

# Meet Sandvik

THE SANDVIK GROUP'S MAGAZINE FOR SHAREHOLDERS AND EMPLOYEES    DECEMBER 2011



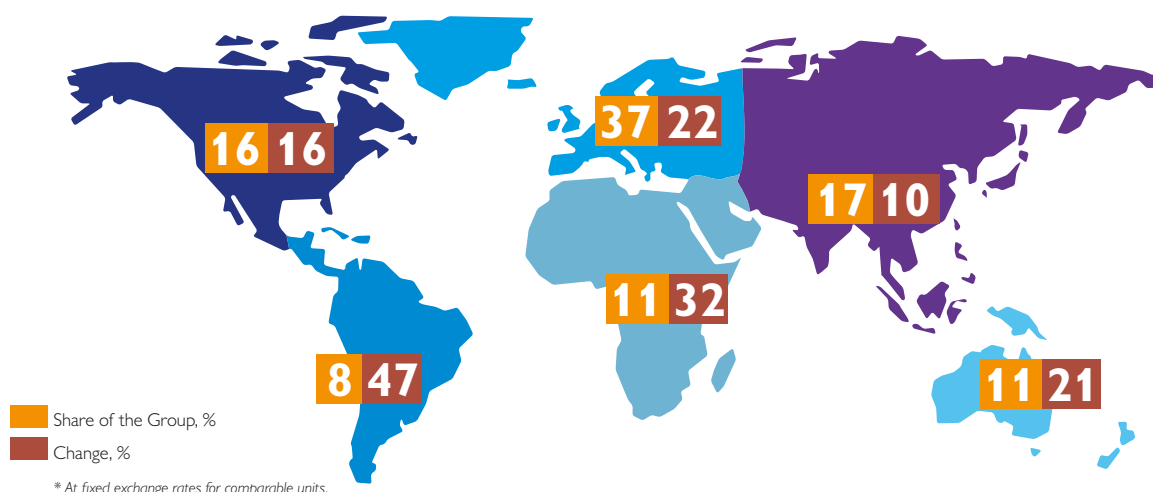
## GOLD FEVER IN SOUTH AFRICA

**New strategy for Sandvik**  
**Three business areas become five**  
**Sustainability on a broad front**

# THIRD QUARTER 2011 IN FIGURES

## INVOICING BY MARKET AREA

Share of group invoicing and percentage change compared with year-earlier period.\*



## INVOICING BY BUSINESS AREA

SEK M	Q 3 2011	Q 3 2010	Change %	Change % <sup>1)</sup>
Sandvik Tooling	6,692	5,966	+12	+18
Sandvik Mining and Construction	10,843	8,676	+25	+32
Sandvik Materials Technology	4,291	4,170	+3	+7
Seco Tools <sup>2)</sup>	1,692	1,420	+19	+19
Group activities	10	9		
<b>Group total</b>	<b>23,528</b>	<b>20,241</b>	<b>+16</b>	<b>+22</b>

## OPERATING PROFIT BY BUSINESS AREA

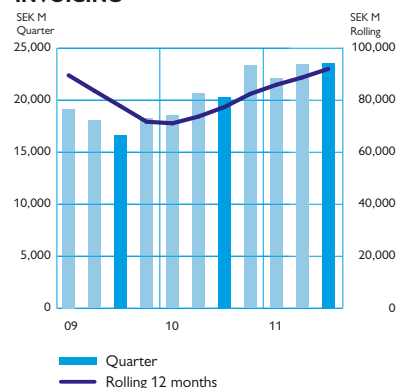
SEK M	Q 3 2011	Q 3 2010	Change %
Sandvik Tooling	1,483	961	+54
Sandvik Mining and Construction	1,550	1,257	+23
Sandvik Materials Technology	-1,542	203	-
Seco Tools <sup>2)</sup>	297	245	+22
Group activities	-123	-134	
<b>Group total <sup>3)</sup></b>	<b>1,665</b>	<b>2,532</b>	<b>-34</b>

## OPERATING MARGIN BY BUSINESS AREA

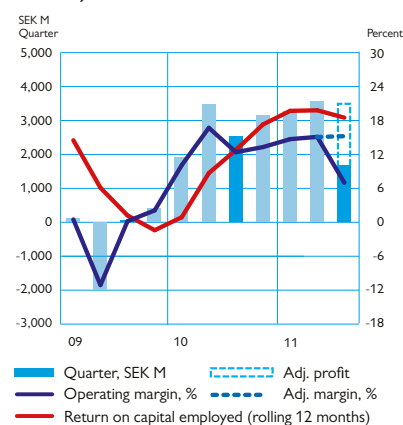
% of invoicing	Q 3 2011	Q 3 2010
Sandvik Tooling	22.2	16.1
Sandvik Mining and Construction	14.3	14.5
Sandvik Materials Technology	-35.9	4.9
Seco Tools <sup>2)</sup>	17.6	17.2
<b>Group total</b>	<b>7.1</b>	<b>12.5</b>

- 1) Change compared with preceding year at fixed exchange rates for comparable units.  
 2) As a result of the majority holding in Seco Tools AB, Sandvik consolidates this company.  
 3) Internal transactions had a negligible impact on earnings for the business areas.

