MEET Sandvik

SANDVIK GROUP MAGAZINE #3–2014

Electric engines, new materials and lower emissions – the future looks bright for the automotive industry.
PAGE 6.

#3-2014

SHIFTING GEARS

The future of automotive

PRESIDENT AND CEO OLOF FAXANDER:
"A truly global player."

KEEPING it cool • Taking action for SUSTAINABILITY • SAFETY first • SPONSORING a noble prize • Breaking a WORLD RECORD

PHOTO: TESLA MOTORS

A truly GLOBAL PLAYER

GLOBALIZATION has changed the nature of business, competition and value creation. The market is increasingly dynamic, with new competition and higher demands on efficiency and expertise. With our knowledge, innovations and products we are at home in all key markets across the globe, staying close to our customers at the local level, always ready to seize new business opportunities.

But globalization for us implies more than understanding the challenges and opportunities of each specific market. It also means transforming into being truly global in culture, diversity and mindset. As a successful global leader we must embrace new challenges and unique opportunities and help our customers become even more successful in their own markets.

We have a long history of delivering products and services to the automotive industry, and now we are set for rapid growth, most of which is expected to take place in emerging markets. The future of the automotive industry demands new functionality and performance as well as new materials, and with our research and development we are prepared to meet our customers' demands. (page 6).

Another important industry, particularly for the US market, is aerospace. The industry demands innovative solutions for the future in order to increase profitability and minimize the environmental footprint. In Fair Lawn, New Jersey, Sandvik has an Aerospace Application Center for the development and testing of customer solutions. We have the solutions to help our customers succeed, and we are proud of our customer collaboration for continuous innovation. (Page 11).

Looking towards 2015 I think it will be even more important to be a truly global player. The world is more connected than ever, and I am looking forward to ayear full of new possibilities. Let us engage even more in innovative activities in the global market. That is where Sandvik belongs.

Olof Faxander, President and CEO, Sandvik AB

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Great wall in China: air conditioners on an office building in Fujian province.

PHOTO: ISTOCK

COOL CONSUMPTION

The United States currently uses more energy for air conditioning than all other countries combined. However, as the temperature and incomes in emerging markets rise, so will the number of air conditioners – and the energy used to run them. Recently, the United States passed the 100 million mark for numbers of house-holds equipped with air conditioners. It's been predicted that China will reach that figure in 2015, up from 50 million households in 2010.

As the consumption of cool air rises, the drive to reduce energy usage has led many refrigerator and air conditioning manufacturers to source alternative high-efficiency materials for new low-energy applications. Many countries have also introduced legislation aimed at reducing energy consumption. In China, a major refrigerator compressor manufacturer had to redesign its compressors to meet the targets. The company looked for a material with high fatigue strength combined with high performance and chose Sandvik Hiflex® Strip steel for the compressor valves. Collectively, it is estimated that this move has helped to reduce the country's electricity consumption by around 25 TWh per year – with the subsequent reduction of CO_2 emissions by 225 million tonnes annually.

IN BRIEF

4.1 – number of seconds it took for the Sandvik-sponsored drag racer Fast Jack Beckham to drive 300 meters at the Gatornationals, USA, 2014. **19.1** – percentage of women working in the Sandvik Group. **98** – percentage of recognized ISO 14001-certified units. **0** – vision of injuries within Sandvik annually.

Tree of life

RECENTLY, SANDVIK MEXICO celebrated its 5th Annual Reforestation Project for the benefit of an ecological reserve located in Tepotzotlán, near Mexico City. Employees and their families were involved in the event, along with local residents. Together they planted 900 trees. Some 5,000 trees in total have been planted over the five years the project has been running. The project is aimed at contributing to the recovery of the area's ecological balance. It also contributes to regional biodiversity, helps to prevent soil erosion and improves air quality for the capital, just 40 kilometers away.

RECOGNITION FOR SUSTAINABILITY WORK

Sandvik has been reconfirmed as a member of the prestigious FTSE4Good Index Series, an index that measures Environmental, Social and Governance performance practices in international companies. The purpose of the FTSE4Good index, which was first launched in 2001, is to provide investors with a tool to identify companies that meet globally recognized corporate sustainability standards.

