D printed car. The two-seater is made of plastic components and takes 44 hours to print, something which manufacturer Local Motors showcased at the Detroit auto show.

The car is outfitted with an electric car battery, motor and suspension from automaker Renault and can go up to 25 miles per hour. The whole project could very well be a first glimpse of the future of the automobile manufacturing.

Sandvik focuses on the 3D technique and has opened a 3D printing R&D center in Sandviken, Sweden, and is in the process of hiring a team for the center, which will house the company's 3D initiatives, including creating shapes and objects that can't be realized with traditional production processes. "We're taking this to another level," says Mikael Schuisky, Operations Manager for Additive Manufacturing at Sandvik. "We're making a focused strategic push to research this for the benefit of the entire Group." ■



Read more about Strati  
and other 3D-printed vehicles  
at [localmotors.com](http://localmotors.com)

# NEWS



## GEAR SUMMIT 2015

Sandvik hosted the first-ever gear summit in Sweden for world-leading decision makers and experts from the gear industry. Read more on [sandvik.com/sandvikstories](http://sandvik.com/sandvikstories)

# 3D

**Asia's first 3D printing conference and exhibition took place this spring**, and Sandvik Osprey, an experienced developer and manufacturer within the additive manufacturing industry, was present.

## DIVERSITY AWARD TO SANDVIK PRESIDENT

Sandvik President and CEO Olof Faxander has been awarded the prestigious "Diversity Award – CEO Driving Diversity", by Sweden's leadership magazine, *Manager*. The magazine's jury commented, "Olof Faxander has, from a business perspective, clearly linked diversity to the business strategy."

Faxander is recognized for Sandvik's clear strategy and targets for diversity and inclusion, which include increasing the global percentage of women in managerial positions within the organization.

## SUSTAINABILITY CONFIRMED

### SANDVIK HAS BEEN RECONFIRMED

as a constituent of the Ethibel Sustainability Index (ESI) Excellence Europe, which indicates that the company performs better than average in its sector in terms of sustainability. Being included in ESI confirms Sandvik as an interesting opportunity for a wide range of international investors and acknowledges the company's strengthened focus on, and proactive work in, fulfilling its goal to be a top sustainable company and how that creates value for Sandvik.



**"Our brand stands for customer value, quality and expertise: these values are at the heart of everything we do. We are developing our various channels – for example, our exciting new website – to ensure that they reflect our values even more closely than before. This new *Meet Sandvik* is another example that we hope you appreciate and enjoy!"**

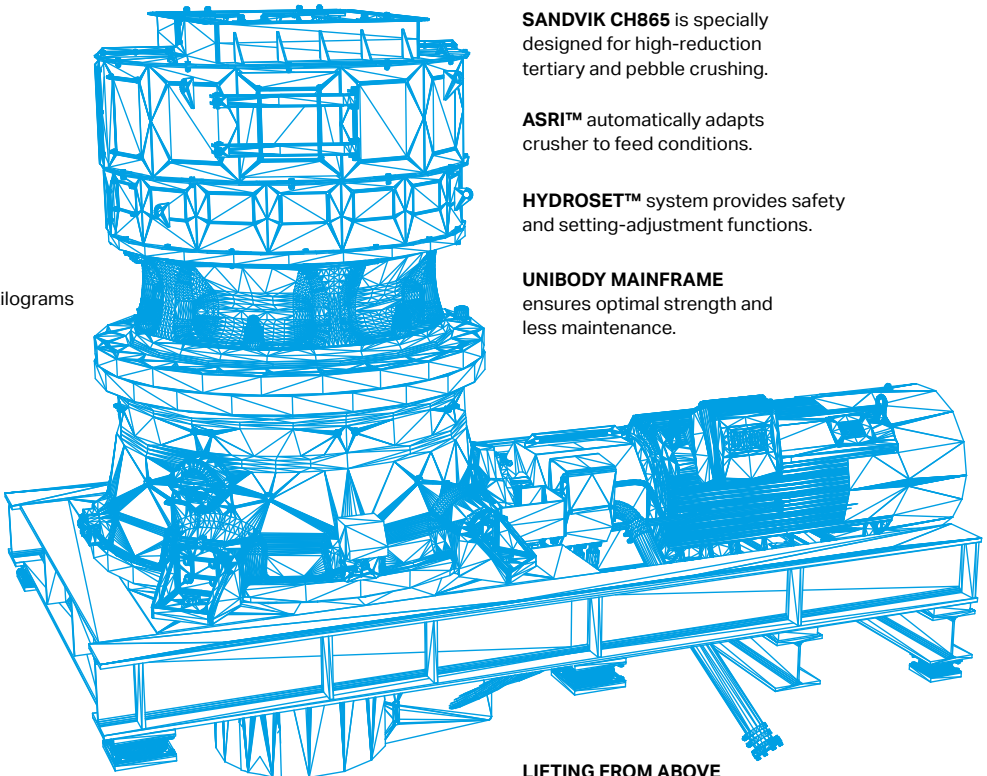
Jessica Alm, Sandvik Executive Vice President and Head of Group Communications

# HIGH-PRODUCTIVITY CRUSHERS LAUNCHED

**EARLIER THIS YEAR** Sandvik launched two new mid-range mining crushers, Sandvik CH860 for high-capacity secondary crushing and Sandvik CH865. Sandvik CH865 replaces a previous crusher and delivers more final product in a tertiary crushing stage application, allowing increased milling throughput. Milling is often a processing bottleneck and CH865 provides increased size reduction and delivers a more final product to the mill, allowing the mine to improve productivity.

"In these challenging times, mines are often looking for increased productivity without necessarily expanding their plants," explains Ulf Carlqvist, Business Line Manager Crushing and Screening, Sales Area Europe, at Sandvik Mining. "Both Sandvik CH860 and Sandvik CH865 are easy to install as replacements to achieve this, as has been proven in the extensive field testing we have performed."

**WEIGHT**  
39,000 kilograms



**SANDVIK CH865** is specially designed for high-reduction tertiary and pebble crushing.

**ASRI™** automatically adapts crusher to feed conditions.

**HYDROSET™** system provides safety and setting-adjustment functions.

**UNIBODY MAINFRAME** ensures optimal strength and less maintenance.

**LIFTING FROM ABOVE** minimizes risks and allows for safer maintenance.



The new M 5B90 milling tool was part of the solution Sandvik Coromant provided for Volvo Cars.

## SANDVIK WINS VOLVO SUPPLIER AWARD

Awarded for excellence after delivering a time- and cost-saving solution.

