Meet Sandvik 2/99







Well-attended

Capital Markets Day



Sandvik's International Capital Markets Day in Finland on 1 June 1999 attracted some 70 participants from the financial community and media. The participants came from Sweden, the UK, Germany and France. The focus during the day was on Sandvik's newly established Mining and Construction business area.

Mining and Construction President Anders Ilstam and other senior executives made presentations of the Group's various operations and participants were given the opportunity to become better acquainted with the Sandvik Tamrock plant for the production of underground loaders and trucks in Turku and the rock drilling rig production plant in Tampere. In Turku, visitors were given practical demonstrations showing how the latest loaders and fast underground trucks perform with maximum loads. The visit to Tampere was concluded with guests being shown an advanced drilling rig in operation deep down in the Sandvik Tamrock test mine adjacent to the plant

Cutting argument from Sandvik

Swiss company Victorinox, which produces the world-renowned Swiss Army Knife, is an important Sandvik Steel customer. Victorinox purchases specially developed cutlery steel with properties that match the company's extremely high quality requirements in terms of the steel's chemical composition, mechanical properties and thickness tolerances. It becomes rapidly evident that the only very best is good enough for this leading Swiss manufacturer when, for example, you study the most advanced product in the Victorinox

product in the Victorinox range, a pocket knife with 33 different functions and an optimal finish •

Finnish Sandvik doctoral positions

There are now two Sandvik Tamrock doctoral positions in Finland. The positions have been established at the Tampere Institute of Technology, within the Hydraulics and Automation field, and at the Helsinki University of Technology within the Institute of Intelligent Machines and Special Robots. These research areas are strongly linked to Sandvik Tamrock's development of rockdrilling machines and loaders. Each of the positions extends for a period of four years and Sandvik's cooperation partner is the Finnish

Government •

Popular convertibles

More than 7,000 of Sandvik's 10,000 employees in Sweden took advantage of the opportunity to purchase convertible

debentures, which can be exchanged for shares in the company during the period 2001-2004. This means that every employee who has subscribed for convertibles can exchange them for shares for an average of SEK 136,000 in accordance with a previously fixed conversion price of SEK 219. If the price is more than SEK 219 on the conversion date, the employee will make a profit. The convertibles offer is designed to stimulate employee motivation and commitment



Today, France ranks as the world's fourth largest industrial nation, with advanced production technology in, for example, the automotive industry, the aerospace industry and telecommunications. The Concorde supersonic jet airliner, the TGV high-speed train and the Ariane communications satellite are just a few examples of projects in which French engineering skills have shown their capabilities.

This also means that France is important for Sandvik. Today, France is the Group's fourth largest market, with sales of SEK 2.6 billion and some 1,900 employees at Sandvik's French production facilities. Sandvik's close relations with France go back a long way. The first commercial links were initiated as early as the 1860s, when they were handled through agents. The subsidiary Sandvik S.A. was formed in 1923.

The subsidiary has its headquarters in Orléans, about 100 km south of Paris in the beautiful Loire Valley, famed for its many castles. In addition to Sandvik's head office in France and the business area managements, Sandvik Coromant's plant for special tools made from cemented carbide, as well as a steel warehouse and distribution center for steel products are also located in Orléans. Sandvik is also represented in France through production at some 20 different companies in the central regions of the country and in the Paris area. Sandvik has a well-developed network of sales personnel and industrial distributors dedicated to serving the Group's thousands of French customers.

An example is the market for cutting tools, in which Sandvik Coromant holds a leading position, particularly within the growing automotive industry, with Renault as one of its major customers. As a result of its recently initiated partnership with Nissan of Japan, the well-known French automotive producer has be-

come the fourth largest vehicle manufacturer in the world. Sandvik sells an extensive range of advanced cementedcarbide tools to Renault for the production of key components, such as engines, gearboxes, brakes and wheel mountings. Some of these special tools are produced at the Group's modern plant in Orléans. The close cooperation between Renault and Sandvik has continued for a number of years and progressively deepened. Sandvik participates actively, alongside the customer, in ongoing projects to improve quality, productivity and profitability in automotive production.

Another sector where Sandvik's modern cemented-carbide inserts assist customers in increasing their production tempo is the aerospace industry. Sandvik is a major supplier to the French aircraft engine manufacturer Snecma.

Sandvik Mining and Construction's Southern-Europe market area has its base in Lyon, France, where Sandvik Tamrock's plant for production of drilling rigs and small loaders is based. The French construction industry and French mining operations are both important customers. Machinery and equipment are also exported from France. In Viriat, not far from Lyon, Sandvik MGT produces tools for mechanical mining of coal and cutting of soft minerals.

Sandvik is the market leader in several areas within the stainless specialty steels area. The automotive industry is a major customer for wire products. One of the largest customers for strip steel is the razorblade producer BIC. The main customers for Sandvik's seamless tubes include the oil and gas industry, the power industry, the automotive industry and the semiconductor segment. Sandvik France is strengthening its positions in key future-oriented sectors. To use an automotive metaphor, Sandvik is running in top gear •





World's cleanest steel repairs broken bones

Quality steel from Sandvik is to be found in many contexts, including the world of medicine. We even produce material which is so clean it can be used inside the human body as an implant to replace worn-out parts of the skeleton. Examples include material for bone nails and hip-joint prothesises. The steel pieces used must be tissue-friendly, be free of toxic substances and not cause allergies. In addition, they must be absolutely safe from corrosion. To produce such super-clean steel requires that the content of slag inclusions be reduced to an extremely low level. Sandvik achieves this by using methods such as vacuum-remelting •

