# MeetSandvik



## Current faces



New president of Sandvik Hard Materials

With effect from 1 October 2003, Tom Erixon, formerly head of Group Staff Business Development and IT, is the new president of the Sandvik Hard Materials product area and a member of the Sandvik Tooling business area's management group. Tom Erixon succeeds Sven Flodmark, who has assumed a business development role within Sandvik Tooling. The new head of the Group's combined IT operations is Executive Vice President Peter Larson, who thereby also becomes Chairman of the Boards of Directors of the IT companies Sandvik Systems Development and Sandvik Information Technology.

#### Sandvik Innovator of the Year

The Sandvik Innovation Prize, awarded to the innovator of the year within the Group, was recently presented for the first time. The prizewinners are two inventors from the Sandvik Tamrock product area – Roger Noel, working in Lyons, France,



and Vesa Peltonen, from Tampere, Finland. They received the prize for their innovative Rock Pilot drilling system, a new concept for improving productivity when drilling under difficult conditions. The new system represents a breakthrough in hydraulic surface drilling. By adjusting the drilling force to the hardness of the rock, it is possible to drill more and straighter holes than before, even in the worst conceivable geological conditions.

The Sandvik Innovation Prize was established to stimulate and reward pioneering achievements within the Group's product and process development. The emphasis is on new inventions, and the prize complements other awards within Sandvik, such as the Wilhelm Haglund Medal.

#### Cover profile

Lourdes Caceres is Managing Director of the Sandvik Mining and Construction business area in Mexico. Lourdes was born in Peru and has a degree in accountancy and auditing from Lima University. She has extensive experience of the business area's various activities. Her career with Sandvik began in Peru 20 years ago. She moved to Mexico in 1991 and, after holding various managerial positions within Sandvik Tamrock, is now responsible for all of the business area's operations throughout the country.

"I really like my job at Sandvik," says Lourdes. "It has played a key role in my personal development and has always provided a challenge."

In her leisure time, Lourdes enjoys going to the beach, dancing and literature.



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New president of Tube product area

Lars Thorén has been president of the Tube product area within Sandvik Materials Technology since spring 2003. Lars is a production technology engineer who most recently worked for the welding company Esab in Gothenburg, where he was vice president for one of the business areas and responsible for European operations. About half of Sandvik Materials Technology's sales derive from Tube, which is a world leader in seamless tubes in stainless steels and special alloys.

#### **Meet Sandvik**

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# Continued focus on profitable growth

Sandvik's order intake and invoiced sales continued to increase in the third quarter despite the weak business climate. I am glad to be able to report that operating profit also increased, despite negative currency effects. A further increase in market shares can be added to the list of positive developments during the period. However, the business climate remains uncertain and we do not expect any significant change in demand in the near future. A number of restructuring measures were taken during the third quarter, and the Group is continuing its internal programs of change with undiminished efforts.

During the preceding quarter, two out of three business areas – Sandvik Mining and Construction and Sandvik Tooling – reported an increase in operating profit. However, for the third business area, Sandvik Materials Technology, the third quarter was a disappointment in terms of earnings. The primary reasons were low capacity utilization and an unfavorable product mix. While the ongoing extensive program of change has produced positive effects to date, this has not been able to offset the weak market situation.

It is time to reverse this trend – productivity must increase and lead times and capital employed must be reduced. We are forced to achieve these changes ourselves, without any help from the business climate and in a situation characterized by negative currency effects. It is a tough assignment, but I am convinced that our efforts will succeed.

One of the cornerstones of Sandvik's profitable expansion over the years has been and remains the Group's substantial investment in research and development. To underscore our interest in product and process development, we have instituted a new prize, to be awarded to the innovator of the year within the Group. The prize has now been presented for the first time, and the recipients were two researchers in Sandvik Mining and Construction who have developed a new system – which we expect to be highly successful in the market – to enhance the efficiency of surface drilling.

We can note another positive news item in the research area during the quarter. Sandvik's new competence center for materials development has been placed in operation in Västberga, Stockholm, Sweden. The facility is the world's largest of its type and will continue to drive Sandvik forward. The continued strengthening of our lead will depend particularly on the results of our continued investment in R&D. I am proud of the high level of expertise dis-

played by our researchers and specialists. You can read more about the new facility and the prize-winning innovators of the year elsewhere in *Meet Sandvik*.