**SANDVIK HAS BEEN AWARDED** the 2014 Volvo Cars Award of Excellence for its tooling supply work. The award was created in 1998 to acknowledge outstanding contributions made by suppliers that have gone the extra mile and contributed to the success of Volvo Cars. A total of 60 suppliers were nominated for the Volvo Cars Award, where finalists were recognized in the categories of Quality, Cost Competitiveness,

Technology, Environmental and Social Responsibility, and Special Recognition. The awards ceremony took place in January in Sweden.

Sandvik was honored for excellence in the Special

Recognition category after identifying and documenting seven projects which improved quality, reduced downtime and extended tool life, delivering a 39.8% saving in tooling costs for Volvo.

**“In addition to a lifespan that is three times longer, there are fewer burrs and quicker tool changes.”**

Vesa Paananen, Volvo Cars, about the Sandvik tooling solution



# 112

**The kilometers of railway** that will help connect a variety of business centers in Germany. Four Sandvik DT820 and DT821 Jumbos will be used in the construction.



Follow the new bloggers Anna Malycheva, Global Trainee and Muzaffer Bayazitoglu, Sales Manager, at [sandvik.com/blog](http://sandvik.com/blog)

## STRENGTHENED R&D TEAM IN INDIA

Sandvik Asia will be hiring about 100 scientists in the coming years to strengthen its research and development team and activities in India. It is also setting up a state-of-the-art global R&D center attached to the manufacturing facility currently being built at Chakan near Pune at a cost of USD 45 million. The R&D center, along with the first phase of the manufacturing unit, is scheduled to be commissioned by 2016.

## HAGLUND AWARD WINNER

**ANDERS DIGERNES** of Sandvik Coromant received this years Wilhelm Haglund medal for the development of a new generation of the technology behind vibration-dampened tools, SilentTools®.

"What is being rewarded here is a good example of successful product development. The new generation Silent Tools®,

possessing a unique patented solution, enables our customers to obtain the highest performance for long tools," says Olle Wijk, Head of Group R&D.

The Wilhelm Haglund Medal for the Product Developer of the Year has been awarded since 1986 and is named after the legendary Managing Director Wilhelm Haglund, who laid the foundations for the Group's successes in the cemented-carbide area.



PHOTO: STEFAN ESTASSY

## MOST INNOVATIVE CORPORATE FACILITY

Sandvik's new center in Sandviken, Sweden, has won an award with partner VisuellDesign for the building's innovative IT and audiovisual solutions, at the Integrated Systems Europe conference in Amsterdam.



**"We make more than 400 parts in our machine shop for Don Schumacher Racing.** The world-class quality we produce is possible because of the advanced machining solutions and cutting tools provided by Sandvik Coromant."

Don Schumacher, DSR owner and International Motorsports Hall of Fame member. Sandvik is a primary sponsor of DSR.

# FOCUS

PHOTO: SANDVIK





# SAFETY IN ALL AREAS

Whether it is underground, under water, at a plant or in an office, safety is a number one concern in a job environment. But safety does not only have to be a compliance matter, it can also be regarded as a business advantage.

TEXT: ÅSA BACKMAN

In many ways, Sandvik is taking the lead in creating a safer environment for its customers through its products, methods and expertise.

**A LARGE NUMBER** of Sandvik customers operate in hazardous environments, such as mines, oil and gas facilities and nuclear plants. Other industries, such as aerospace, automotive and medical, may face lower production risks, but the safety requirements on their products are extremely high. All of these industries place a high priority on the safety of their employees and their products.

"You can do everything right for 999 days, but if you have one serious injury on the next day, all the injury-free days will be forgotten," says Stuart Evans, Global Head of Environment, Health and Safety (EHS), Sandvik Group. "The safety of people is of course what matters the most, but a good safety performance is also good for marketplace credibility and for strengthening your brand."

Having a strong safety culture is an important part of the Sandvik strategy, both in the company's own production and when providing equipment or services to customers. In practice, it comes down to risk management.

"To remove all risks, we would have to stop all the machines, but that's not what anyone wants," says Christian Hörnkvist, Global EHS Manager at Sandvik Materials Technology (SMT). "The most important part with safety is that we care for all employees and customers. All accidents can be prevented. We want to produce, to exceed customer expectations and to make money, which means that we have to be good at identifying and preventing risks. The same situation applies to all our customers."

Customers will always be looking for better materials or technologies to make their operations safer. Oil and gas is a good example.

"There is no room for mistakes," says Bertil Waldén, R&D Manager, Tube, Sandvik Materials Technology. "Still, accidents happen. All we can do is ensure that the material and services we provide keep the highest standards and never fail."

Waldén received the 2012 Wilhelm Haglund Medal for his contributions to the development of stainless steel umbilical tubes for the oil and gas industry, which substantially improved safety compared with the former reinforced plastic tubes.

**AMONG MANY OTHER THINGS** Sandvik has developed products and services that minimize slurry handling and dust for its customers. Furthermore, Sandvik has developed tools and machining processes that can handle the extreme safety demands in the industries where they are used. Tight tolerances and vibration-free, smooth machining processes are critical in avoiding residual stress in the components.

"Our tools must be both productive and extremely reliable in increasingly advanced materials and often very large components," says Per Forssell, Business Segment Manager, Energy, Sandvik Coromant. "Patented products, such as Silent Tools™



boring bars and Coromant Capto™ tool holding system, help our customers machine large and complex components without vibration.”

Within the construction industry, Sandvik often helps its customers carry out maintenance. When Sandvik technicians see safety risks, they always discuss them with the customer to help them improve safety in its operations.

“We had a situation where a Sandvik technician from Italy found a number of safety issues at a customer site in Ethiopia on his first visit,” says Peter Lange, Global EHS Manager at Sandvik Construction. “After a written nonconformity report, the customer quickly provided new routines for a safer crushing plant. The technician could then go back and start maintenance activity under safe conditions.”

**NUMEROUS FEATURES ARE INTEGRATED** into Sandvik’s products for the mining industry to improve customer safety. Risks are evaluated during the design of equipment, including an assessment of the tasks that operators will perform. Areas that are addressed include operator visibility, safety during maintenance and operation and any potential hazards arising when accessing a machine. At the PG Silesia coal mine in southern Poland, Sandvik trains employees in EHS issues. The training includes everything from using personal safety equipment to measuring the levels of methane before excavating.

Strong environmental concerns lead to increasingly advanced processes and products. There is a growing demand for more advanced materials, competence and products that can handle this environment safely. Meanwhile, demand for energy is growing, while energy is becoming more and more challenging to produce.

