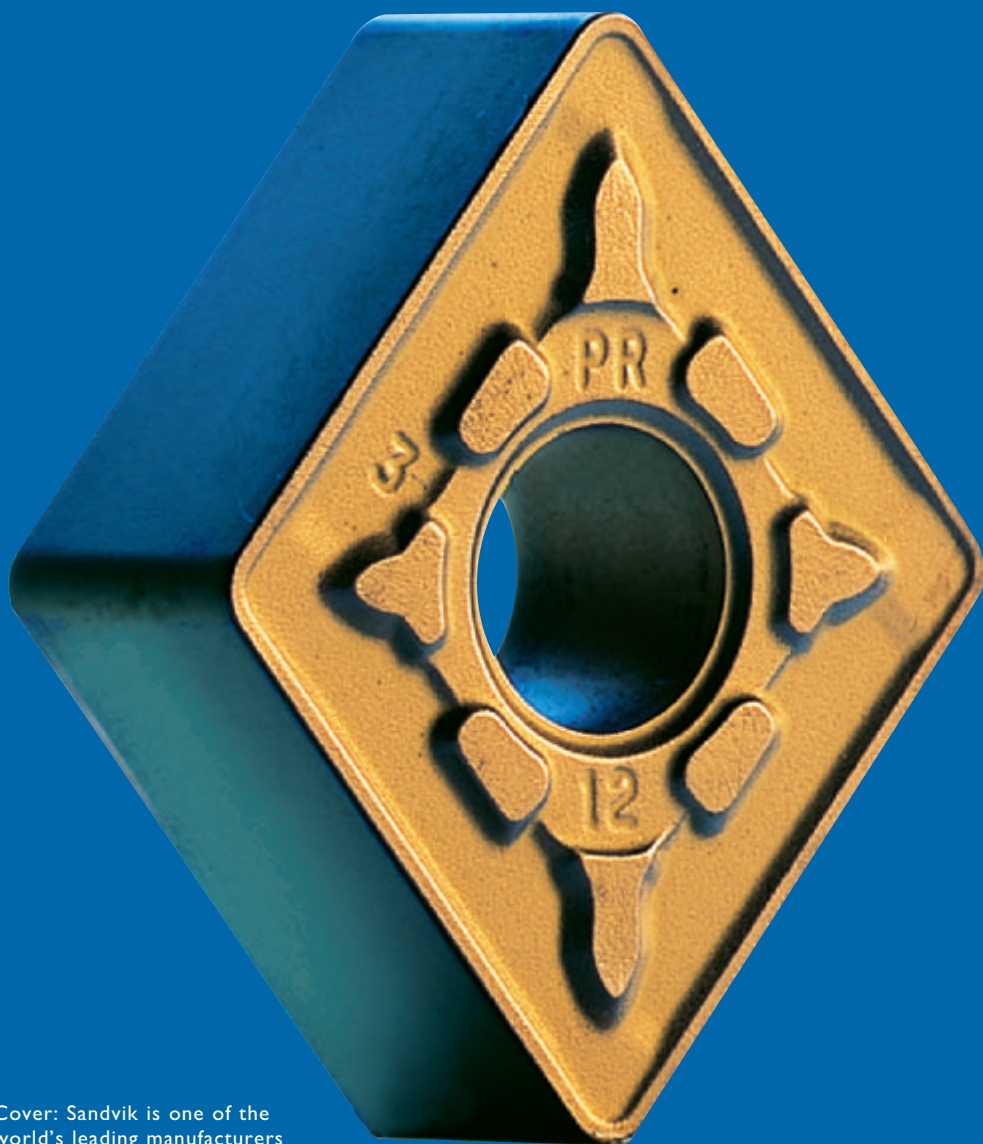


**Sandvik**  
***Annual Report***  
***1998***



Cover: Sandvik is one of the world's leading manufacturers of tools and tooling systems for metalworking, which is represented by these steel chips from turning.

A newly developed cemented-carbide indexable insert from Sandvik Coromant is shown on this page.

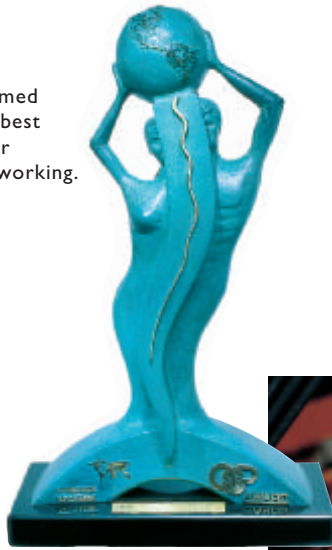
# Sandvik Aktiebolag; (publ) CORPORATE IDENTITY NUMBER 556000-3468

## Annual Report 1998

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General Motors named Sandvik Coromant best supplier of tools for chip-forming metalworking.



Sandvik Coromant's new unit for the manufacture of special inserts is located in Houston, Texas, in the US.



Kanthal received an attractive sample order for materials to manufacture the new euro coins.



A new factory was inaugurated in India for the manufacture of Titex tools.



Sandvik now owns all shares in Poland's largest manufacturer of cemented-carbide tools, Sandvik Baidonit.

Sandvik acquired the German company Poppe & Potthoff's unit for the manufacture of stainless-steel precision tubes.



Throughput time was cut in half at Sandvik Tamrock's modernized plant for rock-drilling machinery in Tampere, Finland.





# Highlights of 1998

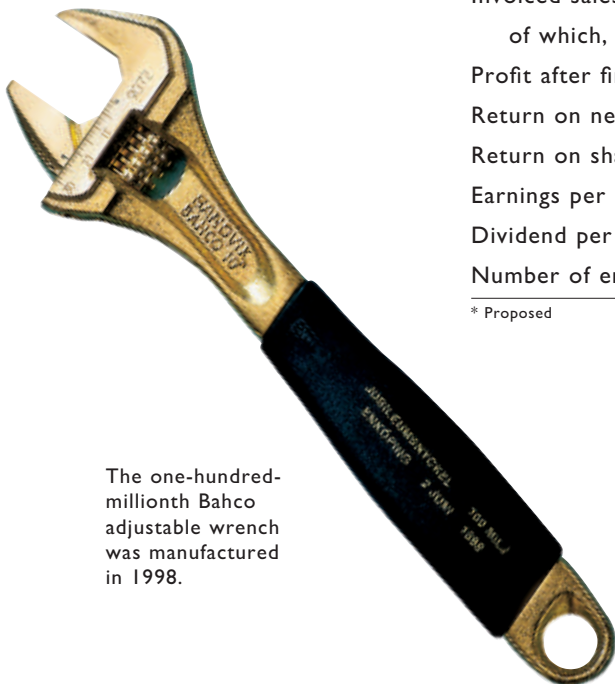


Sandvik Steel installed a new, advanced tube mill in Sandviken.

- Good start but successively weakened business climate.
- Invoiced sales exceed SEK 42,000 M.
- Continued integration of the major company acquisitions in 1997, with comprehensive structural measures.
- Expanded market organization.
- Improved operating profit.
- New capital structure resulted in reduced net financial items.

	1998	1997
Order intake, SEK M	41 700	34 603
Invoiced sales, SEK M	42 400	34 119
of which, outside Sweden, %	94	93
Profit after financial income and expenses, SEK M	3 935	4 205
Return on net assets, %	16.3	17.7
Return on shareholders' equity, %	11.9	14.3
Earnings per share, SEK	8.10	10.15
Dividend per share, SEK	7.00 *	7.00
Number of employees, 31 Dec.	37 520	38 406

\* Proposed



The one-hundred-millionth Bahco adjustable wrench was manufactured in 1998.

Sandvik's world is expanding. In 1998, a number of companies and offices were added in many countries around the world.



# This is Sandvik

The Sandvik Group, with headquarters in Sandviken, is one of Sweden's largest export companies, with worldwide business activities conducted through 300 companies and representation in 130 countries. The Group has 37,500 employees and annual sales of more than SEK 40 billion.

Since it was founded in 1862, Sandvik has developed from a provincial Swedish steelworks into an international, engineering enterprise, with world-leading positions in selected niches.

Two factors that have contributed greatly to Sandvik's business development are the determined marketing efforts in close cooperation with customers throughout the world and continuous product renewal, with particularly strong focus on advanced technology. Group investments in research and development of new products and production methods amount to more than SEK 1 billion annually.

The market consists of industrial customers that use Sandvik products as integral components in their production processes. Industrial consumables account for about two thirds of the Group's portfolio, with capital goods accounting for one third.

Customers operate in many different industrial sectors, including the automotive and aerospace industries, mining and civil engineering, chemicals, oil and gas, power, pulp and paper, household appliances, electronics, medical technology, pharmaceuti-

cals and other engineering industries. Sandvik's objective is to increase its focus on operations in areas that offer greater growth potential than overall industrial growth.

## Organization

The Sandvik Group consists of six separate business areas responsible for research and development (R&D), production and sales of their respective products. Sandvik's business areas are presented on pages 6-7 and Sandvik's Board of Directors and Group Executive Management on pages 70-72.

Seco Tools, an independent, publicly listed company, is also a member of the Group.

## Business concept

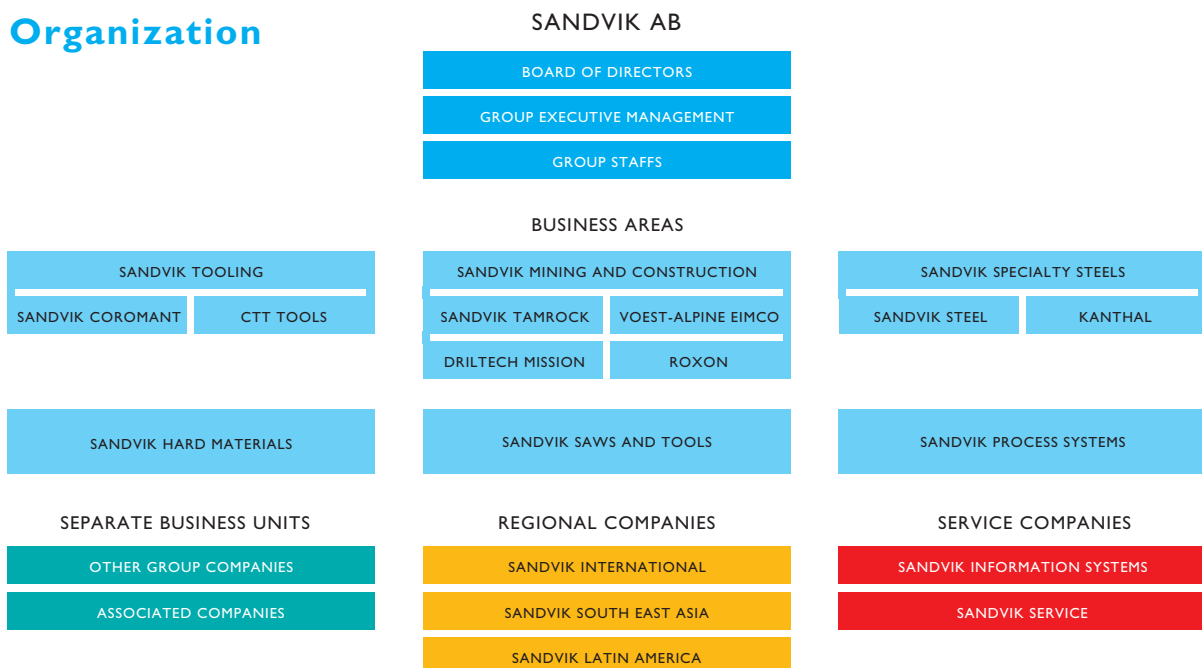
Sandvik shall contribute actively to improving the productivity and profitability of its customers. Products and services offered by the Group shall provide customers with maximum value in terms of performance, quality, speed, safety, flexibility and total economy. Sandvik shall be the obvious first choice for customers.

Operations shall be concentrated primarily in niche sectors where Sandvik is – or has the potential to become – a world leader.

## Strategy

Sandvik shall conduct sophisticated and comprehensive research and development to improve productivity and quality, create time savings and reduce costs for customers and the

## Organization



Group's own operations in the following four areas:

- Materials and surface-coating technology
- Product and application solutions
- Production and process technology
- Information, communications and logistics systems

To ensure the best products supply and support for Sandvik customers, marketing operations shall be conducted primarily by Sandvik Group employees, but also in cooperation with a number of selected industrial distributors. Direct contact with the market is also essential to adapt R&D programs to customer needs.

Sandvik products shall be manufactured mainly in the Group's own production plants. This ensures maximum quality, availability and cost efficiency and also contributes to Sandvik's determined efforts to create a favorable environment.

Standardized production technologies and, in some cases, own production of strategically important manufacturing equipment, guarantee uniform high quality wherever products are manufactured in the world.

Sandvik shall capitalize on inherent synergy effects in R&D, production, marketing and administration in the Group's various business areas and markets.

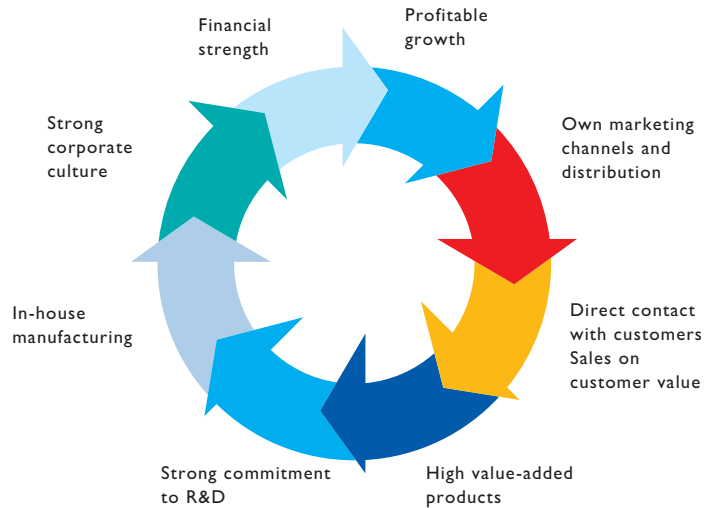
Sandvik shall strive to create working conditions that stimulate employees to perform effectively, assume responsibility and continue to develop in their personal and professional pursuits. The Group shall also promote equality, regardless of gender, race, color, religion, nationality or ethnic origin.

In dealing with customers, suppliers, employees and other interests, Sandvik shall act in a highly ethical manner, and as a good citizen in all countries where the Group operates.

### Financial goals

The goal since 1994 is an average volume growth, including acquisitions, of 6%, with an average return on net assets for the Group of 20%.

Shareholders shall receive a dividend of at least 50% of earnings per share and the dividend plus value growth of the Sandvik share shall exceed the average for the industry, all measured over a business cycle. The Group shall have the financial



The Sandvik Group's successful strategy is based on the interaction of a number of strength factors.

strength that ensures commercial freedom of action while maintaining a well-balanced capital structure over the long term.

### Future growth

One of Sandvik's most important objectives – and a fundamental principle for the achievement of financial goals – is continued business growth. Concurrently, Group operations should be developed and adapted continuously to changes in the business environment.

The Group's strong profitability provides scope for increased R&D programs and investments in production, marketing and supplementary company acquisitions as a means of achieving a higher rate of growth.

Intensified efforts will be made in geographical market regions where the Group has small market shares and where the opportunities for growth appear particularly attractive.

Growth will be achieved mainly through a combination of internally generated expansion, acquisitions and the establishment of joint ventures in existing areas of operation ●

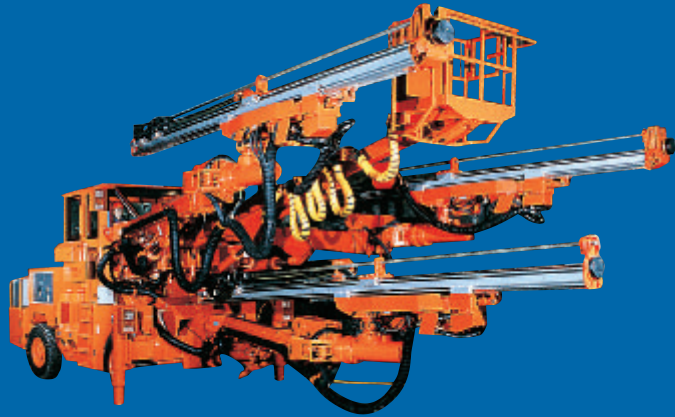
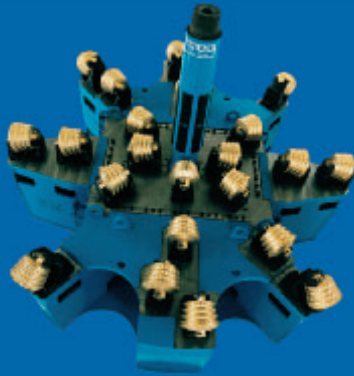


## Sandvik Tooling

Tools and tooling systems for metalworking applications.

*Sandvik Coromant* produces tools made of cemented carbide, ceramics and extremely hard materials such as diamond and cubic boron nitride.

*CTT Tools*, including such trademarks as Dormer, Titex, Prototyp and Precision, produces high-speed steel tools and rotary tools in solid cemented carbide.



## Sandvik Mining and Construction

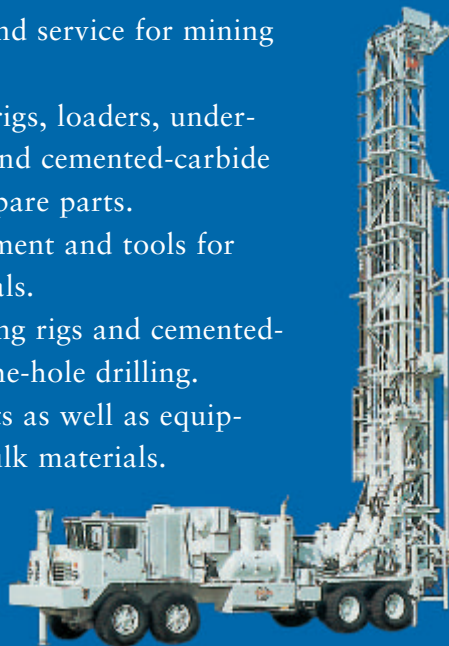
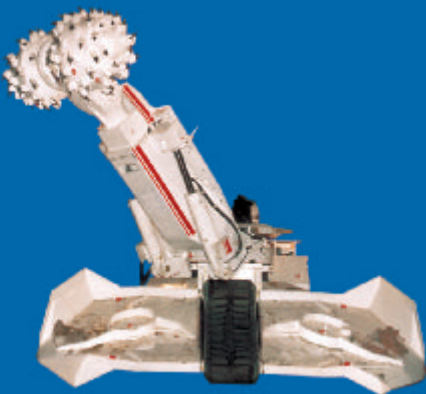
Rock-excavation equipment, tools and service for mining and civil engineering.

*Sandvik Tamrock* produces drilling rigs, loaders, underground trucks, hydraulic hammers and cemented-carbide drilling and raise-boring tools and spare parts.

*Voest-Alpine Eimco* produces equipment and tools for mining of coal and other soft minerals.

*Driltech Mission* makes rotary drilling rigs and cemented-carbide tools for rotary and down-the-hole drilling.

*Roxon* delivers conveyor components as well as equipment and systems for handling of bulk materials.







## **Sandvik Specialty Steels**

Stainless steels, special-alloys and resistance heating materials.

*Sandvik Steel* produces tube, strip, wire and bar in stainless steel as well as in titanium, nickel and zirconium alloys.

*Kanthal* manufactures metallic and ceramic resistance materials in the form of wire, strip and electric heating elements.



## **Sandvik Hard Materials**

Active in the full spectrum of hard materials, from cemented carbide to diamond, including special ceramics for biotechnical applications. Produces cemented-carbide tool blanks, engineering components and rolls.



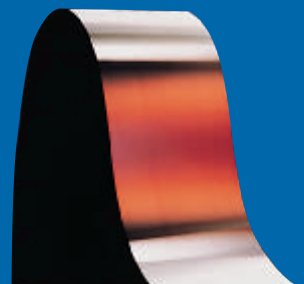
## **Sandvik Saws & Tools**

Manufactures hand tools for professional users. Handsaws, metal saw blades, wrenches, spanners, pliers, files, pruning tools as well as guide bars and saw chains for logging machines and chain saws.



## **Sandvik Process Systems**

Develops, manufactures and markets steel belts and process plants based on steel-belt technology.



# The Sandvik share

The price of the Sandvik share declined 38% during 1998, compared with an average increase of 4% for the engineering industry and 10% for the General Index. During the most recent ten-year period, the total return including dividend rose at an average of 12% annually. The General Index total return rose 15% during the same period.

The beta value for the Sandvik share measured against the Stockholm Stock Exchange rolling 48-month index was 0.95 (1.29). The beta value is a risk measurement showing the volatility of stock prices compared with the entire market over a given period. The value 0.95 means that the Sandvik share price is 5% less sensitive than the market as a whole over the 48 months.

Sandvik shares ranked tenth among the most actively traded shares on the Stockholm Stock Exchange in 1998. A total of 195 million Sandvik shares were traded, of which 84 million were A shares. The turnover was 76% (46), compared with 76% (66) for the entire Stockholm Stock Exchange.

Sandvik's market capitalization at year-end 1998 was SEK 36 billion (59), and Sandvik ranked as the seventeenth largest company on the Stockholm Stock Exchange.

## Dividend policy

The principal financial goal of the Sandvik Group is to create attractive capital return and value growth for those who invest in the Sandvik share.

The goal is that the dividend and value growth shall exceed the engineering industry's average and be clearly higher than the yield on risk-free, long-term financial investments and that shareholders shall receive a dividend of at least 50% of earnings per share – over a business cycle.

With the proposed dividend in 1998 (SEK 7.00 per share), the increase in dividends has been an average of 17% annually since 1994. The dividend comprises 86% of earnings per share in 1998. The average payout ratio during the past five years amounts to 59%.

## Shareholders

The number of shareholders is about 50,600. The ten largest shareholders in Sandvik account for 51% of the number of shares and 59% of voting rights. In total, publicly listed corporations, insurance companies, funds and foundations hold 74% (71) of all Sandvik shares. Shares owned by foreign investors amount to 18% (21) of all shares and 11% of the voting rights.

During recent years, Sandvik has made determined efforts to increase the information to the financial market and established a special function for investor relations.

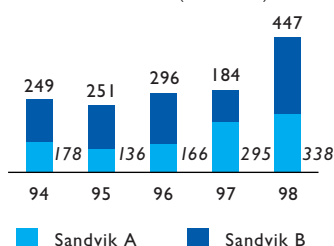
## Options

Standardized options in Sandvik B shares were introduced for trading in May 1993. Warburg Dillon Read has issued covered warrants on Sandvik shares ●

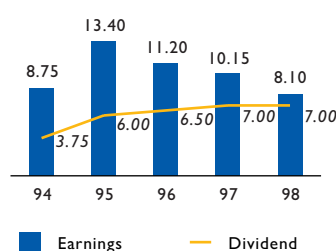
DISTRIBUTION OF SANDVIK AB SHARE OWNERSHIP (DECEMBER 1998)

Holding	Number of shareholders	As % of all shareholders	Total number of shares	% of share capital	Average number of shares per holder
Maximum 500 shares	38 129	75	6 684 062	3	175
501-1 000	5 927	12	4 799 038	2	810
1 001-10 000	5 754	11	15 867 505	6	2 758
10 001-100 000	589	1	16 803 798	6	28 529
More than 100 000	181	0	214 541 597	83	1 185 313
	50 580	100	258 696 000	100	5 115

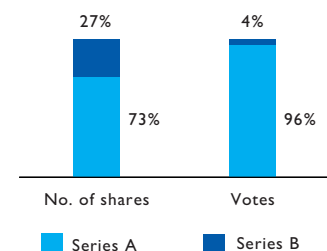
AVERAGE DAILY NUMBER OF SHARES TRADED ON THE STOCKHOLM STOCK EXCHANGE (thousands)



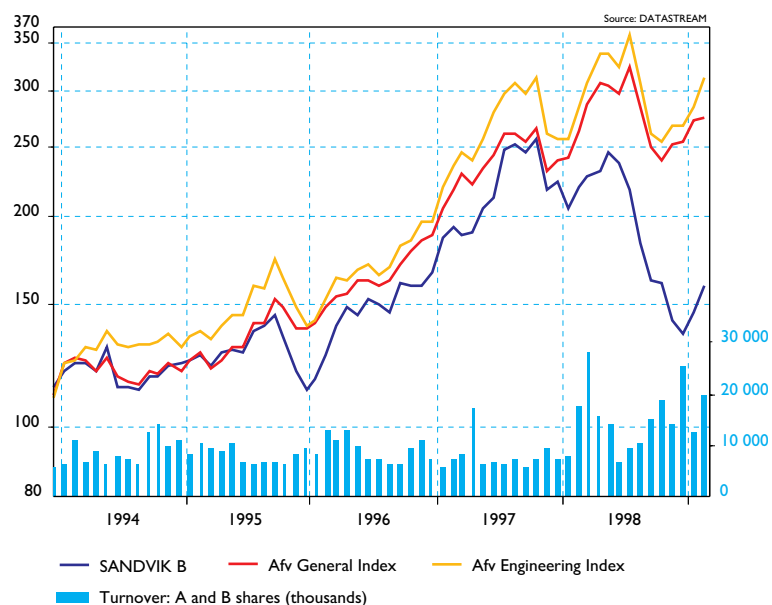
EARNINGS AND DIVIDEND PER SHARE, SEK



DISTRIBUTION OF SHARES AND VOTING RIGHTS



PRICE TRENDS ON THE STOCKHOLM STOCK EXCHANGE, SANDVIK B SHARES



PER-SHARE DATA, SEK

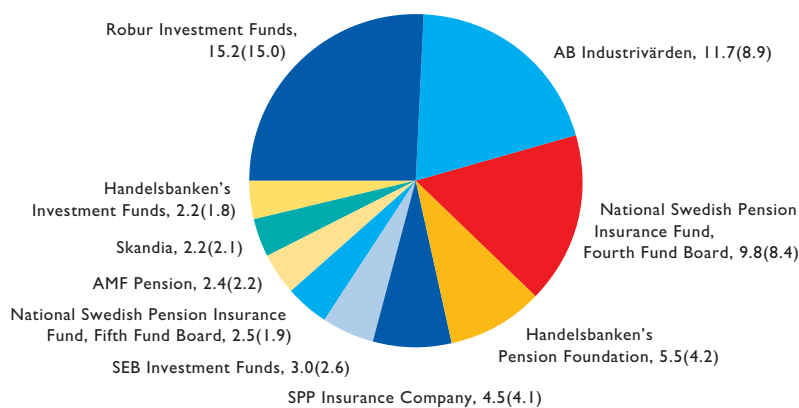
	1998	1997	1996	1995	1994
Earnings <sup>1)</sup>	8.10	10.15	11.20	13.40	8.75
Shareholders' equity	72.00	67.30	72.00	66.40	57.50
Dividend (1998: proposed)	7.00	7.00	6.50	6.00	3.75
Yield <sup>2)</sup> , %	5.0	3.1	3.5	5.2	3.1
Payout percentage <sup>3)</sup> , %	86	69	58	45	35
Quoted prices, A, highest	252	272	186	148	143
lowest	134	182	111	108	100
year-end	141	226	184	116	119
Quoted prices, B, highest	251	274	187	148	142
lowest	134	182	111	109	99
year-end	140	227	185	116	119
P/E ratio <sup>4)</sup>	17.4	22.3	16.4	8.7	13.6
Quoted price, % of shareholders' equity <sup>5)</sup>	196	336	262	175	207

Notes:

- 1) Consolidated net profit for the year per share.
- 2) Dividend divided by quoted price for A shares at year-end.
- 3) Dividend divided by earnings per share.
- 4) Market price of A shares at year-end in relation to earnings per share.
- 5) Market price of A shares at year-end, as a percentage of reported shareholders' equity per share.

Additional definitions are presented on page 54.