"Being reconfirmed as a member of FTSE4Good index proves that we are successful in the way we work with sustainability matters, which to an increasing level are becoming an integral part of our business operations and our company culture," says Olof Faxander, Sandvik President and CEO.

TREE STARS IN FAIR LAWN

When Sandvik renovated its US headquarters in Fair Lawn, New Jersey, it designed the building to give prominence to a majestic northern red oak tree that stands in front it. The tree, towering 50 feet (15 meters) high, is the main focal point as you approach the site. Local legend has it that a production employee brought the sapling from home during Sandvik's early days in the United States in the 1950s, and the tree has grown along with the company. The new building was completed in June 2014.

SANDVIK AND IBM **ATTRACT STUDENTS** TO THE INDUSTRY

A GROUP OF STUDENTS at Kista high school in Sweden is undergoing a mentor program held by Sandvik and IBM. The two companies share the same challenges in attracting future talent, and the purpose of the program is to encourage students to choose technology and IT as their main subject in upper secondary school.

"The students are a delightful group of people who are curious about us, our industry and the challenges we face," says Alexander Puekker, one of Sandvik's mentors. "Many of them are inspired by the possibility to work in a global and innovative environment, which both IBM and Sandvik can offer."

PHOTO: ERIK ARDELIUS

NOBEL PRIZE EXHIBITION MOVES TO INDIA

The Sandvik-sponsored exhibition "The Nobel Prize: Ideas Changing the World" was inaugurated in New Delhi, India, on October 30, 2014. The exhibition, originally staged in Brazil, comprises five pavilions with different Nobel-related themes and includes both workshops and seminars held by Nobel laureates.

"This exhibition is valuable for Sandvik, as it strengthens one of our core values – Innovation," says Inger Östblom, project manager for Sandvik's participation in this project.

Safety – a prerequisite to grow in energy

With her new role as Vice President Strategy and Communication for Sandvik Materials Technology, Lena Berg's ambition is to ensure that the strategic direction makes sense to all 7 000 colleagues around the world and that all operations are executed in line with this direction.

WHAT ARE YOUR GOALS GOING FORWARD?

We've been through a tough transformation phase in Step Change where our goal was to turn Sandvik Materials Technology around and make it more profitable. It is now time to take our business area to the next level, and going forward, we have a clear strategic compass pointing the direction in three areas:

- Safety first!
- Continue the materials evolution.
- Profitable growth in energy and energy efficiency.

This compass makes it easy to understand our journey ahead. Clear target setting, communication, and involvement of all employees are critical elements in Sandvik Materials Technology's business planning process. We have one rule that always apply: Safety before productivity. Always.

Safety is always our first priority. We're aiming at zero accidents. Is it possible? I think so. We evaluate each lost time injury today and ask ourselves: Could this have been prevented? The answer is in almost all cases "yes". As long as we have accidents we can never be satisfied. Managers within SMT have agreed on a motto. We call it "Never walk by" – to never walk by if you see something that doesn't look safe. Stop, confront, question or praise – and this is sometimes easier said than done. Safety is of course about protecting all our employees, but it is also a prerequisite to grow in the energy segment.

TELL US MORE ABOUT THE MATERIALS EVOLUTION AND THE ENERGY CHALLENGE.

The global energy challenge is a fact. Over the coming decades, more people will gain access to energy and enjoy higher standards of living. But at the same time, these developments will place an even greater pressure on our world's resources, as well as on the environment. Within Sandvik Materials Technology, we can meet this challenge at both ends. Our advanced products and materials make it possible to extract and generate energy in areas like oil and gas and nuclear, but they can also enable a more efficient use of energy and reduce emissions in energy efficiency applications.

The materials evolution is our DNA, to continuously develop even more advanced materials is our core and has been since the days of Göran Fredrik Göransson. Our researchers are the best in the world within materials technology and together with our customers; we keep developing the next generation of materials, always one step ahead. What comes next? We often know the answer before our customers realize it. With our unique materials we can make a real difference, by making industrial processes safer and more efficient, while reducing environmental impact. Through our core expertise in materials technology we can really make a difference here, which is something that all employees can be proud of. ■

"With our unique materials we can make a real difference, by making industrial processes safer and more efficient."