“External safety requirements derive from two ends – environmental concern and increasingly challenging energy extraction,” says Waldén. “Both support our business strategy perfectly. The more challenging, the better for us.” ■

Stuart Evans has been working around heavy industry since his university years. He's spent most of this time in mining, but he has also worked in oil and gas and nuclear facilities. Environment, Health and Safety (EHS) issues are therefore nothing new for the Global Head of Environment, Health and Safety, Sandvik Group.

# MOVING FROM COMPLIANCE TO BUSINESS ADVANTAGE

## HOW DOES SANDVIK WORK WITH EHS FROM A CUSTOMER PERSPECTIVE?

Our customers often look for a supplier who has EHS values and a culture at least as strong as their own. They will typically look at the things we say in our Sustainability Business Report and marketing information and then compare it with what we actually do. You can say that they evaluate whether we walk the talk. If we pass this test, they will start looking at how well we have built these values into our product or service offering to the market. To judge this, a customer may look at, for example, whether we have eliminated the major safety issues associated with an underground loader, or how much of our tubing is made from recycled materials.

## HAS SANDVIK ALWAYS HAD THIS VIEW ON EHS?

During its long history Sandvik has probably always thought about EHS in line with current community and market expectations. What has changed in recent times, certainly over the past ten years, is the rate at which those expectations have

increased. It is no longer good enough to think about EHS as an added-on part of our business. Nor is it good enough to just meet the legislated rules and regulations. I think of EHS as a culture change journey. The part of the journey we find ourselves on now is about fully integrating EHS into every aspect of our daily work and about seeing EHS as a business advantage rather than a compliance issue.

## DO YOU MEASURE THE PROGRESS SOMEHOW?

We measure a lot of different aspects of EHS on a regular basis – both the outcomes, such as injury rates and carbon dioxide emissions, and the preventive activities. Every business area has formulated plans on how it will improve its way of working with EHS issues. We follow up these plans on a quarterly basis and report progress to the Group Executives. Our major competitors are all starting to change their way of working and are communicating more about EHS as well, so we need to keep up our momentum and always try to be one or two steps ahead.



## WILL WE WORK DIFFERENTLY WITH EHS IN THE FUTURE?

Most definitely. As the world changes, EHS must adapt more quickly for us to meet the changing community expectations. As an example, new technology and improved data transfer rates make higher levels of automation possible. This makes it possible to move more people away from the more dangerous and remote workplaces. Instead of operators working in deep mines, they can run machines from a safe location on the surface. This transition has already started. ■

# REACHING FOR THE TOP

India's Hindustan Zinc Limited (HZL), the world's leading zinc producer, has a big ambition: They want to become No. 1 in the world when it comes to safety.

**THE BIGGEST ZINC MINE** in the world is the Rampura Agucha mine. The mine has been in production since 1990 and employs more than 2,500 people. Beyond ensuring that production runs as it should, the mine's top priority is strengthening its profile when it comes to Environment, Health and Safety (EHS). An important part of this initiative involves working with partners that have a strong commitment to EHS.

"Sandvik brings the best in safety practices from around the world," says John Palmer, HZL General Engineering Manager, Rampura Agucha. "We envision that the company will be a part of our team by bringing in good maintenance practices and also good safety features on equipment."

Sandvik has supplied more than a dozen pieces of equipment to Rampura Agucha, including drills, underground loaders and trucks. The equipment has helped transform the mine into a modern and safe mechanized operation.

"Sandvik equipment holds a very high standard, and that's why we chose this equipment," Palmer says. "The loaders we are using have the latest features. They have the ability to be used remotely, which means that we can retrieve loaders in breakdown in a safe manner."

Abhay Kumar Nalwaya, Associate Vice President, Projects, Rampura

PHOTO: ADAM LACH



Agucha underground mine, is equally enthusiastic about the equipment's safety features, especially the trucks' park-brake system.

"If the engine fails or anything goes wrong, the truck stops," he says. "It will not move. We really appreciate this safety feature."

L.S. Shekhawat, Chief Operating Officer HZL, is very happy with the safety record of Sandvik overall, saying the company is in line with the site's requirements. "We're learning a lot from Sandvik and trying to implement their global standards on our site," he says. Nalwaya agrees, saying there have not been any recent incidents, thanks to good practices followed by the Sandvik team at the mine. ■

# DEEP SAFETY

Sending divers underwater to work on oil pipelines in the Gulf of Mexico is an inherently risky business. U.S. commercial diving company Aqueos has racked up an impressive safety record by working to prevent accidents before they happen.

**WHEN YOUR BUSINESS** involves sending highly skilled divers to perform hazardous work in the unforgiving ocean depths, you can imagine that safety is a major concern. Aqueos Corporation employs more than 160 trained professional divers who work on underwater pipelines, offshore oilfield platforms, power and communication cables and dams, as well as performing inspections and surveys for companies and government agencies, both offshore and inland.

The company was recently named one of America's Safest Companies by *EHS Today*, a leading U.S. magazine for environmental, health and safety management professionals.

Jerry Zebor, the company's Director of Health, Safety, Environment and Quality, describes the dangerous job of a diver.

"We put them in a sophisticated respirator that we call a diving helmet, and then into an environment that's immediately dangerous to life and health," he says. "Then we turn off the lights,

as there is generally very low water visibility. There's usually a bunch of stuff on the bottom that could harm them, and we may be sending material down to support the work, and some of it could weigh tons. Remember, you have to be careful because there's energy stored in some of these pipelines, and when you cut the pipeline, if not done properly, it can catapult you, smash your head, break your bones, take you for a ride. These are only examples of many hazards." Zebor also mentions common diving hazards such as decompression sickness and nitrogen narcosis.