LARGEST SHAREHOLDERS IN SANDVIK AB  
Votes (shares) in %, December 1998



ANALYSES

The following companies prepared analyses on Sandvik during 1998:

- ABG Securities
- Alfred Berg Fondkommission
- Aragon Fondkommission
- Aros Securities
- BT Alex. Brown International
- Carnegie Fondkommission
- Cazenove & Co.
- Cheuvreux de Virieu Nordic
- Den Danske Bank
- Den norske Bank
- Deutsche Bank
- Enskilda Securities
- Fischer Partners Fondkommission
- Goldman Sachs International
- Hagströmer & Qviberg Fondkommission
- Handelsbanken Markets
- Horn & Co.
- HSBC Securities
- J.P. Morgan Securities Ltd.
- Kleinwort Benson Securities
- Lehman Brothers
- Matteus Fondkommission
- Merrill Lynch
- Morgan Stanley Dean Witter
- Myrberg Fondkommission
- NatWest Securities
- Nordbanken Trading
- Orkla Securities
- Paribas
- Société Générale Securities
- Swedbank Fondkommission
- T. Hoare & Co.
- Warburg Dillon Read

## Well positioned for the new millennium

There was a distinct weakening of the business climate in 1998. Following a good beginning, demand in a number of our product areas gradually declined during the year. Income was affected negatively by the crises in Asia, Russia and Latin America, by depressed prices for metals and raw materials, and by nonrecurring costs. However, as a result of continuing investments in advanced research and development, strengthened market positions with strategic company acquisitions and comprehensive restructuring programs, we are well positioned for future marketing successes and improvements in profit.



The year began on a strong note, with good demand and high invoicing. The business climate weakened during the second quarter, primarily as an indirect result of the crisis in Asia. The downturn worsened visibly during the second half of the year when Russia and countries in Latin America were also hit by a serious crisis. Toward the end of the year, however, we could see signs of an improvement in Asia.

The favorable trend of business for Sandvik Tooling continued, with major successes in NAFTA, among other regions. In Sandvik Mining and Construction, the integration of Tamrock and Sandvik Rock Tools was expanded and accelerated. A new organization was established and a comprehensive restructuring program was begun. Sandvik Specialty Steels

experienced low prices for products and alloys, as well as successively weaker order intake during the second half of the year.

### Strong market position

The greater part of the Group's operations are conducted today in three business areas: Sandvik Tooling, Sandvik Mining and Construction, and Sandvik Specialty Steels. Each accounted for approximately SEK 10 billion of our total sales of more than SEK 42 billion. The common characteristics of these business areas are that they are world leaders in selected product niches, they have a large number of well-established brand names, a global market presence and continuing good potentials for expansion.

Sandvik Tooling consists of Sandvik Coromant, which specializes in cemented-carbide tools, and CTT Tools, which has strong brand names in the field of high-speed steel tools. Our leading position in the market for high-speed steel was strengthened through the acquisition of Precision Twist Drill, which has substantial production and a very well-developed distribution organization in the United States.

Sandvik owns 61% of Seco Tools, which also manufactures cemented-carbide tools. Seco Tools' independence and active competition with Sandvik Coromant ensures maximum sales and market coverage for the Sandvik Group.

Following the acquisition of Tamrock, Sandvik Mining and Construction is offering its customers competitive total solutions for rock-



working that comprise a combination of machinery, tools and service for the highest possible productivity. Aggressive restructuring measures now under way will yield rationalization and coordination gains amounting to at least SEK 400 M annually in the years immediately ahead; this, together with other measures, means that the business area will achieve a level of profitability that is satisfactory in terms of both industry and Group standards.

Sandvik Specialty Steels offers products with high added-value for customers with exacting demands for economy, safety and performance. With the acquisition of Kanthal, the business area is gaining new, attractive products – in the electronic industry, for example – that are judged to have a strong growth potential. Based on a niche strategy and continuous development of products that have higher added value than those of other steel companies, we have a strong market position.

#### **Focus on the customer**

Sandvik's business concept is to contribute actively to improving the productivity, competitive capacity and profitability of the Group's customers. Our products and our service should offer maximum customer values in terms of performance, operating reliability, quality and total economy. The focus on total customer value has proved to be highly successful.

All our sales are based on direct contact and close cooperation with customers. Accordingly, we long ago built up a comprehensive global marketing organization with qualified personnel for various types of customer contacts. During the year we strengthened our market position through acquisitions and by expanding the sales organization in various parts of the world.

Due to the crises in certain countries in Asia and in Russia – market areas in which we have been very active in recent years – we have temporarily been forced to consolidate our operations in those regions. They are still markets of the future that offer us a large sales potential and we will be able to resume the offensive as soon as the situation improves.

We see some improvement in a few countries in Asia. We are continuing our programs in China and India. At the end of 1998, in Poland, where the positive trend of business is conti-

nuing, we acquired all the remaining outstanding shares of the country's largest producer of cemented-carbide tools.

A changed international business environment requires gradual adaptation of our marketing organization, with the trend being toward larger sales regions and increased electronic sales via the Internet, etc. Smooth-functioning logistics constitute an important competitive tool. Today, we have sophisticated and efficient distribution systems, as well as rational, strategically localized central warehouses serving our product areas in various parts of the world.

In recent years we have carried out a substantial investment program to rationalize operations, increase capacity, introduce new production processes and ensure high, uniform product quality. In the new advanced tube mill that was placed in service in Sandviken in 1998, for example, it will be possible to reduce the throughput time from three weeks to three days. The automation of tool production in Gimo, Sweden, continued and a new, modernized production plant that reduces the throughput times for Tamrock's rock-drilling machines by half was inaugurated in Tampere, Finland.

Our investments are also motivated by the need for an improved environment. As described in a special article on page 38, we have implemented many environmental improvements in recent years and have an ambitious program for the future.

Our comprehensive activities in research and development are presented on page 36. World-class research resources and a continuous flow of new competitive products and processes are one of the most important reasons for Sandvik's success in the world market and constitute one of the foundation stones for continuing expansion.

#### **Facing a new millennium**

A comprehensive project designed to ensure that we will be able to handle the changeover to a new millennium without problems in our operations has been under way within the Group since 1997. Most of our computer systems have already been tested and remedied. The remaining systems should be ready by mid-1999.

Sandvik can today offer invoicing in the new European currency, the euro, to all customers who desire it. The Group and Parent Company

financial accounts are still being kept in Swedish kronor. If Sweden becomes a member of the European Monetary Union, a changeover to the euro would further simplify our daily administration.

As a consequence of ongoing restructuring measures, the number of Group employees will continue to decline in 1999. The total decrease during the 1998-1999 period is estimated to amount to approximately 2,000 persons. In addition, over the short term the need for personnel will be adapted to prevailing economic conditions and sales situation.

#### **Financial strength**

The strategy for increased growth that was adopted in 1994 means that we are to increase the volume of our sales, on average, by 6% a year over a ten-year period through organic growth and supplementary acquisitions of companies. Five years after adoption of the strategy, the average is 14%. During this period we have invested SEK 18 billion in our plants and in strategic acquisitions, while payments to the shareholders in the form of dividends and redemptions of shares have amounted to SEK 12 billion.

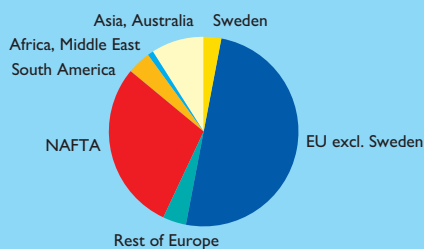
As a result of the sharply weaker business climate and a substantial restructuring program, Group earnings were lower in 1998. The return on net assets of 16%, continued to be good, however; during the past five years it has amounted, on average, to 21%. The equity/assets ratio as of 31 December, 1998 was 47%, and the underlying cash flow continued to be strong during the year.

The Group's capital structure has changed substantially during the past two years and is now distributed more equally between equity and borrowed capital. We are striving for a capital structure that in a number of respects is well balanced over the long term. To the degree that a more consistent surplus liquidity arises, appropriate measures benefiting the shareholders will be taken ●

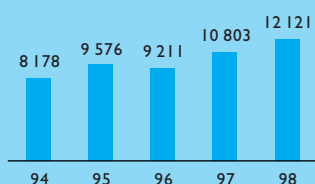
Sandviken, March 1999

**Clas Åke Hedström**  
President and Chief Executive Officer

#### INVOICED SALES BY MARKET AREA

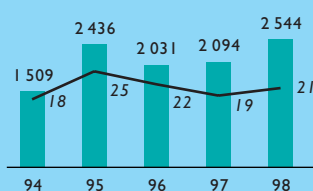


#### INVOICED SALES, SEK M

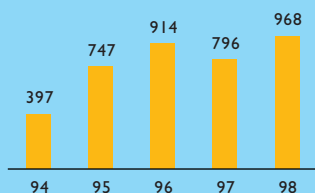


#### OPERATING PROFIT, SEK M

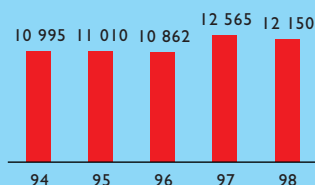
— AS A PERCENTAGE OF INVOICED SALES



#### INVESTMENTS IN FIXED ASSETS, SEK M



#### NUMBER OF EMPLOYEES 31 DECEMBER



#### BUSINESS AREA

## Sandvik Tooling

The business area comprises tools and tooling systems for metalworking applications. Sandvik Coromant is the world's leading manufacturer of cemented-carbide tools, and CTT Tools has a corresponding position in the market for high-speed steel tools.

The market for cutting tools used in metalworking applications generally follows business trends for the international engineering industry. The world market for metalworking tools amounts to approximately SEK 70 billion per year. Customers include companies in automotive and aerospace industries, steel and other engineering industries.

Sales of the business area amounted to SEK 12,121 M and operating profit was SEK 2,544 M. Return on net assets exceeded the Group's minimum requirement of 20% by a broad margin. Including acquisitions, the average increase in volume of business during the past five years has amounted to 11% annually.

## Sandvik Coromant

Sandvik Coromant is the market leader in the development, production and marketing of tools made of cemented-carbide, cubic boron nitride and diamond for metalcutting applications.

Sales invoiced by Sandvik Coromant improved in 1998 as a result of higher demand. The increase amounted to 6% (4% at fixed exchange rates and for comparable units).

Customers include companies that use metalworking to upgrade products made of various materials – cast iron, steel, stainless steel, aluminum and composite materials – to finished components. Leading companies in the aerospace, steel and engineering industries, as well as most of the large manufacturers of cars, trucks, buses, construction equipment, motorcycles and other vehicles use Sandvik Coromant's advanced products.

Lars Pettersson, President of Sandvik Coromant. Born 1954, M.Sc. Eng., employed since 1979.



Tools from Sandvik Coromant play a key role in improving the productivity of customers in modern manufacturing industries.

About ten competing companies have about two thirds of the world market for cemented-carbide tools. A large number of local or highly specialized companies account for the remaining market shares. Sandvik Coromant is the leader in European and South American markets. In the North American market, Kennametal is Sandvik Coromant's largest competitor. In Asia, several Japanese companies are large suppliers. Sandvik Coromant is the most well-established non-Japanese company in Asian markets, with production of cemented-carbide tools in Japan, China and India.

### Market and business conditions

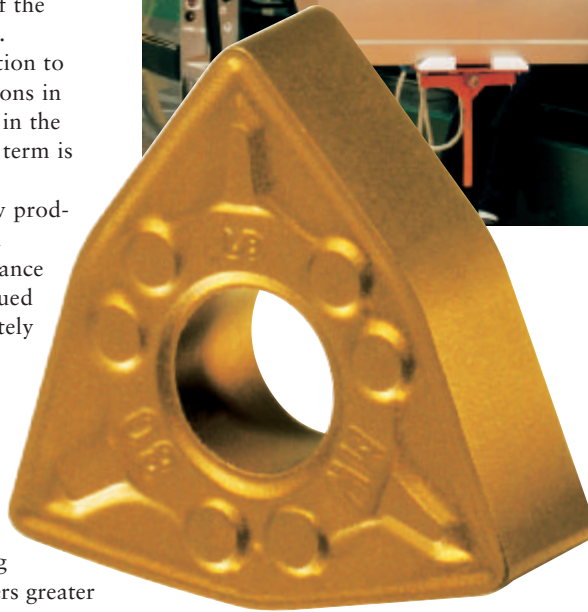
Sales in the NAFTA region – the United States, Canada and Mexico – increased very substantially in 1998 but some leveling-off could be noted at the end of the year. Sales in Europe were firm, notably in Germany, Italy and the Nordic countries, while the market in England was affected negatively by the strong British pound. The trend of business in growth markets in Eastern Europe was favorable, except in Russia where, beginning in the middle of the year, demand fell off sharply due to the severe financial situation in the country.

Demand in China continued to be good, but the economic crisis in Asia affected sales in most of the other countries in the region. Sandvik aligned its organization to the changed business conditions in the area. The sales potential in the Asian markets over the long term is substantial, however.

The development of new products, services and production methods is of critical importance for Sandvik Tooling's continued competitiveness. Approximately 6% of annual sales, or SEK 520 M, was invested in research and development. Development work is being focused primarily on such important niche areas as new cutting materials, coating materials and tooling systems that provide customers greater performance, improved tolerance levels and higher flexibility. The work is being carried out in close cooperation with customers and is based on their needs for greater productivity and cost-effectiveness.

Research work is conducted in Sandvik's laboratories and in cooperation with customers, universities and technical colleges. Comprehensive development of new production technologies is taking place at the main plant in Gimo in Sweden and the methods and systems available there are then placed in service continuously in Sandvik Coromant's other units throughout the world.

Development work in the area of metalworking applications is being driven by the customers' needs for newer, lighter and stronger component materials, increasingly faster machines and more highly automated processes. Based on its continuous and comprehensive research and development, Coromant is a technological leader.



Cemented-carbide tools from Sandvik Coromant make it possible for the automotive industry to increase productivity.

### Investments

Sandvik Coromant's production takes place in more than 40 plants throughout the world. All production is based on identical raw materials and processes, applying the same, very high standards of quality.

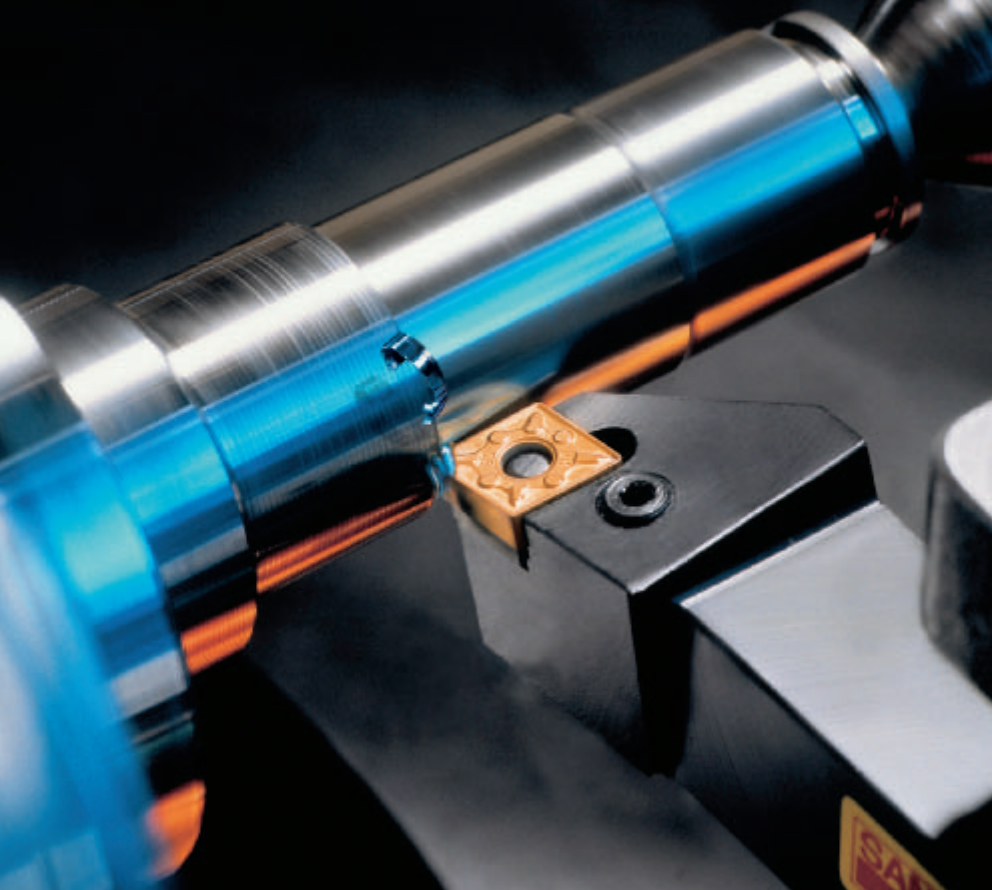
In each major marketing region there are one or more production facilities that can quickly meet local customers' wishes in terms of special tools. The rate of investment increased during the year and the number of production units established in new markets continued to be high during the year.

The capacity for cemented-carbide inserts and tools and the degree of automation were further increased in Gimo. The new plant for the production of cemented-carbide powder that was inaugurated in 1997 increased Group production capacity considerably. Agreements on flexible working hours for employees were reached in



In Sandviken, Sweden, investments were made in new equipment for the development of cutting tools for high-speed machining.





A new type of indexable insert, the Wiper, provides substantial cost savings within the manufacturing industry.

Gimo and in some of the other large production plants.

Outside Sweden, large investments were made in the plant in Houston, Texas, in the US, where an expertise center for the grinding of special inserts made of various hard materials is being built up.

The new cemented-carbide plant in Langfang City, outside Beijing, was inaugurated officially in the beginning of the year. The plant is the most modern of its type in China and meets the high requirements imposed for quality and environmental compatibility. The plant, which received ISO 9000 certification in 1998, produces for both the local and global markets.

In December 1998, as part of Sandvik's growth strategy in expanding product and market areas, the Group acquired all the remaining outstanding shares of Sandvik Baildonit S.A., the Polish cemented-carbide company in Katowice. The company, which is now a wholly owned subsidiary, is Poland's largest manufacturer of cemented-carbide tools; its products are sold mainly in the domestic market but the percentage of exports is gradually increasing.

Following large investments in new technology, production equipment and data systems, the plant now meets high demands imposed in terms of productivity, quality and environmental compatibility.

Sandvik Coromant's distribution concept, which is keyed to delivery on customers' terms, offers a major competitive advantage. During 1998 a new inventory management system was installed for all three central warehouses: Gimo in Sweden, Schiedam in the Netherlands, and Erlanger in Kentucky, in the United States. The new system improves the quality of service, increases efficiency and makes it possible to offer customers special delivery solutions. Customers can thereby reduce their own inventories and utilize the latest products more rapidly.

During the year substantial investments were made to improve service to customers. A number of the important growth markets in Asia and Central Europe were incorporated in Sandvik's global data network, which simplifies communications considerably. It means that more customers are gaining access to faster and more reliable deliveries and increasingly to the same commercial-

product support in all parts of the world.

The expansion of Sandvik Coromant's Training Centers is continuing. During 1998 a new facility that is responsible for training customer's and Sandvik personnel in Austria, the Czech Republic, Hungary and Slovakia was placed in service in Vienna. At the end of the year a new Training Center was inaugurated at Sandvik Baildonit in Katowice, Poland. It is the first industrially owned training unit for cutting operations in the country. At these and other units throughout the world, there is complete equipment for training purposes that is fully adapted to local market requirements.

Work on a new electronic catalog based on advanced Web technology, as well as preparations for selling via the Internet, are under way. As more and more information is becoming available electronically, there is a corresponding upgrading of equipment and of expertise on the part of sales personnel worldwide.

There was a continuing very favorable trend of so-called Partnership Sourcing whereby Sandvik Coromant signs agreements to become the supplier of all cutting tools to a customer. General Motors, the world-leading American car company, named Sandvik Coromant "Supplier of the Year" in the cutting-tool category for successful programs in a number of GM plants throughout the world, including those in Brazil.

#### New products

A number of the product innovations introduced recently attracted special attention during 1998. For example,

the unique TwinGrade drill, which is based on two co-sintered cemented-carbide grades, was honored by the European Powder Metallurgy Association as the most innovative product of the year.

The program in the milling segment has been substantially renewed in recent years. The latest addition to the product line, the CoroMill 390 is the first end mill with cemented-carbide inserts that offers the same precision as a mill made

of solid cemented carbide. It tolerates higher loads and the unique versatility



Sandvik Coromant's center for the development of cutting tools in Sandviken is equipped with advanced measuring instruments.



of the insert technology offers customers considerable improvements in productivity. With the CoroMill 390, the use of the tool itself is simplified through laser marking on both the package and the product.

The growth in sales of the Coromant Capto modular tool system continued. Additional licensing agreements were signed during the year, which is resulting in wider distribution of the system and greater freedom of choice for customers.

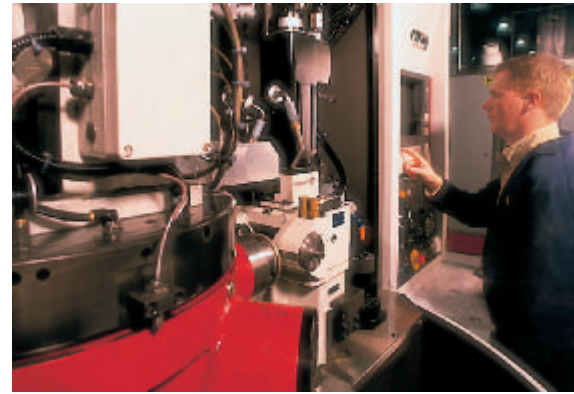
More and more customers are demanding cemented-carbide tools that can eliminate the need for subsequent costly grinding. As a result, Sandvik Coromant introduced Wiper, a new type of insert that offers large cost-savings in both turning and milling. By using the new type of insert, the grinding operation can be completely eliminated, which also substantially shortens throughput times in customers' plants.

During the year Sandvik Coromant introduced a completely new concept in cutting tools with edges made of cubic boron nitride in the cemented carbide. This offers even safer and more reliable machining, as well as exceptionally good high-temperature properties. The use of cubic boron nitride, one of the hardest cutting materials available, makes it possible to conduct fine-machining operations at high speeds in the aircraft industry and with very long tool lives. The capacity per insert is being increased at least tenfold in each area of application, which means considerable cost advantages.

A new version of AutoTAS, the modular system for tool administration was launched. This increases the possibilities of using information from a large number of systems for tool data in the same computer environment.

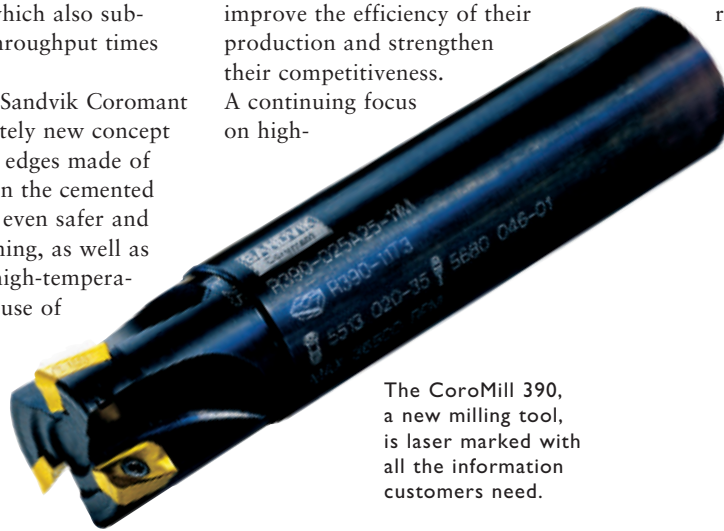
Sandvik Coromant has a complete program of inserts for turning, milling and drilling. The very strong brand name has greatly facilitated the introduction of new products in recent years. Sandvik Coromant has been able to consolidate its position of global leadership in both established and newer product areas. Sales via own channels or selected distributors guarantee direct contact with customers in all segments of the market. As part of the marketing program, information about Sandvik's products and the added value they offer customers is being communicated in a consistent manner, in all languages.

Sandvik Coromant is continuously advancing its positions in the market. Sophisticated new products and new forms of cooperation are helping customers throughout the world to improve the efficiency of their production and strengthen their competitiveness. A continuing focus on high-



Cutting tools made from super-hard materials are made in Houston, Texas.

of strength, Sandvik Coromant is well positioned to meet the new and higher demands that the market is imposing, and to increase its relative share of the market ●

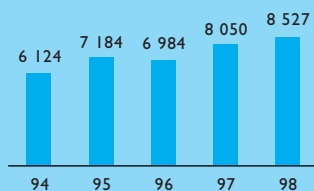


The CoroMill 390, a new milling tool, is laser marked with all the information customers need.

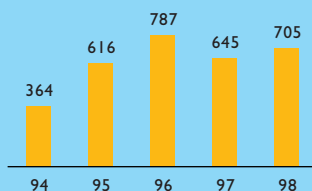
performance tools and systems designed to increase productivity and utilize machines more efficiently, as well as to reduce production costs in customer plants, is also the driving force in Sandvik Coromant's own strategic development. A well-developed marketing organization and ongoing aggressive programs are constantly broadening the base of operations. Based on these positions

## Sandvik Coromant

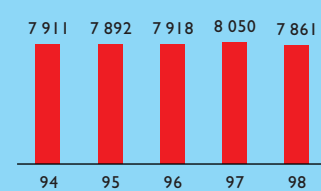
INVOICED SALES, SEK M



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER



# CTT Tools

CTT Tools is the world's largest manufacturer of high-speed steel tools for metalworking applications and is rapidly expanding operations in rotary solid cemented-carbide tools, a sector increasingly characterized by rapid growth. CTT Tools is now organized in four sectors based on brand names: Dormer (including Master), Titex, Prototyp and Precision (including Triumph and Union Butterfield).

Sales invoiced by CTT Tools in 1998 increased 32% (4% in fixed currencies and for comparable units). Demand was firm throughout Europe, with the exception of England, where the strong British pound had a negative

## Market and business conditions

The world market for high-speed steel tools, which is estimated at between SEK 25 billion and SEK 30 billion, is highly fragmented, with several hundred producers. Since it is also a mature market, CTT is growing by increasing market shares and by participating in structural changes.

In contrast, the market for solid, rotary cemented-carbide tools is growing sharply and is estimated at approximately SEK 10 billion at the present time. There is no clear market leader in this sector, but rather many small and medium-size competitors. CTT has expanded sharply within the sector in recent years and its objective is to be a world leader here, too. It grew more than 40% in 1998 and its market shares increased.

The market for various types of special tools as supplements to standard tools is also increasing and this is imposing demands for rapid quotations and deliveries. Accordingly, CTT is now building up small, flexible production cells for special tools in many of its plants in order to increase service to customers and to improve competitiveness.

## Dormer

Following the closing of the end mill plant in England, Dormer today has six production units. Large investments were made in all of the plants. Capacity for the special production of taps was increased in Sweden, and for production of solid cemented-carbide drills in England. The establishment of a central warehouse in the Netherlands substantially improved the level of service. A large number of product innovations were introduced; these included drills for soft materials, a doubling of the number of cemented-carbide drills and a newly developed standard drill. A new electronic product catalog was also launched.



Advanced drills made of high-speed steel from CTT Tools are widely used in aircraft manufacturing.

impact. Sales in the United States declined slightly during the second half of the year. In Latin America, particularly in Brazil, the business climate was much weaker throughout 1998. Demand in Asia was low. Profit was affected adversely by the earlier comprehensive restructuring program in Precision in the US.



**Titex**

In October Titex inaugurated a new factory in India that manufactures both high-speed steel products and solid cemented-carbide products for the local market. Titex thus has three plants: in Germany, France and India. Major investments were made in the plant in Germany to increase the capacity to produce solid cemented-carbide products. Investments were also made to improve the re-sharpening service for application tools. Many product innovations, including coated drills and several types of cemented-carbide drills were introduced during 1998. A new version of the Titex electronic product catalog was also launched.

**Prototyp**

During the year Prototyp, which has a plant in Germany, established new sales companies in Italy and France. Aggressive investments were made to increase production capacity and improve marketing resources in the sector of solid cemented-carbide end mills. Sales of special taps developed favorably. New products launched included solid cemented-carbide end mills used in high-speed machining. Prototyp also has one of the industry's best cutting tool databases.

**DORMER**



A company was established in India for the manufacture of Titex high-speed steel tools and solid cemented-carbide tools.

**Precision**

Precision Twist Drill Co., which was acquired in 1997, has two factories in the US. The company is one of the leading producers of high-speed steel tools in the country. The Group includes Union Butterfield, which has a production unit in the US. A major restructuring program is being implemented within Precision. The factories are being retooled for production in "cells" and "miniplants" as a means of raising productivity, shortening lead times, reducing the percentage of rejects, and increasing expertise. This program, which has largely been completed, had a negative impact on earnings in 1998. Following the completion of rationalization measures and large investments to increase productivity, there will be good potentials for continuing expansion and sharply improved profitability.