PHOTO: ERIK ARDELIUS

TEXT: **ÅSA BACKMAN** ILLUSTRATION: **BORGS**

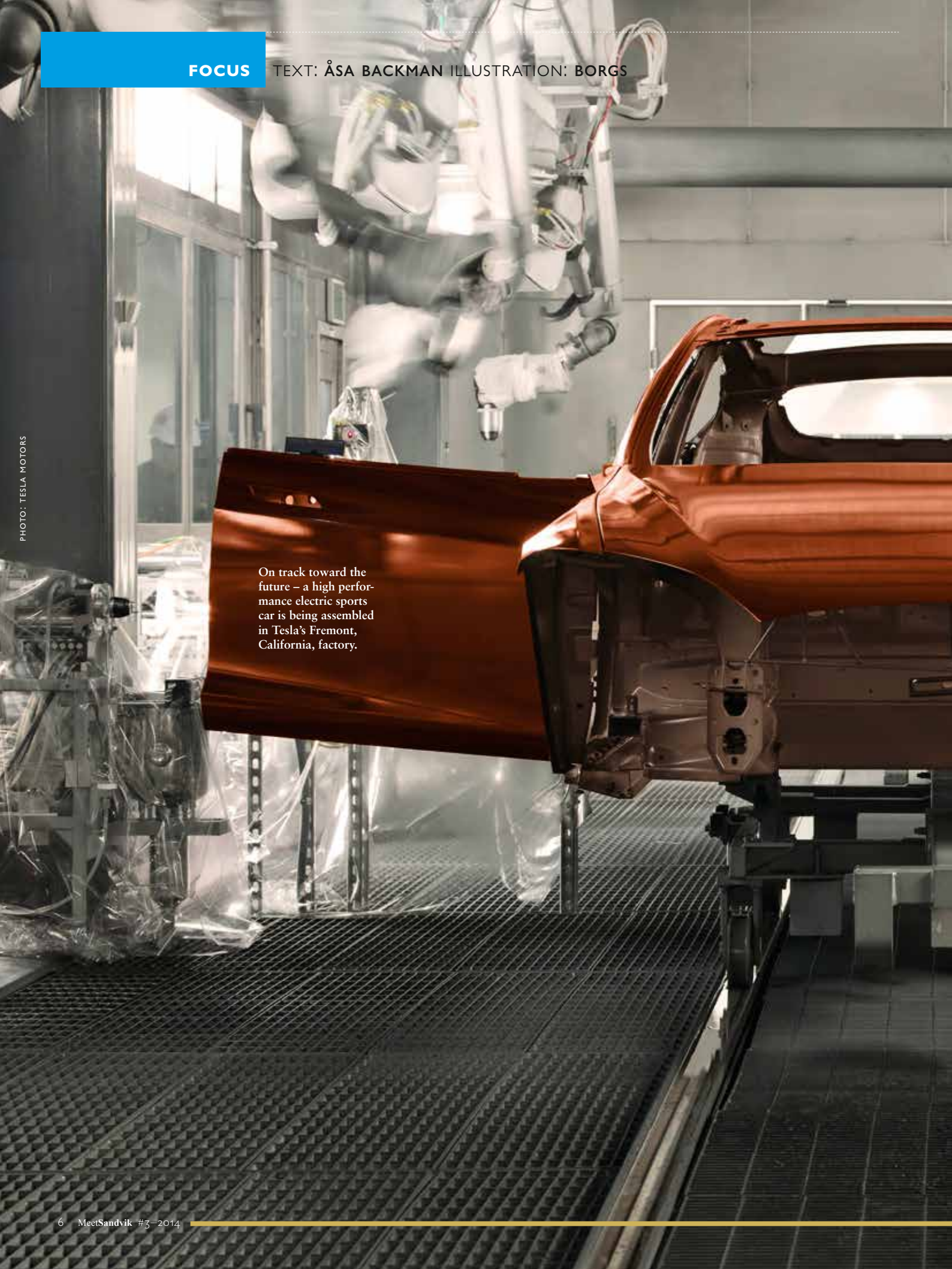


PHOTO: TESLA MOTORS

On track toward the future – a high performance electric sports car is being assembled in Tesla's Fremont, California, factory.