The integration of the newly acquired companies Walter and Valenite is proceeding according to plan. Walter showed a positive sales trend in all its operations, while Valenite developed less favorably as a result of the weak demand in the US automotive industry. Valenite's competitiveness and profitability will steadily improve as its product range is upgraded and its efficiency improved in the areas of production and logistics.

Finally, a few words about Sandvik as a global company – a subject that has been in the spotlight during the year. Sandvik is active in many sectors and a large number of countries. This has always been the dynamic behind our successes, remains so today and will continue to be so. The fact that the Group is active worldwide, including in developing countries, often gives rise to complex conditions. Sandvik bases its operations on the laws and regulations that apply in each country and complies with the trade recommendations issued by the Swedish Government, the EU and the UN. Our guiding document, The Power of Sandvik, is intended to provide support for employees in day-to-day operations and embodies the Group's business concept, goals and values, as well as concrete policies in regard to business ethics, working conditions and the environment. Sandvik aims to bring a responsible approach to doing what we do best - helping our customers to increase their productivity. In this way we also make a positive contribution to the economic and social development where we are active.

Lars Pettersson
President and CEO



Third quarter 2003

**ORDER INTAKE:** SEK 11,550 M, up 2%\*

INVOICED SALES: SEK 11,520 M, up 2%\*

PROFIT AFTER
NET FINANCIAL ITEMS:
SEK 1,103 M, up 6%

**EARNINGS PER SHARE:** SEK 3.15

**OPERATING CASH FLOW:** + SEK 1,644 M

NUMBER OF EMPLOYEES 30 SEPTEMBER 2003 37,090

\* Change in percent compared with year-earlier period at fixed exchange rates for comparable units.

## News from Sandvik's world

#### Needles and pins

Acupuncture was first used as a method for curing disease more than 5,000 years ago in China. The method involves inserting metal needles into the skin and muscles at specific points. Today, modified forms of acupuncture also use electrical stimulation through the needles to combat pain. The method causes very little pain in itself, since the needles are super-fine and disposable in order to eliminate the risk of infection. Of course we won't needle you with the fact that the basic material, highly pure stainless steel wire, is provided by Sandvik Materials Technology.



#### A show of power

Sandvik Mining and Construction's powerful combination of highly efficient machines and tools is gaining new ground, this time in Brazil. The world's third highest dam (200 meters) is situated in this country – on the Canoas River in Campos Novos, approximately 500 kilometers southwest of São Paulo to be precise. The business area is responsible for all deliveries of rock-excavation equipment, tools and service for the construction of the hydroelectric power station and the dam. Construction began two years ago and the project is scheduled for completion in mid 2005. Sandvik Tamrock's drilling rigs and rock-drilling equipment have shown impressive results both above and below ground.





#### Soft landing

You are sitting in an aircraft as it prepares to land. You are hoping (in fact it is a virtual certainty) that the plane will land softly and smoothly. But for many passengers, landing can still be a distressing experience. For them it may be reassuring to know that there are many people thinking of the well-being of passengers. Particularly the aircraft industry, which has equipped aircraft seats with shock absorbers of stainless steel from Sandvik to enhance comfort. So the next time you fly, spare a thought for the Sandvik Group's product developers.

#### High-impact high-tech

Rammer, currently celebrating its 25th anniversary, is a brand within Sandvik Mining and Construction that manufactures hydraulic hammers for breaking and demolition. Rammer has now developed a new, remote-controlled system, Ramona, which connects to a hammer to analyze the rock that is to be processed. Electronic data are transmitted from a number of sensors on the hammer to the operator's cab. This allows the operator to gain an overview of working conditions and thus implement optimum measures. The first customer in the world to use the system was a customer in Italy and the experience was highly promising. The results were as expected: a marked increase in efficiency and productivity.