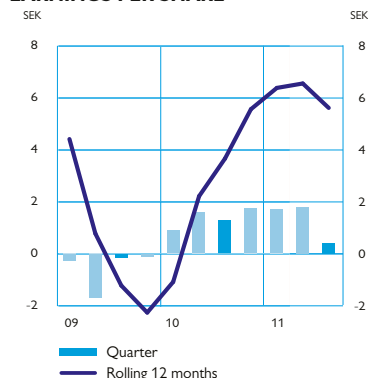
## INVOICING



## PROFIT, MARGIN AND RETURN



## EARNINGS PER SHARE



**Meet Sandvik:** The Sandvik Group's magazine for shareholders and employees **Editor-in-Chief and responsible under Swedish press law:** Jenny Rogström **Editor:** Jonas Rehnberg **Production:** Spoon Publishing AB **Print:** Sandvikens Tryckeri **Date of print:** December 2011  
 Published in Swedish and English, in printed form and at [www.sandvik.com](http://www.sandvik.com) **Email:** [info.group@sandvik.com](mailto:info.group@sandvik.com)



# Positive business climate

**WITH THE EXCEPTION** of certain segments, the business climate was positive in the third quarter and favorable development was reported for order intake and invoiced sales. While both Sandvik Mining and Construction and Sandvik Tooling registered high demand, the trend for some of Sandvik Materials Technology's product groups weakened.

**THE NORTH AMERICAN** market developed positively during the quarter as did South America and Australia, while demand in Europe and Asia leveled off in certain segments. Seasonally, the third quarter is normally the year's weakest, with a somewhat lower rate of invoicing and higher level of tied-up capital in relative terms. This is expected to return to a more normal level over the next few quarters. In light of the increasing sense of uncertainty as regards the macroeconomic conditions in the market, we are increasing the level of readiness to manage any weakening of the economy in forthcoming quarters.

**AT FIXED EXCHANGE** rates, order intake and invoiced sales rose by slightly more than 20%, amounting to 24.8 billion SEK and 23.5 billion SEK, respectively. Adjusted for impairment of goodwill and other one-off costs totaling approximately 1.7 billion SEK, operating profit amounted to about 3.4 billion SEK, or 14% of invoiced sales. The reported operating profit was 1.7 billion SEK, or 7.1% of invoiced sales.

**EFFORTS AIMED AT** introducing the new strategy and shaping the new organization are proceeding well and according to schedule.

Olof Faxander, President and CEO, Sandvik AB



**Order intake**  
SEK 24,825 M, +21%\*

**Invoicing**  
SEK 23,528 M, +22%\*

**Operating result**  
SEK 1,665 M

**Result after financial items**  
SEK 1,110 M

**Result for the period**  
SEK 704 M

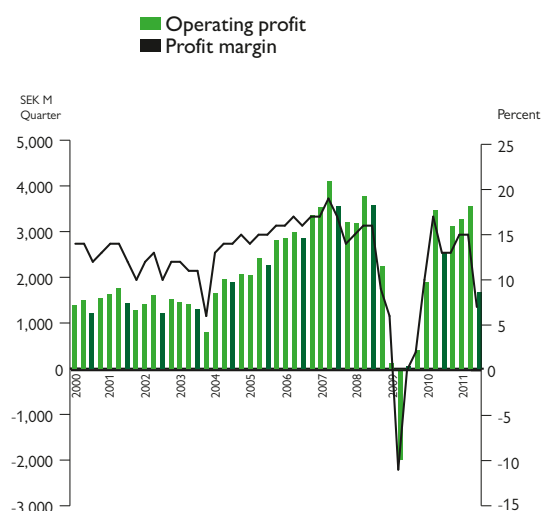
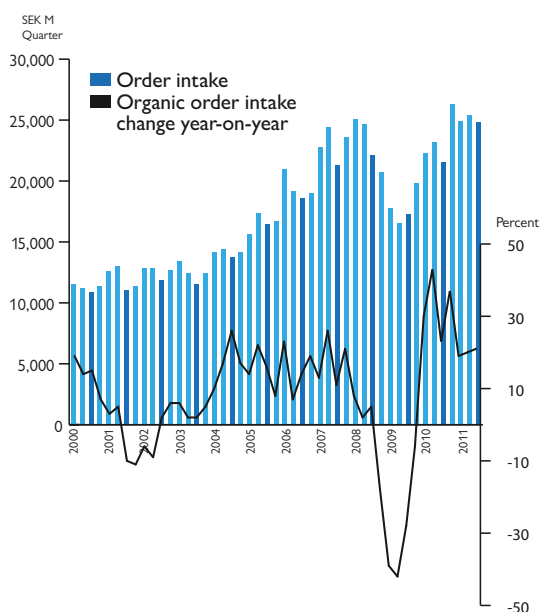
**Result per share**  
0.53 SEK <sup>1)</sup>