AN INDUSTRY GEAR SHIFT

The automotive industry is growing rapidly, particularly in Asia. With growing environmental concerns, the challenge for the automotive industry is to produce energy-efficient cars with lower emissions. Sandvik is partnering with the automakers to enable sustainable growth.

WardsAuto, which has published reports about the automotive industry since 1924, predicts that car sales will increase globally from 88 million cars in 2013 to 107 million in 2020. That's more than three cars sold every second.

Shorter product life cycles, consumers' desire for a more personal design, increased connectivity and environmental focus are factors that are changing conditions for the industry. They also affect production.

"The production of cars is increasing in emerging markets such as China and India, while the development in traditional automotive countries, for example Europe, Japan and the US,

Sandvik's solutions and

is substantially slower," says Mattias Nilsson, Program Manager Automotive at Sandvik Coromant. "That's one of the principal trends we see."

Johan Luuke, Business Project Manager Automotive Transmission at Sandvik Coromant, agrees and adds that the trend includes both geographical and machining aspects. "Our customers are moving from rigid transfer lines to more flexible machining centers and often unmanned production," he explains. "This development calls for reliable cutting tools that last longer, often for a whole shift, with maintained quality."

The use of lighter and more complex materials that can withstand higher pressures is a trend that comes with environmental concerns. Demand for powerful engines with lower emissions calls for higher output and lower weight.

"Environmental concern is driving the automotive industry," says Jari Ponsiluoma, Global Product Manager, Automotive Tube, Sandvik Materials Technology. "We will see more hybrids and electric cars on the streets in the future. However, internal combustion engines will dominate for many years to come."

One way of producing lighter cars is to replace cast iron engine blocks with aluminum. To meet this need, Sandvik is developing tools for aluminum machining that are dedicated to the automotive industry.

"We must be at the forefront and offer solutions for tomorrow's requirements, even though cast iron will dominate for many years to come," says Nilsson. "That's our way to stay competitive and to be the natural partner for the industry."