#### Hot news

A completely new heating element of silicon carbide, Kanthal Globar ® SD, has been developed by Sandvik product area Kanthal. The new product can cope with temperatures of up to 1,600°C and is primarily aimed at the heating of industrial furnaces. The new element is used in the electronics, aluminum, steel, glass and other industries worldwide. Improved lifetime, mechanical strength and resistance to aggressive environments are some of the properties that are most appreciated by customers.

#### Prestigious

To achieve the fine edge and to facilitate re-sharpening, the blade is made from the best materials imaginable.

The knife is the prestigious French
Laguiole brand and naturally the material is stainless steel from Sandvik. According to the manufacturer, 109 different stages are required to complete the handmade knives. The reputation of this quality product depends upon the materials used being of the highest standard and on the professional expertise used in manufacture. What counts is the feeling of the knife when held, its carefully calibrated balance. For the connoisseur, this is the cutting edge.



Peter Gossas has a solid background for his current job and has been a steel man all of his professional life. When he talks about his business area, however, he seldom mentions alloys or steel grades. Instead, his focus is on how to empower human resources in a stimulating manner. His vision is that Sandvik Materials Technology must be best in its class, meaning in those niches on which the business area is focused. According to Peter Gossas, this not only involves investing in machinery and equipment. Instead, it involves investing in employees, to encourage them to release their know-how and to create a new approach.

#### Peter Gossas on niches:

"Before I joined the company, I regarded Sandvik Materials Technology as a specialized steel company with advanced products. Now that I am on the inside, I can see that this niche thinking is much more profound and more powerful

than I could ever have imagined. With more than 900 materials in the production program, Sandvik Materials Technology really is a unique company in the industry. No one even comes close to our specialization. That is something we absolutely have to stand up for and enhance."

#### ... on adding value:

"As I see things, we are more of an engineering company than a steel company. Our product program consists of special alloys, metallic and ceramic resistance materials, as well as process and sorting systems. We have northern Europe's largest R&D center for stainless steels and special alloys. The materials that we produce have a high level of added value – the value of the end products is 5–50 times the value of the original materials. Everything is focused on ensuring that the customer receives a product that is as closely tailored to requirements as possible. It was not least for these reasons that

we changed the name to Sandvik Materials Technology in the beginning of this year. This underscores our role as a high-tech partner in the field of materials technology. We will strengthen our leading position in advanced materials and highly refined products."

#### ... on product renewal:

"Constantly developing new products in close cooperation with global customers is truly ingrained in our employees. We are continously refining this concept. In part it is a question of moving faster from idea to finished product and commercialization. We will find shortcuts to enhance the efficiency of this process. One step in this direction is that we have created Nova, a new unit for parts of our business development that I like to describe as a greenhouse for our business area. This is the perfect environment for planting new ideas, and we ensure with careful nurturing that these ideas achieve maximally rapid growth. Medical materials, for example, which is an area where we see excellent opportunities for growth, are part of Nova."

#### ... on marketing:

"This is another outstanding specialty in Sandvik Materials Technology. We have a large number of very competent employees around the world who know how to work close to customers to find the right solutions. Together with the R&D staff, these specialists are on the leading edge when it comes to developing new products. However, we can do even better here, as well. We must never regard our products and services as standard. Instead, we must constantly develop our products so that we offer unique customer benefits. We will also make sure that we become more proficient in communicating this added value to customers. By so doing, we can make sure that we are the last ones to leave the customer's negotiating table."

#### ... on manufacturing:

"I see great potential for improvement in this area, and this is not a question of investing in new equipment. The challenge for us lies in becoming better at making efficient use of our resources. The organization must be simplified, and work routines must become smarter. It is essential to shift responsibility downward in the organization. The operator teams should function as a company within the company. We are now introducing a completely new way of working in production that is intended to shorten lead times dramatically. This is a question of educating the organization and changing the way we think. Everything can be done better, and the more I see of our operations within Sandvik Materials Technology, the more opportunities I discover. We will become the world's most efficient producer in our field. I believe that we can get there within a two-year period. It will be a challenge, but it is fully possible."

#### ... on capital efficiency:

"Everything that I have talked about thus far – and none of this is magic in any way – is focused on one thing: We will make better use of our capital. Steel manufacturing itself is not the major cost. Rather, it is the fact that we tie up money in projects that take too long or in products with unnecessarily long delivery times. That does not generate revenues. Our capital must be employed more efficiently and provide faster returns. This is the approach we must take in improving profitability."