With the strong brand names being marketed through separate sales channels, the restructured plants with modern machines, continuous

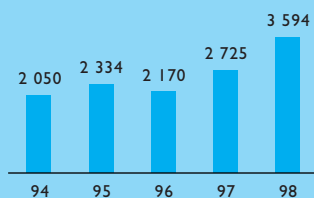
new product development, expert personnel and a smooth-functioning sales-and-service organization, CTT Tools is well positioned to capture additional shares of the global market for both high-speed steel tools and solid cemented-carbide tools ●

Håkan Larsson,  
President of  
CTT Tools.  
Born 1951, MBA,  
employed since  
1993.

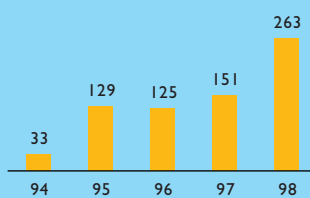


**CTT Tools**

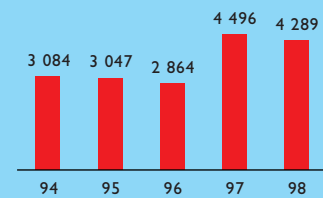
INVOICED SALES, SEK M



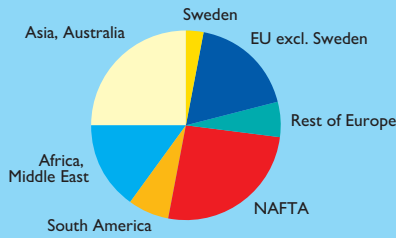
INVESTMENTS IN FIXED ASSETS, SEK M



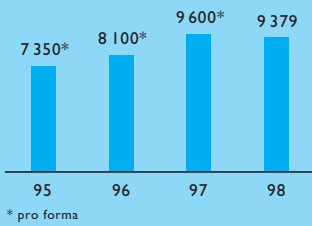
NUMBER OF EMPLOYEES 31 DECEMBER



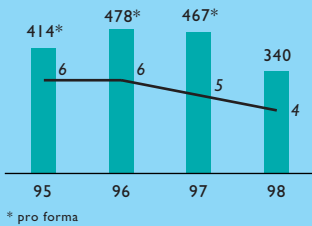
INVOICED SALES BY MARKET AREA



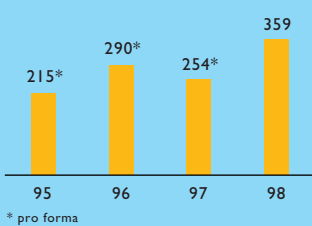
INVOICED SALES, SEK M



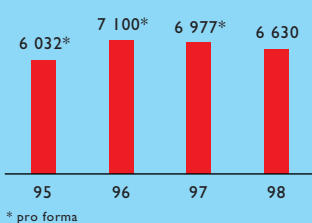
OPERATING PROFIT, SEK M  
— AS A PERCENTAGE OF INVOICED SALES



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER



BUSINESS AREA

# Sandvik Mining and Construction

The Sandvik Mining and Construction Business Area, which was formed following Sandvik's purchase of Tamrock and the merger of Tamrock and Sandvik Rock Tools, is a leading supplier of rock-working equipment, tools and services to the world's mining and civil engineering industry. Sandvik Mining and Construction offers the market's most advanced product program for drilling, excavation, loading and transportation of rock and minerals, for demolition and for bulk-materials handling. By supplying innovative technology, products and systems, customers are being helped to increase their capacity and productivity.

Invoiced sales of Sandvik Mining and Construction declined by 2%, compared with pro forma 1997 sales. Profit was lower, due to weaker demand, lower invoicing and, not least, large restructuring costs. The return on net assets was 5%.

Sandvik Mining and Construction has a solid knowledge of the entire process, which means substantial added value for customers. Equipment and machines often constitute parts of a large service- and maintenance-intensive operation such as in underground and open-pit mines, or a processing plant for bulk materials. The efficiency of these systems depends on regular service and maintenance – and the costs of unscheduled shutdowns are high. The long-term business potential for sales of tools, service and spare-parts contracts generally is much higher than the initial investment in machinery.

**Structural changes**

The integration of Tamrock and Sandvik Rock Tools, the demand for a new and simplified structure and the need for improved profitability resulted in a restructuring program and a plan for reducing the number of employees throughout the world by 15%, or approximately 1,000 persons.

The new organizational structure became effective 1 January, 1999. Operations are

now being conducted in four separate business sectors with specific product lines, customer areas and brand names: Sandvik Tamrock, Voest-Alpine Eimco, Driltech Mission and Roxon.

**Sandvik Tamrock**

Sandvik Tamrock develops, produces and markets rigs for surface and underground drilling, as well as loaders and trucks used in underground mines and hydraulic hammers for demolition and breaking of materials. Its main production facilities are located in Finland, Sweden, France, Canada, Brazil and India.

Sandvik Tamrock also develops, produces and markets cemented-carbide tools, wear parts and spare parts, and performs customer services ranging from emergency repairs to work performed under long-term tools, service and spare-parts contracts. Facilities for repairing and rebuilding equipment are located in the most important market areas.

Customers include operators of mines containing precious metals and base metals, as well as the contractors who work in these mines. Companies that construct hydro power stations, dams, highways,

Anders Ilstam, President of Sandvik Mining and Construction. Born 1941, A.E., employed since 1993.





railways and other infrastructure constitute another customer category, along with producers of cement and aggregate and companies that demolish buildings and recycle structures.

Investments in mining are driven by metal prices and expectations of future needs for metals. Over time, the need for base metals and the trend in the mining industry is linked to growth in industrial production. Demand for precious metals such as gold is also consumption-related due to the sale of jewelry. The after-market requirements for spare parts, tools and service in the mining industry is linked to the excavated volumes of material and needed for reliable production.

**TAMROCK**

**SANDVIK**  
Rock Tools

**VOEST-ALPINE**  
EIMCO

**ROXON**  
A Sandvik Company

**Driltech**  
**Mission**



The trend of business in the civil engineering sector is dependent mainly on public investments in infrastructure and residential construction and is closely related to general economic growth.

**Voest-Alpine Eimco**

Voest-Alpine Eimco develops, produces and markets equipment for underground mining of coal and other soft minerals, as well as cemented-carbide tools used in mining these materials and for such specialized use as asphalt milling. The company is also the leading supplier of road-heading equipment in the civil engineering sector and has a great deal of know-how in mechanical rock excavation. Its principal plants are in Austria, France, the United States, South Africa and Australia.

Mining customers use mechanical methods to excavate soft minerals. Civil engineering customers use road headers to create tunnels or underground space in soft and

Straighter holes and increased drilling efficiency is achieved by using the new surface-drilling rig, Tamrock Pantera 1500, in combination with the tool system, Sandvik Sixty.

Sandvik Mining and Construction offers customers competitive comprehensive solutions within rock-working through a combination of machinery, tools and service.



fragmented rock. The long-term growth in the coal segment is stable and is linked to the production of energy. The other soft minerals constitute mainly raw materials for the chemical industry.

#### **Driltech Mission**

Driltech Mission's equipment consists of drilling rigs and cemented-carbide tools for rotary and down-the-hole drilling. The products are used in open-pit mines, exploration drilling and other large-scale surface excavation, and in well drilling. Down-the-hole drilling tools are also used in the civil engineering industry and for ground reinforcement. The company's main plants are in Mexico, the United States and India. Driltech Mission's customers include operators of mines for coal and metals, civil engineering contractors and companies that specialize in ground reinforcement and drilling for water.

#### **Roxon**

Roxon is an engineering company and a components manufacturer. The company supplies conveyor components, designs and delivers equipment and systems that handle bulk materials and services and repairs these systems. Its customers are operators of coal and metal mines, quarries, harbors, terminals and solid-fuel power plants.

Roxon's products are used throughout the materials-handling chain, from an underground coal mine to the preparation plant and subsequent transport to a harbor and loading of a vessel, then to the ship unloading and handling of the coal by an end-user – a power plant, for example. Roxon manufactures its products in Finland, Sweden, Germany and Australia. Small, flexible workshops are located close to customers in many markets.

#### **Competition**

The various business sectors have different competitors. Sandvik Tamrock and Driltech Mission compete with



The new, fast, underground truck, Supra, was introduced during the year.



The world's largest underground loader, the Toro 2500, considerably increases customers' productivity.



Atlas Copco (Sweden), Ingersoll-Rand (US) and Furukawa (Japan), among other companies. Boart (South Africa) is a competitor in drilling tools and Krupp (Germany) and Nippon Pneumatic (Japan) compete in the demolition area.

Joy and Long-Airtox, both based in the US, compete with equipment used to mine coal and soft minerals. Kennametal (US) is the principal competitor offering mineral-mining tools. Roxon competes with various suppliers of systems for handling bulk materials. Continental (US) is a competitor in the field of conveyor components and systems.

**Market and business conditions**

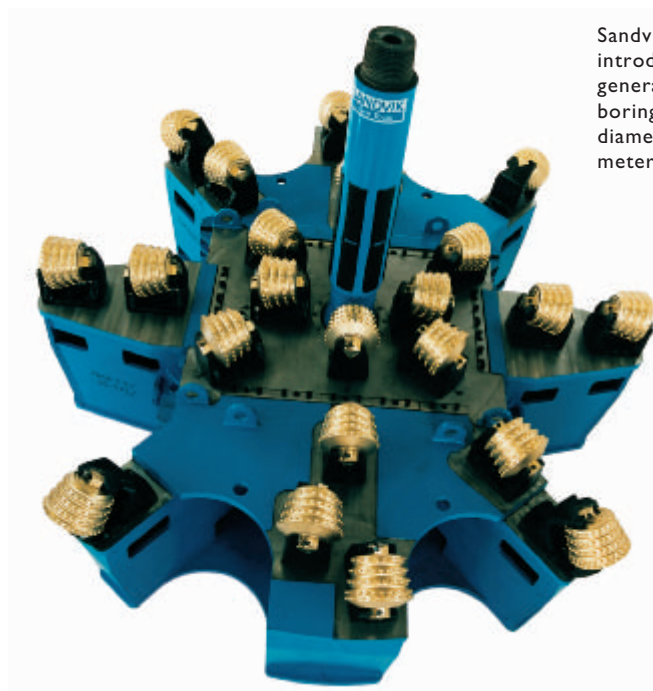
Viewed as a whole, Sandvik Mining and Construction's markets experienced a weaker business climate during 1998. Operations related to the construction and civil engineering sectors did better than those in the mining industry, since the trend of infrastructure business was relatively strong in a number of markets. Base metal prices declined gradually during the year, largely due to disturbances in the world economy.

The low metal prices caused profitability problems for many mining companies with low rates of activity, and even resulted in shutdowns.

The number of prospecting projects declined and many mining companies sought to reduce operating costs and increase productivity. This also created business opportunities since the corrective measures will mostly require investments in new equipment. There was a certain shift from underground mining to surface mining, with generally lower production costs. Underground mines with high mineral contents continued to develop favorably.

Gold prices fluctuated around USD 290 per ounce during the year. Demand for gold continued to be firm but the financial situation in Asia and the presumed liquidation of gold assets by the central banks kept prices down. Investments in new gold mines with low mining costs continued. In contrast, the number of new underground projects declined and the rate of growth in existing mines was lower. Since total production did not decrease, interest was focused on production equipment – production drilling rigs, loaders, trucks and tools.

The international market for coal



Sandvik Tamrock introduced a new generation of raise-boring heads with diameters of up to six meters.

was also affected negatively during the year. Spot prices for coal were depressed by the financial uncertainty and the low prices for oil. Australia's coal exports were affected severely since Japan and Southeast Asia are the main markets. Problems in the coal industry in many markets resulted in smaller investments in new mining operations and in replacement of equipment. Demand in the after-market remained firm, however, since the volume of global production increased slightly.

Demand in the civil engineering sector was good in many European

Voest-Alpine Eimco is a leading manufacturer of equipment and tools for underground mining of coal and other soft minerals.







Driltech Mission manufactures rotary drilling rigs and cemented-carbide tools for rotary and down-the-hole drilling.

countries and in the US and on the whole varied much more than in the relatively weak mining industry. A number of large infrastructure projects were started in Europe at the end of the year and the highway-maintenance program in the US was increased. Except in China, the number of civil engineering projects in Asia declined.

**Investments**

A multiple-year investment program to modernize the drilling-equipment plant in Tampere, Finland, continued during 1998. Following the modernization, throughput time has been halved. A comprehensive investment program is also under way in the breaker production facilities in Lahti, Finland.

Sandvik Mining and Construction has one of the fullest-coverage marketing and service networks in the industry. Positions were further strengthened during the year by establishing new own sales units and forming joint-venture companies. The joint-venture company – Tamrock Luoyang Machinery Co. Ltd. – is located in China and is owned 60% by Sandvik and 40% by the Chinese Ministry of Railways. The company is offering Chinese customers repair and re-building services that match factory standards. During 1998 sales of products in Ghana were taken over from the former independent distributor. In

South Korea a joint-venture company was recently established with the former distributor, Suh Jun Trading Co. Ltd., Sandvik holds a 70% interest in the company.

**New products**

Sandvik Mining and Construction continued to invest substantial resources to develop new products and improve service. In hard rock drilling, the most notable product introductions were those of the Tamrock Pantera 1500 surface drilling rig and Sandvik Sixty, a heavy duty tool system for top-hammer drilling. Combined, these products make it possible to drill straighter holes, with greater drilling efficiency, without the need for costly special tools.

A new generation of large raise-boring heads with diameters up to six meters was introduced during the year. These products are being used with great success in major projects in South Africa and Australia, among other countries, further strengthening leadership in the field of raise-boring tools.

During the second half of the year the first units of the new, fast “Supra” underground trucks were delivered to customers in North and South America. The trucks have a patented suspension undercarriage which doubles the productivity of hauling operations through a combination of high speed and heavy load.

Rammer’s hydraulic hammer is used for rock crushing and demolition.



The world's largest underground loader, the Toro 2500, is becoming increasingly important in LKAB's production in its iron ore mine in Kiruna, Sweden. The units delivered most recently are equipped with an advanced control system that permits unmanned operations.

Rammer's range of hammers used in mining and demolition was increased during the year with new models for use in tunnels and for scaling. A newly developed heavy G100T tunnelling hammer offers customers a low-cost alternative for rapid and flexible tunnel-driving in fragmented and layered rock.

During 1999 Voest-Alpine Eimco will introduce a completely new production system that permits mechanical mining of much harder rock than has been possible to work up to now without drilling and blasting. The system is based on a combination of a newly developed Voest-Alpine road header and new revolutionary cemented-carbide tools made by Sandvik Tamrock.

The integration of Tamrock and Sandvik Rock Tools was strengthened and accelerated during 1998. A new organization was established and other restructuring measures were initiated. These measures are designed to result in sharply improved competitiveness and a consequent satisfactory level of profitability over the long term ●

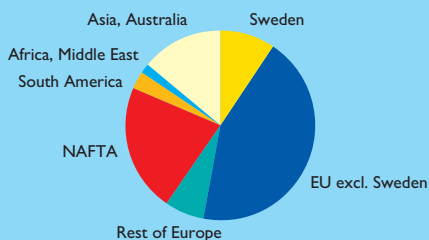


Roxon supplies equipment and systems for the handling and conveying of bulk materials in mines.

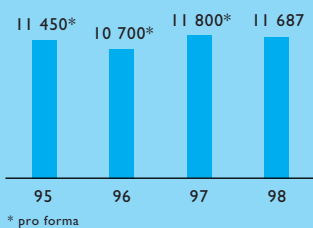


Sandvik Tamrock's plant in Tampere has undergone an extensive modernization.

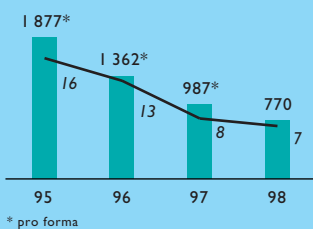
INVOICED SALES BY MARKET AREA



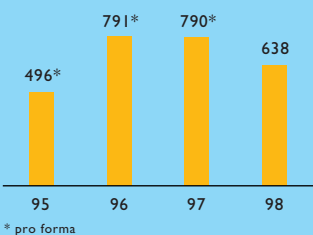
INVOICED SALES, SEK M



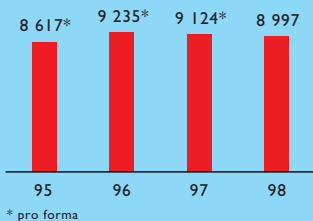
OPERATING PROFIT, SEK M  
— AS A PERCENTAGE OF INVOICED SALES



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER



BUSINESS AREA

# Sandvik Specialty Steels

This business area includes the Sandvik Steel and Kanthal companies. Sandvik Steel is a world-leading manufacturer of products made of stainless steel and special alloys. Kanthal is a world leader in producing metallic and ceramic resistance materials.

The world market for the business area's products is in the range of SEK 75 billion. The customers are in most industrial segments, including chemicals, oil and gas, power, pulp and paper and engineering, as well as in consumer-oriented sectors such as the automotive, household appliances and electronics industries.

Kanthal has been wholly owned by Sandvik since 1997 and has close links to Sandvik Steel. Sandvik Specialty Steels' invoicing in 1998 amounted to SEK 11,687 M, with operating profit of SEK 770 M. The return on net assets was 7%. Including acquisitions, the average growth in volume of the business area's operations during the past five years amounted to 6% annually.

## Sandvik Steel

Sandvik Steel manufactures tube, strip, wire and bar for users with exacting demands on economy, reliability and performance. Products are produced mainly in stainless steel as well as titanium, nickel and zirconium alloys. Average value-added is high relative to raw material content. Tube products account for about 50% of total sales. Operations are focused on product niches in which Sandvik Steel has leading positions in the market.

Sandvik Steel's sales were unchanged compared with the preceding year. Prices declined, due to lower nickel and alloy prices. Sales increased in Europe, decreased in Asia and were unchanged in North America. Order intake was distinctly weaker during



Sandvik Steel's high-quality strip steel is used in modern safety razors and electric shavers.



the second half of the year. Profit was lower as a result of declining prices and a write-down of raw-material content in inventory due to the lower prices for alloys.

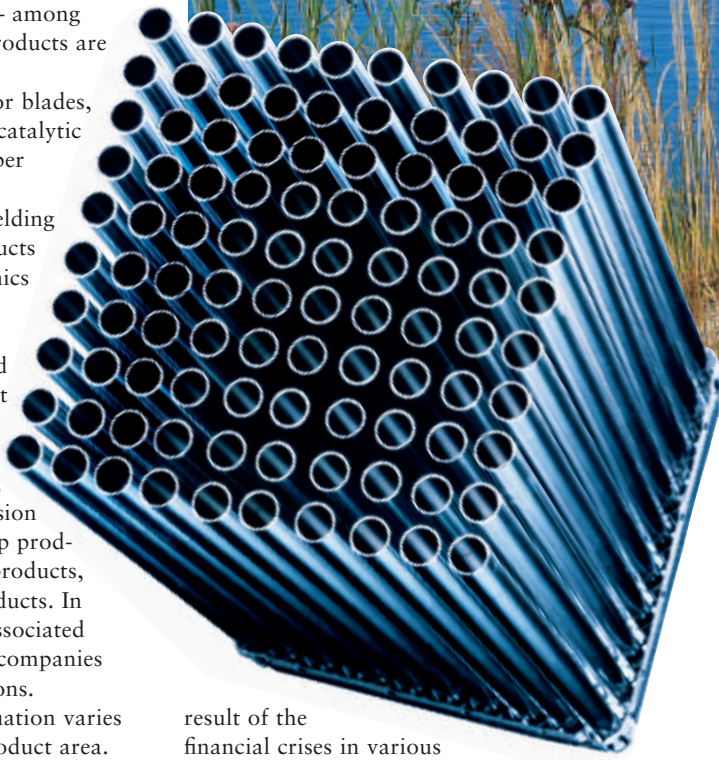
The largest group of products is seamless tubes made of stainless and high-alloy steels and special metals for users with high demands on performance, reliability, corrosion-resistance properties, and precision. The customers are in the chemical and petrochemical industry, the power industry, the oil and gas industry, the automotive industry, aerospace and the electronics industry – among others. Strip and wire products are used in the production of saws, razor blades, knives, electric shavers, catalytic converters for cars, flapper valves, refrigerator compressors, springs, welding material and other products for the precision mechanics industry.

Sandvik Steel's operations are conducted in eight different product areas or divisions: Metallurgy and long products, extruded tube, cold-finished tube, precision tube, special metals, strip products, wire and welding products, and complementary products. In addition, a number of associated companies and product companies have specialized operations.

The competitive situation varies from product area to product area. Sandvik Steel is a world leader in the field of seamless stainless steel tubes, where there are three major competitors. In the wire and strip field there are a few individual competitors that are active in the entire production chain, as well as many small independent drawing plants and cold-rolling mills. The various competitors individually cover only between 5% and approximately 20% of Sandvik Steel's product program.

#### Market and business conditions

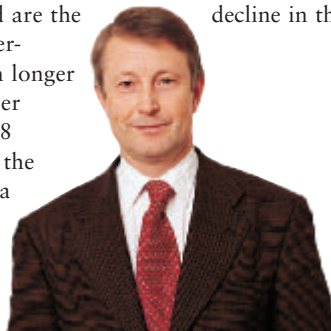
The consumption of stainless steel shows a growth trend of about 5% in volume, faster than the growth in GDP in the world. The basic driving forces underlying this trend are the market's demands for higher-performance materials with longer lives and greater strength per unit of weight. During 1998 consumption stagnated for the first time in many years as a



Cladding tubes for the nuclear power industry are an example of products from Sandvik Steel that fulfill extremely high quality requirements.

result of the financial crises in various parts of the world. Over the long-term, however, the trend of the market is expected to continue to be favorable for Sandvik Steel since demand is increasing in the areas in which operations are being strategically focused: highly processed quality products.

Demand from such consumer-oriented sectors as the automotive and white-goods industries continued to be strong during most of the year. This favored the sales of strip and wire products in particular. Demand for stainless steel tube products for use in the oil and gas industry was high. However, demand for this product, too, decreased during the latter part of the year in parallel with the decline in the price of oil.



Per Ericson, President of Sandvik Steel. Born 1946, M.Sc. Eng., M.A., employed since 1974.



The new assembly line for heat-exchanger tubes that was installed in Sandviken during the year will mean considerably shorter production time.

The market for titanium tubes used in the aircraft industry continued to develop positively, as did demand for tubes used in the fertilizer industry.

However, utilization of capacity was high in all of the production units during the greater part of 1998, but decreased perceptibly where low-processed products were concerned during the final months of the year. The financial crisis in Asia caused many of our customers in Europe and North America to postpone various investment projects.

Utilization of capacity continued to be low in the Sandvik Calamo (Sweden) and Sandvik Choksi (India) units that were acquired in 1996. The semiconductor industry, which is the dominant customer category for Sandvik Calamo's electropolished tubes, continued to defer its investment projects. Sandvik Choksi's development was restrained by the very weak demand in India and the rest of Asia.

Tube fittings and welded tubes from Avesta Sandvik Tube (AST), an associated company in which Sandvik holds a 25% interest, are important complementary products being offered. AST's results declined sharply and represented a charge of SEK 27 M (1997: profit of SEK 10 M) against earnings in 1998.

In the other associated company, Fagersta Stainless (Sandvik's holding: 50%), which manufactures stainless steel wire rod, sales decreased to SEK 1,246 M (1,316), with a resulting negative impact of SEK 13 M (1997: profit of SEK 4 M) on earnings.

### Investments

Sandvik Steel implemented a comprehensive investment program in 1998. A very large investment was made in a completely new production plant in Sandviken, "Tube Mill 98" for heat-exchanger tubes. The total cost was approximately SEK 275 M.

In the newly constructed 300-meter-long building, Sandvik Steel is producing long tubes in a unified product flow from extruded material to finished cold-processed and heat-treated and tested tubes – with a flow time of less than 20 hours. The equipment was developed largely in-house and is characterized by high performance in terms of automation and the quality of finished products. It includes systems for energy-recycling and the work environment has been distinctly improved. With the new tube plant, Sandvik Steel can substantially reduce delivery times for advanced heat exchanger tubes in long lengths for use within the chemical and petrochemical industries. Product performance has been improved at the same time.

A number of other important investment projects were completed in the tube sector. In Sandviken, the capacity and productivity of the largest of the three extrusion presses were increased by rebuilding the furnace equipment.

The capacity for hydraulic and instrument tubes was also increased and

a new pilger mill for large-diameter tubes was placed in service. A new tube-bending machine for steam-generator tubes was installed. During the year Sandvik Steel acquired from Poppe & Pothoff GmbH, a German company, its unit for production of stainless-steel precision tubes. The company has annual sales of approximately SEK 160 M, with 80 employees. By restructuring among Sandvik's various mills for small-diameter tubes, a substantial rationalization effect can be achieved, which will also release capacity for future expansion.

At Sandvik Choksi in India, in which Sandvik holds a 51% interest, the investment program that was begun in connection with the formation of the joint-venture company in 1996 was completed. Sandvik Choksi can now offer extruded products of the same high quality as those being offered by other Sandvik tube mills.

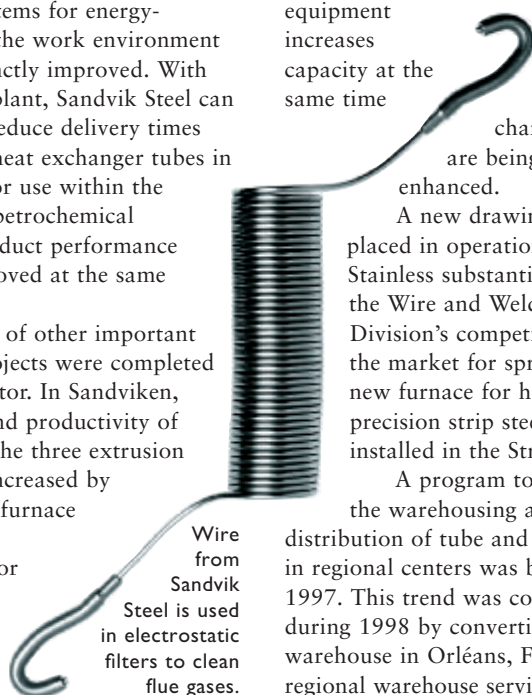
In all, Sandvik Steel during the past four years has carried out a very comprehensive investment program at a total cost of slightly more than SEK 1 billion, excluding acquisitions, to consolidate its position as a leading world producer of seamless tubes. Productivity and product performance in this core business within Sandvik Steel that accounts for 40% of sales have both been improved radically.

A new heat-treatment plant for heavy bar steel was placed in operation in the Metallurgy and Long Products Division. The new equipment increases capacity at the same time

that product characteristics are being further enhanced.

A new drawing machine placed in operation in Gusab Stainless substantially increases the Wire and Welding Division's competitiveness in the market for spring wire. A new furnace for hardened precision strip steel was installed in the Strip Division.

A program to concentrate the warehousing and distribution of tube and bar products in regional centers was begun in 1997. This trend was continued during 1998 by converting the warehouse in Orléans, France, to a regional warehouse serving all of



Wire from Sandvik Steel is used in electrostatic filters to clean flue gases.



Southwestern Europe.

It was also decided to develop the existing warehouse operations in Singapore and Chomutov, Czech Republic, to regional warehouses for tube and bar products. Sales companies in a number of countries were organized in sales regions to further strengthen the roles of these logistics centers.

The distribution operations for tube and bar products in Montreal, Canada, was sold to an independent distributor with broader market coverage. This is expected to have a favorable impact on sales in the Canadian market.

**Product development**

Sandvik Steel is a world leader in materials development in its product niches and is investing continuously in research and development of new products and production methods. The research center in Sandviken has more than 200 specialists, researchers and engineers with broad knowledge of materials and long experience in the field. The development of highly processed stainless steel products and other special alloys continued in close cooperation with customers and end-users. A large number of projects started in 1998 will offer a good return within the next few years.

A number of successful development projects were completed in the electronics and environmental fields. Sales of newly developed materials for the power industry increased. Research involving materials for superheater tubes in boilers fired with biofuel was conducted successfully. New materials for ethylene furnaces were delivered to customers in the petrochemical industry. There were broader areas of application for a patented so-called maraging steel whose material properties are now also being used in razor blades and for cutting edges.