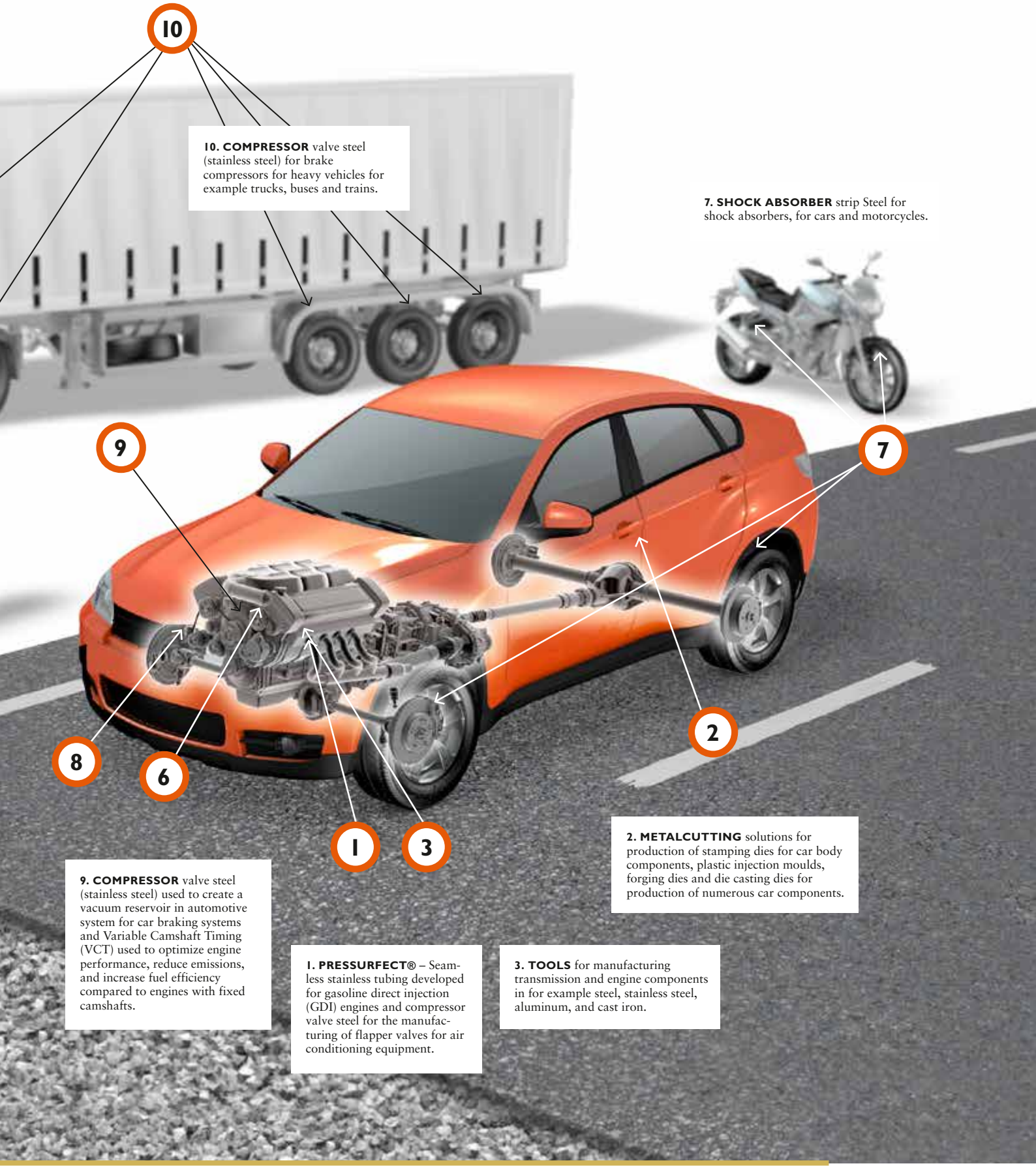
Gasoline direct injection (GDI) is an efficient technology that enables higher output in a machine. High-pressure GDI fuel systems are already used in more than 500,000 engines on the road, including Ford EcoBoost engine series. Sandvik has developed a unique material for GDI fuel systems that has received innovation awards in both China and the US.

"Pressurfect® XP Seamless stainless tube is the only material for GDI fuel systems on the market today that can withstand the high pressures of tomorrow's cars." says Ponsiluoma.

Both the move toward more complex production and the demand for advanced materials are good news for Sandvik.

"Collaboration with competent partners is getting more and more important for the automotive companies, from research and development throughout the whole supply chain," says Luuke. "Competition is intense, and you always have to be one step ahead to succeed in this industry. We have the expertise in both material technology and manufacturing." ■

applications for the automotive industry.



10. COMPRESSOR valve steel (stainless steel) for brake compressors for heavy vehicles for example trucks, buses and trains.

7. SHOCK ABSORBER strip Steel for shock absorbers, for cars and motorcycles.

9. COMPRESSOR valve steel (stainless steel) used to create a vacuum reservoir in automotive system for car braking systems and Variable Camshaft Timing (VCT) used to optimize engine performance, reduce emissions, and increase fuel efficiency compared to engines with fixed camshafts.

1. PRESSURFECT® – Seamless stainless tubing developed for gasoline direct injection (GDI) engines and compressor valve steel for the manufacturing of flapper valves for air conditioning equipment.

3. TOOLS for manufacturing transmission and engine components in for example steel, stainless steel, aluminum, and cast iron.

2. METALCUTTING solutions for production of stamping dies for car body components, plastic injection moulds, forging dies and die casting dies for production of numerous car components.

THIRD QUARTER 2014 IN FIGURES

INVOICING BY MARKET AREA Share of Group invoicing.