#### ... on attitudes:

"We have a strong position in the market, and we have the material resources. We have the expertise and strong brands. The rest is a question of attitude. The company is the world leader in most of its activity areas. We can retain that position by leveraging the power in our organization and in our employees. Everyone should be able to come to work every day and feel that it is interesting, not because we feel secure in doing the same thing today that we did yesterday, but because each day provides a new opportunity to become even better and more efficient. It is my responsibility and that of other managers to create the right climate for achieving that."

#### ... on opportunities:

"We have hard work ahead of us. Profitability must improve. But the signs that we will succeed can already be seen. With respect to product renewal, we are in a better position than ever. We have several products in the pipeline that are without parallel in the market. The improvement potential in production is much greater than we ourselves considered possible a few years ago, and more efficient manufacturing with reduced lead times will result in increased capacity, service capability and capital efficiency. We just need to keep working constantly with the large as well as small improvements. Step by step. That is how we will make our way up to the winner's stand."

Paler Gostas

## Productivity as guiding



### New developments beneath the surface

Over the years, airline passengers approaching Kansas City International Airport in the US Midwest have been able to gaze down at Hunt Midwest's mining operations, since the company's surface quarrying of limestone has been conducted in close proximity to the airport. Now, however, after 44 years, the company is extending operations underground to guarantee the future availability of high-quality raw material. Sandvik is represented in the mine by an advanced drilling rig from Tamrock's Axera series, tailor-made for this application. The customer particularly appreciates the rig's ease of handling and the expansive view from the cab. Not to mention the number of cubic meters excavated!



Team play in Brazil

For more than a year, Sandvik Tooling has been the main supplier of cutting tools to DaimlerChrysler automotive group, at the bus and truck plant on the outskirts of São Paulo, Brazil. In practice, the cooperation means that Sandvik is totally responsible for all the cutting tools required by DaimlerChrysler. The role of sole supplier also commits Sandvik to closely follow the entire production process at their plant. For the customer, the advantages are less administration and a substantial reduction in inventory - potentially no inventory on hand at all! And most importantly, productivity can be increased. For Sandvik, the partnership is an opportunity to introduce its own high-quality tools and provide them with quick deliveries, services and technical assistance in direct contact with the customer. A partnership with built-in driving force.

#### Major order for heat exchangers

Edmeston is an engineering company in the Sandvik Materials Technology business area that develops and markets complete system solutions based on Sandvik's and Kanthal's materials technology. The company recently received a number of orders for heat exchangers. These orders are a breakthrough in several attractive markets – China, South Korea, the US and Sweden. Particularly in China, the market for this type of heat exchanger, a so-called air preheater, is expected to grow substantially.

Air preheaters are used in carbon black plants that produce raw materials for car tires and other products. The system has great potential, since it can also be used in other industrial processes. Inside the air preheater process gas flows through the Sandvik tubes whereby the outside air is heated to 800°C. The air is then returned to the process. This procedure saves the customer a lot of energy – as much as 50 percent – while simultaneously greatly reducing carbon dioxide emissions into the environment. An excellent example of high technology serving the customer and the environment.



## star

#### Peak performance

A new tool system for rock drilling has been developed within the Sandvik Mining and Construction business area. The Sandvik Alpha 330 system is specially designed to provide longer service intervals than before. It is more robust and can tolerate tougher conditions without deforming, providing improved drilling precision as well as having a lower energy requirement than any other system. The lifetime of the tools is also up to 80 percent longer. For customers this naturally means fewer stoppages and thus even higher productivity. This is an argument that hits home.





#### IT provides shortcut for customers

Sandvik Coromant now communicates with customers, such as Swedish Volvo Trucks, and suppliers worldwide by using advanced IT systems – in real time. This is achieved through the use of proprietary systems and as a result of the prize-winning collaboration with US software giant Microsoft on the concept of Web Services. The new technology combines information from various systems, old and new, in such a way that all of the accumulated information can be accessed. This could, for example, include information about inventory, prices, orders and deliveries, to which it is planned in due course to be able to link external information in such areas as logistics, distribution and purchasing. The aim, of course, is to reduce administration and ultimately provide better service to customers. That is the way to create profitable growth. By the way, did you know that about 25 percent of Sandvik Coromant's sales are conducted via various network solutions?