**DESPITE THESE RISKS**, Aqueos has never had a fatality in its 15 years of operation, Zebor says. A high level of management commitment to the consistent demonstration of passion for safety by Ted Roche, President and CEO, sets the tone for this safety-positive culture. Core values of excellence, safety and professionalism are key parts of

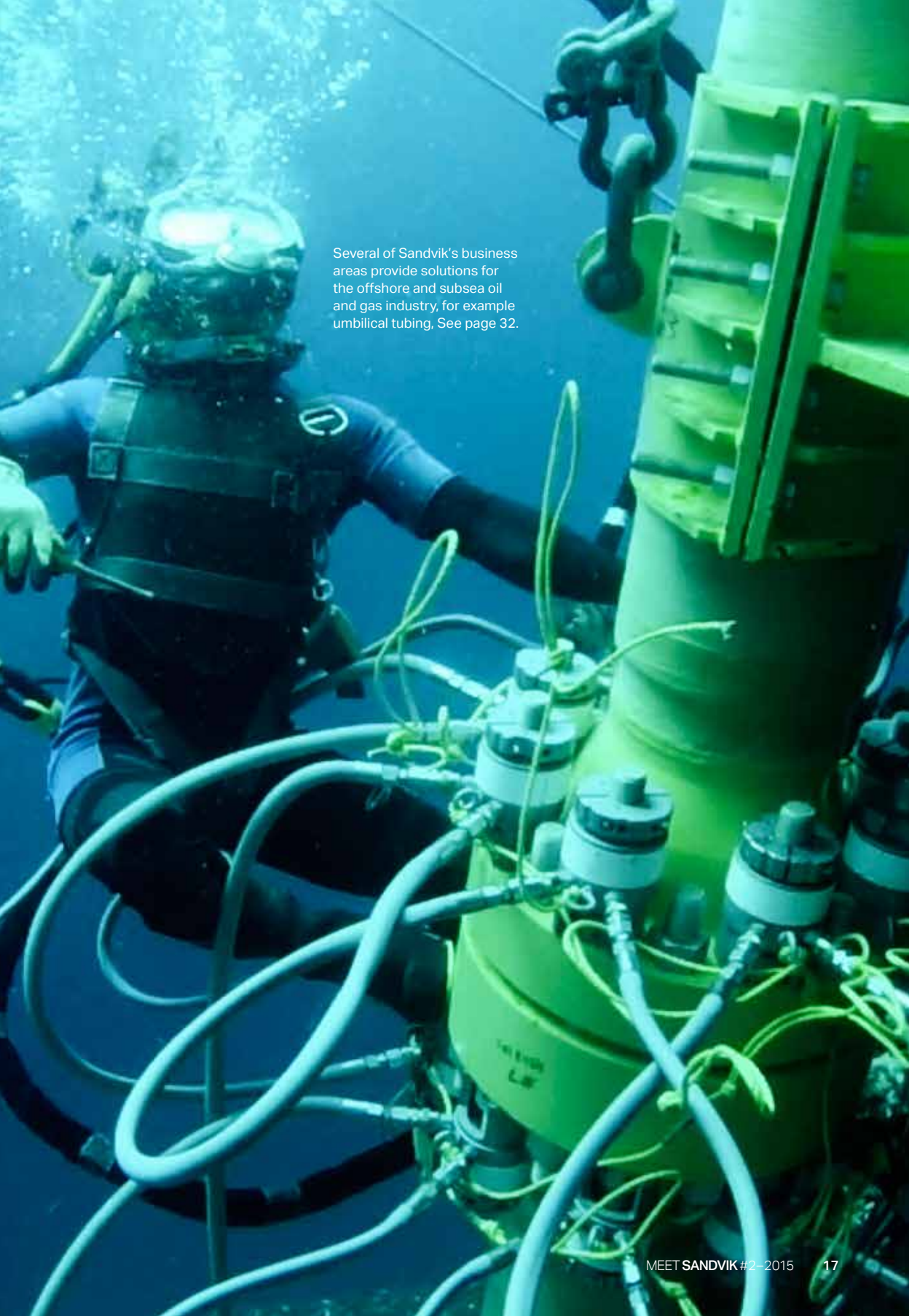
the company's culture. Aqueos focuses on both Predictive Incident Prevention – predicting incidents by using leading indicators – and a real-time Environment of Active Caring, in which divers look out for one another.

Part of the company's approach to safety involves a proprietary database program called the Aqueos HUB. The HUB creates many efficiencies, including making it possible to share peer-based observations of hazards, positive behaviors, at-risk behaviors, near-miss information and safety alerts across all active jobs. This information helps to keep accidents from happening in the first place.

"Our most important asset is our personnel, and we have an obligation to all of them for a safe working environment," Zebor says.

In recognition of its approach to safety, Aqueos has been acknowledged with numerous awards. ■





Several of Sandvik's business areas provide solutions for the offshore and subsea oil and gas industry, for example umbilical tubing. See page 32.

**NAME:** Kenny Ambrose

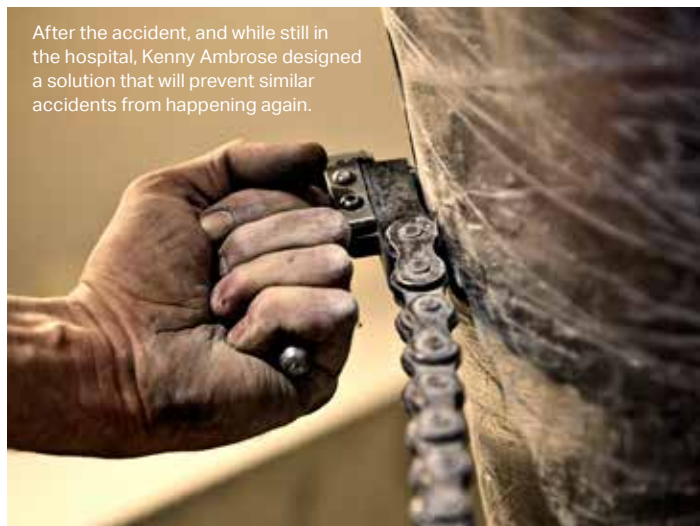
**POSITION:** Wire Operator, Wire and Heating Technology, Sandvik Material Technology, Bethel, Connecticut, USA.

**NUMBER OF YEARS WITH SANDVIK:** 15

**FREE TIME:** Spending time with his wife and daughter, hunting, fishing, hiking



PHOTO: PONTUS HOOK



After the accident, and while still in the hospital, Kenny Ambrose designed a solution that will prevent similar accidents from happening again.

## "IT HAPPENED SO FAST..."

Even with a focus on safety, accidents do happen. For Sandvik employee Kenny Ambrose it meant losing part of his finger, but it also meant a new solution that will prevent the accident from happening again.

**THE FREQUENCY** of accidents at Sandvik Materials Technology is declining year by year. Still, accidents happen. Extreme heat, heavy equipment and large, sharp and heavy components are part of the workday for many employees. At Sandvik's Bethel facility in the U.S. state of Connecticut, Kenny Ambrose and his colleagues skillfully manage risks every day. However, on September 11, 2013, a chain snapped off part of Ambrose's finger. "I was lucky," he says. "It could have been so much worse."