**Cash flow**  
SEK +2,614 M, -34%

\* Change compared with the corresponding quarter in the preceding year, at fixed exchange rates for comparable units.

<sup>1)</sup> Calculated on shareholders' participation in earnings for the period. No dilution effects.

## Sandvik Group's financial development



# New strategy streng

In September, Sandvik announced a new strategy aimed at creating better conditions for long-term growth. Three business areas will be split into five, the head office will move to Stockholm, and Sandvik's presence in growth markets will be strengthened. Concurrently, there will be some management changes and common functions will be more clearly linked to reduce costs and shorten internal decision-making processes.

“SANDVIK HAS A strong offering and is the market leader in many fast-growing and mature markets,” says Olof Faxander, CEO. “We need to further improve and strengthen this position in certain areas and do a better job of coordinating and ensuring that resources and funds are directed to areas that provide the best return.”

When he presented the new strategy at the Capital Markets Day in September, Faxander emphasized four keywords that will characterize the strategy: The *ambition* to be world class in every core area.

Increased *speed* at all stages – from decision-making processes to development and product launches. He also spoke about the importance of a clearer *focus* on the core business and growth markets and that operations failing to

live up to expectations will be evaluated for divestment.

Faxander also spoke about the importance of becoming more *global* in mindset and organization while remaining firmly anchored locally. This includes internationalizing executive management and locating development and manufacturing units close to emerging markets.

“We’ll grow where growth takes place,” says Faxander, pointing to China and India as locations where Sandvik’s presence will increase.

The new “One Sandvik to be number one” strategy reflects Sandvik’s ambition to be number one for its customers, shareholders, and employees. The new organization will be in place in early 2012 and the goals are to be achieved by 2015.



**Three business areas become five**  
“It’s essential that we adapt strategies and our organization to a world of rapid

## Sandvik’s five new business areas



### Sandvik Mining

Focused on global leadership on products, solutions and services for high-performing hard rock and soft rock underground and surface mining operations.



### Sandvik Machining Solutions

Holds a clear global leadership by offering productivity enhancing products and solutions for advanced industrial metal cutting.



### Sandvik Materials Technology

Offers high value-added advanced materials and special alloys for demanding applications in selected niches.



### Sandvik Construction

Offers high-performing products, solutions and services within selected niches of the global construction industry.



### Sandvik Venture

A business area aiming to create the best possible environment for growth and profitability in attractive and fast-growing operations.

# Strengthens Sandvik



change, where the ability to act and react quickly is critical for long-term success,” says Faxander. “The new organization will have a clear, strong focus on four core areas with the objective of becoming a world leader. We also need to generate development opportunities for new and related business, and in the fifth business area we must ensure that small operations with good potential have the opportunity to evolve as much as possible.”

To increase focus and achieve maximum interchange within each core business – and also to optimize the organization for growth and profitability even in the new and smaller operations – the company is being organized into the following business areas starting in 2012: Sandvik Mining, Sandvik Machining Solutions, Sandvik Materials Technology, Sandvik Construction, and Sandvik Venture.

These product areas will be included in Sandvik Venture: Sandvik Process Systems, Sandvik Hard Materials, Diamond Innovations, Wolfram and Dormer, and parts of Sandvik MedTech that cover medical instruments and implants. ■

**As a result of the new strategy, Sandvik Mining and Construction will be split into two independent business areas. Gary Hughes, President of Sandvik Mining, and Thomas Schultz, President of Sandvik Construction, describe their new roles.**

**Gary Hughes**, President of Sandvik Mining, a new business area as of 2012

**Born:** 1958

**Employed:** 1997

President of the Underground Mining customer segment within Sandvik Mining and Construction since 2010. More than 20 years of experience in the global mining industry.

**What would you like to contribute to the executive management team?**

I've worked in many parts of the world and am a true global citizen, and I feel comfortable with external and internal stakeholders from around the world. Being a people person, I look forward to implementing the One Team philosophy in line with our One Sandvik strategy. I'll do this by being open, respectful, and committed to living up to our values.