A world of opportunities

This year, 15 years have passed since Sandvik hosted its first Swedish foreign-country trainees. Through the years, thousands have applied for these attractive summer jobs. Since the start in 1985, a total of nearly 200 young students in Sweden have received the opportunity to work for a few months within Sandvik's international organization. This year, ten young engineering, economics and system analyst students departed into the wide world – to Sandvik companies in the U.S., Brazil, the U.K., France, Switzerland, Spain and Turkey. One of these was Anders Dahl, who studied materials technology with a special focus on industrial economics and organization at the Royal Institute of Technology in Stockholm. He is now working at Sandvik Steel in Scranton, Pennsylvania in the US



25% lower production costs

The expanding Swedish company Haldex is a leading manufacturer of brake equipment for trucks and other heavy vehicles. Major savings were made as the result of a suggestion involving alterations to the manufacturing process using customized Coromant tools. The total production costs per component were reduced by more than 25%. In addition, more than 4,000 machine hours were freed per year, which



meant that the company was able to relocate all of its production to Sweden from units abroad. This is yet another example of how Sandvik is helping its customers to improve their competitiveness and profitability •

Bits & Pieces

Sandvik scholarship awarded to Chalmers researcher

Doctor of Technology Yashar Yourdshahyan at the Chalmers Institute of Technology has been awarded Sandvik Coromant's 1998 Materials Scholarship. Lars Pettersson, president of Sandvik Coromant presented the scholarship, which is worth SEK 35,000. Yashar was recognized for his successful work in using advanced calculation

technology within hard surface coatings for insert materials. This is an area of major interest to the development of Coromant tools for metalworking applications.

Sandvik to the fore

Say the name Ferrari and most motor enthusiasts will adopt a dreamy-eyed look. The legendary Italian auto company's Formula 1 team has won more victories over the years than any other team. Did you know that the advanced cemented-carbide tool from Sandvik Coromant is an important element in the company's manufacture of such components as engine blocks and crankshafts? Materials such as aluminum, which are difficult to handle, require tools of the highest class to match the extremely high quality demands. That is all that counts – in the short run as well as the long race

Net attracting attention

Interest in Sandvik's website on the Internet is increasing. The Group's website, www.sandvik.com, now has the equivalent of more than half a million visitors each year. These visitors want financial information, news and, in particular, to know more about the various products. It is the products which are increasingly coming into focus. Now, in various sectors of the Group, electronic catalogues are being produced, and these are a prerequisite for the next stage of development – electronic commerce. Commerce via the net will become an important complement to Sandvik's traditional sales channels in just a few years •



Neat power package

Sandvik Tamrock's new drilling rig, the Axera DO6, is currently arousing great interest in the mining sector. The compact and powerful rig is easily maneuvered. It has been specially developed to be able to work in confined spaces such as small mine drifts. This is an interesting niche with great development potential •

Sandvik at the bottom of the sea

The oil and gas industry is an important Sandvik customer. At sea, the hydraulic remote control of production is a core issue. This is where Sandvik comes into the picture. Sandvik supplies high-strength stainless steel pipes which can handle the extreme pressure at depths of 1,500 meters. The pipes are supplied in welded lengths of up to 20 kilometers, coiled in large rolls. The pipes are included in "umbilicals," which consist of a number of small-diameter pipes twisted around an electric cable or a pipe in the middle. The entire package is covered in several layers of protective plastic. Installation is then carried out from a special vessel – in the North Sea, the Atlantic, and the Gulf of Mexico or in other places where oil and gas are extracted from under the sea

Refined ability

Of course diamonds are surrounded by

a little magic - the world's most expensive precious stone, adored by humans for centuries. Did you know that only every tenth diamond that is mined, often using Sandvik Tamrock's drilling tools, is classified as a precious stone? The remaining 90 percent are too small, of the wrong color or have other defects. These are used instead as industrial diamonds, such as abrasives, for cutting glass or in drill bits for such activities as oil drilling. Synthetic industrial diamonds are also produced and this is an area in which Sandvik has major materials and technological skills. Graphite is exposed to extremely high pressure, approximately 60,000 bars, and temperatures of around 1,500° C. In order to withstand these enormous stresses, cemented-carbide tools are used in the form of punches and pads manufactured by Sandvik Hard Materials. High-pressure technology can also be used for the production of so-called polycrystalline diamonds and cubic boron nitride which are used as materials for tools with extremely high requirements on the durability of the cutting edges. The fact that Sandvik is part of these areas, too, is another story - but just as precious •

Did you know that Sandvik is now con

Sandvik is now concentrating on three core areas?

Sandvik's focus on growth has now borne fruit. During the past five years, we have nearly doubled our sales. Today, consolidated annual sales amount to more than SEK 40 billion, with 34,000 employees at

300 companies in 130 countries.

In order to
establish a breeding ground for
continued
strong expansion, we are now
focusing our operations on three
main areas – Tooling,
Mining and

Construction, and Specialty Steels.

The **Tooling** business area is mainly involved in tools and tools systems for metalworking applications. Major customers include the world's automotive and aerospace industries.

Mining and Construction specializes in equipment and tools for rock

excavation. These are used in mines and civil engineering projects worldwide

Within **Specialty Steels**, products are developed in stainless steel, special

alloys and ceramic resistance material. Customers are from most industrial segments.

We want to achieve a world-leading position for all of these business areas – each of which has sales of nearly SEK 10 billion or more. The concentration of our opera-

tions is aimed at further strengthening our positions.

And this is of particular benefit to our customers. The bigger and stronger we are, the better able we are to improve their productivity and profitability. And it is exactly this that is the core of our business concept •