Ambrose has been working for Sandvik for 15 years in different positions. His job at the time of the accident was to draw heavy resistance wire through a series of blocks. The wire accumulates around a rotating cylindrical drum. He had performed this task day after day for five years and knew exactly what to do. On this particular day, however, there was a weld break and a spring load stopped working. "It happened so fast, I just didn't see it coming," says Ambrose.

Ambrose has had two surgeries since the accident. While at the hospital the first time, he came up with a solution that would prevent others from getting caught in the chain the way he did. His idea was to put a handle at the end of the chain.

"The simple solutions are often the



best," he says. The next step is to replace the original solution with a new handle. "There are always improvements to make," says Ambrose, "and we always have safety in mind when looking for new solutions. I've been working here for many years, and so I know the risks, but think about all the new employees coming in with limited experience."

Ambrose can still perform all his tasks at work without difficulty. He just has to do things a bit differently. The accident hasn't affected his life outside work much either: He can still do everything he loves, such as spending time with his family, fishing, hiking and hunting. Ambrose was lucky. ■



# A TALE OF TWO TUSKS

When Spike the elephant broke his tusks, the keepers at Calgary Zoo got a little innovative dental help from their friends.

TEXT: KIP HANSON ILLUSTRATION: BORGS

## **SPIKE LIKES TO PLAY ROUGH.**

Whether it is tossing truck tires high in the air or wreaking havoc with the watering system, this 5,500-kilogram (12,000-pound) Asian elephant has earned a reputation of an inquisitive giant. Unfortunately, Spike's sense of curiosity sometimes gets him into trouble.

Spike moved to the Calgary Zoo in Alberta, Canada, in 1992, after Hurricane Andrew damaged his birthplace home at the Miami Zoo in Florida in the U.S. His first encounter with the dentist's chair was in 2002, when the roughhousing teenager broke his left tusk on a tire swing, an event that earned him a shiny new stainless steel crown.

Six years later, Spike broke his other tusk, so severely that zoo veterinarians were concerned about the possibility of infection. Dr. Doug Whiteside, the Calgary Zoo's senior staff veterinarian, says it is not uncommon for male elephants to

wear down or break their tusks, but problems can occur if the sensitive pulp is left exposed. The area needs to be protected with a temporary cap until the tooth can grow out away from the pulp.

Luckily, the playful pachyderm had friends and benefactors willing to lend a helping hand. Whiteside contacted the Southern Alberta Institute of Technology, also known as SAIT Polytechnic, the same institution that helped with Spike's first set of artificial tusk caps. And while the original prostheses worked quite well – until Spike sheared one off, that is – the decision was made to develop more accurate tusk caps with respect to shape and size of the tusks, rather than the

approximated curved versions machined in 2002.

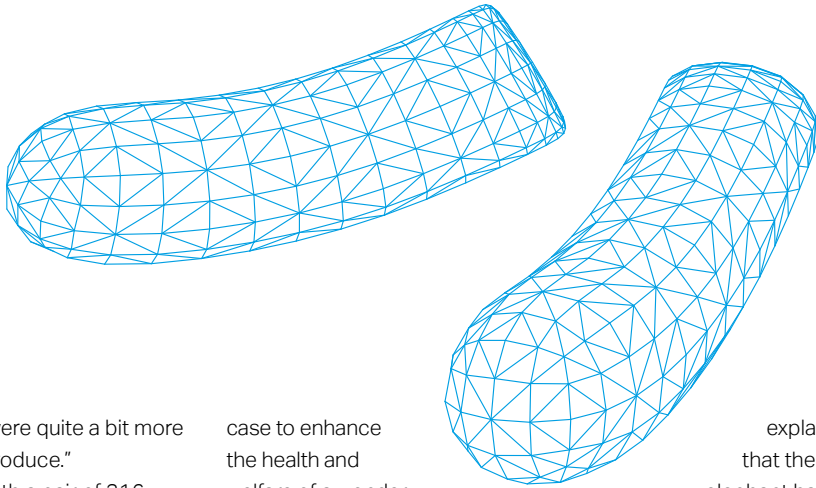
Using the same fiberglass material a human doctor employs to wrap a broken leg, they cast mirror images of Spike's tusks and sent them to SAIT. The inside surfaces were scanned and the data transferred to CAD software for solid modeling.

That is when Mike Desjardins stepped in.

Desjardins is President of Lab Machine Works Inc., a local machine shop with greater knowledge of prosthetic elephant tusk machining than anyone in Alberta. "I was commissioned to machine the first set," he says. "Because of the curved shape and the greater →

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"I think this project was a great example of how innovative partnerships can work, in this case to enhance the health and welfare of a wonderful species."



size, these were quite a bit more difficult to produce.”

Starting with a pair of 316 stainless steel blanks 20 centimeters (eight inches) in diameter and 58 centimeters (23 inches) long, Desjardins was facing 230 kilograms (500 pounds) of metal removal. He reached out to Sandvik Coromant Area Sales Manager Jim Cordoviz and Area Representative Scott Jensen, who donated a pair of milling cutters.

“Working with SAIT, we split the blanks lengthwise and welded fixturing tabs on each half,” Desjardins explains. “Each piece was then clamped into a Haas VF-2 vertical machining center. The G-code was produced by processing the solid models through our MasterCAM programming system. Even so, it took more than 120 hours to finish the project.”

“I think this project was a great example of how innovative partnerships can work, in this

case to enhance the health and welfare of a wonderful species,” Whiteside says. “The community really came together for Spike, and we are very appreciative of the expertise, time, and material donated for this project.”

Sadly for Whiteside, his coworkers and visitors to the Calgary Zoo, Spike and the other elephants there have since moved on. In 2013, zoo officials took the painful decision to relocate him and the three females to other facilities, with larger herds, more room to roam and a greater chance of genetic diversity, an important consideration for this endangered species.

If you could ask him, Spike might tell you he misses the Canadian winters, but maybe not – his current address is Busch Gardens in Tampa, Florida.

Spokesman Travis Claytor

explains that the bull elephant has recently been introduced to the herd of five females and is enjoying a warm and sunny habitat. “Spike is doing quite well in his new home and has instantly made a connection with the trainers at the park,” says Claytor. “We are excited to have him as part of our family here at Busch Gardens.”

If you decide to pay Spike a visit, do not spend too much time looking for the elephant with the metal tusk caps. Shortly before leaving Calgary, Spike broke them both off while in musth, a period of heightened sexual activity in male elephants. After consulting with experts on tusk repair, and seeing that Spike’s tusks had started to heal from his last misadventure, zoo officials decided to leave the caps off. Spike’s visits to the dentist’s chair may be a thing of the past. ■



Follow Spike on his own Facebook page, search for “Spike the elephant”.