**Which aspect(s) of the new strategy do you view as most important?**

It's important to set ambitions high and to execute quickly. To me, the most important aspect to getting this done is



our people. Our success relies on how we work together and how we maximize returns on this great company's intellectual capital. The organization is a platform but the brand comes alive through our people and our actions going forward.

**What are Sandvik's key strengths?**

Our values, our global footprint, and our fantastic people are strengths we should be proud of and better at capitalizing on. We also have a long history of working on development projects with our customers that has, and will continue to strengthen Sandvik.

**Thomas Schulz**, President of Sandvik Construction, a new business area as of 2012

**Born:** 1965

**Employed:** 2001

President of the Construction customer segment within Sandvik Mining and Construction since 2006. Many years of experience in the global mining and construction industry.

**What would you like to contribute to the executive management team?**

Personally, I'll contribute my strong belief in teamwork and a direct, open dialog based on respect and honesty. From a business standpoint, I'll do my best to implement the new strategy, retain our customer focus, and fulfill the promises we make.

**Which aspect(s) of the new strategy do you view as most important?**



“Focus” and “speed” are essential to the future success of our company and require the active participation of all Sandvik employees. Another important aspect of the new strategy is the One Sandvik transformation.

**What are Sandvik's key strengths?**

The enthusiasm and values of our employees and our customers' trust in us.



# Gold fever in South

**South Africa is now Sandvik's fifth largest individual market, and the trend points sharply upward – but also downward into the world's deepest mines, where Sandvik products help mine gold.**

**S**andvik Mining and Construction is by far the Group's largest business area in South Africa, but Sandvik Tooling and Sandvik Materials Technology also contribute to favorable developments.

South Africa was hit by the global recession a few years ago, but thanks to huge investments in infrastructure and stadiums for the 2010 World Cup, the construction sector held its own. The World Cup was followed by a mining industry boom and Sandvik's sales increased 27% last year.

Country Manager George Filen describes the positive situation from his boardroom at headquarters in Johannesburg: "We're growing much faster than the South African economy, which is mostly due to the mining industry."

The country's economy is projected to grow just over 3% in 2011.

"South Africa is blessed with deposits,"

says Charles Deacon, Sandvik Mining and Construction's Vice President of Marketing for Region Africa. "The country ranks among the most important producers globally of half of the world's ten most important minerals: gold, platinum, manganese, nickel and uranium. Coal and iron ore also contribute significantly to the South African economy."

South Africa accounts for an estimated 50% of the earth's gold deposits, but these deposits are found far underground. Today, Sandvik products are found in one of the world's deepest single drop mine shafts: Goldfields South Deep Mine, which is three kilometers deep.

"The deepest that any person is working in is the Mponeng Mine at four kilometers down, where the rock can be as hot as 66 degrees Celsius," says Deacon. "It's possible that gold will be extracted at a depth of ten kilometers someday."

Sandvik's challenge is to develop equipment that is automated and adapted



**George Filen**, Sandvik's Country Manager in South Africa.

to conditions at these depths. Transporting staff up and down takes two to three hours per shift, and air and water must also be sent down.

"There are great opportunities for Sandvik," says Filen. "Together with the Chamber of Mines, South Africa's Council for Scientific and Industrial Research, and mining company Anglo-Gold Ashanti, we are developing mining at these depths. Sandvik South Africa is continuously contributing to research and development in this area."

Africa is a continent of the future on which the world is focused due to its huge raw material reserves and expand-



Mine outside Johannesburg.



Production of rock drilling tools in Krugersdorp.



## Sandvik in South Africa

**Established:** 1947. The first drill steel factory started up in 1948

**Sales:** Fifth largest entity in the Sandvik Group

**Number of full-time employees:** About 2,000

**Main products:** Mining and construction equipment, high-speed steel and cemented-carbide cutting tools, high temperature materials, seamless tubes

**Major industries:** mining, quarrying, construction, automotive

**Locations:** Head office in Jet Park near Johannesburg, plant for manufacturing rock drill tools in Krugersdorp, service centers in Jet Park and Delma, nine branch offices in Burgersfort, Durban, Cape Town, Francistown, Kathu, Port Elizabeth, Welkom, Rustenburg, and Swakopmund (Namibia). Sandvik South Africa has personnel on site at 22 mines, of which 19 are in South Africa, two in Botswana, and one in Namibia.

# Africa

ing economies. South Africa is the catalyst, and it is from here that Sandvik currently runs its African operations. The company's second-largest market in Africa is Central Africa, where Zambia's copper mines are of particular interest.