#### New insights

Sandvik's Kanthal product area supplies precision wire that is used in advanced keyhole surgery, such as cardiovascular operations and surgical procedures on the brain and nervous system. This operation method is less invasive for the patient and involves less risk of complications. Patient recovery time is also significantly shorter. Yet another example of what the Group's motto "We make it possible" means in practice.

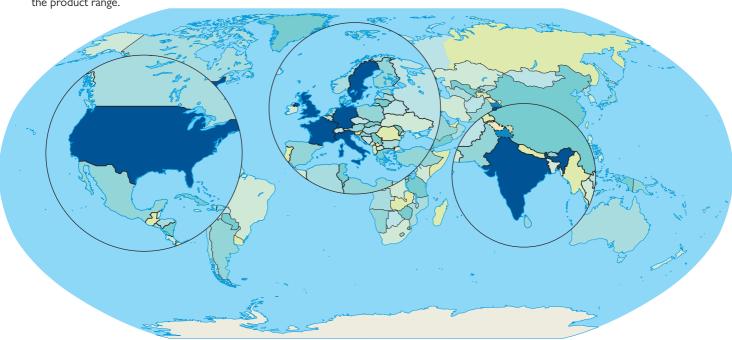
## Sandvik restructures

#### Focuses on synergies in the US

Further restructuring measures are being implemented at Precision Twist Drill, which delivers tools of high-speed steel and solid carbide to customers including the US aerospace and automotive industries. The company's manufacturing organization is currently being incorporated into Sandvik Tooling. The focus will be on the customer orientation of the product range.

#### Outsources operations

Sandvik AB has decided to proceed with its plans to outsource parts of operations within the company Sandvik Service to an external partner, Manpower Solutions. This involves the transfer of construction and facilities management, payroll services and company healthcare. Approximately 180 people are working within these areas, 150 of these in Sandviken and 30 in Stockholm. All will be offered employment with Manpower in the locations where they now work. Manpower, which currently has some 1,600 employees in the Nordic region, is a leading supplier of business support services and cooperates with more than 100 companies.



#### Divests operations

The Sandvik Mining and Construction business area has divested operations in the field of continuous coal-mining machinery at EIMCO LLC in the US. These operations have annual sales of approximately SEK 400 M. Also sold was the Chemical Products Division within Sandvik MGT LLC, at Bristol in the US. The company, which has annual sales of approximately SEK 100 M, produces a chemical grouting material used to secure roof bolts in mines.

In Europe, Sandvik has sold its 49-percent minority holding in French company Eurotungstène Poudres S.A. to Eramet of France, which previously held 51 percent of the shares. Eurotungstène Poudres, which has some 125 employees, produces cobalt and tungsten-based powders primarily for manufacturers of diamond-cutting tools.

### Concentrates production in Europe

The Sandvik Tooling business area is continuing the planned concentration of its operations. The number of manufacturing units is set to decrease with the goal of improving efficiency. Part of this process involves phasing out the production of special tools in Milan, Italy, and the transfer of these operations to the existing unit in Piacenza, which will now coordinate the business area's production in the country. The grinding of special inserts at Düsseldorf in Germany will be moved to Featherstone in Birmingham, the UK, which will thus handle the entire production process. In addition to greater production efficiency, these changes will provide other positive effects. Delivery service and reliability will be further improved. Lead times will shorten. This entails advantages for customers too.

#### Increases productivity in India

Productivity has increased substantially at Sandvik Materials Technology's production plant for seamless and stainless tubes in Raipur in the state of Gujarat in western India. This is the result of the complete renovation of the plant and extensive changes in approach, including increased responsibility for various teams. Investments have also been made in improving the environment. Ultimately, of course, the commitment of the employees was decisive in increasing efficiency.



Sandvik Coromant is a world leader in powder metallurgy and surface coatings for the manufacture of cutting tools. The product area is in the forefront in the development of cemented-carbide tools that can meet tomorrow's demands for efficient turning, milling and drilling of metal. Through a new competence center for materials development in Västberga, Stockholm, Sweden, yet another step is being taken in development.