Various investment projects were

followed up to determine how materials and product quality are being affected by new production processes. All stages of production are objects of continuous review that is designed to improve product quality and productivity. One example is the exchange of experience in the wire field that was especially successful in the US, and which resulted in markedly increased productivity combined with improved product quality.

Sandvik Steel is participating in development projects that are being conducted within the framework of the European research community. This work is currently being conducted in 16 different projects comprising both pure research programs and general activities that increase expertise in key areas.

In the field of information technology, large investments were made to standardize and develop the company's infrastructure, to provide increased IT support to the sales organization, to develop electronic trading and to improve operations in the regional distribution centers.

A structure was developed for providing external information via the Internet covering all product areas and sales companies. Sandvik Steel's internal network – the intranet – was developed during the year and has gradually been utilized to a greater degree to distribute information within the organization.

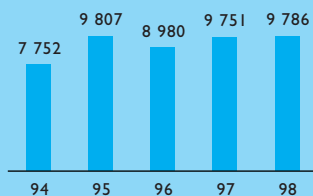
With Sandvik Steel's market- and efficiency-oriented operations based on geographically dispersed production, product specialization in niche areas and well-developed logistics, the company is able to offer advanced, high-quality products and full-coverage service that meets customers' ever-higher demands throughout the world. This strong market position provides a good basis for competing, and opportunities for continued favorable growth over the long term ●



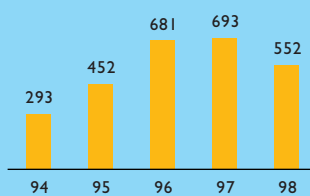
After new investments, the capacity for heavy bar steel has increased and product characteristics have been improved.

**Sandvik Steel**

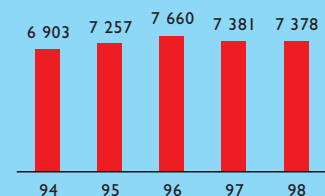
INVOICED SALES, SEK M



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER





# Kanthal

Kanthal is a leading global manufacturer of metallic and ceramic resistance materials in the form of wire, strip and electric heating elements for household appliances and industrial furnaces.

Kanthal's invoiced sales declined by 8%, to SEK 1,901 M, in 1998 after having increased by 19% in 1997. A substantial part of the decrease can be attributed to the H. P. Reid company that was acquired in 1997 and which was affected by the downturn in the electronics industry and in the economy in Japan, which is a large market for Kanthal.

The trend of the market for Kanthal's principal product – resistance wire – was stable in Europe and very favorable in the United States, while development in the Asian markets, including Japan, was very weak. Profitability declined and was also affected adversely by old contracts for nickel. The restructuring of operations in Brazil, India, China and Australia had an adverse effect on earnings.

The world market for resistance materials is estimated at approximately SEK 5 billion. A few specialized steel mills and independent redrawers comprise Kanthal's major competition for metallic resistance materials. In the segment for high-temperature elements in ceramic materials, competition consists primarily of one American and two Japanese companies.

## Product areas

The market for Kanthal's products is divided into consumer products and industrial products. Consumer products consist mainly of heating wire for household appliances. Growth in this segment follows general economic trends. The customers are large, well-known appliance manufacturers or their suppliers and the industry is characterized by strong competition and increasing price pressure. Kanthal is a world leader in this product area.

The industrial products comprise heavy heating wire and complete heating elements and systems for the furnace industry. Customers consist of a limited

number of furnace builders and a very large number of end-users. Competition centers mainly on the products' properties, economic life and quality – and there is somewhat less sensitivity to prices than in the consumer-product field. Kanthal is focusing aggressively on the industrial segment by developing products and applications and by acquiring companies with complementary products. Gas-heated industrial furnaces, which today account for approximately 80% of all the furnaces in the world, are expected to become a new area for expansion for Kanthal. The company introduced a number of new products in this field in 1998.

## Market and business conditions

In the European market, the business climate in Germany and Great Britain continued to be good. In Germany, Kanthal benefited from the introduction of a new technology for producing stove heating plates by using thin strip instead of wire. This is creating good prospects for a continuing increase in sales in 1999. In the other regions of Europe there was a leveling-off in demand in Italy, Spain and most East European countries. The problems that had begun already in 1997 in Latin America – notably in Brazil – deepened and affected sales adversely in 1998.

The lower demand affected heating wire used in household appliances and the electronics industry, in particular. Sales of bimetals and strip products were firm, due in part to large test order for material for the new euro coins.

## Investments

In line with the strategy of concentrating production in fewer units, more and more basic material is being produced in Hallstahammar, Sweden. Another dry drawing machine used for the production of reprocessed wire was acquired, which increased capacity and raised productivity.

The drawing mills in Brazil and Australia were closed. Operations in Australia will be concentrated in the Melbourne area, with



A new dry drawing machine improved productivity at the Kanthal plant in Hallstahammar.

Harry Furuberg,  
President of Kanthal.  
Born 1951, M.Sc. Eng.,  
employed since 1998.





sales offices and a certain amount of service-oriented production of furnace elements. Kanthal's operations in Brazil will in the future consist of sales and production of elements. Closer cooperation with Sandvik Steel is planned. Similar coordination with local Sandvik units has taken place in Portugal, Russia and Bulgaria, and more such moves are planned.

In the beginning of 1999 Kanthal acquired an American company, MRL Industries, which produces heating cassettes for diffusion furnaces used in the production of semiconductors, so-called microchips. The company is the world's largest manufacturer of such cassettes and its customers are primarily furnace manufacturers in the United States. Kanthal supplies heating material in the form of wire and the acquisition is increasing the added value of its products and the opportunities for attractive technical development in this industry of the future. The acquisition is also strengthening

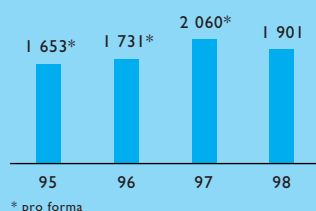
Kanthal's operations in the US by positioning the company closer to end-customers.

To consolidate its world-leading position in the industry and improve its profitability, Kanthal will implement production-rationalization measures and other cost-reduction measures combined with continuing aggressive marketing and investments in the development of products and applications ●

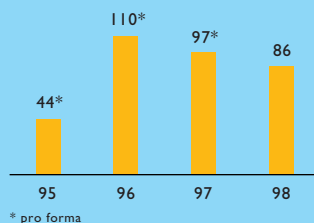
Heating cassettes used for manufacturing of microchips.

## Kanthal

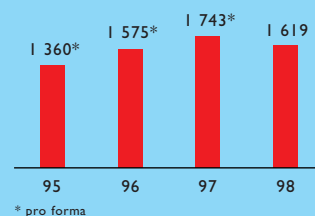
INVOICED SALES, SEK M



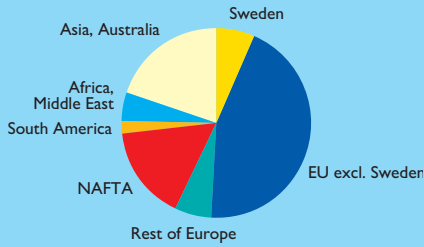
INVESTMENTS IN FIXED ASSETS, SEK M



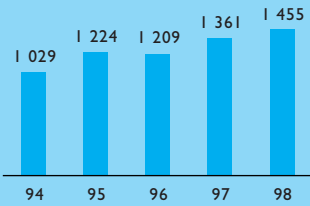
NUMBER OF EMPLOYEES 31 DECEMBER



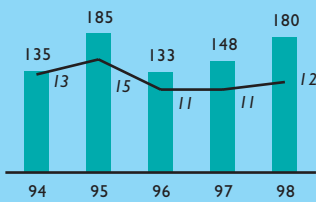
INVOICED SALES BY MARKET AREA



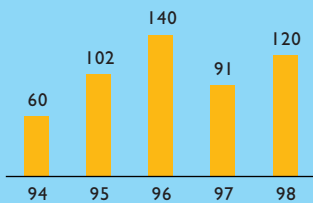
INVOICED SALES, SEK M



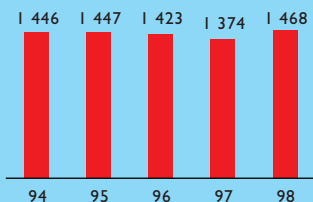
OPERATING PROFIT, SEK M  
— AS A PERCENTAGE OF INVOICED SALES



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER



BUSINESS AREA

# Sandvik Hard Materials

Sandvik Hard Materials is active in the full spectrum of its field, ranging from cemented carbide to diamond, including special ceramics for biotechnical applications. The business area manufactures and markets large volumes of cemented-carbide blanks for tool manufacturers, components for the engineering industry and carbide rolls for the steel industry.

Sales invoiced by Sandvik Hard Materials during the year increased by 7% (3% in fixed currencies and for comparable units). The return on net assets was 16%. Including acquisitions, average volumes have increased 10% annually over the past five years.

Sandvik Hard Materials has developed into a leading industrial company with specialized production units in eleven countries and an international marketing organization. It is the only company in the industry with true global coverage and today has representation in more than 50 countries. The competitors are mainly companies that are active only in individual large home markets or within limited product niches.

**Market and business conditions**

The general trend of the market for Sandvik Hard Materials' products was favorable during the year. However, growth was restricted by a shortage of capacity in our large plants. Comprehensive investment programs were begun at a number of the units to eliminate the limited capacity for products that are assessed to have good long-term growth potentials.

Sales of CIC rolls used in the steel industry improved strongly, compared with 1997. The new fully cast rolls were very well received by customers, creating a number of new application possibilities for this concept. In contrast, sales of traditional solid cemented-carbide rolls were weaker. A new

robotized finishing unit was placed in operation, which improved quality and productivity. This in turn created conditions for more aggressive market penetration.

**New products**

In recent years Sandvik Hard Materials has focused on segments of the market and customer groups where long-term growth is expected to be



Cemented-carbide tools from Sandvik Hard Materials are used for manufacturing aluminum cans.

greater than in the industry in general. Typical areas of this type include blanks for solid cemented-carbide drills and end mills that are replacing comparable products in the high-speed steel field.

Blanks for microdrills – used by manufacturers of mobile telephones to drill assembly holes in printed circuit boards – are another example. The underlying growth in the electronics industry is very large. Demands for high, uniform quality, as well as for qualified product development are substantial, which favors Sandvik Hard Materials since it has greater R&D resources than its competitors.

Carbide rotary cutters used for the production of diapers and sanitary products are additional examples of new products from Sandvik Hard Materials. The increase in production speed of hygienic disposables demands cemented-carbide tooling. A cemented-carbide tool lasts up to 100 times longer than a comparable steel tool, which offers our customers considerable gains in



Lars Wahlqvist, President of Sandvik Hard Materials. Born 1938, M.Sc. Eng., employed 1969-1975 and since 1981.



productivity. This product, which is highly sophisticated technically, was cited by the Swedish Academy of Engineering Sciences (IVA) as one of the year's most advanced innovations.

Individually-made ceramic dental crowns, which are manufactured by Procera-Sandvik AB (owned 50/50 by Sandvik and Nobel Biocare) constitute another fast-growing product area, in which sales tripled during the year. The introduction of new dental products such as bridges and caps is expanding the market potential greatly and assuring long-term growth.

Parallel with investments in growth areas, there is a systematic phasing out of products that are not seen to have the potential for good long-term profitability or growth.

### Structural changes

To improve the efficiency of operations and reduce costs, production units were further specialized and investments were made in increased capacity. The first stage of the new plant in Mexico was placed in service during 1998. The plant will initially supply the NAFTA market.

A new plant constructed in accordance with modern flow principles was inaugurated in India at the end of the year. The plant will supply the growing Indian market with quality products.

A comprehensive central warehouse and distribution project that will be fully implemented during 1999 was begun during the year. All sales and production inventories for warehoused products are being concentrated in a single location in Europe. This will result in improved delivery service and lower costs for inventory control and distribution.

To improve the efficiency of selling operations and reduce their costs, a program to structure national sales organizations in larger units was initiated. One sales region was formed for NAFTA and another for the Benelux countries, France, Spain and Portugal.

The strategic focus on growth areas is continuing and products with special potentials for expansion today constitute a growing percentage of business. This is creating prospects for good long-term growth in volume and profitability ●

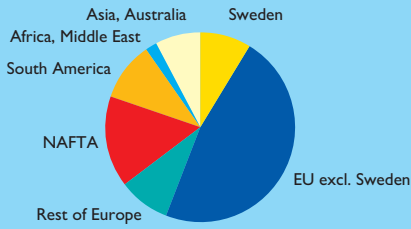


Micro-balls of extremely fine-grained cemented carbide with a diameter of approximately 1 mm, are used in the manufacturing of various kinds of ball-point pens.

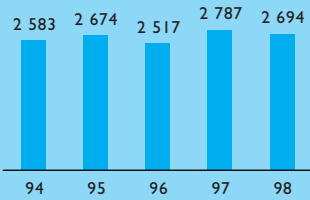


Carbide rotary cutters are used for manufacturing diapers, among other applications.

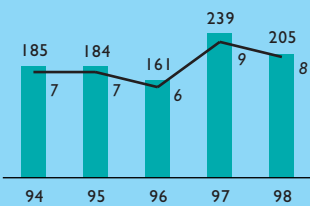
INVOICED SALES BY MARKET AREA



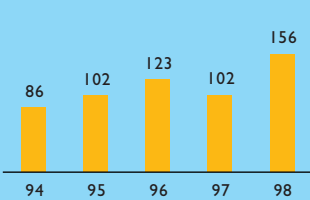
INVOICED SALES, SEK M



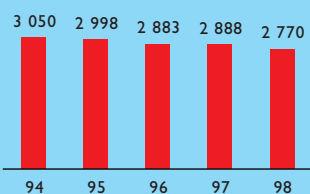
OPERATING PROFIT, SEK M  
— AS A PERCENTAGE OF INVOICED SALES



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER



BUSINESS AREA

# Sandvik Saws and Tools

Sandvik Saws and Tools, one of the world's largest manufacturers of handsaws and metalsaw blades, also has strong market positions for other products such as wrenches, spanners, pliers, files, pruning tools as well as guide bars and saw chains for logging machines and chain saws. These tools are designed for and sold mainly to professional users.

Sales invoiced by Sandvik Saws and Tools declined by 3% in 1998. The company's share of the market was unchanged or, in certain important product areas, somewhat higher than in the preceding year. Profits were lower, due to the smaller sales volume. The return on net assets was 12%. Including acquisitions, average volumes in the business area have increased 1% annually over the past five years.

**Market and business conditions**

The total market potential for Sandvik Saws and Tools' products amounts to about SEK 100 billion per year, with one third in Europe, one third in North and South America, and one third in the rest of the world. The market is characterized by strong brand-name awareness, specialized production and distribution, and very traditional buying habits. The trend continues to be toward fewer and larger manufacturers and distributors, which is reflected primarily in acquisitions and mergers.

In Europe, where Sandvik Saws and Tools and two other tool manufacturers account for approximately 15% of the market, there are still more than 40 medium-size

producers and more than 400 small ones. This compares with the situation in North America where five large producers have a combined market share of more than 50%.

Sandvik Saws and Tools is favored by the growing concentration in the industry, due to its strategic know-how in efficient, coordinated logistics, its well-known brand names and its strong market presence. Its activities are focused on large distributors,

many of which operate in a number of markets.

Demand for hand tools and saw blades declined during the year, due to the financial crisis in the Southeast Asian markets that tradition-

ally are large users of metalsaw blades and other metal processing tools.

Toward the end of the year the crisis also had repercussions in Eastern Europe, notably in Russia, where weaker demand and

credit problems made it difficult to do business. Sales were higher in the most important countries in Western Europe.

In North America, as well as in the greater part of Latin America, demand weakened and sales declined.

Forestry tools and metalsaw blades were the product areas affected most seriously by declining demand.

The business area's shares of the markets for pruning tools as well as for the range of mechanical tools increased.



New secateurs for wine growers.

Göran Gezelius,  
President of Sandvik Saws and Tools.  
Born 1950, MBA,  
M.Sc. Eng., employed since 1982.





### Structural changes

A number of relocations of operations that were part of the comprehensive rationalization program started in 1996 were effected during the year. Production of forestry tools was concentrated to the United States and the production of certain mechanical tools was transferred from Germany to the existing plant in Argentina. Following some production problems in the early stages, productivity has increased substantially.

Investments in new and improved production methods continued. Many manufacturing units were modernized to further raise the levels of quality and productivity. Sandvik Saws and Tools also invested in new methods that make it possible for distributors to gain direct access to an order and logistics system via the Internet. Customers can search through the entire product catalog, make inquiries about deliveries and levels of inventories, and place orders electronically. The system has been introduced in the Nordic region and will gradually be made available in other markets.

### New products

The intensive program to develop and sell ergonomic hand tools continued during the year. Sales of the new ergonomic screwdrivers with three-component handles that were introduced on a large scale in 1998 were highly successful. The business area also introduced a new ergonomic pipe wrench that attracted a great deal of attention, especially in the Scandinavian countries.

Sales of ergonomic hand tools as a percentage of Sandvik Saws and Tools' total sales increased. The trend of demand for tools of this type continued to be favorable. The principal reason is heightened awareness that industrial injuries can be caused by improperly designed tools. The product line now contains more than 300 different ergonomic articles.

Other new products introduced during the year were a torque wrench employing a unique patented design, pruning shears for use in the wine industry, pruning saws with a patented tooth design, and a new guide bar for use in logging operations.

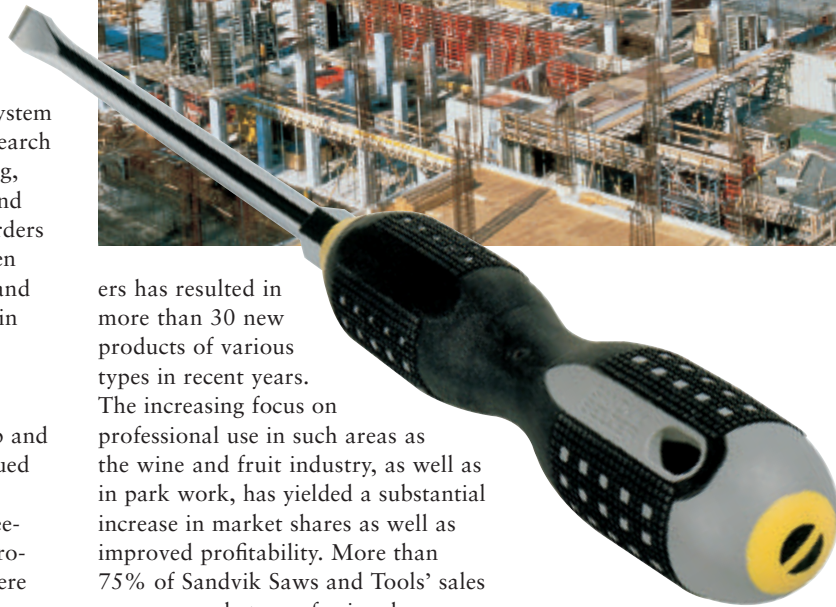
All these products were developed in close cooperation with professional end-users. This approach was especially characteristic of the expanded range of pruning tools, where close cooperation with custom-



ers has resulted in more than 30 new products of various types in recent years. The increasing focus on professional use in such areas as the wine and fruit industry, as well as in park work, has yielded a substantial increase in market shares as well as improved profitability. More than 75% of Sandvik Saws and Tools' sales are now made to professional users.

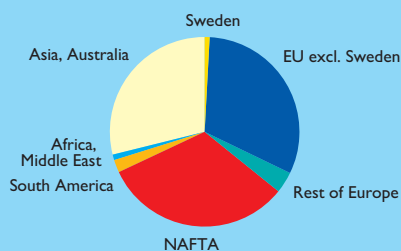
Based on the continuing development of the product program, the concentration of production resources and sharply increased productivity, there is a good potential for further market successes ●

New ergonomic screwdrivers with three-component handles have become a sales success among professional users.

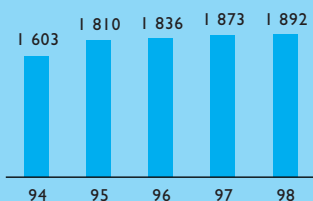




INVOICED SALES BY MARKET AREA

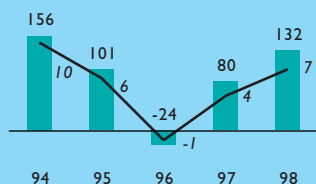


INVOICED SALES, SEK M

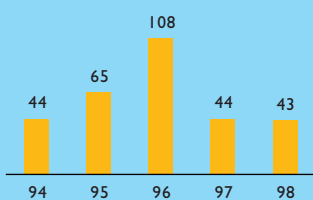


OPERATING PROFIT, SEK M

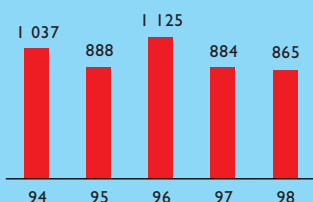
— AS A PERCENTAGE OF INVOICED SALES



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER



BUSINESS AREA

# Sandvik Process Systems

Sandvik Process Systems manufactures and markets complete systems for automatic goods sorting and process plants for chemical and food processing industries. The process plants are generally based on steel conveyor belts, which are also sold separately.

Invoiced sales of Sandvik Process Systems increased by slightly more than 1% in 1998 (1997: 2% decrease in volume and for comparable units) and earnings continued to improve. The return on net assets was 17%.

The downturn in the economy during the year affected primarily the after-market for steel belts, which experienced declining demand and smaller volumes of sales in both Europe and Asia. The trend of business in North



Advanced equipment for manufacturing steel belts is located at the plants in Sandviken.

Including acquisitions, average volumes in the business area have increased 5% annually over the past five years.

Sandvik Process Systems is a world-leading manufacturer in its product niches. There are a limited number of competitors in the steel-belt field. In the process plant sector Sandvik Process Systems is competing with many companies, as well as with processes based on other methods and materials than steel belts.

The trend toward stronger regional marketing organizations for Europe, America and Asia was intensified during the year. In 1998, the increased focus on facilities based on steel-belt technology that has occurred during the past two years resulted in a merging of the organizations for steel-belt technology and process plants.

America was favorable in both the steel-belt and process-plant sectors. The level of sales of sorting systems was lower, but with improved and more stable profitability. Sorting systems recorded another excellent year in Japan.

**Steel Belts**

Continuing improvements and rationalization of production were implemented in Sandviken. The trend is toward larger and technically more advanced belts and higher customer requirements, and this is imposing major demands on both equipment and the flexibility of production. Increased customer demands have been met with new steel grades that



Svante Lindholm, President of Sandvik Process Systems. Born 1947, B.L., employed since 1981.

were introduced during the year. The program to develop new applications in association with large customers continued to be pursued intensively.

### Industrial Processing

The trend of business in Industrial Processing was positive in 1998, with much higher invoiced sales than in the preceding year. The trend in North America, where sales increased more than 50%, was especially favorable. The restructuring initiated there in 1997, and which was largely completed during 1998, improved the profitability.

Customers are to an increasing extent choosing steel-belt-based technical solutions, and this involves an increased sales potential in the after-market.

Continuing improvements in profitability are being achieved through better utilization of synergies with the Steel Belts product unit. More than 70 Rotoform plants were sold during the year, confirming the business area's world-leading position in the chemical industry in the segments for pastillating and granulating processes. Substantial progress was made in development programs involving new applications, notably the production of artificial marble for use in hygienic areas and in flooring. An initial test order for this attractive growth area was received in the United States.

### Sorting Systems

The globalization of the operations, combined with the heavy emphasis on exchanges of technology among the three principal units in Europe, America and Asia resulted in the receipt of strategic orders involving various technical solutions from all of these regions. New advanced test centers were established in order to be able to test and optimize different sorting systems in association with customers.

Japan is the most important market for Sandvik Process Systems' sorting systems; more than 300 systems for automatic sorting of goods are being used there today by all major Japanese forwarding companies. During the year important breakthroughs were made into the Chinese market, where orders were obtained from the post offices in Beijing and Guangzhou.

Operations in North America have been consolidated and Sandvik Process Systems has been established as an important partner for the US



Steel belts and steel-belt-based processes are used in pulp, paper and board manufacturing.

Postal Service and all the large delivery services. The integration of product lines of the Italian subsidiary, CML, has created new marketing opportunities in Europe and the US. During the year CML received a number of important and large orders, primarily in the banking sector, from mail order companies and from distribution centers.

In February 1999 Sandvik concluded an agreement with Advent International Corp., an American investment company, covering the sales of the operations within Sorting Systems. Automatic sorting systems represent an attractive growth market but its connection with Sandvik's core business has gradually diminished and the opportunities for synergies are limited. The sale will mean an increased focus on Sandvik Process Systems' other businesses, steel belts and steel-belt-based industrial processes, where Sandvik is a world leader.

Advent intends to form a special company for sorting operations in which Sandvik during a transition period will own nearly 20% of the shares and temporarily contribute to the financing. The management of Sorting Systems is also being offered to acquire shares in the newly formed company, which also plans to acquire complementary companies.

The coordination of the Steel Belt and Industrial Processing units will permit a further concentration of resources and reduction of costs. Together with the ongoing upgrading

of the global order-handling and project-control systems, this will further increase the flexibility of the business area's operations, and its profitability ●



Products from Sandvik Process Systems are used in chocolate production.



# R&D yields results

A goal-oriented and comprehensive focus on high-technology research and development within selected product areas is one of the most important contributing factors to Sandvik's world-leading position, and also forms the basis for continued expansion. The objective is to be both a technical and market leader in those areas where the Group is active.

Sandvik's research and development (R&D) is growing in importance and scope. Operations are spread over a broad field, with a focus on materials technology. In the past decade, investments within this area have increased substantially and totaled nearly SEK 1.6 billion in 1998, including quality assurance. Development work is carried out in many different places throughout the world and employs more than 1,200 persons, many of whom are highly educated within various special areas.

One of Europe's largest R&D centers for special steel and a center for the development of cutting tools are located at the plants in Sandviken.

## Result-oriented operations

A fundamental condition for R&D work is cooperation with customers. Sandvik's objective is to create added-value for the customer through product development, and in that way increase their productivity, profitability and competitiveness. Therefore, the customer is often involved at a very early stage through discussions, tests, etc. This methodology has characterized the R&D work since the company was established more than 135 years ago and has proven to be very effective.

Long-term perspectives and sustainability are important criteria for R&D operations. One of Sandvik's

strength factors is a solid technical skills base that has been built up through systematic work over many years. An important task for the Group's R&D organization is to maintain and strengthen this skills base in order to lay the groundwork for continued product and process development.

The products and processes developed within Sandvik should

be patentable. Sandvik has an aggressive patent strategy and, at present, has approximately 2,600 patents in effect. A substantial increase in the number of patents granted has occurred in the 1990s and Sandvik is, as a rule, at the top of the so-called Swedish patent league.

One condition for being able to develop good products is a close cooperation between product development and the actual production units. That is why Sandvik's successful product development is often based on the development of its own processes and improved production technology. The company also develops its own methods for processes and trains



3.



1. Furnace for diamond coating of cemented-carbide inserts at Sandvik Coromant in Västberga, Stockholm.

2. Sandvik Tamrock has a special test mine in Tampere, Finland, for the development of machinery and equipment for rock excavation.

3. Testing of advanced alloys at Sandvik Steel's R&D unit in Sandviken.



A world-leading laboratory for cemented carbide is located in Stockholm, while Tampere in Finland is the center for global development of equipment for rock excavation. In addition, R&D work is carried out in many other parts of the world such as Europe, North America and Asia.

R&D operations are directly connected to the Group's different business areas. Through this decentralization, research personnel have close contact with production and the market, which simultaneously gives them the opportunity to develop contacts in the scientific world in important countries and market areas.





Jenny Källqvist at the Chalmers Institute of Technology in Gothenburg is a post-graduate student carrying out research for Sandvik within the area of the microstructure of austenitic steels.

administrative technicians in the management of production, inventory control and distribution.

Within the framework for Sandvik's decentralized organization, cooperation forms and networks have been developed to ensure the best possible utilization of collective expertise and that the existing synergy effects are utilized. Such synergies are noticeable within several areas.