**Charles Deacon,**  
Sandvik Mining and Construction's Vice President of Marketing for Region Africa

In West Africa, Sandvik is based in Ghana, which is the continent's second largest gold producer and a major oil producer of the future. The oil sector is important to Sandvik Materials Technology, and new discoveries are increasing

opportunities.

Sandvik also sells tools for assembling cars to the local automotive industry, and Sandvik Tooling has increased its sales in the country. "Regarding sales of the Coromant tool, 35% of invoicing goes to general engineering and 30% to the automotive industry," says Cameron Parker, General Manager of Sandvik Tooling in South Africa.

A general problem in South Africa is finding enough skilled workers, and for the past seven years, Sandvik has been actively working with several schools and technical training centers. This has also become one of the company's



**Cameron Parker,**  
General Manager of Sandvik Tooling in South Africa.

most important corporate social responsibility (CSR) projects.

"We focus on promoting math and natural science skills," says Miles Wakeford, Sandvik veteran and CSR manager. "We're currently involved with several schools that are

located near mines and are looking at eight more. We've also helped renovate two schools."

Sandvik has invested 55 million rand (just over USD 7 million) in its apprenticeship program and 600 young people have been trained so far, of whom about 80% are black.

Sandvik's first major investment out-

"The deepest that any person is working is in the Mponeng Mine at four kilometers down, where the rock can be as hot as 66 degrees Celsius."

side Sweden ended up in South Africa. It was 1947, during the post-war era, and there was a mining boom. Today, there's another mining boom as witnessed by Sandvik's sales, which rose 27% last year. No one could have envisioned this when the first steel was sold in South Africa in 1928.

2011 appears to be a successful year since demand has sometimes exceeded capacity. Providing a new recession doesn't take place, 2012 also looks promising.

# Sustainability – a customer advantage

Reduced energy use, more efficient production, safer working environments, lower raw material consumption, and recycling are important focus areas in Sandvik's sustainability initiatives. The goal is to have more products and solutions that help reduce customers' environmental impact.

## Recycled metal saves energy

**SANDVIK'S RECYCLING PROGRAM** was initiated in 1997, but it didn't really take off until ten years later. "Environmental awareness wasn't as prominent in the 1990s," says Bo Nelander, Program Coordinator for Sandvik Tooling's cemented-carbide recycling. "Today, with climate issues in focus around the world, it's easier for people to understand and for us to pursue recycling. Sandvik Coro-

mant was first and then company after company followed suit."

Ulf Lundahl, Purchasing Director at Sandvik Tooling, explains that the purpose of recycling is threefold: "First, it's an important part of our strategic materials supply. Second there are lower costs for the finished product. And third, it represents a good deal of the company's long-term sustainability efforts."

The cemented carbide in Sandvik Tooling's metal cutting tools consists mostly of tungsten. About 75% of all virgin tungsten (from mining) is produced in China, which in recent years has limited its exports since it prefers to export finished products rather than raw materials.

"To reduce our dependence on China, we're interested in increasing re-purchases of waste products," says Lundahl. "It's also a service to customers, since they can manage their waste in compliance with the ever stricter regulations in this area."

Mining virgin tungsten has a greater environmental impact than recycling it from waste products. Sandvik mainly uses two different recovery processes: "The zinc process at our India plant converts the sintered cemented carbide to powder," says Nelander. "However, the metals are not separated, which means they can't be used in all products. Our chemical recycling in Austria costs more to process, but the metals are separated there, which allows full reuse in new products."

Waste from Sandvik's own production processes is included among the thousands of metric tons of cemented-carbide scrap that flows back to Sandvik's tool production. "Our ambition is to minimize these internal material losses, but when it does happen we collect it and reuse it in new products," says Lundahl. ■



**Bo Nelander, Program Coordinator for Sandvik Tooling's cemented-carbide recycling.**



**Sandvik recycles cemented-carbide inserts.**



## Conveyors reduce carbon dioxide

**THERE IS GLOBAL** demand in the mining industry for more efficient production methods with the least possible environmental impact. The trend is moving toward a reduction in the use of trucks to transport ore and waste rock from mines to processing plants, landfills, intermediate storage, or sea terminals. Trucks are being replaced by electric conveyor belts and Sandvik has delivered solutions to many customers in Europe, as well as Africa and South America.

Thomas Jabs, Global Product Line Manager at Sandvik Mining and Construction in Germany, points out that many of the mines in South America are at high altitudes – up to 5,000 meters above sea level – making the conveyor solution extra attractive.

At these altitudes diesel truck engines do not work as well, losing up to 35% of their power due to a lack of oxygen, whereas conveyor belts, can actually generate power. “By connecting a generator when the conveyor belt is running downhill, power is generated that can be used elsewhere in the mine, adding an extra environmental benefit,” says Jabs.