INVOICED SALES BY BUSINESS AREA

MSEK	Q3 2014	Q3 2013	Change %	Change % [1]
Sandvik Mining	**6,806**	6,961	–2	–6
Sandvik Machining Solutions	**7,658**	6,922	+11	+4
Sandvik Materials Technology	**3,735**	3,224	+16	+12
Sandvik Construction	**2,232**	2,055	+9	+2
Sandvik Venture	**2,155**	1,252	+72	+7
Group activities	**7**	2		
Group total	**22,593**	20,416	+11	+2

OPERATING PROFIT BY BUSINESS AREA

MSEK	Q3 2014	Q3 2013	Change %
Sandvik Mining	**614**	858	–28
Sandvik Machining Solutions	**1,496**	1,454	+3
Sandvik Materials Technology	**482**	175	+176
Sandvik Construction	**1**	88	–99
Sandvik Venture	**133**	199	–33
Group activities	**–264**	–243	
Group total [2]	**2,462**	2,531	–3

OPERATING MARGIN BY BUSINESS AREA

% of invoicing	Q3 2014	Q3 2013
Sandvik Mining	**9.0**	12.3
Sandvik Machining Solutions	**19.5**	21
Sandvik Materials Technology	**12.9**	5.4
Sandvik Construction	**0.0**	4.3
Sandvik Venture	**6.2**	15.9
Group total	**10.9**	12.4

1) Change compared with preceding year at fixed exchange rates for comparable units. 2) Internal transactions had negligible effect on business area profits.

ORDER INTAKE: 20,981 MSEK **INVOICED SALES:** 22,593 MSEK **OPERATING PROFIT:** 2,462 MSEK **PROFIT AFTER FINANCIAL ITEMS:** 2,001 MSEK **PROFIT FOR THE PERIOD:** 1,458 MSEK **EARNINGS PER SHARE:** 1.17 SEK **CASH FLOW FROM OPERATIONS:** +3,296 MSEK

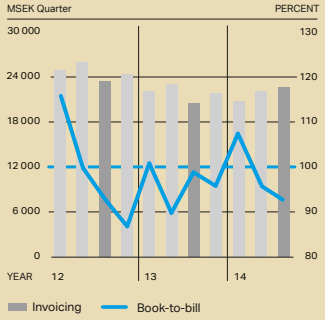
NEW PRESIDENT FOR SANDVIK VENTURE

On January 1, 2015, Jim Nixon will become President of Sandvik Venture and a member of Sandvik's Group Executive Management. Nixon, currently President of Varel International Energy Services Inc., which Sandvik acquired earlier this year, will succeed Tomas Nordahl, who will leave Sandvik for a position outside the Group. "Jim Nixon has an exceptionally strong background, one that Sandvik will benefit from greatly, considering our strategic direction with an increasing focus on growing in the energy segment," says Sandvik President and CEO Olof Faxander. "His entrepreneurial experience is well suited for Sandvik Venture, with the business area's focus on developing and growing a number of businesses in a similar way to how he has grown Varel over the years."

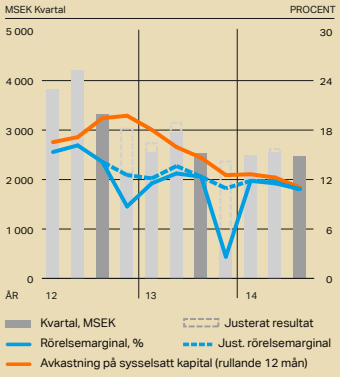
HEAD OF INVESTOR RELATIONS APPOINTED

As of November 1, Ann-Sofie Nordh is Head of Investor Relations at Sandvik. She has been with Sandvik since early 2014, and her background includes 20 years of experience in the financial markets. Magnus Larsson, Sandvik's current Head of Investor Relations, has taken on a position leading business development projects in Sandvik. He continues to report to Chief Financial Officer Mats Backman.