#### **Expertise at the highest level**

A well-functioning cooperation with universities, technical colleges and external research institutes is becoming increasingly important for Sandvik. This is often manifested in the form of research projects, where Sandvik gains from external expertise. The need for this kind of external cooperation will grow at the same rate as the complexity within different technological areas and demands on products and processes increases. By gaining from this expertise and knowledge from the university world, Sandvik has been able to develop entirely new processes for the production of cemented carbide.

An interesting type of cooperation involves Sandvik's post-graduate student program. These are young researchers whose doctoral

work is completely financed by Sandvik. They carry out research at the leading universities in Sweden within areas that are strategically important for the company, such as materials science.

#### **Areas with large potential**

New R&D tools and scientific discoveries provide industrial research with continuously new and exciting possibilities. Today, a lot of strong R&D activities are under way in a number of Sandvik's technological areas, and there is considerable potential for further development.

In the steel area, the majority of R&D projects begin with calculations and modeling. With the help of computers, it is now possible to simulate the effects of the different chemical compositions on a material's microstructure, and in that way, optimize characteristics such as corrosion resistance, weldability, mechanical properties, etc. Through this, development time is substantially reduced since experiments are increasingly used only to verify that the desired characteristics have been achieved. High-level basic research is carried out at the well-equipped laboratory in Sandviken.

Sandvik's success in cutting tools,

rock-drilling tools and wear parts in cemented carbide is based on a high level of expertise within powder metallurgy, coating and chip-forming technology. With the help of modeling technology and a well-equipped processing laboratory, new types of production methods are being developed in the cemented-carbide laboratory in Stockholm.

Within the cemented-carbide and high-speed-steel areas, there is an ongoing development of techniques for coating of cutting edges with a thin layer of different compounds such as titanium nitride and aluminum oxide. Understanding how this layer will look in various processing applications and how the products should be geometrically designed are of vital importance for the development of competitive products and are, therefore, one of Sandvik's most important key areas.

Automation is becoming increasingly important for the Sandvik Mining and Construction business area. The mines of tomorrow will be increasingly remote-controlled from a centralized control area, not only to create safer and better working environments, but to increase production economy through less interruptions for personnel changes, ventilation, etc. In order to develop remote-controlled drilling processes and loaders for extremely demanding work environments, it is necessary that a technology be developed that is both advanced and sustainable. Sandvik Tamrock is a leader within this development area.

R&D work is not only a question of technological leaps and developing entirely new products. It is also a constant ongoing step-by-step improvement process in the development of existing products and production methods ●

# Sandvik and the environment

## Environmental policy

- Matters pertaining to the exterior environment and the work environment are an integral part of the Group's overall approach to business operations. Decisions related to business activities that affect the environment are guided by considerations of what is ecologically justified, technically possible and economically reasonable.
- Sandvik shall strive continuously to improve the exterior environment and work environment. The aim is to minimize consumption of energy and scarce resources and the use of materials that are harmful to humans and the environment.
- A minimum requirement for all Group operations shall be to protect employees and eliminate risks that may impair their health or the health of others. Sandvik shall comply with applicable laws and agreements with respect to the exterior environment and the work environment, and follow good industrial practice in the countries where it operates.
- In their dealings with Sandvik, suppliers shall be encouraged to adopt principles compatible with the company's environmental policy. Sandvik believes that common environmental requirements and standards should be established internationally and will work with others to develop such requirements and standards.
- The company will support employees

Sandvik's environmental awareness is integrated as a natural element in the Group's total business operations. Environmental consideration is always included in the assessment of investments and acquisitions, changes in processes and production methods, in the development of new products and with regards to selection of packaging materials and transport systems.

The Group conducts licensed operations in accordance with the Environmental Protection Act at its main plants in Sandviken and Gimo, in the Swedish parent company and in many of the Swedish subsidiaries. Most of the large foreign subsidiaries also conduct operations which are covered by specific environmental legislation. Extensive annual environmental reports are submitted for the main operations in Sweden to the environmental authorities in which statutory license decisions and compliance with their conditions are reported. Similar reports are submitted in other countries.

### Environmental management system in accordance with ISO 14001

In addition to the prescribed environmental reporting, the Sandvik Group has decided to successively establish environmental management systems in its production facilities in accordance with ISO 14001.

The ISO 14001 environmental standard is well established

internationally. It is similar in form and can be easily combined with the ISO 9001 quality system. It is based on goal-oriented control and continuous improvement.

Accordingly, it is well suited to Sandvik's work methods.

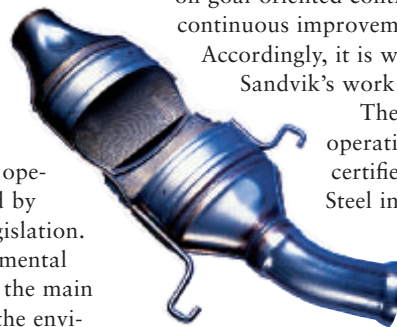
The first major operation to be certified is Sandvik Steel in Sandviken.

The aim is to complete work during 1999. During 1998, all

employees of Sandvik Steel in Sandviken, about 3,500 persons, participated in a basic environmental training course. Training

of environmental coordinators, environmental auditors and other key personnel is planned during 1999.

The entire operations of Sandvik Specialty Steels will be certified. Similar efforts have already been initiated within the other business areas: Sandvik Tooling, Sandvik Mining and Construction, Sandvik Hard Materials, Sandvik Saws and



Extremely thin strip steel from Sandvik Steel is used in the catalytic converters for automobile exhaust systems.

Sandvik's units in Sandviken will be environmentally certified.





Tools and Sandvik Process Systems. Certain smaller units are already certified and several more are expected to be certified during 1999.

#### Significant events during 1997/98

All landfills within Sandvik's industrial area in Sandviken have been identified and groundwater testing has been initiated.

During 1998 a new technology was installed in Sandviken, so-called reverse osmosis, or RO technology, to clean oil emulsions. As a result, the discharge of toxic and oxygen depleting substances into the Storsjön lake has been minimized.

Nitrogen oxides, NOx, contribute to overfertilization and acidification of land and waterways. Accordingly, the new furnace installation carried out at Sandviken in 1997/98 is equipped with so-called low-NOx burners.

Sorting at the source was introduced in 1998 for all waste within the Sandvik industrial area in Sandviken. Industry-specific and hazardous waste is handled in accordance with the laws and regulations governed by applicable permits for the operations, while for other wastes the principles and guidelines of reuse, recycling, energy recovery and disposal are applied. As a result the amount of waste to disposal has declined drastically.

Sandvik Coromant's collection of used cemented-carbide inserts for recycling has been very successful.

At Kanthal in Hallstahammar, the discharge of solvents, gasoline, etc, to the atmosphere declined from 14,000 to 1,000 liters per year. A transition is under way from disposal packaging to returnable packaging. Returnable packaging is used for 70% of the deliveries from Kanthal.

Sterling Tubes in Great Britain has reduced energy consumption by 15% and water consumption by 10%.

Günther & Co. in Frankfurt am Main, Germany, which produces Titex products, has been certified in accordance with ISO 14001.

Sandvik Tamrock in Sandviken, Köping and Stockholm replaced the solvent-based golden paint on drilling tools with a more environmentally friendly water-based paint.

Sandvik Metal Saws in Lidköping initiated a sorting-at-source program and water consumption was reduced through connecting the tempering furnaces in series and through discontinuing salt-bath annealing.

Sandvik Bahco in Enköping installed a new cleaning technology

for oil emulsions and cleaning fluids. Lead annealing has been replaced by a new method. The use of organic solvents has been reduced sharply, including discontinuing use of trichloroethylene. Sorting-at-source was initiated and the packaging for wrenches and pliers adapted to improve the environment.

Sandvik Bahco Argentina constructed a waste-water treatment plant for the process water from the coating plant. This reduces the discharge of nickel and chrome.

Sandvik Coromant's new tool plant in China meets the same high environmental standards as similar plants in the rest of the world.

Sandvik Obergue in Portugal initiated sorting-at-source and virtually eliminated the use of lead and trichloroethylene in the annealing of metal files. A new waste-water treatment plant for process water was built.

#### Did you know that...

Many of Sandvik's products help customers to improve the environment. The demand for these products is affected positively by increased demands for energy savings and lower emissions into the environment.

- Sandvik develops cemented-carbide inserts for chip-forming metalworking without the use of coolants which impact on the environment.

- Sandvik's new type of heat-exchanger tubes facilitates recovery of more heat at higher temperatures, even in demanding environments.

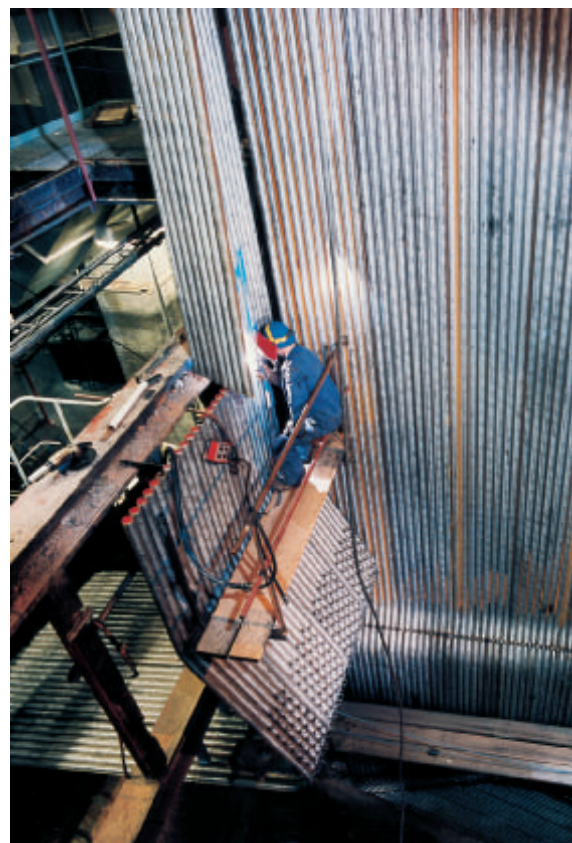
- Sandvik Steel's thin foils made of high-temperature materials increase the efficiency of catalytic converters for automobiles and various industrial cleaning plants.

- Cemented-carbide components from Sandvik Hard Materials ensure that valves close tightly which reduces fuel consumption in fuel-injected engines.

- Wire springs from Sandvik Steel are used in electrostatic filters for fossil-fuel-fired power plants.

- Sandvik Process Systems sells so-called oil-skimmers based on steel belts which facilitate recovery of oil from contaminated water.

- Sandvik's discharge of CO<sub>2</sub> from plants and offices is less than one-tenth of the level from a typical steel company in Sweden, measured in relation to invoicing ●



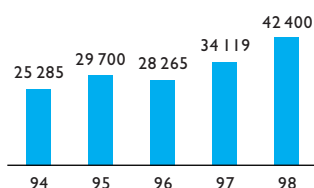
Sandvik's composite tubes withstand the aggressively corrosive environments in waste incineration plants.



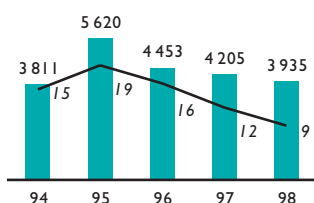
# Report of the Directors

## Group review

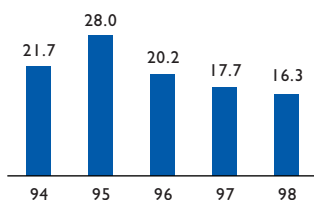
INVOICED SALES, SEK M



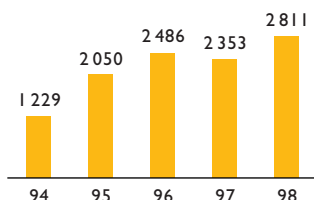
OPERATING PROFIT, SEK M  
— AS A PERCENTAGE OF INVOICED SALES



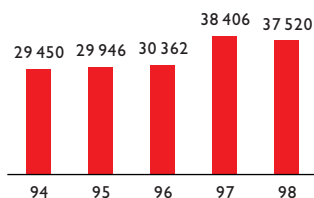
RETURN ON NET ASSETS, %



INVESTMENTS IN FIXED ASSETS, SEK M



NUMBER OF EMPLOYEES 31 DECEMBER



Invoiced sales of the Sandvik Group in 1998 amounted to SEK 42,400 M (34,119), an increase of 24% in value and 1% for comparable Group units at fixed exchange rates. Markets outside Sweden accounted for 94% (93) of sales. The order intake at year-end rose to SEK 41,700 M (34,603), an increase of 21%, with a 2% decrease for comparable Group units at fixed exchange rates.

Profit after financial income and expenses totaled SEK 3,935 M (4,205). Return on net assets was 16.3% (17.7). Earnings per share amounted to SEK 8.10 (10.15).

The Board of Directors proposes a dividend of SEK 7.00 (7.00) per share, corresponding to 86% of earnings per share.

### Structural changes

In 1998, Sandvik Coromant acquired all shares outstanding (49%) in Poland's largest company for manufacturing cemented-carbide tools, Sandvik Baildonit S.A. in Katowice.

Sandvik Steel acquired the German company Poppe & Potthoff's unit for production of stainless precision tubes, with annual sales of about SEK 160 M.

Sandvik increased its ownership interest in the listed subsidiary Sandvik Asia Ltd., from 55% to 73%. In India, CTT Tools started a company for high-speed steel tool production, Titex India.

Sandvik Coromant increased production in China, with a plant for cemented-carbide tools in Langfang.

Sandvik Mining and Construction formed a joint-venture company in China, Tamrock Luoyang Machinery Co. (Sandvik 60%, China Ministry of Railways 40%).

Subsidiaries were formed in Slovenia, Greece, Romania and the Ukraine and representative offices were established in Croatia and Azerbaijan. Sandvik Mining and Construction formed sales companies in Bolivia and Ghana.

In January 1999, Sandvik formed a joint-venture company in Korea with Suh Jun Trading Co. for distribution of drilling rigs and tools. Sandvik owns a 70%-interest in the company which is expected to post sales of about SEK 80 M annually.

In January 1999, Sandvik's subsidiary Kanthal AB acquired the American company MRL Industries Inc., based in California. MRL is the world's largest manufacturer of heating cassettes for the electronics industry. The company has annual sales of about SEK 160 M.

### Effects of major acquisitions in 1997

During 1997, Sandvik carried out three major company acquisitions: Tamrock Group, Kanthal Group and the US company Precision Twist Drill. Sandvik owned 93% of the shares in Tamrock at 31 December 1997 and, after an extended offer period and compulsory redemption procedures, owned 100% in September 1998.

The goodwill arising in the three acquisitions was about SEK 1,500 M in Kanthal, SEK 800 M in Precision Twist Drill and SEK 1,600 M in Tamrock. The goodwill amount was increased for the latter two acquisitions after a close review in 1998 of the situation at the time of purchase.

During 1998, strong measures were implemented to integrate the acquisitions into the Sandvik Group. Primarily, an extensive restructuring program was initiated within Sandvik Mining and Construction, in which Sandvik Rock Tools and Tamrock are now integrated. The entire production process within Precision Twist Drill was realigned and rationalized during the year. These restructuring measures adversely affected earnings in the first year.

The three acquisitions reported total invoiced sales in 1998 of about SEK 10,300 M. The operating margin was low after costs for integration, restructuring and goodwill amortization. Consequently, the effect on net earnings per share was negative in the first year.

### Board procedures

During the year, the Board adopted a special work procedure regarding its activities.

The members of the Board of Directors are presented separately on pages 70-71. The Board met five times during the year, of which once in conjunction with a

visit to a Group subsidiary in Germany. The Board's work has involved issues regarding acquisitions and their integration, significant investments and review of the company's long-term goals. The Board also established internally a committee to handle issues regarding the salaries of certain senior executives.

Certain matters in which the Board retains decision authority include:

- investments in amounts of SEK 15 M and higher
- acquisition and divestment of companies or operating units
- increases in share capital in the subsidiaries and associated companies
- the company financing policy and policy for trading in currencies and interest-rate instruments.

During the year, business area managers reported to the Board about strategic and other important matters within the business area.

#### Market conditions and sales

After a strong opening, the global business climate weakened successively during 1998. The rate of increase in industrial production fell from 3.5% on an annual rate at the beginning of the year to 2% at year-end. The business climates in the EU and NAFTA were favorable, but softened in the fourth quarter. A sharp weakening occurred in South America during the autumn and a crisis situation arose in Russia. Economic activity was low in Asia throughout the year, but certain signs of improvement were detected at the end of 1998.

Lower prices for oil, coal and metal raw materials had an adverse impact on some important customer segments.

On average, the SEK weakened against the USD and the EU currencies, but strengthened against the ZAR, JPY and the AUD. Accordingly, in total, Sandvik's invoiced sales were 1% higher in 1998 than would have been the case at 1997 exchange rates.

Demand was relatively strong for Sandvik's products at the beginning of the year, with the peak value in February. During the second quarter, demand fell to the same value for comparable units

	SANDVIK GROUP		
	1998	1997	Change %
Order intake, SEK M	41 700	34 603	+21
Invoiced sales, SEK M	42 400	34 119	+24
Profit after financial items, SEK M	3 935	4 205	-6

	INVOICED SALES BY MARKET AREA				
	1998 SEK M	Share %	1997 SEK M	Change % *	
EU (excl. Sweden)	16 777	39	13 799	22	8
Sweden	2 375	6	2 231	6	0
Rest of Europe	2 401	6	1 888	27	5
Total, Europe	21 553	51	17 918	20	6
NAFTA	10 626	25	8 195	30	-5
South America	1 978	5	1 703	16	-10
Africa, Middle East	1 916	4	987	94	8
Asia, Australia	6 327	15	5 316	19	-12**
Group total	42 400	100	34 119	24	1

\* Change excluding currency effects and company acquisitions.

\*\* Change excluding acquisitions.

#### INVOICED SALES IN THE 10 LARGEST MARKETS

	1998 SEK M	1997 SEK M	Change %
US	8 943	7 050	27
Germany	4 443	3 454	29
Italy	3 010	2 547	18
France	2 631	2 328	13
Great Britain	2 543	2 239	14
Sweden	2 375	2 229	7
Australia	2 323	1 335	74
Japan	1 654	1 605	3
Canada	1 231	830	48
Spain	1 028	669	54

#### INVOICED SALES BY BUSINESS AREA

	1998 SEK M	1997 SEK M	Change % *	
Sandvik Tooling	12 121	10 803	12	4
Sandvik Mining and Construction	9 379	3 582	/	-2
Sandvik Specialty Steels	11 687	10 780	8	-2
Sandvik Hard Materials	1 455	1 361	7	3
Sandvik Saws and Tools	2 694	2 787	-3	-5
Sandvik Process Systems	1 892	1 873	1	0
Seco Tools	3 151	2 889	9	6
Group activities	21	44	/	/
Group total	42 400	34 119	24	1

\* Change excluding currency effects and company acquisitions.

Seco Tools is a listed company and publishes its own Annual Report on its operations.

as a year earlier and then declined during the third and fourth quarter to below the level in the preceding year. Mainly, Sandvik Specialty Steels posted declining order intake.

Invoicing rose for comparable units during the first three quarters and particularly in the first. Invoiced sales declined in the fourth quarter.

Invoiced sales by market area are presented in a separate table.

Group sales in Sweden for the full year were unchanged, but increased within the rest of the EU by 8% at fixed exchange rates and for comparable units. In Central and Eastern Europe, the increase was 5%. The favorable development in the NAFTA region weakened successively during the year and, in addition, was affected strongly in the fourth quarter by reduced invoicing from large project transactions within Sandvik Specialty Steels and Sandvik Process Systems. Invoiced sales in South America were 10% lower than a year earlier due to the sharp decline in the economy during the autumn. Invoiced sales in Asia/Australia increased 19% as a result of acquisitions, but without the acquisitions declined 12%, or by about SEK 600 M.

The Group's invoiced sales by business areas are presented in a separate table.

Sandvik Tooling's invoiced sales rose 12%, of which 4% in price and volume for comparable units. Business development was strong in Europe and the NAFTA region, but softened in the fourth quarter. Market shares increased. New products in turning and drilling posted very favorable performance.

In its first year as a new business area, Sandvik Mining and Construction

posted invoiced sales 2% lower than in 1997 (pro forma). Demand for machinery in the mining industry, particularly for coal mining, was low virtually worldwide. Nevertheless, demand remained favorable for spare parts and tools. Demand in the construction industry was relatively good, particularly in the US.

Sandvik Specialty Steels' invoiced sales rose 8% to SEK 11,687 M, mainly due to Kanthal being included for the full year. Sandvik Steel's invoiced sales were largely unchanged despite prices having fallen 5%, mainly due to declining alloy prices. Order intake fell significantly during the second half of the year, primarily for products with a low level of value-added processing. Kanthal's invoiced sales declined 8%, due mainly to the prevailing business climate in Asia.

Sandvik Hard Materials reported continued very high demand in the electronics industry, which resulted in increased invoicing.

Sandvik Saws and Tools was affected already in 1997 by the crisis in Southeast Asia and lost a large portion of its volume there due to low demand and inventory drawdowns by distributors. Forestry tools and metal saw blades were the hardest hit product areas. In contrast, the trend in Europe and NAFTA was positive.

Invoicing by Sandvik Process Systems rose during the year in Japan but fell in the US due to earlier low order intake, which improved first at the end of the year.

## Earnings and returns

Operating profit in 1998 was affected adversely by the weakened business climate and, among other items, by:

- SEK 400 M due to lower prices for nickel and the resulting pressure on steel prices and writedown of inventories
- SEK 400 M for integration and restructuring measures
- SEK 300 M due to declines in invoiced sales in Russia, South America and Asia.

As a result of good productivity and volume development, particularly for Sandvik Tooling, operating profit improved by 5% compared with a year earlier to SEK 4,595 M (4,370), despite the aforementioned adverse effects.

Allocations to Sandvik's profit-sharing plan for employees in wholly-owned companies in Sweden totaled SEK 150 M (150).

After the change in the Group's capital structure, net financial expense of SEK 660 M is reported (expense: 165). As a result, profit after financial income and expenses declined to SEK 3,935 M (4,205). Tax charges totaled SEK 1,675 M (1,283), or 43% (30) of profit before taxes. This was unusually high due to an extra tax expense of nearly SEK 400 M related mainly to rulings in tax cases from the late 1980s. Consolidated net profit, after tax and minority interest, was SEK 2,095 M (2,725). Earnings per share amounted to SEK 8.10, compared with SEK 10.15 a year earlier.

Return on net assets declined to 16.3% from 17.7% a year earlier. Return on shareholders' equity amounted to 11.9% (14.3).

Excluding the additional tax expense, the tax rate would have been 33% and earnings per share SEK 9.65, with return on shareholders' equity of 14.2%.

## Operating profit by business area

Sandvik Tooling's operating profit improved to SEK 2,544 M, yielding a high margin of 21%. Sandvik Coromant posted another strong year and increased its market shares. CTT Tools posted very good performance despite the changes within Precision Twist Drill in the US and lower demand from the aerospace industry.

Sandvik Mining and Construction's operating profit amounted to SEK 340 M, and the margin was 4%. It was affected in the fourth quarter by ongoing restructuring measures, change in product mix and lower production volumes. The restructuring program decided in the third quarter, which within 2-3 years should yield rationalization and coordination gains of at least

## EARNINGS AND RETURNS

	1998	1997
Operating profit, SEK M	4 595	4 370
as a percentage of invoiced sales	10.8	12.8
Profit after financial income and expenses, SEK M	3 935	4 205
as a percentage of invoiced sales	9.3	12.3
Return on net assets, %	16.3	17.7
Return on shareholders' equity, %	11.9	14.3
Earnings per share, SEK	8.10	10.15

Definitions, page 54.

## QUARTERLY TREND OF PROFIT AFTER NET FINANCIAL ITEMS

	Invoiced sales SEK M	Profit after financial items SEK M	Net margin %
1997			
1st Quarter	7 327	941	13
2nd Quarter	8 155	1 164	14
3rd Quarter	7 958	1 045	13
4th Quarter	10 679	1 055	10
1998			
1st Quarter	10 770	1 140	11
2nd Quarter	10 480	1 135	11
3rd Quarter	10 020	827	8
4th Quarter	11 130	833	7



SEK 400 M, is proceeding as planned.

Sandvik Specialty Steels' operating profit amounted to SEK 770 M, or 7% of invoiced sales. Lower prices and the low nickel price affected results by SEK 400 M. Earnings at the close of the year were reduced by production cutbacks due to lower order intake and by restructuring costs. Provisions for planned personnel reductions amounted to SEK 75 M. Associated companies posted losses.

Sandvik Hard Materials' earnings were favored by higher invoicing of products with relatively high profitability.

Sandvik Saws and Tools posted operating profit of SEK 205 M. The margin declined from 9% to 8% due to lower invoicing.

Sandvik Process Systems' operating profit developed favorably, totaling SEK 132 M. The margin was 7%.

Group activities include operating expenses for central administration and finance operations and other activities in the Group units not linked to the business areas. Earnings in 1998 are not comparable with 1997 results which included Tamrock as an associated company.

#### Raw materials

The raw material prices for both cemented-carbide and steel products fell during the year. The purchasing price at 31 December for cobalt was about 25% lower than a year earlier and for nickel approximately 30% lower.

#### Financial position

Net financing from operations totaled SEK 4,595 M (4,984), with cash flow after dividend and investments amounting to a net outflow of SEK 560 M (outflow: 2,035). Liquid funds at year-end amounted to SEK 1,800 M (2,494). Interest-bearing provisions and liabilities less liquid funds yielded a net debt of SEK 8,412 M (7,160).

The company's fixed-interest term was extended during the year to one year. A portion of the company's financing, directly or indirectly, was made in high interest-rate countries to fund working capital in these countries. As a result, the company's financing costs were higher than if financing had been carried out in Swedish kronor.

Sandvik established a long-term credit facility in 1997 amounting to USD 650 M (about SEK 5,200 M), which secures the company's liquidity needs. In December 1998, Sandvik established a commercial paper program in the international money market that entitles the company to borrow up to EUR 250 M (about SEK 2,200 M). Standard &

#### OPERATING PROFIT BY BUSINESS AREA

	1998		1997	
	SEK M	% of sales	SEK M	% of sales
Sandvik Tooling	2 544	21	2 094	19
Sandvik Mining and Construction	340	4	234	7
Sandvik Specialty Steels	770	7	921	9
Sandvik Hard Materials	180	12	148	11
Sandvik Saws and Tools	205	8	239	9
Sandvik Process Systems	132	7	80	4
Seco Tools	677	21	575	20
Group activities	-253	/	79	/
Operating profit	4 595	11	4 370	13

#### FINANCIAL POSITION

	1998	1997
Net financing from operations, SEK M	4 595	4 984
Cash flow, SEK M	-560	-2 035
Liquid assets and short-term investments, 31 Dec., SEK M	1 800	2 494
Loans, 31 Dec., SEK M	7 529	6 976
Net debt, SEK M	8 412	7 160
Net financial items, SEK M	-660	-165
Equity ratio, %	47	47
Debt/equity ratio, times	0.5	0.5
Shareholders' equity, SEK M	18 621	17 414
Shareholders' equity per share, SEK	72.00	67.30

Definitions, page 54.

Poor's, the international credit rating institute, granted the company an A+ rating for long-term and A-1/K-1 for short-term borrowing. The high credit rating provides Sandvik with strong possibilities to continue receiving favorable financing terms in international capital markets.

The Group's preparations for the introduction of the new European currency, the euro, proceeded as planned. In a first phase, customers and suppliers who so desire can conduct their business with Sandvik in euros. After the millennium shift, Sandvik's subsidiaries in the European economic and monetary union, EMU, will establish the euro as their accounting currency. For the Group, the introduction of the euro resulted in a reduction in transaction-based currency exposure.

At year-end, Sandvik had hedged the SEK value of exports from Sweden for about 9 months through forward contract sales of currency. The flow represents the company's largest transaction exposure.

Sandvik AB's net flows of currencies, based on exports from and imports to Sweden, denominated in SEK M were:

	1998	1997
Euro currencies	4 910	4 600
USD and CAD	1 860	1 600
GBP	1 100	960
JPY	450	600
Other currencies	1 090	1 040
Total	9 410	8 800

#### Inventories

The value of inventories amounted to SEK 10,350 M (10,039) at year-end, which was 24% (24) relative to invoiced sales.

#### Trade receivables

Trade receivables at year-end totaled SEK 8,629 M (8,350). In relation to invoiced sales in the fourth quarter, receivables amounted to 19% (20) on an annual basis.