But even in more varied terrain, the up to 20 kilometer-long conveyor belts demonstrate clear environmental benefits compared to trucks. Using electric power rather than diesel fuel is just one of the ways in which carbon dioxide emissions are reduced.



**Conveyor solution in Brazil.**

“The key to the high efficiency of the conveyor belts is their low deadweight,” says Jabs. “Although the underlying drive system is extremely technical, what appears is basically just a moving belt covered with an enormous amount of rocks. A truck is heavy, requiring a lot of energy to move, even when it’s empty.”

He points out that the electric conveyor belt also improves the working environment around the mine with less noise and dust from heavy traffic on gravel roads. Increased capacity requirements can also cause logistical and safety

problems for those who simply rely on trucks.

“There’s a physical limit to the number of vehicles that can be used safely and efficiently in a mine and an average of seven people are needed to drive and maintain a truck. A conveyor belt on the other hand, has no drivers and is fully automated,” says Jabs.

“We continue to develop our overall offer with complementary equipment at both ends of the conveyor belt, such as mobile crushers that make the ore manageable for the next step in the process.” ■

## Identifying the environmental effects

**A VALVE STEEL**, used in compressors, roll stock for shavers, and two kinds of knife steel, were scrutinized in recent months from an environmental perspective by a team at Sandvik Materials Technology’s Research and Development department.

“The aim is to learn how to systematically and transparently assess the environmental impact of our products during their useful life,” says Project Manager Karin Östman.

Östman explains that the company’s production processes have long been studied and disclosed in compliance with established requirements, but when it came to the environmental impact of products, information was more limited. Now customers and investors are increasingly interested in these issues.

“Regulatory requirements for environmental labeling will be tightened,” says Östman. “More and more companies want to be able to use climate declarations and the like in their marketing. Using life cycle analysis, customers can get information about whether our products

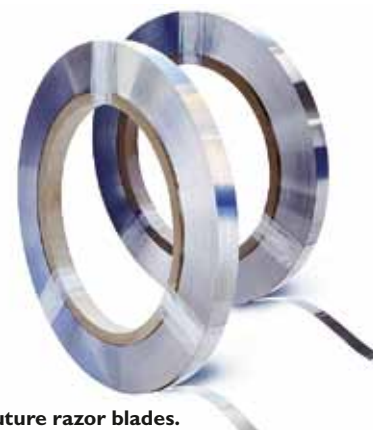
give them more value at a lower cost to the environment compared with other solutions. They can also get a concrete figure, such as the product’s carbon footprint up to the point when the product is delivered to them.”

In the pilot project, the environmental impact of the four steel types is being analyzed, from raw material extraction – via the various production stages in steelworks, hot rolling and cold rolling -- all the way up to delivery from Sandvik. The data is collected from various production systems.

“We are looking primarily at the quantity of raw materials, energy consumption, and yield – that is the proportion of material that becomes high-grade products and how much we lose to waste,” says Östman. “The degree of recovery and alloy content has quite an impact on the analysis, but we also consider the effect of a number of other intermediate chemicals.”

The next step is to monitor how the product is used by Sandvik’s customer prior to scrapping. That project is scheduled for early 2012.

“We want to be able to verify how our materials contribute to safer, more efficient processes among customers, which in the long run means lowering the environmental impact,” says Östman. “The goal is to have a working methodology for how we can develop life cycle analyses of our products and communicate the results through, for example, environmental product declarations and various climate impact indices.” ■



**Future razor blades.**

# Record interest in Sandvik

Attendance was at an all-time high at Sandvik's annual Capital Markets Day in September. About 150 financial analysts, fund managers, and media representatives from Swedish and foreign companies gathered for an eventful day.

**THE MAJOR ATTENTION** focused on Sandvik's Capital Markets Day was a reflection of the change process facing Sandvik. The theme of the day was the new strategy and organization.

CEO Olof Faxander opened the day with a review of the new strategy and also took the opportunity to present the new members of Group management. He said that executive management had started revising the company's financial objectives, but gave no exact date for when the new targets will be presented. CFO Ola Salmén then went through the second quarter results.

Despite a turbulent fall season on the markets, Faxander said the company stands by its market assessment presented with the second quarter report. "There is great uncertainty, especially in the capital markets, that is difficult to predict," said Faxander. "It's largely a matter of political decisions that we can't influence." He added that one objective of the new organization is to bring about greater flexibility and faster reactions.

"The companies and organizations that succeed are the ones that are the fastest and best adapted to the changes taking place in the world," said Faxander.

After the initial presentation, participants were divided into smaller groups that rotated between four stations. The

participants received detailed information about the various business areas and had the opportunity to meet the business area managers and ask them questions.