# REPORT

Figures from the Interim Report

- Trends and tendencies • Key figures and news • CEO comment • Interview

A blurred digital display of a stock market table. The table has four columns. The first column contains stock symbols, the second contains current prices, the third contains previous prices, and the fourth contains percentage changes. The background is dark blue, and the text is white and light blue. The table is tilted slightly to the right.

|        |       |        |        |
|--------|-------|--------|--------|
| 000001 | 17,19 | -0,06  | -0,14% |
| 000002 | 42,14 | +0,56  | 1,91%  |
| 000003 | 27,87 | +0,17  | 3,52%  |
| 000004 | 21,18 | +0,26  | 0,89%  |
| 000005 | 27,33 | -1,14  | -4,08% |
| 000006 | 31,58 | +13,53 | 3,32%  |
| 000007 | 96,51 | +0,82  | 0,54%  |
| 000008 | 25,32 | +0,41  | 1,62%  |
| 000009 | 29,81 | +0,22  | 0,74%  |

## FIGURES from the Interim Report Q1 2015

### INVOICED SALES BY BUSINESS AREA

| MSEK                         | Q1 2015 | Q1 2014 | Change % | Change % <sup>1)</sup> |
|------------------------------|---------|---------|----------|------------------------|
| Sandvik Machining Solutions  | 8,438   | 7,400   | +14      | -0                     |
| Sandvik Mining               | 6,863   | 6,601   | +4       | -9                     |
| Sandvik Materials Technology | 3,712   | 3,547   | +5       | +1                     |
| Sandvik Construction         | 2,144   | 1,871   | +15      | -1                     |
| Sandvik Venture              | 2,172   | 1,362   | +59      | -0                     |
| Group Activities             | 5       | 2       |          |                        |
| Group Total                  | 23,334  | 20,783  | +12      | -3                     |

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

### OPERATING PROFIT BY BUSINESS AREA

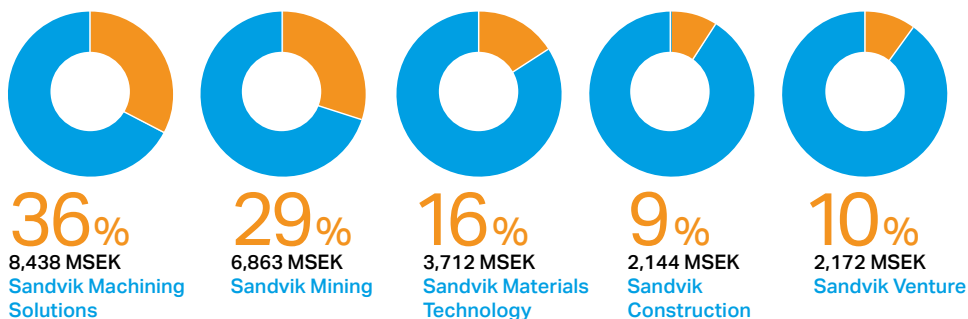
| MSEK                         | Q1 2015 | Q1 2014 | Change % |
|------------------------------|---------|---------|----------|
| Sandvik Machining Solutions  | 1,129   | 1,480   | -24      |
| Sandvik Mining               | 68      | 688     | -90      |
| Sandvik Materials Technology | 100     | 421     | -76      |
| Sandvik Construction         | -95     | -11     | N/M      |
| Sandvik Venture              | 192     | 233     | -18      |
| Group Activities             | -342    | -333    |          |
| Group Total <sup>2)</sup>    | 1,052   | 2,478   | -58      |

2) Internal transactions had negligible effect on business area profits

### OPERATING MARGIN BY BUSINESS AREA

| % OF INVOICING               | Q1 2015 | Q1 2014 |
|------------------------------|---------|---------|
| Sandvik Machining Solutions  | 13.4    | 20.0    |
| Sandvik Mining               | 1.0     | 10.4    |
| Sandvik Materials Technology | 2.7     | 11.9    |
| Sandvik Construction         | -4.4    | -0.6    |
| Sandvik Venture              | 8.8     | 17.1    |
| Group Total                  | 4.5     | 11.9    |

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





# TRENDS AND TENDENCIES

## MATS BACKMAN, CFO

### HOW WOULD YOU DESCRIBE SANDVIK'S STRONG FIRST QUARTER OF 2015?

While demand remained generally stable, we noted earnings growth and margin expansion as well as strong cash flow. Successful focus on managing net working capital continued, supporting cash flow. Key drivers to earnings growth were the positive impact of exchange rates as well as delivery on savings from structural improvements.

### WHICH ARE YOUR KEY PRIORITIES IN FINANCE TO SUPPORT SANDVIK'S GROWTH TARGETS?

Our key priorities are a balance sheet for growth, excellence in business control, including a focused performance management process, and a global finance function with common processes throughout the group and solid financial control, risk management and internal control.