#### Shareholders' equity

Shareholders' equity at year-end amounted to SEK 18,621 M (17,414), or SEK 72.00 (67.30) per share. The equity ratio was 47% (47).

#### Capital expenditures

	1998	1997
Investments in plants, property and equipment, SEK M	2 811	2 353
as a percentage of invoiced sales	6.6	6.8

Investments in plants, property and equipment increased 19% to SEK 2,811 M. Major investments included:

- Increase in capacity for production of inserts in Gimo, Sweden, and in Houston, Texas. New inventory control system for Sandvik Coromant at the central warehouses in Sweden, the Netherlands and the US.

- CTT Tools increased capacity in Great Britain, Germany and India for solid cemented-carbide tools.
- Sandvik Mining and Construction's modernization and expansion of the plants in Finland.
- Completion of Sandvik Steel's new mill in Sandviken, Tube Mill 98, for production of tubes for heat exchangers.
- Increase in capacity of the extrusion presses in Sandviken and in India.
- Sandvik Hard Materials' modernization of production in Mexico and India.
- Total purchase prices for companies acquired in 1997 amounted to SEK 391 M (4,291).

#### Research, development and quality assurance

Group investments during 1998 in research and development and quality assurance amounted to SEK 1,568 M (1,350), an increase of 16% compared with 1997. Investments corresponded to 4% of invoiced sales.

Examples of new products within Sandvik Tooling include a unique drill based on two co-sintered cemented-carbide grades, an end mill with inserts, CoroMill 390, Wiper, a new type of insert for turning and milling, cutting tools with cubic boron nitride edges, a high-speed steel drill for soft materials and new types of drills in solid cemented-carbide.

Sandvik Mining and Construction's developments included a surface drilling rig Tamrock Pantera 1500, the Sandvik Sixty tool system, the Supra underground truck, large-diameter raise-boring heads and a newly developed road header with new types of cutting tools.

New steel grades within Sandvik Specialty Steels involved superheater tubes for boilers fired with biofuel, tubes for ethene furnaces in the chemical industry and maraging steel for cutting edges.

Notable developments in the other business areas include ergonomic screwdrivers with a three-component grip, shears for harvesting grapes and new material grades for steel belts.

#### Personnel

The number of employees at year-end was 37,520 (38,406). For comparable units, the number of employees declined by 995 (1997: decrease of 553).

At 31 December 1998, the number of persons employed by the Group in Sweden was 11,112 (10,989).

Details regarding personnel costs and the average number of employees in Sweden and abroad are provided on page 56.

	1998	1997
Number of employees, 31 Dec.*	37 520	38 406
Average number of employees		
Women	7 331	6 217
Men	30 632	26 214
Total	37 963	32 431

\* Part-time employees adjusted to reflect an equivalent number of full-time employees.

#### Employee profit-sharing and bonus program

Sandvik adopted a profit-sharing fund in 1986 for employees at the Parent Company and wholly owned subsidiaries in Sweden. Under the rules for this fund, a minimum return requirement must be met before an allocation is made from profits. The allocation is restricted to a maximum of SEK 150 M. The Sandvik Group return in 1998 means the maximum requirement was achieved and SEK 150 M was allocated to the fund.

The possibility of a long-term bonus has been provided to Group executive management and about 250 senior executives in Sweden and abroad which is based on price trends for Sandvik Series B shares during the five-year period from 1995 to 1999, and is to be paid in the year 2000. The terms are described in Note 1. The accrued portion of the bonus that would fall due if the price at year-end 1998 applied at year-end 1999, SEK 34 M, was provided in the 1998 accounts.

#### Environment

The Group conducts licensed operations in accordance with the Environmental

Protection Act at its main plants in Sandviken and Gimo within the Swedish Parent Company and in a number of Swedish subsidiaries. Most of the larger foreign subsidiaries also conduct operations which are covered by specific environmental regulations. Annually, comprehensive environmental reports on the main Swedish operations are submitted to the supervisory authorities in which the license standards and compliance with all the various requirements are presented. Similar reporting is also carried out in other countries.

#### Year 2000 project

Since 1997, Sandvik has been carrying out a Groupwide project aimed at ensuring that operations, without disturbances, will transition smoothly into the new millennium. The project involves all business areas and all companies in the Group. It covers all proprietary

IT systems as well as microprocessor systems, so-called embedded systems, in the production processes. Most of the systems have been remedied, tested and verified. The remainder shall be completed by mid-1999. Readiness plans for the millennium shift have been initiated. The estimated costs for the project to date are SEK 150 - 200 M.

#### Parent Company

Sales invoiced by the Parent Company amounted to SEK 12,491 M (12,318) and operating profit was SEK 1,182 M (1,107). Investments in property, plant and equipment amounted to SEK 841 M (861).

The number of employees in the Parent Company and subsidiaries at 31 December 1998 was 8,309 (8,187).

In addition to Sweden, the Parent Company's operations are carried out in a number of countries, through branch offices and representative offices.

# Consolidated income statement

Amounts in SEK M		1998	1997
Invoiced sales	Notes 2, 3	42 400	34 119
Cost of goods sold	Note 5	-28 813	-22 926
<b>Gross profit</b>		13 587	11 193
Selling expenses		-6 675	-5 408
Administrative expenses		-2 080	-1 703
Share of profits in associated companies	Note 18	-4	300
Other operating income		279	326
Other operating expenses		-512	-338
<b>Operating profit</b>	Notes 1, 6, 7, 8	4 595	4 370
Income from securities and loans held as fixed assets	Note 11	17	29
Other interest income and similar income	Note 12	113	224
Interest expense and similar charges	Note 12	-790	-418
<b>Profit after financial items</b>	Note 4	3 935	4 205
Income taxes	Note 14	-1 675	-1 283
<b>Profit after tax</b>		2 260	2 922
Minority interests		-165	-197
<b>Net profit for the year</b>		2 095	2 725



# Consolidated balance sheet

Amounts in SEK M		1998	1997
<b>ASSETS</b>			
<b>Fixed assets</b>			
Intangible fixed assets			
Patents and other intangible assets	Note 15	140	141
Goodwill	Note 15	4 462	3 964
		4 602	4 105
Tangible fixed assets			
Land and buildings	Note 15	4 179	3 821
Plant and machinery	Note 15	7 656	6 889
Equipment, tools, fixtures and fittings	Note 15	1 135	944
Construction in progress and advance payments for tangible assets	Note 15	1 172	1 082
		14 142	12 736
Financial fixed assets			
Participations in associated companies	Note 18	371	386
Loans to associated companies		3	3
Other investments held as fixed assets	Note 19	64	72
Other long-term receivables		279	179
		717	640
<b>Total fixed assets</b>		<b>19 461</b>	<b>17 481</b>
<b>Current assets</b>			
Inventories	Note 20	10 350	10 039
Current receivables			
Trade receivables		8 629	8 350
Due from associated companies		97	127
Prepaid income taxes		89	299
Other receivables		765	786
Prepaid expenses and accrued income		415	485
		9 995	10 047
Liquid assets	Note 21	1 800	2 494
<b>Total current assets</b>		<b>22 145</b>	<b>22 580</b>
<b>TOTAL ASSETS</b>		<b>41 606</b>	<b>40 061</b>
Assets pledged	Note 28	692	774

Amounts in SEK M		1998	1997
<b>SHAREHOLDERS' EQUITY AND LIABILITIES</b>			
<b>Shareholders' equity</b>			
Restricted equity			
Share capital	Note 22	1 552	1 552
Restricted reserves		9 436	8 263
		10 988	9 815
Unrestricted equity			
Unrestricted reserves		5 538	4 874
Net profit for the year		2 095	2 725
		7 633	7 599
<b>Total shareholders' equity</b>	Note 23	18 621	17 414
<b>Minority interests</b>		872	1 169
Provisions			
Provisions for pensions	Note 26	2 463	2 386
Provisions for taxes	Note 14	2 236	2 267
Other provisions	Note 27	1 649	957
		6 348	5 610
Interest-bearing liabilities			
Bond loans		194	94
Loans from financial institutions		7 335	6 882
Other long-term liabilities		220	292
	Note 28	7 749	7 268
Non-interest-bearing liabilities			
Advance payments from customers		286	338
Trade payables		2 323	2 490
Bills payable		288	183
Owed to associated companies		50	226
Income tax liabilities		560	312
Other liabilities		1 408	2 120
Accrued expenses and deferred income	Note 30	3 101	2 931
	Note 29	8 016	8 600
<b>TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES</b>		41 606	40 061
Contingent liabilities	Note 31	866	830

# Consolidated funds statement

Amounts in SEK M	1998	1997
<b>Funds supplied from operations</b>		
Profit after financial items	3 935	4 205
Profits retained in associated companies	20	-251
Depreciation	2 099	1 486
Gain/loss on sale of shares and fixed assets	-94	-7
Taxes paid	-1 358	-905
<b>Total funds from operations</b>	<b>4 602</b>	<b>4 528</b>
<b>Change in working capital</b>		
Change in inventories	-268	104
Change in current receivables	84	-399
Change in current operating liabilities and provisions	177	751
<b>Total change in working capital</b>	<b>-7</b>	<b>456</b>
<b>Net financing from operations</b>	<b>4 595</b>	<b>4 984</b>
<b>Net investments</b>		
Acquisitions of companies and shares	-391	-4 291
Less acquired liquid assets	5	1 464
Investments in tangible fixed assets	-2 811	-2 353
Sales of companies and shares, excl. liquid assets	59	136
Settlement of balances with sold companies	-15	-148
Sale of tangible fixed assets	197	103
<b>Net investments</b>	<b>-2 956</b>	<b>-5 089</b>
<b>Dividends</b>	<b>-2 199</b>	<b>-1 930</b>
<b>Cash flow</b>	<b>-560</b>	<b>-2 035</b>
<b>External financing</b>		
Shareholders' equity:		
Redemption of shares	-	-4 000
Rights issue	-	102
<b>Total shareholders' equity</b>	<b>0</b>	<b>-3 898</b>
Loans:		
Change in short-term loans	932	3 486
Change in long-term loans	-384	-349
<b>Total loans</b>	<b>548</b>	<b>3 137</b>
Other financing, net:		
Change in long-term receivables	-67	54
Change in pension liability	75	117
Change in other long-term liabilities	-99	-357
Change of minority interests	-	-
<b>Total other financing, net</b>	<b>-91</b>	<b>-186</b>
<b>Net external financing</b>	<b>457</b>	<b>-947</b>
Translation differences, etc.	-591	-81
<b>Change in liquid assets and short-term investments</b>	<b>-694</b>	<b>-3 063</b>



# Parent Company

## income statement

Amounts in SEK M		1998	1997
Invoiced sales	Note 2	12 491	12 318
Cost of goods sold	Note 5	-9 902	-9 816
<b>Gross profit</b>		<b>2 589</b>	<b>2 502</b>
Selling expenses		-458	-391
Administrative expenses		-881	-883
Other operating income		132	105
Other operating expenses		-200	-226
<b>Operating profit</b>	Notes 1, 6, 7	<b>1 182</b>	<b>1 107</b>
<b>Result from financial items</b>			
Income from shares in Group companies	Note 9	1 120	1 735
Income from shares in associated companies	Note 10	397	398
Income from securities and loans held as fixed assets	Note 11	70	17
Other interest income and similar income	Note 12	147	169
Interest expense and similar charges	Note 12	-455	-314
<b>Profit after financial items</b>	Note 4	<b>2 461</b>	<b>3 112</b>
Shareholders' contribution		-	-1
<b>Appropriations</b>			
Other appropriations	Note 13	-83	-150
<b>Profit before tax</b>		<b>2 378</b>	<b>2 961</b>
Income taxes	Note 14	-334	-263
<b>Net profit for the year</b>		<b>2 044</b>	<b>2 698</b>

# Parent Company

## balance sheet

Amounts in SEK M		1998	1997
<b>ASSETS</b>			
<b>Fixed assets</b>			
Intangible fixed assets			
Patents and other intangible assets	Note 16	6	9
		6	9
Tangible fixed assets			
Land and buildings	Note 16	376	404
Plant and machinery	Note 16	2 416	2 183
Equipment, tools, fixtures and fittings	Note 16	266	312
Construction in progress and advance payments for tangible assets	Note 16	763	567
		3 821	3 466
Financial fixed assets			
Shares in Group companies	Note 17	6 398	6 010
Loans to Group companies		1 046	834
Shares in associated companies	Note 18	17	26
Loans to associated companies		3	3
Other investments held as fixed assets	Note 19	0	8
Other long-term receivables		21	20
		7 485	6 901
<b>Total fixed assets</b>		<b>11 312</b>	<b>10 376</b>
<b>Current assets</b>			
Inventories	Note 20	2 389	2 228
Current receivables			
Trade receivables		621	683
Due from Group companies		4 830	3 014
Due from associated companies		99	126
Prepaid income tax	Note 14	0	177
Other receivables		198	218
Prepaid expenses and accrued income		109	118
		5 857	4 336
Liquid assets	Note 21	100	465
<b>Total current assets</b>		<b>8 346</b>	<b>7 029</b>
<b>TOTAL ASSETS</b>		<b>19 658</b>	<b>17 405</b>
Assets pledged	Note 28	4	10

Amounts in SEK M		1998	1997
<b>SHAREHOLDERS' EQUITY AND LIABILITIES</b>			
<b>Shareholders' equity</b>			
Restricted equity			
Share capital	Note 22	1 552	1 552
Share premium reserve		20	20
Legal reserve		297	291
		1 869	1 863
Unrestricted equity			
Profit brought forward		708	357
Net profit for the year		2 044	2 698
		2 752	3 055
<b>Total shareholders' equity</b>	Note 23	4 621	4 918
Untaxed reserves			
Accelerated depreciation	Note 24	1 476	1 362
Tax allocation reserve	Note 25	1 605	1 562
Tax equalization reserve	Note 25	107	160
Foreign exchange reserve	Note 25	0	11
Other untaxed reserves	Note 25	36	45
		3 224	3 140
Provisions			
Provisions for pensions	Note 26	1 029	959
Provisions for taxes	Note 14	175	318
Other provisions	Note 27	49	70
		1 253	1 347
Interest-bearing liabilities			
Bond loans		194	94
Loans from credit institutions		2 075	956
Loans from Group companies		5 247	4 616
	Note 28	7 516	5 666
<b>Non-interest-bearing liabilities</b>			
Advance payments from customers		12	11
Trade payables		517	650
Due to Group companies		976	203
Due to associated companies		394	528
Income tax liabilities		164	-
Other liabilities		105	141
Accrued expenses and deferred income	Note 30	876	801
	Note 29	3 044	2 334
<b>TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES</b>		19 658	17 405
Contingent liabilities	Note 31	3 304	4 024



# Parent Company

## funds statement

Amounts in SEK M	1998	1997
<b>Funds provided from operations</b>		
Profit after financial items	2 461	3 112
Depreciation	401	380
Gain/loss on sale of fixed assets	28	-21
Taxes paid	-126	-103
Dividends paid		
Shareholders' contributions	-	-1
Group contributions	-744	-572
<b>Total funds provided from operations</b>	<b>2 020</b>	<b>2 795</b>
<b>Change in working capital</b>		
Change in inventories	-161	82
Change in current receivables	-1 521	-1 440
Change in current operating liabilities and provisions	546	-576
<b>Total change in working capital</b>	<b>-1 136</b>	<b>-1 934</b>
<b>Net financing from operations</b>	<b>884</b>	<b>861</b>
<b>Net investments</b>		
Acquisitions of companies and shares	-334	-126
Investment in tangible fixed assets	-841	-861
Change in long-term loans to subsidiaries	-294	-532
Sale of companies and shares	97	44
Sale of tangible fixed assets	15	28
<b>Net investments</b>	<b>-1 357</b>	<b>-1 447</b>
<b>Dividends</b>	<b>-1 811</b>	<b>-1 810</b>
<b>Cash flow</b>	<b>-2 284</b>	<b>-2 396</b>
<b>External financing</b>		
Shareholders' equity:		
Redemption of shares	-	-4 000
Rights issue	-	102
<b>Total shareholders' equity</b>	<b>-</b>	<b>-3 898</b>
Loans:		
Change in short-term loans	1 083	4 908
Change in long-term loans	767	576
<b>Total loans</b>	<b>1 850</b>	<b>5 484</b>
Other financing, net:		
Change in long-term receivables	-1	534
Change in pension liability	70	74
Change in other long-term liabilities	0	0
<b>Total other financing, net</b>	<b>69</b>	<b>608</b>
<b>Net external financing</b>	<b>1 919</b>	<b>2 194</b>
<b>Change in liquid assets</b>	<b>-365</b>	<b>-202</b>

# Accounting principles

The same principles were applied in 1998 as in 1997. However, the Parent Company accounts were adapted to the statement by the Urgent Issues Committee of the Swedish Financial Accounting Standards Council regarding reporting of Group and shareholder contributions. Group contributions are reported based on the financial substance, mainly to minimize Group taxes. Accordingly, since Group contributions are not a consideration paid for services rendered, they are charged directly against retained earnings less their tax effect. Earnings and shareholders' equity in comparable years are adjusted to reflect this principle.

## Consolidation principles

The consolidated accounts cover the Parent Company, all subsidiaries and associated companies. Subsidiaries are defined as companies in which the Parent Company directly or indirectly holds more than half the votes. Associated companies are companies linked to the Group's operations and in which the Parent Company has a direct or indirect long-term shareholding amounting to not less than 20% and not more than 50% of voting rights. The proportional consolidation method is applied for certain joint ventures.

The consolidated accounts are prepared in accordance with the principles stated in the Swedish Financial Accounting Standards Council's recommendation.

All acquisitions of companies are reported in accordance with the purchase method. Goodwill is determined in the local currency. While goodwill is normally amortized straightline over 5 to 10 years, amortization periods up to 20 years may be decided in cases of important strategic acquisitions. Amortization is reported as selling expenses. If goodwill is determined to have declined permanently in value, extra amortization is applied. Internal transactions are eliminated.

Divested companies are included in the consolidated accounts until the time of the sale. Companies acquired during the current year are consolidated from the time of purchase.

The consolidated balance sheet and income statement are presented without untaxed reserves and appropriations. Untaxed reserves reported by individual companies within the Group have been apportioned so that deferred tax is reported under provisions, with the remainder included in the Group's shareholders' equity. Deferred tax, generally at the tax rate for the next fiscal year, has been calculated separately for each company. The tax attributable to changes in the untaxed reserves of individual Group companies in the course of the year is included in Group tax expenses as estimated future taxes. The remaining portion is included in the Group's net earnings. In the event of a change in the tax rate, the change in tax liability is included in tax expenses for the year.

In classifying the shareholders' equity of the Group as unrestricted or restricted, the method proposed in the Swedish Financial Accounting Standards Council's recommendation is followed, with net effects of any applicable withholding taxes also taken into account.

## Foreign currency

In preparing the consolidated financial statements, the accounts of foreign subsidiaries are translated in accordance with the draft recommendation of the Swedish Institute of Authorized Public Accountants.

Since the local currency is the "functional currency" for most foreign subsidiaries, the current-rate method is used. Changes in Group equity arising from variations in exchange rates prevailing on the balance sheet date, compared with rates at the preceding year-end, have direct effects on Group equity. The financial statements of companies operating in high-inflation countries are initially translated into US dollars in accordance with the monetary/non-monetary method. Translation differences that arise have affected income for the year. In a second stage, the balance sheets and income statements of these companies are translated from USD to SEK using the current-rate method.

Receivables and liabilities in foreign currencies are stated at the applicable

rate of exchange on the balance sheet date. In cases where forward exchange contracts have been entered into, however, the forward rate of exchange is used in valuations of underlying receivables or liabilities.

Outstanding forward exchange contracts relating to sales of currencies are not valued if the currency flow resulting from sales of goods is expected to cover the forward contracts.

## Short-term investments

Bonds and other short-term investments are valued at historical cost or market value on the balance sheet date, whichever is lower. In the process of valuation, this principle is applied to the portfolio as a whole, meaning that unrealized losses are offset against unrealized gains. Any remaining loss is deducted from interest income, whereas gains are not recognized.

## Inventories

Inventories are valued at the lower of historical cost in accordance with the first-in/first-out principle and unrealizable value, taken as replacement cost in the case of semifinished goods and raw materials.

## Depreciation of tangible fixed assets

Scheduled depreciation charged in industrial operations is based on the historical cost of assets and their estimated economic lives. Straight-line depreciation is normally applied over 5-10 years for machinery and equipment, 10-50 years for buildings, and 20 years for site improvements. Declining balance depreciation over 3-5 years is applied to computer equipment. The difference between scheduled depreciation and depreciation for tax purposes is shown by individual companies as accumulated accelerated depreciation under untaxed reserves.

## Profit recognition

Sales are recognized at the time of delivery and are equal to sales price less deduc-

tions for value-added tax, discounts and returns. Income from contracts extending more than one year is reported in accordance with the percentage of completion method. If projected costs for completion of such projects exceed remaining revenues, a provision is made for the estimated losses.

Estimated costs of product guarantees are charged against operating costs at the time of sale.

#### **Research and development costs**

Research and development costs are expensed as incurred.

#### **Taxes**

Tax expense for the year includes taxes paid, deferred taxes and the share of taxes in associated companies. Current taxes also include foreign withholding taxes paid in respect of dividends. Deferred tax includes tax effects taken into account in the group accounts according to the Swedish Financial Accounting Standards Council's recommendation.

This includes deferred tax in the untaxed reserves of individual Group companies, deferred tax when different values are assigned at Group and company level, including unrealized internal profits, as well as tax effects on purchase-accounting fair-value adjustments, including those attributed to acquired tax-loss carry-forwards. Under deferred tax, Sandvik also includes any tax deferred in consequence of participation in net losses of partly owned limited partnerships.

#### **Funds statement**

Purchase prices paid or received for shares in companies acquired or sold are shown in the funds statement. Assets and liabilities in the companies when they were bought or sold are not included in the sections of the funds statement dealing with changes in working capital, net investments and internal financing/net investments. Estimated future taxes and changes in deferred tax liability are not included.

## **DEFINITIONS**

#### **Earnings per share**

Consolidated net profit divided by the average number of shares outstanding during the year.

#### **Equity ratio**

Shareholders' equity and minority interests in relation to total capital.

#### **Debt/equity ratio**

Interest-bearing current and long-term debts (including pension liability) divided by the total of shareholders' equity and minority interests.

#### **Rate of capital turnover**

Invoiced sales divided by average total capital.

#### **Return on shareholders' equity**

Consolidated net profit for the year as a percentage of average shareholders' equity during the year.

#### **Return on net assets**

Profit after financial income and expenses, plus interest expenses and translation differences on loans, as a percentage of average total capital, less non-interest-bearing debts.



# Application of US GAAP

(Generally accepted accounting principles in the US)

The Sandvik Group's financial statements have been drawn up in accordance with aforementioned Swedish accounting principles. Significant differences between these principles and generally accepted accounting principles in the US (US GAAP) as applicable to the Sandvik Group are described below.

## Deferred tax

Sandvik reports deferred taxes to the extent promulgated by recommendations of the Swedish Financial Accounting Standards Council regarding group accounts. Accordingly, reported deferred taxes include primarily deferred tax liabilities relating to untaxed reserves. Deferred tax assets are recognized only to the extent relating to unrealized profits and the application of different valuation principles in Group accounts and individual company accounts. The effects of tax-loss carryforwards are reported mainly as reduced tax expenses when they are utilized. Under US GAAP, deferred tax effects on all differences between book values and tax values of assets and liabilities, including operating loss carryforwards, are taken into account. Values of deferred tax assets, however, are subjected to a recoverability test. Overall, the value of certain tax-loss carryforwards is recognized earlier under US GAAP than under Swedish principles.

Additionally, tax effects arise from other differences between Swedish and US GAAP, as shown in the reconciliation below.

## Acquisitions

Swedish principles for valuations of own shares issued in conjunction with acquisitions are less prescriptive than corresponding US principles. Because of such differences, the acquisition value of the CTT group is reported at a somewhat higher amount under US GAAP.

## Revaluation of assets

As permitted under Swedish GAAP, certain fixed assets have been reported at values in excess of acquisition cost. Such revaluation of assets is not permitted under US GAAP.

## Capitalization of interest

In accordance with Swedish GAAP, interest expenses incurred to finance new buildings, machinery and equipment are charged against earnings. US GAAP requires that such interest expense be capitalized and depreciated with other acquisition costs over the lifetime of the asset.

## Foreign exchange

Under Swedish GAAP, unrealized gains and losses on forward exchange contracts to hedge anticipated future transactions are normally deferred and reported with the underlying transaction when it occurs. US GAAP allows such reporting only for specifically identified firm orders. In other cases, forward exchange contracts are marked to market and unrealized gains and losses are included in reported profit.

## Pensions

Differences between Swedish and US GAAP in pension accounting pertain mainly to the choice of discount rate and the US practice of basing the calculation

of capital value on projected salary at the time of retirement rather than actual salary at the time of calculation. The differences have not been quantified, however, and are not included in the following reconciliation.

## General

Other areas in which the application of US GAAP to Sandvik Group accounts would entail not insignificant differences include mainly provisions and, in acquisition of companies, restructuring provisions which pertain to the acquiring company.

Under Swedish GAAP, the provision for costs for restructuring is made when the plan is prepared and the decision taken. US GAAP places additional requirements for making a provision. This means that the costs for these and similar measures are booked at a later date in applying US GAAP.

The application of US GAAP would have the following approximate effect on the Sandvik Group's reported net profit, earnings per share and shareholders' equity:

(Amounts in SEK M, unless otherwise stated)	1998	1997
Net profit for the year according to the consolidated income statement	2 095	2 725
Increase/decrease in		
Deferred taxation	-146	124
Acquisitions	-4	-4
Revaluations of assets	7	2
Capitalization of interest	-5	-11
Foreign exchange	-103	-1
Other adjustments	15	11
Tax effects of US GAAP adjustments	-14	21
Net profit based on US GAAP	1 845	2 867
<b>Earnings per share based on US GAAP, SEK</b>	<b>7.15</b>	<b>10.70</b>
Shareholders' equity according to consolidated balance sheet	18 621	17 414
Increase/decrease in		
Deferred taxation	313	459
Acquisitions	57	61
Revaluations of assets	-336	-309
Capitalization of interest	137	142
Foreign exchange	-119	-16
Other adjustments	197	182
Tax effects of US GAAP adjustments	-57	-43
Shareholders' equity based on US GAAP	18 813	17 890
<b>Earnings per share based on US GAAP, SEK</b>	<b>72.70</b>	<b>69.20</b>

# Notes to the accounts

## The Consolidated and Parent Company accounts

(Amounts in SEK million, unless otherwise stated)

### Note 1. Employees and personnel costs

#### 1.1 Average number of employees

	Group				Parent Company			
	1998		1997		1998		1997	
	Total	women %	Total	women %	Total	women %	Total	women %
Sweden	11 048	20	10 658	20	7 995	19	7 913	18
EU (excl. Sweden)	11 367	18	9 350	18	136	15	132	15
Rest of Europe	1 424	36	1 469	37	32	19	37	14
<b>Total Europe</b>	<b>23 839</b>	<b>20</b>	<b>21 477</b>	<b>20</b>	<b>8 163</b>	<b>19</b>	<b>8 082</b>	<b>18</b>
NAFTA region	7 124	23	5 027	21	-	-	-	-
South America	1 891	11	1 658	11	3	40	5	20
Africa, Middle East	929	14	642	14	2	50	2	50
Asia, Australia	4 180	14	3 627	14	37	36	13	38
<b>Group total</b>	<b>37 963</b>	<b>19</b>	<b>32 431</b>	<b>19</b>	<b>8 205</b>	<b>19</b>	<b>8 102</b>	<b>18</b>

#### 1.2 Wages, salaries, other remunerations and social costs

	Group		Parent Company	
	1998	1997	1998	1997
Wages, salaries and other remunerations	9 950	8 156	2 202	2 107
Social costs	3 186	2 622	989	930
(of which, pension costs)	(715)	(535)	(233)	(216)
Employee profit sharing	150	150	122	131
<b>Total</b>	<b>13 286</b>	<b>10 928</b>	<b>3 313</b>	<b>3 168</b>

Of pension costs, SEK 31 M and SEK 2 M relate to the Board of Directors and the President in the Group and Parent Company, respectively. The outstanding pension commitment to these persons amounted to SEK 113 M at the Group level and SEK 21 M in the Parent Company.