# Research in new environment

The new facility is the largest of its type in the world, with a very high level of expertise. Nearly two thirds of the 110 employees are development engineers with higher degrees, and a full 25 percent have PhDs. At the same time, the new unit is naturally part of the Sandvik Group's overall network, with all that this implies in terms of access to joint resources and opportunities for teamwork. In addition, there is extensive cooperation with external research institutions worldwide. This shows that the Group's sights are set on maintaining its leading role in the area, both commercially and scientifically.

While at the customer level cemented-carbide tools account for only a few percent of the cost of the finished product, the tools' importance for the end result is many times greater. Work is proceeding on several fronts at the new research center to develop the composition of tool materials and determine how different microstructures produce varying material properties, and how these function in different application areas. In simple terms, it is a matter of finding, for each individual purpose, the best balance between durability and toughness. This applies to the materials in cutting edges - primarily cemented carbide with a thin surface layer, but also ceramic materials and cubic boron nitride. The challenges are many. It is a matter of working with increasingly advanced materials, increasing processing speeds, creating even smoother surfaces on the machined object, trying to eliminate

the need for cutting fluids in processing, and much more. Another aspect of research and development work that should not be forgotten is the wide-ranging development work on the actual production processes within Sandvik – a key competitive factor for the Group.

Product development is not conducted solely in Sandvik's laboratories but also in close contact with customers, in accordance with the Group's well-known success concept. Own materials-development specialists around the world perform the actual tests at customers' facilities and thus form the connecting link to the market. Finally, a key aspect of R&D work is to secure patent protection for new products and systems, in order to ensure that the commercial benefits from the advances made stay within the Group.

As proof of the importance of advanced R&D for Sandvik Coromant, 50 percent of sales derive from products that have been developed during the past five years. High-tech research and development in selected product areas is one of the main reasons for the entire Group's world-leading position and the foundation for continued profitable growth. The ultimate winners are the customers, for whom the continuous product-development process creates added value in the form of higher productivity leading to improved profitability. Because Sandvik's discoveries in the universe of materials technology always end up in the real world – in the engineering workshop.

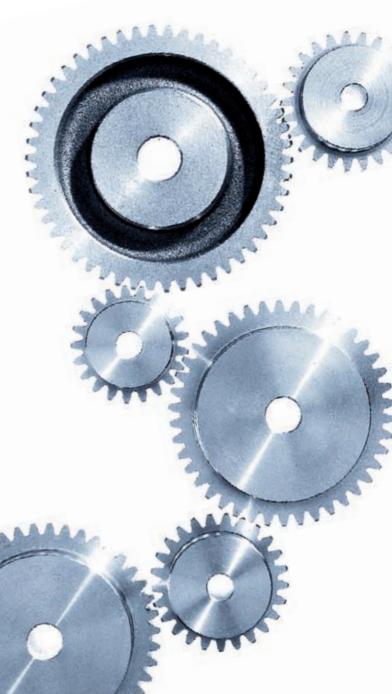


Positive spiral: In the engineering industry, there are constant demands to produce more, in a shorter time and at lower cost. Efficient metalworking – turning, milling and drilling – is the key to success. The major gains lie in being able to use highly productive cemented-carbide tools that do more work in a shorter time. In brief, the very thing in which we specialize at Sandvik.

Small input, large return: While it may be true that tools only account for a few percent of the cost for the finished product, their importance for the end result is all the greater. Every little increase in machining speed enables the total cost for the finished product to be drastically reduced.

<u>Full speed:</u> Take Sandvik Coromant's patented new Wiper inserts, for example, which are revolutionizing the automotive industry. They enable productivity to be doubled at one stroke, greatly reducing the cost for producing a gearbox or an engine. Talk about shifting into high gear!

Innovations at full throttle: Sandvik is investing substantially more in R&D than its competitors. We invest about 4 percent of our sales, corresponding to about SEK 2 billion annually. The result is a constant stream of new products and ideas that help our customers to become more competitive. We help them to accelerate the pace of production.





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