### HOW WILL YOU SECURE A BALANCE SHEET FOR GROWTH?

We have restored net debt to equity to target level through a good cash

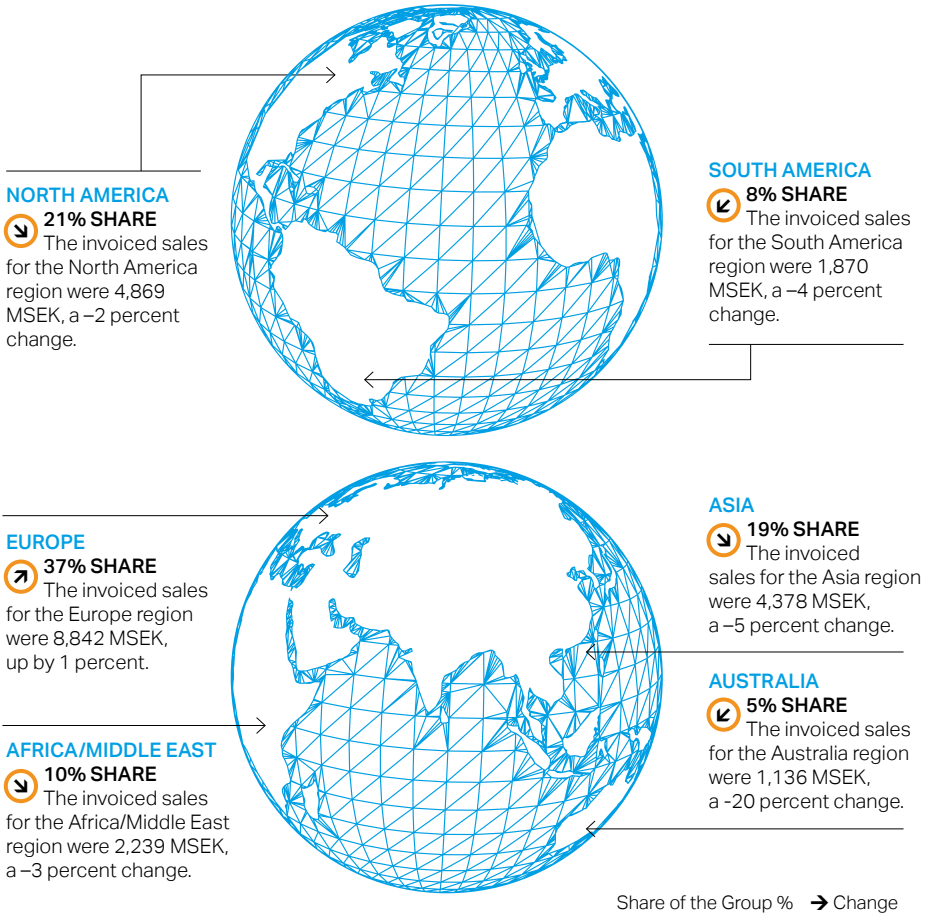
flow supported by reductions in Net working capital and lower capital expenditure. Inventory reductions amounted to some 3 BSEK for the preceding three quarters. Going forward and to finance our growth, we aim to secure an effective capital allocation based on size, growth and profitability and further reductions of Net working capital. Cash generation will continue to be in focus. At the same time, we maintain our active portfolio management and our strategy to divest non-core businesses.

### CAN YOU ELABORATE ON YOUR PORTFOLIO MANAGEMENT STRATEGY GOING FORWARD?

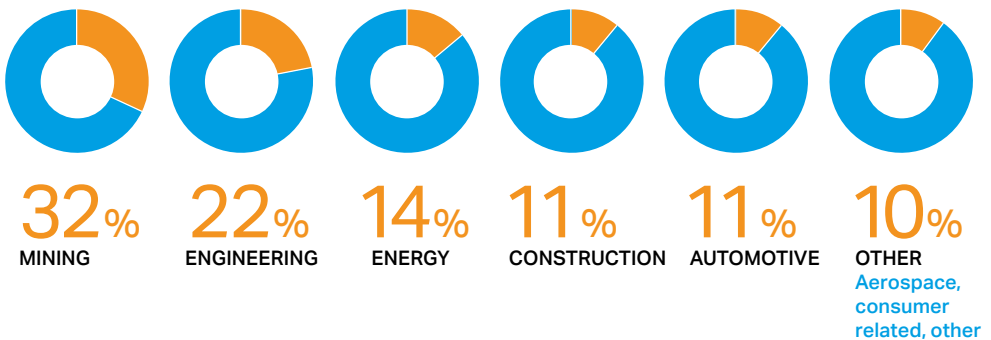
We will actively evaluate further divestments within the business areas – as well as investigate acquisitions, all as part of our continuous strategy to strengthen our core activities and profitable growth. ■



## INVOICED SALES BY MARKET AREA Share of Group invoicing



## INVOICED SALES by segment



## CEO COMMENT ON 2014

"One of the most important elements of our culture is safety. We are very pleased to report a further reduction in our lost-time injury frequency rate, which declined for the fourth consecutive year to a total of 2.5 at the end of 2014 for all operations – the lowest in Sandvik's history."

Read more on [sandvik.com/investors](http://sandvik.com/investors)

## SUPPLY CHAIN OPTIMIZATION CONTINUES

Sandvik is now launching the second phase of its supply chain optimization program comprising a total of ten unit closures, predominantly in Europe. In addition, Sandvik is implementing further measures to adjust the cost base to current demand as well as making a project write-down related to Mining Systems. The total group savings are estimated at approximately 1.1 billion Swedish kronor (USD 125 million), yearly run-rate, by the end of 2016. Nonrecurring charges associated with the initiatives, totaling about SEK 1.9 billion (USD 220 million), will impact the first quarter of 2015.



## THREE NEW MEMBERS OF THE BOARD

During the Annual General Meeting three new board members were elected. Johan Molin, Chairman of the Board, Jennifer Allerton, Board Member and Claes Boustedt, Board Member.

# 0.33

### Earnings per share, SEK

Order intake **23,167 MSEK** / Invoiced sales **23,334 MSEK** / Operating profit **1,052 MSEK**  
 Profit after financial items **563 MSEK**  
 Cash flow from operations **+2,431 MSEK**

# RECORD-SETTING LAUNCH FROM SECO TOOLS

Seco Tools has just launched a new generation of Duratomic™, with three grades and 943 new products. Never before have so many products from the company entered the market at the same time. "It is a record," says CEO Lars Bergström.



**WHAT KIND OF PRODUCTS ARE YOU LAUNCHING AND IN WHAT AREAS?**

It is a product range in the area of inserts for turning applications for the machining industry and includes a wide range of grades that can be used in a broad spectrum of products for turning steel. This is a new generation of the product range we launched in 2007. At that time it was a fundamentally new way of creating a coating on inserts for metalcutting where we aligned the atomic structure in a way that had never been done before. By doing that we increased productivity and tool life. Now we are basically doing it again, by taking that technology to the next level.

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**"We have never launched three grades and this many products at the same time before."**