#### 1.3 Wages, salaries and other remunerations by market area\*

	Group		Parent Company	
	1998	1997	1998	1997
Sweden	2 975	2 770	2 157	2 065
EU (excl. Sweden)	3 466	2 667	30	30
Rest of Europe	174	176	6	6
<b>Total Europe</b>	<b>6 615</b>	<b>5 613</b>	<b>2 193</b>	<b>2 101</b>
NAFTA region	2 170	1 580	-	-
South America	284	265	0	0
Africa, Middle East	115	81	1	1
Asia, Australia	766	617	8	5
<b>Total</b>	<b>9 950</b>	<b>8 156</b>	<b>2 202</b>	<b>2 107</b>

of which, to Boards of Directors and Presidents:

	Group				Parent Company			
	1998		1997		1998		1997	
	Salaries and remunerations	of which, bonus	Salaries and remunerations	of which, bonus	Salaries and remunerations	of which, bonus	Salaries and remunerations	of which, bonus
<b>Total</b>	<b>252</b>	<b>24</b>	<b>208</b>	<b>21</b>	<b>10</b>	<b>4</b>	<b>10</b>	<b>3</b>

\* In addition there are provisions for bonuses to senior executives, see Note 1.4

#### 1.4 Information on benefits to senior executives in 1998

The Chairman of the Board, Percy Barnevik, received a fixed fee of SEK 387,000 and no other benefits were paid. Chief Executive Officer and President Clas Åke Hedström received fixed salary, Board fees, the value of free residence and company car totaling SEK 3,325,000. Bonus paid was SEK 2,507,000. Board member and former Chief Executive Officer Per-Olof Eriksson holds a contract which was reported in the 1993 Annual Report. His Board fee amounted to SEK 150,000. Salary and the value of free residence and company car was SEK 234,000 in 1998.

There is a reciprocal 12-month notice of termination for the President. Should notice be served by the Company, or by the President in the event that significant structural changes have occurred, an annual pension of 75% of total average remunerations paid during the three most recent years is paid up to age 63 (that is, a maximum of three years). From age 63, an annual pension of 55% of pension-based salary is paid.

There are agreements on reciprocal rights to request early retirement at age 62 for a few other senior executives. The reciprocal notification period for these persons varies between 6 and 12 months. From age 62, they will receive lifetime pension benefits corresponding to the amounts that would have been paid if employed until ordinary pension age.

There is the possibility of a long-term bonus for Group management and approximately 250 other senior executives in and outside Sweden based on price development for Sandvik B shares during the period 1995-1999 and payable in the year 2000. If paid, this bonus will be based on multiplying 10% of one-two month's salary (1994 level) by the difference between the market price of B shares at year-end 1999 (plus addition of declared dividends during 1995-1999) and a base price of SEK 144. A provision has been made for the accrued portion of this bonus, which would fall due for payment if the price at year-end 1998 would also apply at year-end 1999, in the amount of SEK 34 M.

#### Note 2. Invoiced sales by business area

	1998 SEK M	1997 SEK M	Change %	*
Sandvik Tooling	12 121	10 803	12	4
Sandvik Mining and Construction**	9 379	3 582	/	-2
Sandvik Specialty Steels***	11 687	10 780	8	-2
Sandvik Hard Materials	1 455	1 361	7	3
Sandvik Saws and Tools	2 694	2 787	-3	-5
Sandvik Process Systems	1 892	1 873	1	0
Seco Tools	3 151	2 889	9	6
Group activities	21	44	/	/
<b>Group total</b>	<b>42 400</b>	<b>34 119</b>	<b>24</b>	<b>1</b>

\* Change excluding currency effects and company acquisitions.

\*\* Including Tamrock from Nov. 1997.

\*\*\* Including Kanthal from July 1997.

#### Parent Company sales and purchases

Sales to Group companies from the Parent Company amounted to SEK 8,683 M (8,572), or 70% (70) of total sales. The share of exports was 83% (83). Parent Company purchases from Group companies amounted to SEK 865 M (851), 11% (11) of total purchases.

#### Note 3. Invoiced sales by market area

	1998 SEK M	Share %	1997 SEK M	Change %	*
EU, excl. Sweden	16 777	39	13 799	22	8
Sweden	2 375	6	2 231	6	0
Rest of Europe	2 401	6	1 888	27	5
<b>Total, Europe</b>	<b>21 553</b>	<b>51</b>	<b>17 918</b>	<b>20</b>	<b>6</b>
NAFTA region	10 626	25	8 195	30	-5
South America	1 978	5	1 703	16	-10
Africa, Middle East	1 916	4	987	94	8
Asia, Australia	6 327	15	5 316	19	-12 **
<b>Group total</b>	<b>42 400</b>	<b>100</b>	<b>34 119</b>	<b>24</b>	<b>1</b>

\* Change compared with preceding year excluding currency effects and company acquisitions.

\*\* Change excluding acquisitions.

#### Note 4. Noncomparable items

	Group		Parent Company	
	1998	1997	1998	1997
Capitals gains from sales of shares and companies	54	81	59	27
Write-downs of shares	-	-	-17	-
	54	81	42	27

#### Note 5. Research, development and quality assurance

	Group		Parent Company	
	1998	1997	1998	1997
Costs for research and development	1 070	985	588	596
Quality assurance	498	365	197	122
<b>Total</b>	<b>1 568</b>	<b>1 350</b>	<b>785</b>	<b>718</b>

All research, development and quality assurance costs are expensed as incurred. The costs are shown among Cost of goods sold.

#### Note 6. Amortization/depreciation of tangible and intangible fixed assets

	Group		Parent Company	
	1998	1997	1998	1997
<i>Scheduled amortization/depreciation</i>				
Goodwill	-285	-110	-	-
Other intangible assets	-20	-16	-3	-2
Land and buildings	-186	-142	-19	-17
Plant and machinery	-1 247	-906	-295	-249
Equipment, tools, fixtures and fittings	-361	-312	-85	-112
	<b>-2 099</b>	<b>-1 486</b>	<b>-402</b>	<b>-380</b>



### Note 7. Leasing costs for operational leasing

	Group		Parent Company	
	1998	1997	1998	1997
Leasing costs	224	78	11	0
Contracted future committed leasing fees due thereafter				
1999	176		8	
2000	113		4	
2001	70		2	
2002	45		-	
2003 and later	98		-	
Total	502		14	

### Note 8. Operating profit by business area

	1998		1997	
	SEK M	% of sales	SEK M	% of sales
Sandvik Tooling	2 544	21	2 094	19
Sandvik Mining and Construction*	340	4	234	7
Sandvik Specialty Steels**	770	7	921	9
Sandvik Hard Materials	180	12	148	11
Sandvik Saws and Tools	205	8	239	9
Sandvik Process Systems	132	7	80	4
Seco Tools	677	21	575	20
Group activities***	-253	/	79	/
Operating profit	4 595	11	4 370	13

\* Tamrock is included from November 1997.

\*\* Incl. Kanthal as an associated company for the first half of 1997 and as a subsidiary from July 1997.

\*\*\* Incl. share of profits in Tamrock as an associated company January-October 1997.

### Note 9. Parent Company income from Group companies

	1998	1997
Dividends	1 125	1 709
Gains from sale of shares	5	26
Write-downs	-10	-
	1 120	1 735

### Note 10. Parent Company income from associated companies

	1998	1997
Dividends	399	400
Gains from sale of shares	-2	-
Write-downs	-	-2
	397	398

### Note 11. Income from securities and loans held as fixed assets

	Group		Parent Company	
	1998	1997	1998	1997
Interest income, Group companies	-	-	19	9
Other interest income	-	6	-	6
Dividends	4	4	1	1
Exchange rate differences	6	10	-	-
Gain on sale of shares	-	1	56	1
Other income	7	8	-6	-
	17	29	70	17

### Note 12. Other interest income and expense

	Group		Parent Company	
	1998	1997	1998	1997
Interest income, Group companies	-	-	139	104
Other interest income	113	224	8	65
Total interest income	113	224	147	169
Interest expenses, Group companies	-	-	-281	-240
Other interest expenses	-676	-344	-166	-67
Exchange rate differences	-69	-34	-	-
Bank charges	-44	-37	-8	-7
Other expenses	-1	-3	-	-
Total interest expense	-790	-418	-455	-314

### Note 13. Other appropriations

	Parent Company	
	1998	1997
Accelerated depreciation	-114	-123
Appropriation to tax allocation reserve	-43	-87
Reversal of tax equalization reserve	53	53
Change in foreign exchange reserve	12	13
Change in other untaxed reserves	9	-6
	-83	-150

## Note 14. Taxes

Income tax expense	Group		Parent Company	
	1998	1997	1998	1997
Current taxes	-1 358	-905	-126	-103
Tax effect of Group contributions, net			-208	-160
Deferred taxes:				
– Current year appropriations to/from untaxed reserves	-24	-121	-	-
– Income from partly owned limited partnerships, etc.	-103	-140	-	-
– Other	-177	-55	-	-
Total deferred taxes	-304	-316	-	-
Share in taxes of associated companies	-13	-62	-	-
Total	-1 675	-1 283	-334	-263

Tax liabilities	Group		Parent Company	
	1998	1997	1998	1997
Provisions for deferred taxes:				
– Untaxed reserves reported by Group companies	2 158	2 103	-	-
– Future taxes due to losses in partly owned limited partnerships, etc.	172	177	-	-
– Other Group reporting adjustments, tax-loss carryforwards, unrealized internal profits, etc.	-631	-513	-	-
Total	1 699	1 767	-	-
Other tax provisions	537	500	175	318
Total provisions	2 236	2 267	175	318
Income tax liabilities	560	312	164	-
Prepaid income tax	-89	-299	-	-177
Net	471	13	164	-177
Total tax liabilities	2 707	2 280	339	141

### Tax proceedings

During 1998, rulings were handed down in several significant tax cases in Sweden from the later half of the 1980s:

- Rulings from the Supreme Administrative Court regarding deductions for losses in the 1989-90 taxation of two subsidiaries, which are owners of two limited partnerships that lease aircraft. The rulings mean that the deductions for losses were disapproved. A petition for a new trial was submitted by all parties. In addition, Sandvik owns another limited partnership, which has had similar operations, which is also involved in tax proceedings.
- Rulings regarding Sandvik AB's taxation in 1986 and 1987 from the Administrative Court of Appeal. The case pertained mainly to deductions for loss on liquidation of foreign subsidiaries and inventory valuations issues of an annualization nature.

- Rulings regarding Sandvik Invest AB's taxation in 1989 and 1990 from the Administrative Court of Appeal. The cases pertained to deductions for loss carryforwards.

In total, the above rulings, plus certain other, individually minor in extent, tax issues resulted in nonrecurring costs in 1998 of nearly SEK 400 M.

At year-end 1998, Sandvik was involved in a number of proceedings with the Swedish tax authorities. Sandvik assesses that any additional tax charges, including fees and interest, are covered by existing reserves and provisions. For some cases, which as yet have not been decided in County Administrative Courts, Sandvik assesses the risk of additional taxes as remote. In the event that all disputes would result in additional taxes as claimed by the tax authorities, the additional tax expense would be in the range of SEK 100 M.

## Note 15. Consolidated intangible and tangible assets

	Patents and similar rights	Goodwill	Buildings and land	Machinery	Equipment and tools	Construction in progress	Total
<i>Cost</i>							
At beginning of the year	236	4 654	5 970	16 127	2 619	1 082	30 688
Additions	11	3	282	1 263	396	1 011	2 966
Acquisitions of subsidiaries	-	764	36	-	2	-	802
Divestments and disposals	-13	-	-197	-449	-244	-55	-958
Reclassifications	33	-32	65	354	423	-881	-38
Advances paid during the year	-	-	-	-	-	5	5
Translation differences	10	23	254	407	122	10	826
	277	5 412	6 410	17 702	3 318	1 172	34 291
<i>Accumulated amortization/depreciation</i>							
At beginning of the year	95	690	2 448	9 248	1 675	-	14 156
Acquisitions of subsidiaries	-	-	5	-	-	-	5
Divestments and disposals	-11	-	-140	-438	-212	-	-801
Reclassifications	26	-32	-49	-255	265	-	-45
Amortization/depreciation for the year	20	285	183	1 247	361	-	2 096
Translation differences	7	7	109	255	94	-	472
	137	950	2 556	10 057	2 183	-	15 883
<i>Accumulated revaluations</i>							
At beginning of the year	-	-	299	10	-	-	309
Acquisition of subsidiaries	-	-	-	-	-	-	-
Divestments and disposals	-	-	-4	-	-	-	-4
Scheduled depreciation for the year of revalued amounts	-	-	-3	-	-	-	-3
Depreciation/amortization for the year	-	-	26	-	-	-	26
Revaluations during the year	-	-	7	1	-	-	8
	-	-	325	11	-	-	336
Planned residual value at end of the year	140	4 462	4 179	7 656	1 135	1 172	18 744
Fixed assets held under financial lease agreements are included in the following amounts:							
<i>Cost</i>							
				21	9		
<i>Accumulated revaluations</i>							
				5	4		
Rateable values, buildings (in Sweden)							
			1 100				
Rateable values, land (in Sweden)							
			174				



## Note 16. Parent Company intangible and tangible assets

	Patents and similar rights	Buildings and land	Machinery	Equipment and tools	Construction in progress	Total
<i>Cost</i>						
At beginning of the year	21	592	5 115	794	567	7 089
Purchases	-	25	544	30	243	842
Divestments and disposals	-	-68	-111	-44	-47	-270
Reclassifications	-	-	-27	27	-	0
	21	549	5 521	807	763	7 661
<i>Accumulated amortization/depreciation</i>						
At beginning of the year	12	239	2 932	482	-	3 665
Divestments and disposals	-	-34	-104	-44	-	-182
Reclassifications	-	-	-18	18	-	0
Amortization/depreciation for the year	3	19	295	85	-	402
	15	224	3 105	541	-	3 885
<i>Accumulated revaluations</i>						
At beginning of the year	-	51	-	-	-	51
Planned residual value at end of the year	6	376	2 416	266	763	3 827
Rateable values, buildings		225				
Rateable values, land		68				

## Note 17. Shares in subsidiaries

	Parent Company
<i>Cost</i>	
At beginning of the year	6 010
Purchases	332
Issues for non-cash consideration	259
New capital stock issues	82
Disposals	-274
Reclassifications	-1
	6 408
Write-downs during the year	-10
Book value at end of the year	6 398

## Sandvik AB's holdings of shares and participations in subsidiaries

### Direct shareholdings

According to Balance Sheet of 31 December 1998; company, location	Corp. ID no.	No. of shares	Holding, % <sup>2)</sup>	Book value SEK '000	
SWEDEN	Dormer Tools AB, Halmstad	556240-8210	80 000	100	25 145
	Dropler High Tech AB, Helsingborg	556332-0380	1 000	100	321
	Ecocat AB, Sandviken	556272-9680	6 840	100	1 800
	Edmeston AB, Gothenburg	556238-7554	40 000	100	3 000
	Fragoso AB, Sandviken	556337-3710	1 000	100	50
	Guldsmedshytte Bruks AB, Lindesberg	556040-0854	100 000	100	11 950
	Gusab Holding AB, Sandviken	556001-9290	1 831 319	100	53 474
	Gusab Stainless AB, Mjölby	556012-1138	200 000	100	34 019
	AB Sandvik Belts, Sandviken <sup>1)</sup>	556312-2992	1 000	100	100
	AB Sandvik Calamo, Molkom	556190-2569	50 000	100	5 000
	AB Sandvik Coromant, Sandviken <sup>1)</sup>	556234-6865	1 000	100	50
	Sandvik Coromant Norden AB, Stockholm <sup>1)</sup>	556350-7846	1 000	100	100
	AB Sandvik Falken, Sandviken	556330-7791	1 000	100	100
	Sandvik Far East Ltd. AB, Sandviken	556043-7781	10 000	100	10 000
	AB Sandvik Hard Materials, Stockholm <sup>1)</sup>	556234-6857	1 000	100	50
	Sandvik Hard Materials Norden AB, Stockholm <sup>1)</sup>	556069-1619	1 000	100	50
	AB Sandvik Information Systems, Sandviken <sup>1)</sup>	556235-3838	1 000	100	50
	AB Sandvik International, Sandviken <sup>1)</sup>	556147-2977	1 000	100	50
	Sandvik Invest AB, Sandviken	556020-6517	1 772 068	100	181 654
	AB Sandvik Powders, Sandviken	556011-3911	30 000	100	7 000
	AB Sandvik Process Systems, Sandviken	556041-9680	25 000	100	2 500
	AB Sandvik Rock Tools, Sandviken <sup>1)</sup>	556234-7343	1 000	100	50
	Sandvik Rock Tools Svenska Försäljnings AB, Sandviken <sup>1)</sup>	556288-9443	1 000	100	50
	AB Sandvik Service, Sandviken <sup>1)</sup>	556234-8010	1 000	100	50
	AB Sandvik Steel, Sandviken <sup>1)</sup>	556234-6832	1 000	100	50
	Sandvik Stål Försäljnings AB, Stockholm <sup>1)</sup>	556251-5386	1 000	100	50
	AB Sandvik Teknik, Sandviken	556350-7929	30 000	100	10 000
	AB Sandvik Tranan, Sandviken	556330-7817	1 000	100	100
	AB Sandvik Västberga Service, Stockholm <sup>1)</sup>	556356-6933	1 000	100	100
	Sandvik Örebro AB, Sandviken	556232-7949	10 000	100	13 262
	AB Sandvik Örnén, Sandviken	556330-7783	1 000	100	100
BELARUS	ZP Sandvik		-	100	137
BRAZIL	Dormer Tools S.A.		2 137 623 140	100	200 000
	Sandvik do Brasil S.A.		1 894 797 190	100	46 072
CHINA	Sandvik China Ltd.		-	100	83 191
	Sandvik International Trading (Shanghai) Co. Ltd.		-	100	17 466
COLOMBIA	Sandvik Colombia S.A.		1 580 105	94 <sup>3)</sup>	8 088
CZECH REPUBLIC	Sandvik CZ s.r.o.		-	100	0
GERMANY	Sandvik GmbH		-	1 <sup>3)</sup>	1 486
	Sandvik Holding GmbH		-	1 <sup>3)</sup>	367
GREECE	Sandvik A.E. Tools and Materials		5 599	100	1 567
HUNGARY	Sandvik KFT		-	100	3 258
INDIA	Sandvik Asia Ltd.		1 359 715	73	135 325
	Sandvik Choksi Ltd.		15 810 000	51	58 844
ITALY	CML Handling Technology S.p.A.		28 571	10 <sup>3)</sup>	13 907
JAPAN	Sandvik K.K.		2 600 000	100	180 000
KENYA	Sandvik Kenya Ltd.		35 000	96	0
KOREA	Sandvik Korea Ltd.		752 730	100	46 856

Direct shareholdings

According to Balance Sheet of 31 December 1998; company, location		No. of shares	Holding % <sup>2)</sup>	Book value SEK '000
MEXICO	Sandvik Méxicana S.A. de C.V.	406 642 873	90 <sup>3)</sup>	71 000
MOROCCO	Sandvik Maroc S.A.	940	94	1 825
NETHERLANDS	CTT Cutting Tool Technology B.V.	220 000	100	122 216
	Sandvik Benelux B.V.	20 000	100	27 496
	Sandvik Finance B.V.	18 786	100	4 896 433
PERU	Sandvik del Perú S.A.	777 718	100	1 425
POLAND	Sandvik Baildonit S.A.	148 100	100	93 140
	Sandvik Polska Sp.z. o.o.	3 211	100	57
PORTUGAL	Sandvik Portuguesa Lda	199 600	100	8 300
SLOVAKIA	Sandvik Slovakia s.r.o.	-	100	1 378
SPAIN	Minas y Metalurgia Española S.A.	59 999	50 <sup>3)</sup>	3 700
TURKEY	Sandvik Endüstriyel Mamüller Sanayi ve Ticaret A.S.	46 242 588	100	0
ZAMBIA	Sandvik (Zambia) Ltd.	4 999 999	100	0
ZIMBABWE	Sandvik (Private) Ltd.	233 677	100	3 269
Other companies and dormant companies, wholly owned				10 963
				6 398 041

1) Subsidiaries conducting business on behalf of the Parent Company

2) Refers to percentage of votes, which also corresponds to percentage of share capital.

3) Remaining shares are held by other Group companies.

## Sandvik AB's holdings of shares and participations in subsidiaries

### Indirect shareholdings in significant operating Group companies

		Group holding, % <sup>1)</sup>			Group holding, % <sup>1)</sup>
SWEDEN	Kanthal AB	100	FRANCE	Safety S.A.	100
	Kanthal Machinery AB	100		Sandvik Aciers S.N.C.	100
	KOPO AB	90		Sandvik Coromant S.N.C.	100
	Roxon AB	100		Sandvik Hard Materials S.A.	100
	Sandvik Bahco AB	100		Sandvik Outillage S.N.C.	100
	Sandvik Bahco Norden AB	100		Sandvik Process Systems S.A.	100
	AB Sandvik Hand Tools	100		Sandvik Rock Tools S.A.	100
	AB Sandvik Metal Saws	100		Sandvik S.A.	100
	AB Sandvik Saws and Tools	100		Sandvik Tobler S.A.	100
	Seco Tools AB	61		Tamrock Loaders S.A.	100
ARGENTINA	Sandvik Bahco Argentina S.A.	100		Tamrock S.A.	100
	Tamrock Argentina S.A.	100		Tamrock Secoma S.A.	100
AUSTRALIA	Kanthal Australia Pty. Ltd.	100	GERMANY	CTT Management GmbH	100
	Roxon Pty. Ltd.	100		Dormer Tools GmbH	100
	Sandvik Australia Pty. Ltd.	100		Edmeston GmbH	100
	Sandvik Hard Materials Pty. Ltd.	100		Gurtec GmbH	100
	Tamrock Coal Australia Pty. Ltd.	100		Günther & Co. GmbH	100
	Tamrock Pty. Ltd.	100		Kanthal GmbH	99
AUSTRIA	Günther & Co. Ges.m.b.H.	100		Prototyp-Werke GmbH	100
	Sandvik in Austria Ges.m.b.H.	100		Sandvik Belzer GmbH	100
	Tamrock Voest Alpine Bergtechnik Ges.m.b.H.	100		Sandvik Belzer Produktion GmbH	100
				Sandvik GmbH	99
BELGIUM	Dormer Tools N.V./S.A.	100		Sandvik Kosta GmbH	100
BOLIVIA	Tamrock Bolivia S.R.L.	100		Sandvik P&P GmbH	100
BRAZIL	Kanthal Brasil Ltda.	100		Sandvik Process Systems GmbH	100
CANADA	Dormer Tools Inc.	100		Tamrock GmbH	100
	Sandvik Canada Inc.	100		TOP Präzisionswerkzeuge GmbH	100
	Tamrock Canada Ltd.	100	HONG KONG	Kanthal Electroheat Hk Ltd.	100
	Tamrock Loaders Inc.	100		Sandvik Hongkong Ltd.	100
CHILE	Sandvik Chile S.A.	100		Tamrock Far East Ltd.	100
	Tamrock Chile S.A.	100	INDIA	Kanthal India Ltd.	57
CHINA	Qingdao Sandvik Die Cutting Systems Co. Ltd.	60			Titex India Pvt. Ltd.
	Tamrock (China) Ltd.	100	IRELAND	Sandvik Ireland Ltd.	100
	Tamrock Louyang Machinery Co. Ltd.	60		ITALY	CML Handling Technology S.p.A.
COLOMBIA	Sandvik Colombia S.A.	99			Dormer Tools S.p.A.
	CZECH REPUBLIC	Sandvik Chomutov Precision Tubes s.r.o.	100		Driver-Harris S.p.A.
DENMARK		Sandvik A/S	100		Impero S.p.A.
		Sandvik Bahco Norden A/S	100		Master Tools S.p.A.
FINLAND	Roxon Oy	100		Sandvik Italia S.p.A.	100
	Suomen Sandvik Oy	100		Sandvik Process Systems S.p.A.	100
	Tamrock Oy	100		Società Italiana Kanthal S.p.A.	100
FRANCE	Cermep S.A.	51	JAPAN	Kanthal K.K.	100
	Dormer Tools S.A.	100		KOREA	Kanthal Korea Ltd.
	Gunther S.A.	100			Tamrock Service Korea Ltd.
	Gunther Tools S.A.	100	LUXEMBOURG	Sansafe S.A.	100
	Kanthal S.A.	100		MALAYSIA	Sandvik Malaysia Sdn. Bhd.
	Precitube S.A.	100	MEXICO		Sandvik de Mexico S.A. de C.V.
Prototyp S.A.	100			Tamrock de Mexico S.A. de C.V.	100



		Group holding, % <sup>1)</sup>
NETHERLANDS	Dormer Tools B.V.	100
	Dormer Tools International B.V.	100
	Sandvik Process Systems B.V.	100
	Sandvik Saws and Tools Benelux B.V.	100
NEW ZEALAND	Kanthal Trading Australasia Ltd.	100
	Sandvik New Zealand Ltd.	100
NORWAY	Sandvik Norge A/S	100
	Tamrock Norge A/S	100
PERU	Tamrock Peru	100
PHILIPPINES	Sandvik Philippines Inc.	100
	Tamrock Philippines Inc.	100
POLAND	Voest Alpine Technika Górnicza, Tunelova Spolka z.o.o.	100
PORTUGAL	Sandvik Obergue-Limas o Mécânica Lda	100
ROMANIA	Sandvik Romania SRL	100
RUSSIA	Moskovskij Kombinat Tverdih Splavov	98
SINGAPORE	Kanthal Electroheat Pte. Ltd.	100
	Sandvik South East Asia Pte. Ltd.	100
	Sandvik Treasury (Far East) Pte. Ltd.	100
SOUTH AFRICA	Sandvik (Pty) Ltd.	100
	Tamrock Africa (Pty) Ltd.	100
SPAIN	Impero SAIE	100
	Kanthal SP S.A.	100
	Sandvik Española S.A.	100
SWITZERLAND	Sandvik AG	100
	Santrade Ltd.	100
	Sandvik Hard Materials Taiwan Pty. Ltd.	100
TAIWAN	Sandvik Taiwan Ltd.	100
	Sandvik Thailand Ltd.	100
THAILAND	Sandvik Thailand Ltd.	100
	Alloy Wire Ltd.	100
U.K.	CTT Tools UK	100
	Dormer Tools Ltd.	100
USA	Dormer Tools Inc.	100
	Driltech Inc.	100
	Eimco Coal Machinery Inc.	100
	Eimco Great Britain Ltd.	100
	Kanthal Ltd.	100
	Osprey Metals Ltd.	100
	Resist Alloy Intern. Ltd.	100
	RGB Stainless Ltd.	100
	Sandvik Band Saws Ltd.	100
	Sandvik Ltd.	100
	Sandvik Metinox Ltd.	100
	Sandvik Process Systems Ltd.	100
	Sandvik Rock Tools Ltd.	100
	Saxon Blades Ltd.	100
	Sterling Tubes Ltd.	100
	Titex Tools Ltd.	100

		Group holding, % <sup>1)</sup>
USA	H. P Reid Co. Inc.	100
	The Kanthal Corporation	100
	Kanthal Global Inc.	100
	Pennsylvania Extruded Tube Co.	70
	Precision Twist Drill Co.	100
	Sandvik Inc.	100
	Sandvik Milford Corp.	100
	Sandvik Process Systems Inc.	100
	Sandvik Rock Tools Inc.	100
	Sandvik Sorting Systems Inc.	100
	Sandvik Special Metals Corp.	100
	Sandvik Windsor Corp.	100
	Tamrock USA Inc.	100
	Triumph Twist Drill Co.	100
VENEZUELA	Union Butterfield Corporation	100
	Sandvik Venezuela C.A.	100
ZAMBIA	Tamrock Zambia Ltd.	60
ZIMBABWE	Tamrock Zimbabwe (Pvt.) Ltd.	100

<sup>1)</sup> Ownership percentage pertains to capital, which also corresponds to percentage of voting rights for the total number of shares.