The day concluded with a question and answer session. "It's a very good approach and the station system provides a good structure," said Mats Liss, an ana-

lyst at Swedbank. "We had the opportunity to interact with the new management team and it was a fruitful day." He also approved of the reorganization.

"Three business areas will become five and it feels natural," said Liss. "From a stock market perspective this also leads to better transparency in the long run." ■



## Chinese deliveries

As the world's largest gold producer, China is an important market for mining equipment. Sandvik Mining and Construction has received a contract from Shandong Gold to deliver mining machines to three operations in Shandong province.

The contract represents the largest single order ever for mining equipment in China and it strengthens Sandvik's position as China's leading provider of mining technology. The equipment is scheduled to be delivered in 2012 and will consist of Sandvik drill rigs, loaders and trucks.

"Sandvik was initially chosen because

we are a low-risk option, but also because we have an excellent understanding of their operations and can deliver the required machines and services," says Schubert Huang, Vice President of Sandvik Mining and Construction, Region EAS.

Sandvik has secured yet another contract in China for delivery of mining machinery to the Kailin Group, including drill rigs, bolters, and long-hole rigs. State-owned Kailin was founded in 1958 to extract phosphorous iron ore in the Guizhou province ■





## Medal to Sandvik's Olle Wijk

Olle Wijk, Vice President and Head of R&D and Technology at Sandvik Materials Technology, was awarded the Swedish Royal Institute of Technology's gold medal for industrial collaboration 2011. Wijk, who received the medal at a ceremony in Stockholm's City Hall, received the award for his successful collaborations between industry and universities.

"The Royal Institute has a very strong research and educational environment," says Wijk. "Within Sandvik, we have extensive research and development programs and throughout the years, contact with universities has been, and still is, central to our recruitment of competent employees."

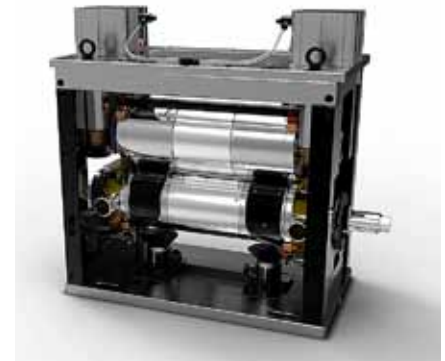
Sandvik is recognized for having a very close, well-functioning collaboration with the Swedish Royal Institute of Technology. Wijk began his research career there in the early 1970s. In May 1980, he received his doctorate in process metallurgy and then started working at Sandvik as a process developer in metallurgy. ■

## Cutting edge technology

An expert in rotary cutting technology, Sandvik is launching a new generation of cutting solutions designed especially for companies that manufacture hygiene products like diapers, facial tissues, and panty liners. The solution consists of a cylinder with an edge and an anvil that works under pressure against the cutter.

Paolo Ocleppo, Marketing Manager at Rotary Cutting Solutions, Sandvik Hard Materials, explains why Sandvik's expertise is greatly appreciated by customers: "The cutting solution is a critical component of the production line," says Ocleppo. "If the cut isn't good, then the line stops, resulting in huge downtime costs. Sandvik cutters ensure a stable cut and reliable performance at high speed and under critical cutting conditions."

The raw material to be cut passes through the cutter and anvil, which are both mounted in a frame. Sandvik's new generation of frames are built to run at high speeds and are less sensitive to



disruptive elements like vibrations and contamination.

New features include a vacuum system using computational fluid dynamics analysis to optimize air flow for perfect raw material control and two damping systems, one being a tuned mass damper developed by Sandvik Hard Materials in cooperation with Teeness AS, a Sandvik-owned company. ■

## Congratulations Sandvik!

On January 31, 1862, the articles of incorporation for Högbo Steel and Ironworks were approved. That date is considered Sandvik's birthday, and its 150th birthday in 2012 will be celebrated in various ways around the world throughout the year.

The next issue of Meet Sandvik, published in January next year, will be a commemorative edition depicting the company's fantastic 150-year journey from an ironworks in northern Sweden's inland

to a leading global company with about 50,000 employees and customers in 130 countries. We will present the pioneers of the past, the heroes of today, the challenges of tomorrow, and how Sandvik will meet these challenges with a new strategy.

Around the world, anniversary ambassadors at Sandvik locations will be responsible for co-ordinating the celebrations and adapting them to local conditions. Anniversary portals on the Sandvik intranet as well as Sandvik's web will be regularly updated with news regarding the celebrations. ■



## Energy efficiency in Japan

When Fukushima and other nuclear power plants were taken off the electrical grid after the natural disaster in Japan, the Japanese government asked industries to reduce their electricity consumption by 15%. In response, Sandvik Coromant started a productivity program to save electricity in the metal processing industry.