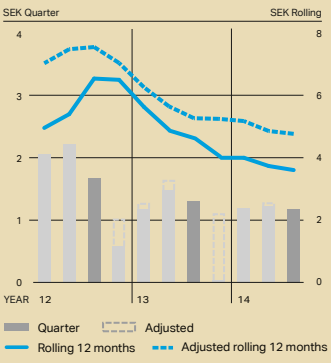
INVOICED SALES AND BOOK-TO-BILL



OPERATING PROFIT AND RETURN



EARNINGS PER SHARE



NEW HEATING PRODUCTS PRESENTED

At the recent Glasstec international trade fair in Düsseldorf, Germany, Sandvik demonstrated its Kanthal® branded heating products and systems included in advanced process technologies and energy-saving operations. ”Sandvik provides a complete solution for heating requirements, from system design to delivery, commissioning and installation,” says Martin McIver, acting Marketing Manager, Business Unit Heating Systems.

NEW CONSTRUCTION SOLUTIONS

In November Sandvik launched a host of new products at the Bauma China international trade fair. Participating at the important Asian event enabled Sandvik to show how the company is able to provide specific solutions for the rapidly growing Asian markets.

IN FOCUS

The view from the US

To thrive in an ever-changing market, a company needs to innovate, stay flexible and always keep its customers in focus, says Rick Askin, President, Sandvik US.

THE UNITED STATES IS SANDVIK'S SINGLE LARGEST MARKET BY REVENUE. WHAT ARE THE GREATEST CHALLENGES BOTH FOR THE US AND FOR SANDVIK?

The greatest challenge for Sandvik and the United States is our ability to adapt to the ever-changing business and competitive landscape. The market, the competition and the business climate will continue to change, and demands for innovative solutions to deliver productivity will continue to increase. As business cycles have a greater global reach, in order to be successful we need to continue to innovate, be flexible enough to adapt to rapidly changing business conditions and keep our customers' productivity in focus.

AEROSPACE IS ONE OF OUR MOST IMPORTANT DEVELOPING SEGMENTS. WHAT IS GOING ON THERE?

Commercial aerospace continues to introduce new materials in order to innovate, reduce weight and increase fuel efficiency. From supplying titanium tubing to machining composites or super alloy castings, Sandvik is active in helping our aerospace customers achieve their objectives. We have centers in which we work with our customers to develop and test new processes and to design solutions that make our customers more efficient. It is through this cooperation and continuous innovation that we are both successful.

YOU HAVE A REPUTATION FOR ALWAYS BEING IN A POSITIVE MOOD. HOW DO YOU KEEP UP YOUR GOOD SPIRITS AT WORK?

I simply enjoy life. Each of us needs to find our individual driver to good spirits and happiness. For me it is skiing. At work, I draw much of my energy and positive mood from my surroundings. As an organization, Sandvik challenges me, and at the same time I have the privilege to be surrounded by very talented and terrific people with whom to collaborate. This allows me to believe that we can achieve whatever we strive to do, and that brings positive energy and enthusiasm.

PHOTO: PONTUS HÖÖK

SANDVIK

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More than 214,000 coins were used in the creation of the mosaic.

Sandvik sets a WORLD RECORD

To highlight the important role that the manufacturing industry plays, Sandvik Coromant broke the Guinness World Record for the World's Largest Coin Mosaic. The mosaic will also secure a future of competent workers within the industry.

ON SEPTEMBER 10, 2014, Sandvik Coromant broke the Guinness World Record for the World's Largest Coin Mosaic. The mosaic, which was assembled during the International Manufacturing Technology Show in Chicago, comprises coins with a total value of 65,000 US dollars – the amount that the manufacturing industry contributes to the US economy each second. More than 214,000 coins – silver dollars, quarters, dimes, nickels and pennies – were used in the creation of the mosaic, which took three days to fashion and covers an area of 79 square meters.

The total value of the mosaic, plus donations made by sponsors, has been donated to the Manufacturing Institute, a world-leading nonprofit organization that delivers world-class information and services to US manufacturers and is dedicated to developing, qualifying and attracting talent in the manufacturing industry. The donation will benefit future generations by helping students take advantage of different initiatives and programs.

By creating the mosaic, Sandvik Coromant wants to make visible the important role that the manufacturing industry plays in the US economy. The mosaic highlights the importance of career development within the industry. It depicts a manufacturing worker holding a gear that surrounds a globe, focused on North America. The growth of the industry is depicted through a set of rising bar graphs – topped by the headline "Manufacturing Our Future."■