**AMONG THE NEW PRODUCTS THERE IS A UNIVERSAL GRADE. TELL US ABOUT THAT.**

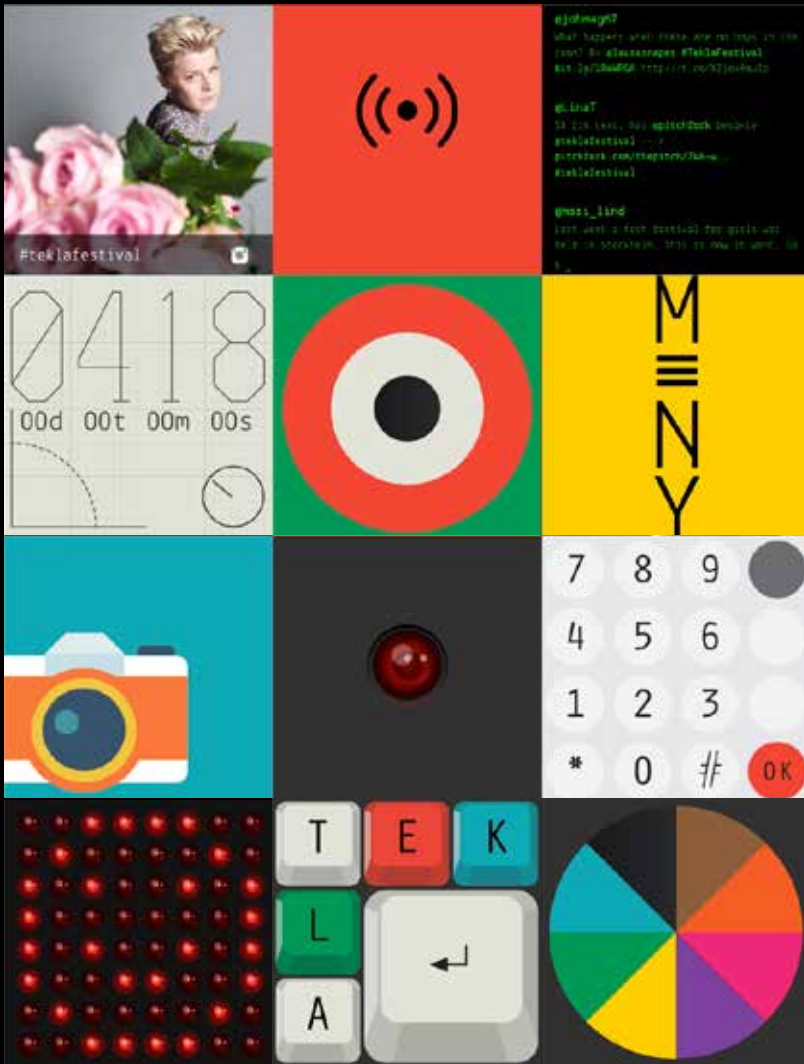
Normally you buy many different kinds of tools for different applications. But within our new range of products we have one grade that is universal, meaning it is good at pretty much everything. It is actually unique. We think that we are the first company in our business to launch a universal product.

**IN WHAT WAY IS THIS LAUNCH RECORD-SETTING?**

We have never launched three grades and this many products at the same time before, so it is record-setting for us. This big launch makes it possible for us to do massive marketing.

**WHAT DOES THIS LAUNCH MEAN FOR SECO TOOLS AND YOUR POSITION ON THE MARKET?**

Seco has its stronghold within milling applications, but we are also quite recognized within turning applications. This launch will definitely enhance our capability within the turning market. These cutting-edge products have placed us ahead of our competitors in this area. We expect to sell more to existing customers as well as expand our customer range in areas where we are not active today. ■



## CALL YOUR GIRLFRIEND

The Swedish musician Robyn has teamed up with a technological institute to create a one-day festival to introduce the field of technology to girls aged 11 to 18 years. The artist's presence goes hand in hand with the university's Science and Art motto.

**SWEDISH ARTIST ROBYN** and the Royal Institute of Technology (KTH) in Stockholm have a very good relationship. In 2013 KTH students built a robot inspired by Robyn, a singer-songwriter and record company owner. That same year, Robyn received KTH's Great Prize for her use of new technology in her artistry. The prize became the seed for Tekla, a technology festival that took place for the first time in april 2015. Robyn and KTH worked together on the event.

"As a recipient of the prize you are expected to hold a seminar for the students," explains Paulina Modlitba Söderlund, project leader for Tekla. "Because of her previous contacts with KTH, Robyn was aware that the university had difficulty recruiting women to their engineering programs. She thought that instead of holding a lecture for those who are already enrolled, it might be better to do something for those who were still indecisive about their academic path."

The festival offered everything from robot programming to 3D design and digital visualization. The 200 visitors to the festival had the opportunity to try out technology and participate in workshops led by female scientists and technicians. The target group was girls aged 11 to 18.

"Something happens with girls and boys when they are 11 or 12," says Modlitba Söderlund. "Until then they do roughly the same things, without branding these things as being for 'girls' and 'boys,' but after that they start going separate ways. For example, many boys start engaging in programming and gaming in their spare time, which gives them a lead that can be discouraging for

girls when they decide to venture into the technology field."

Robyn describes how she had as great an interest in music as her male friends when she was young, but it was the boys who started bands, taught themselves computer programs for music and later became music producers. If she had had a big sister or other female role model, she could have learned those aspects of the music field a lot earlier than she did. Today Robyn is herself a role model for many, as both an artist and an entrepreneur.

**"ROBYN DIDN'T** just put her celebrity seal on the festival," Modlitba Söderlund says. "She was engaged in the project from the beginning, to create a festival that she would have wanted to visit as a young girl."

Modlitba Söderlund stresses that the program was not made more light weight because it was for girls. "We did not 'lower the bar' or adapt the content according to the notion that girls are more interested in the softer aspects of music, dance and clothes," she says "This was a broad technology event with many of today's most exciting companies as collaborators."

The goal of Tekla was first to show that technology is fun and inspiring so that visitors eventually will become interested in a career in technology, explains Modlitba Söderlund. Having the festival at the KTH campus made the environment familiar to the girls when, it is hoped, they return in the future as students. If everything goes well, there are expectations that the Tekla festival will happen again. Or, as Robyn says in her song "Fembot": "Once you have gone tech, you ain't never going back." ■



[www.teklafestival.se](http://www.teklafestival.se)

**NAME:** Robyn **BORN:** 1979 **OCCUPATION:** Artist, songwriter, record company owner.  
**SONGS INCLUDE:** "Do You Really Want Me," "Dancing On My Own," "With Every Heartbeat,"  
 "Hang With Me," "Do It Again" and "Call Your Girlfriend."

**ATTRACTING TALENT**

Sandvik works extensively on attracting and recruiting new talent, through activities together with universities, sponsorships and trainee programs. A second round of the successful 18-month trainee program will start in September with a new group of talents from China, India, South Africa, Sweden and the U.S.



Follow Sandvik on LinkedIn:  
[www.linkedin.com/company/sandvik](http://www.linkedin.com/company/sandvik)



## THE OBJECT | The umbilical

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**Sandvik super-duplex stainless steel tubes are used for umbilicals, the lifeline between surface installations and subsea equipment.**

Umbilicals are designed for high systematic pressure at great depths, where thinner walls and high strength are required. Sandvik is the global market leader in stainless steel umbilical tubing and has over the last 20 years supplied more than 100 million meters (300 million feet) of umbilical tubes to all major fabricators and oil companies. That is enough to go around the world two and a half times.