Noriyuki Matsumoto, who is responsible for developing the concept, says

that the program has been received with great interest. One challenge, however, was to get companies to accept that even tool manufacturers can give advice on reducing energy consumption.

"Because the electricity is consumed by machines, customers expected to get advice from machine manufacturers, not the tool manufacturers," says Matsumoto.

He points out that the program has

been a useful tool for communicating productivity. "We demonstrate that we're a company that thinks modernly and in line with social trends, which generates a lot of goodwill."

During the winter, the demand for electricity in Japan increases substantially. Sandvik will continue to support efforts to conserve energy. ■

## Hello there ...

... **Jacob Eisenberg, who moved to Stockholm from Amsterdam to become the new managing director for Sandvik Intellectual Property in September 2011. What does your job involve?**

Under the new strategy, intellectual property (IP) is a Group function in a separate company: Sandvik Intellectual Property (SIP). My role is to ensure that we at SIP take care of all the IP needs of our stakeholder clients, which not only includes traditional departments, such as R&D for patents and Sales & Marketing for trademarks, but also other Group functions like Legal, Tax, HR and Risk Management.

### What is intellectual property?

Intellectual property is a part of the law whereby someone can have exclusive ownership of his or her creation. Every country in the world has some form of IP law under which an inventor can get exclusive rights to make, use, or sell his or her invention by obtaining a patent. The same is true when someone comes up with a new trade name and gets a trademark or writes new software and gets a copyright. These products and services are generally created under an employ-



ment contract, and the employer accrues the IP rights. So, it is generally up to the employer to create as well as enforce IP rights.

### Which part is most important to Sandvik?

From a sheer size perspective, Sandvik has more patents than trademarks or copyrights. That noted, they are all so different that it's difficult to weigh one against the other. In practice, intellec-

tual property contributes greatly to the company's financial growth. These are long-term investments that can't easily be taken away from Sandvik once granted.

### What are the major risks involved?

One risk is that Sandvik's innovative nature is not properly understood by the market. Intellectual property is a measure of a company's innovativeness that is often considered by analysts, shareholders, and others who are considering investing in Sandvik. We must therefore create and take advantage of as much IP as possible. Another risk is that our R&D goes unprotected into the market. We must therefore be diligent in enforcing our IP rights against theft. A third risk is that we focus too narrowly on a limited geographic market, thereby opening ourselves up to being copied or lagging behind our competitors in other markets.

### What useful experiences do you bring from previous jobs?

I would like to think that I bring an open-minded, international viewpoint. I have been quite fortunate in having had the opportunity to work and study both in America and Europe. I have also been fortunate enough to work with all phases of intellectual property creation. ■

## Sandvik makes cars greener

By 2015, the EU will have introduced new environmental targets that will drastically reduce vehicle emissions. To achieve these tough new goals, automotive component manufacturers are turning to Sandvik for help in developing a new generation of fuel injectors.

"Fuel injectors are key to reducing emissions," says Martin Hahn, Automotive Components Product Manager at Sandvik Hard Materials in Barcelona. "Our customers aim to reduce fuel consumption up to 20% by optimizing combustion and reducing emissions. To do that, injectors have to function in pressures up to 2,800 bar."

By comparison, an inflated bicycle tire is subject to a pressure of 7 bar. Traditional metal components cannot take these



tough conditions for long, but Sandvik's cemented-carbide components can. They can also take the wear and tear that occurs from constant contact with fuel. At the same time, they ensure the engine performs well throughout its lifetime. ■

To reduce the negative environmental and health effects from road vehicles, the EU has initiated regulations limiting the amount of emissions permitted for cars sold within the EU. The Euro 6 standard will require further reductions in carbon dioxide, hydrocarbon, and nitrogen oxide emissions by 2015.

## Mine revival

After being closed for nearly 20 years, the mine in Dannemora in Sweden has reopened. The black iron ore in Dannemora has attracted people for centuries. The mine was opened for the first time in the 15th century. The reopening has already resulted in a five-year contract between Dannemora Magnetite and German steel producer Salzgitter Flachstahl. Dannemora will deliver up to 300,000 metric tons of iron ore, which will be mined with the help of 13 mobile mining machines and three stationary crushers from Sandvik. The partnership also includes a full service package with maintenance, repairs, and preventive maintenance.

"We chose Sandvik because they offered the best overall solution," says Kjell Klippmark, CEO of Dannemora Magnetite.

The company expects to extract more than two million metric tons of ore annually from the mine, and there is an estimated 28 million metric tons of ore to extract. Full production will get started in late 2013. ■