## Note 18. Participations in associated companies

	Group
<i>Proportion of equity in associated companies</i>	
At beginning of the year	386
Reclassifications	5
Share in profits after net financial items of associated companies	-4
Share in taxes of associated companies	-13
Less dividends received	-16
Translation differences	13
Proportion of equity at end of the year	371

## Holdings of shares and participations in associated companies

### Associated companies

According to the Balance Sheet of 31 December 1998; company, location		Corp. ID no.	Number of shares	Holding, % <sup>1)</sup>	Group proportion of equity, SEK M	Book value, SEK '000
<i>Owned directly by Sandvik AB</i>						
SWEDEN	Balzars Sandvik Coating AB, Stockholm	556098-1333	56 840	49	18.9	3 819
	Fasttrack Sweden Uthyrnings AB, Stockholm	556530-1180	940	48.5 <sup>2)</sup>	0.1	94
	G-Drill AB, Stockholm	556331-8566	6 000	30	2.7	4 000
	Procera-Sandvik AB, Stockholm	556350-7879	5 000	50	- <sup>3)</sup>	600
	QR Uthyrnings AB, Stockholm	556330-7775	4 700	48.5 <sup>2)</sup>	0.5	470
FRANCE	Eurotungstène Poudre S.A.		112 353	49	85.9	7 737
					108.1	16 720
<i>Owned indirectly by Sandvik AB</i>						
SWEDEN	Avesta Sandvik Tube AB, Fagersta	556057-8592	150 000	25	53.0	
	Fagersta Stainless AB, Fagersta	556051-6881	400 000	50	167.6	
	G-Drill AB, Stockholm	556331-8566	3 000	15	1.3	
	Associated companies owned by Seco Tools				4.8	
FINLAND	Caterpillar Impact Products Ltd.		400	40	6.8	
FRANCE	Deville S.A.		13 990	35	28.1	
IRELAND	Uirlis Torc Teoranta Ltd.		181 000	49	1.0	
					262.6	
<b>TOTAL</b>					<b>370.7</b>	

1) Pertains to share of votes, which also corresponds to share of capital unless otherwise stated.

2) Share of capital 90.4%.

3) Consolidated in accordance with the proportional method.

### Note 19. Other investments held as fixed assets

#### Other companies

According to the Balance Sheet of 31 December 1998	Holding, as %	Book value SEK M
<i>Owned directly</i>		
Other shares and participations		0
		0
<i>Owned indirectly</i>		
Amstek Inc.	48	12
Eimco Elecon (India) Ltd.	25	4
Harvest Ventures	30	18
Opticat International AB	25	5
Shougang Kanthal CL	50	2
Stc Shanghai Tokan Ceramics Co. Ltd.	50	8
Thermia AB	9	4
Other shares and participations abroad		11
		64
<b>TOTAL</b>		<b>64</b>

### Note 20. Inventories

	Group		Parent Company	
	1998	1997	1998	1997
Raw materials and consumables	2 430	2 281	591	526
Work in progress	1 820	1 836	765	847
Finished goods	6 100	5 922	1 033	855
	10 350	10 039	2 389	2 228

### Note 21. Liquid assets and short-term investments

	Group		Parent Company	
	1998	1997	1998	1997
Cash and bank balances	1 555	1 724	100	75
Short-term investments	188	742	-	390
Bonds with longer maturity than one year	57	28	-	-
<b>Total</b>	<b>1 800</b>	<b>2 494</b>	<b>100</b>	<b>465</b>

### Note 22. Share capital

	1998		1997	
	A shares	B shares	A shares	B shares
A shares	189 450 259		189 450 259	
B shares	69 245 741		69 245 741	
<b>Total number of shares at SEK 6 par value</b>	<b>258 696 000</b>		<b>258 696 000</b>	

A shares each carry one vote, whereas B shares carry one-tenth of a vote. All shares carry equal rights to participate in the profits and net assets of the Company.

The Sandvik share is listed on the Stockholm Stock Exchange. Shares can also be traded in the US as American Depositary Receipts (ADR).

### Note 23. Changes in shareholders' equity

Group	Share capital	Restricted reserves	Unrestricted reserves	Consolidated net profit	Total
Reported at the end of 1997	1 552	8 263	4 874	2 725	17 414
Changes due to changed currency rates 1998	-	-	782	-	782
Appropriation of 1997 net profit	-	-	2 725	-2 725	-
Dividend paid	-	-	-1 811	-	-1 811
Surrendered bonus shares	-	6	-	-	6
Transfer of shares in earnings of associated companies	-	-65	65	-	-
Other movements between unrestricted and restricted shareholders' equity	-	1 232	-1 232	-	-
Translation differences	-	-	135	-	135
Net profit for the year	-	-	-	2 095	2 095
Reported at the end of 1998	1 552	9 436	5 538	2 095	18 621

Restricted reserves include profits retained in associated companies amounting to SEK 225 M. Appropriations to restricted reserves, as proposed by subsidiary boards, reduce unrestricted Group equity by SEK 21 M.

### Parent Company

	Share-capital	Share premium reserve	Legal reserve	Profit brought forward	Net profit	Total
Reported at the end of 1997	1 552	20	291	769	2 286	4 918
Effect of change in accounting principles:						
Reporting of Group contributions paid against shareholders' equity	-	-	-	-572	572	0
Reporting of tax effect of Group contribution against shareholders' equity	-	-	-	160	-160	0
Opening balance in 1998 in accordance with new accounting principles	1 552	20	291	357	2 698	4 918
Appropriation of 1997 net profit	-	-	-	2 698	-2 698	0
Dividends	-	-	-	-1 811	-	-1 811
Surrendered bonus shares	-	-	6	-	-	6
Group contributions paid	-	-	-	-744	-	-744
Tax effect of Group contributions paid	-	-	-	208	-	208
Net profit for the year	-	-	-	-	2 044	2 044
Reported at the end 1998	1 552	20	297	708	2 044	4 621

### Note 24. Parent Company accelerated depreciation

	Buildings and land	Plant and machinery	Equipment, tools, fittings and fixtures	Patents and similar rights	Total
Reported at the end of 1997	27	1 165	169	1	1 362
Accelerated depreciation for the year	-10	111	12	1	114
Reported at the end of 1998	17	1 276	181	2	1 476

### Note 25. Parent Company other untaxed reserves

	Tax equalization reserve	Tax allocation reserve	Foreign exchange reserve	Other untaxed reserves
Reported at the end of 1997	160	1 562	11	45
Change during the year	-53	43	-11	-9
Reported at the end of 1998	107	1 605	0	36

### Note 26. Provision for pensions

	Group		Parent Company	
	1998	1997	1998	1997
Swedish PRI pension plan	1 223	1 148	955	885
Other pensions	1 240	1 238	74	74
<b>Total</b>	<b>2 463</b>	<b>2 386</b>	<b>1 029</b>	<b>959</b>

### Note 27. Other provisions

	Group		Parent Company	
	1998	1997	1998	1997
Restructuring provisions	516	192	-	-
Guarantees	198	65	24	23
Personnel-related provisions	283	114	16	38
Other provisions	652	586	9	9
<b>Total</b>	<b>1 649</b>	<b>957</b>	<b>49</b>	<b>70</b>

At 31 December 1998, the Group's provisions for restructuring, in conjunction with the major acquisitions in 1997, were as follows:

Pertaining to Tamrock	389
Pertaining to Kanthal	16
Pertaining to Precision Twist Drill	44
<b>Total</b>	<b>449</b>

### Note 28. Interest-bearing liabilities

Maturity after balance sheet date

	Group				Parent Company			
	Within one year	2-5 yrs	After five years	Total	Within one year	2-5 yrs	After five years	Total
Bond loans	94	-	100	194	94	-	100	194
Credit institutions	6 500	467	368	7 335	1 516	396	163	2 075
Group companies	-	-	-	-	4 563	684	-	5 247
Other liabilities	122	65	33	220	-	-	-	-
<b>Total</b>	<b>6 716</b>	<b>532</b>	<b>501</b>	<b>7 749</b>	<b>6 173</b>	<b>1 080</b>	<b>263</b>	<b>7 516</b>

Liabilities to credit institutions include SEK 2,063 M in loans assumed under a long-term credit facility. The facility amounts to SEK 5,200 M, due in 2004. SEK 1,426 M of the available commercial paper program of SEK 4,300 M was utilized at year-end. The Group's liabilities related to financing lease agreements amount to SEK 21 M. Payments due in 1999 of SEK 11 M are reported with current liabilities. Subsequent payments amount to SEK 5 M in 2000, SEK 4 M in 2001, and SEK 1 M in 2002.

### Assets pledged for liabilities to financial institutions

	Group		Parent Company	
	1998	1997	1998	1997
Real-estate mortgages	546	328	4	10
Chattel mortgages	146	446	-	-
<b>Total</b>	<b>692</b>	<b>774</b>	<b>4</b>	<b>10</b>

### Note 29. Non-interest-bearing liabilities

Maturity after balance sheet date

	Group		Parent Company	
	1998	1997	1998	1997
Within one year	7 801	3 044	-	-
Within 2-5 years	163	-	-	-
After five years	52	-	-	-
<b>Total</b>	<b>8 016</b>	<b>3 044</b>	<b>-</b>	<b>-</b>

### Note 30. Accrued expenses and prepaid income

	Group		Parent Company	
	1998	1997	1998	1997
Personnel related	1 617	1 545	715	689
Other	1 484	1 386	161	112
<b>Total</b>	<b>3 101</b>	<b>2 931</b>	<b>876</b>	<b>801</b>

### Note 31. Contingent liabilities

	Group		Parent Company	
	1998	1997	1998	1997
Bills discounted	84	115	-	-
Other surety undertakings and contingent liabilities	782	715	3 304	4 024
<b>Total</b>	<b>866</b>	<b>830</b>	<b>3 304</b>	<b>4 024</b>
of which, for subsidiaries			3 111	3 853



# Proposed appropriation of profits

The Board of Directors and President propose that the surplus brought forward from the preceding year	707 904 510
and the profit for the year	2 044 377 093
SEK	2 752 281 603

be appropriated as follows:	
a dividend of SEK 7.00 per share	1 810 872 000
carried forward	941 409 603
SEK	2 752 281 603

Sandviken, 18 February 1999

Percy Barnevik  
Chairman

Bo Boström	Georg Ehrnrooth	Per-Olof Eriksson
Göran Lindstedt	Clas Reuterskiöld	Mauritz Sahlin
Sven Ågrup	Clas Åke Hedström President	

Our Audit Report was submitted on 10 March 1999

Bernhard Öhrn  
Authorized Public Accountant

Lars Svantemark  
Authorized Public Accountant

## Auditors' Report

**To the Annual General Meeting of  
Sandvik Aktiebolag; (publ)  
Corporate identity number 556000-3468**

We have audited the Parent Company and the consolidated financial statements, the accounts and the administration of the Board of Directors and the President of Sandvik Aktiebolag for the year 1998. These accounts and the administration of the company are the responsibility of the Board of Directors and the President. Our responsibility is to express an opinion on the financial statements and the administration based on our audit.

We conducted our audit in accordance with generally accepted auditing standards in Sweden. Those standards require that we plan and perform the audit to obtain reasonable assurance that the financial statements are free

of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and their application by the Board of Directors and the President, as well as evaluating the overall presentation of information in the financial statements. We examined significant decisions, actions taken and circumstances of the company in order to be able to determine the possible liability to the company of any Board member or the President or whether they have in some other way acted in contravention of the Swedish Companies Act, the Annual Accounts Act or the Articles of Association. We believe that our audit provides a reasonable basis for our opinion set out below.

In our opinion, the Parent Company and the consolidated financial statements have been prepared in accordance with the Annual Accounts Act, and, consequently, we recommend that the income statements and the balance sheets of the Parent Company and the Group be adopted, and that the profit of the Parent Company be dealt with in accordance with the proposal in the Report of the Directors.

In our opinion, the Board members and the President have not committed any act or been guilty of any omission, which could give rise to any liability to the company. We therefore recommend

that the members of the Board of Directors and the President be discharged from liability for the financial year.

Sandviken, 10 March 1999

Bernhard Öhrn  
Authorized Public Accountant

Lars Svantemark  
Authorized Public Accountant

## Directors and Auditors



### DIRECTORS

**Percy Barnevik**, Chairman of the Board, London, b. 1941. Chairman of the Board of Investor AB and ABB Asea Brown Boveri Ltd. Director of General Motors, U.S.A. Chairman of the Board of Sandvik AB since 1983. Sandvik shares: 150,000 A.

**Sven Ågrup**, Lidingö, b. 1930. Chairman of the Board of AGA AB. Director of Telefon AB LM Ericsson, Handelsbanken and Tetra Laval. Director of Sandvik AB since 1983. Sandvik shares: 3,000 B

**Per-Olof Eriksson**, Sandviken, b. 1938. Chairman of the Board of Swedish National Grid, Thermia AB and Odlander, Fredrikson & Co. Director of Handelsbanken, Preem Petroleum AB, SSAB Svenskt Stål AB, AB SKF, AB Volvo, AB Custos, Skanska AB, N.V. Koninklijke Sphinx, the Royal Institute of Technology, Assa Abloy AB and the Federation of Swedish Industries. Member of the Royal Academy of Engineering Sciences (IVA). Director of Sandvik AB since 1984. Sandvik shares: 100,000 B.

**Mauritz Sahlin**, Gothenburg, b. 1935. Chairman of the Board of Air Liquide AB, CHAMPS, FlexLink AB, Novare Kapital AB and the Chamber of Industry and Commerce of Western Sweden. Director of Investor AB, IRO AB, Scania AB, Statoil (Norway) and the Federation of Swedish Industries. Director of Sandvik AB since 1993. Sandvik shares: 1,000 A.

**Clas Åke Hedström**, Sandviken, b. 1939. President and Chief Executive Officer of Sandvik AB. Director of Scania AB, the Federation of Swedish Industries and the Association of Swedish Engineering Industries. Director of Sandvik AB since 1994. Sandvik shares: 242 A, 18,154 B.

**Georg Ehrnrooth**, Helsinki, b. 1940. President and Chief Executive Officer of Metra Oyj Abp. Chairman of the Board of Assa Abloy AB and Pensionsförsäkringsbolaget Varma-Sampo. Director of Försäkringsaktiebolaget Sampo, Oy Karl Fazer Ab and the Central Association of Finnish Industry and Employers. Director of Sandvik AB since 1997. Sandvik shares: 6,000 B.

Sandvik's Board of  
Directors. (L-R)

Georg Ehrnrooth,  
Clas Reuterskiöld,  
Per-Olof Eriksson,  
Percy Barnevik,  
Clas Åke Hedström,  
Sven Ågrup,  
Birgitta Karlsson,  
Göran Lindstedt,  
Jan Broberg,  
Bo Boström and  
Mauritz Sahlin.



**Clas Reuterskiöld**, Stocksund, b. 1939. President and member of the Board of AB Industrivärden. Director of AGA AB, Telefon AB LM Ericsson, Handelsbanken, Skanska AB and SCA. Director of Sandvik AB since 1997. Sandvik shares: 2,000 A.

**Bo Boström**, Åshammar, b. 1949. Chairman, AB Sandvik Steel Union Committee, Metal Workers' Union, Sandviken. Director of Sandvik AB since 1988. (Employee representative) Sandvik shares: 200 B

**Göran Lindstedt**, Sandviken, b. 1942. Chairman, Sandvik AB Union Committee, Industrial Salaried Employees' Association. Director of Sandvik AB since 1989. (Employee representative)

#### Deputy Directors

**Jan Broberg**, Bollnäs, b. 1963. Chairman, AB Sandvik Hand Tools Union Committee, Metal Workers' Union, Bollnäs. Director of Sandvik AB since 1996. (Employee representative)

**Birgitta Karlsson**, Stocksund, b. 1952. Sandvik Västberga, Stockholm. Union Committee, Association of Graduate Engineers. Director of Sandvik AB since 1998. (Employee representative) Sandvik shares: 261 A, 169 B

#### AUDITORS

Bernhard Öhrn, Stockholm  
Authorized Public Accountant

Lars Svantemark, Stockholm  
Authorized Public Accountant

#### Deputies

Åke Näsman, Stockholm,  
Authorized Public Accountant

Peter Markborn, Stockholm  
Authorized Public Accountant

## Group Executive Management



**Clas Åke Hedström**  
President and Chief Executive Officer,  
b. 1939, M.Sc. Eng.,  
employed since 1965.



**Leif Sunnermalm**  
Executive Vice President,  
b. 1938, M.Sc. Econ.,  
employed since 1971.



**Gunnar Björklund**  
Executive Vice President,  
b. 1935, M.Sc. Eng.,  
employed since 1959.

## Group Staff and Service Companies

Controller: .....Anders Vrethem  
Finance: .....Gunnar Båtelsson  
Research and Development: .....Hans Mårtensson  
Information: .....Björn Jonson  
Investor Relations: .....Heléne Gunnarson  
IT: .....Lars-Anders Nordqvist

Legal Affairs: .....Malcolm Falkman  
Personnel: .....Rune Nyberg  
Taxes and Financial Projects: .....Thomas B. Hjelm  
AB Sandvik Information Systems: .....Peter Lundh  
AB Sandvik Service: .....Björn Sköld



# Business units

Major operating business units are listed below:

## EUROPE

### Austria

Sandvik in Austria Ges.m.b.H., Vienna  
Manager: Helmut Stix  
Tel. 1 277 37

Günther & Co. Ges.m.b.H., Vienna  
Manager: Eckhard Planegger  
Tel. 1 270 60 70

Voest-Alpine Eimco, Zeltweg  
Manager: Ilkka Hakala  
Tel. 03577 75 50

Voest-Alpine Bergtechnik Ges.m.b.H, Zeltweg  
Manager: Heinz Gach  
Tel. 03577 75 50

### Belarus

Sandvik Bisov, Minsk  
Manager: Lars Karman  
Tel. 17 236 20 46

### Belgium

Sandvik Benelux, Brussels  
Manager: Georges Verhoeven  
Tel. 02 702 98 00

Dormer Tools N.V./S.A., Mortsels  
Manager: Ben Luyckx  
Tel. 03 440 59 01

### Bosnia-Herzegovina

AB Sandvik International  
Representative Office, Sarajevo  
Manager: Jim Stevenson  
Tel. 71 20 52 61

### Bulgaria

Sandvik Bulgaria Ltd., Sofia  
Manager: Miroslav Markov  
Tel. 02 958 12 31

### Croatia

AB Sandvik International  
Representative Office, Zagreb  
Manager: Jim Stevenson  
Tel. 01 61 77 138

### Czech Republic

Sandvik CZ s.r.o., Prague  
Manager: Roger Jansson  
Tel. 02 24 25 33 11

Sandvik Chomutov Precision Tubes s.r.o.,  
Chomutov  
Manager: Lars-Olof Skoog  
Tel. 0396 615 111

### Denmark

Sandvik A/S, Copenhagen  
Manager: Jens Aage Jensen  
Tel. 43 46 51 00

Sandvik Bahco Norden A/S, Copenhagen  
Manager: Esben Brandstrup  
Tel. 43 63 03 30

Sandvik Hard Materials, Espergaerde  
Manager: Peter Lorentzen  
Tel. 49 17 49 00

### Finland

Suomen Sandvik Oy, Helsinki  
Manager: Kalevi Hellstén  
Tel. 09 87 06 61

Sandvik Tamrock Oy, Tampere  
Manager: Lasse Hakoaho  
Tel. 0205 44 121

Sandvik Tamrock Oy, Lahti  
Manager: Ilkka Järvinen  
Tel. 0205 44 151

Sandvik Tamrock Oy, Turku  
Manager: Olavi Rantala  
Tel. 0205 44 131

Sandvik Tamrock, Tampere  
Market area CIS  
Manager: Veikko Heikkilä  
Tel. 0205 44 121

Sandvik Tamrock, Tampere  
Market area Northern Europe  
Manager: Matti Heiniö  
Tel. 0205 44 121

Roxon Oy, Hollola  
Manager: Jarmo Juntunen  
Tel. 0205 44 181

### France

Sandvik S.A., Orléans  
Manager: André Baron  
Tel. 02 38 41 41 41

Sandvik Coromant S.N.C., Orléans  
Manager: André Baron  
Tel. 02 38 41 41 41

Dormer Tools S.A., Orléans  
Manager: Philippe Benoist  
Tel. 02 38 41 40 15

Gunther S.A., Soultz-sous-Fôrets  
Manager: Claude Leray  
Tel. 03 88 80 20 00

Gunther Tools S.A., Soultz-sous-Fôrets  
Manager: Bernard Finantz  
Tel. 03 88 80 20 05

Prototyp S.A., Orléans  
Manager: Mats Christenson  
Tel. 02 38 41 46 50

Sandvik Tobler S.A., Paris  
Manager: Jean-Pierre Colombano  
Tel. 01 34 47 33 00

Sandvik Tamrock France S.A., Lyon  
Manager: Gérard Dequet  
Tel. 04 72 45 22 00

Sandvik Tamrock Secoma S.A., Lyon  
Manager: Gérard Bellement  
Tel. 04 72 45 22 00

Sandvik MGT S.A., Viriat  
Manager: Ezio Fogliata  
Tel. 04 74 45 94 60

Sandvik Aciers S.N.C., Orléans  
Manager: Georges Verhoeven  
Tel. 02 38 41 41 41

Sandvik Precitube S.A., Charost  
Manager: Patrick Champion  
Tel. 02 48 26 20 12

Kanthal S.A., Paris  
Manager: Franck Vilenstein  
Tel. 01 47 86 56 60

Sandvik Hard Materials S.A., Epinouze  
Manager: Björn von Malmborg  
Tel. 04 75 31 38 00

Sandvik Outillage S.N.C., Orléans  
Manager: Dominique van Straelen  
Tel. 02 38 41 41 41

Sandvik Process Systems S.A., Orléans  
Manager: André Baron  
Tel. 02 38 41 41 41

### Germany

Sandvik GmbH, Düsseldorf  
Manager: Ulrich Fezer  
Tel. 0211 502 70

Sandvik Coromant, Düsseldorf  
Manager: Mats Carlerörs  
Tel. 0211 502 70

Sandvik Kosta GmbH, Renningen  
Manager: Jens Orbanke  
Tel. 07159 160 30

Dormer Tools GmbH, Düsseldorf  
Manager: Dick Geerlings  
Tel. 0211 95 09 00

Günther & Co. GmbH & Co., Frankfurt/Main  
Manager: Klaus Scholl  
Tel. 069 78 90 20

Prototyp-Werke GmbH, Zell-Harmersbach  
Manager: Mats Christenson  
Tel. 07835 770

TOP Präzisionswerkzeuge GmbH,  
Frankfurt/Main  
Manager: Horst Mack  
Tel. 069 78 90 26 17

Sandvik Tamrock GmbH, Essen  
Manager: Wolfgang Gruber  
Tel. 0201 178 53 00

Gurtec GmbH, Schöppenstedt  
Manager: Arto Karjalainen  
Tel. 05332 930 90

Sandvik Steel, Düsseldorf  
Manager: Udo Vogt  
Tel. 0211 502 72 00

Sandvik P&P, Werther  
Manager: Henrich Strackerjahn  
Tel. 05203 70 13 21

Kanthal GmbH, Mörfelden-Walldorf  
Manager: Hilmar Linder  
Tel. 06105 400 10

Sandvik Hard Materials, Düsseldorf  
Manager: Wit Horsten  
Tel. 0211 502 75 57

Sandvik Belzer GmbH, Wuppertal  
Manager: Frank Schweitzer  
Tel. 0202 479 70

Sandvik Process Systems GmbH, Fellbach  
Manager: Johann Taps  
Tel. 0711 510 10

#### **Greece**

Sandvik A.E., Athens  
Manager: Gunnar Anell  
Tel. 1 898 28 80

Sandvik International  
Representative Office, Athens  
Manager: Robert Khouri  
Tel. 1 898 28 80

#### **Hungary**

Sandvik in Hungary Ltd., Budapest  
Manager: Göran Wretås  
Tel. 1 431 27 00

#### **Ireland**

Sandvik Ireland Ltd., Dublin  
Manager: Mary Healy  
Tel. 01 295 20 52

Sandvik Tamrock Oy, Irish Branch, Kilkenny  
Manager: Matti Heiniö  
Tel. 0358 0205 44 121

#### **Italy**

Sandvik Italia S.p.A., Milan  
Manager: Marco Schirinzi  
Tel. 02 30 70 51

Sandvik Coromant, Milan  
Manager: Pietro Calegari  
Tel. 02 30 70 51

Dormer Tools S.p.A., Milan  
Manager: Fabrizio Resmini  
Tel. 02 38 04 51

Prototyp Srl, Milan  
Manager: Elke Aurarrd  
Tel. 02 38 03 180

Master Tools S.p.A., Rovereto  
Manager: Fabrizio Resmini  
Tel. 0464 48 28 00

Sandvik Tamrock Tools, Milan  
Manager: Mats Blacker  
Tel. 02 30 70 51

Sandvik Steel, Milan  
Manager: Pier Giorgio Martellozzo  
Tel. 02 30 70 51

Società Italiana Kanthal S.p.A., Milan  
Manager: Lelio Segre  
Tel. 02 66 04 91 77

Driver-Harris S.p.A., Terrazano di Rho  
Manager: Lelio Segre  
Tel. 02 93 90 19 34

Sandvik Hard Materials, Milan  
Manager: Osvaldo Rosello  
Tel. 02 30 70 51

Sandvik Saws and Tools, Milan  
Manager: Marco Schirinzi  
Tel. 02 30 70 51

Sandvik Process Systems S.p.A., Milan  
Manager: Giancarlo Tazzioli  
Tel. 02 38 01 06 00

#### **Netherlands**

Sandvik Benelux B.V., Schiedam  
Manager: Georges Verhoeven  
Tel. 010 208 02 08

Dormer Tools B.V., Veenendaal  
Manager: Ingemar Broström  
Tel. 0318 56 95 69

Sandvik Saws and Tools Benelux B.V., Helmond  
Manager: Louis Cuppens  
Tel. 0492 58 23 33

Sandvik Process Systems B.V., Breda  
Manager: Hans Mulders  
Tel. 076 572 08 20

#### **Norway**

Sandvik Norge A/S, Oslo  
Manager: Jon Ambur  
Tel. 67 13 27 40

Tamrock Norge A/S, Oslo  
Manager: Hans Hanto  
Tel. 22 72 40 24

#### **Poland**

Sandvik Polska Ltd., Warsaw  
Manager: Christer Evans  
Tel. 22 647 38 80

Sandvik Baildonit S.A., Katowice  
Manager: Adam Ratuszny  
Tel. 322 57 10 61

Voest Alpine Eimco, Katowice Szopienice  
Manager: Andrzej Jagiello  
Tel. 32 256 80 20

#### **Portugal**

Sandvik Portuguesa Lda, Lisbon  
Manager: Nuno Batalha  
Tel. 01 424 54 00

Sandvik Obergue-Limas e Mecânica Lda,  
Vila do Conde  
Manager: Björn Karlsson  
Tel. 052 65 01 50

#### **Romania**

Sandvik Srl.  
Manager: Thierry Proner  
Tel. 1 330 54 43

#### **Russia**

Sandvik, Moscow  
Manager: Roland Setterberg  
Tel. 095 956 50 80

Sandvik – MKTC OAO, Moscow  
Manager: Robert Hartinger  
Tel. 095 289 70 74

Sandvik Tamrock Representative Office, Moscow  
Manager: Seppo Häyrynen  
Tel. 095 203 16 11

#### **Slovakia**

Sandvik Slovakia s.r.o., Bratislava  
Manager: Otto Kames  
Tel. 07 544 24 97

#### **Slovenia**

Sandvik d.o.o.  
Manager: Jim Stevenson  
Tel. 64 21 15 44

#### **Spain**

Sandvik Española S.A., Madrid  
Manager: Björn von Malmberg  
Tel. 91 660 51 00

Sandvik Tamrock, Madrid  
Manager: Luis Alvarez  
Tel. 91 650 60 42

Kanthal SP S.A., Barcelona  
Manager: Jan Setterberg  
Tel. 93 680 28 24

Sandvik Hard Materials, Barcelona  
Manager: Björn von Malmberg  
Tel. 93 862 94 00

#### **Sweden**

Sandvik AB, Sandviken  
Group CEO: Clas Åke Hedström  
Tel. 026 26 00 00

AB Sandvik Coromant, Sandviken  
Manager: Lars Pettersson  
Tel. 026 26 60 00

Sandvik Coromant Norden AB, Kista  
Manager: Lennart Lindgren  
Tel. 08 793 05 00

CTT Management, Halmstad  
Manager: Håkan Larsson  
Tel. 035 16 53 00

Dormer Tools AB, Halmstad  
Manager: Ingemar Broström  
Tel. 035 16 52 00

Sandvik Mining and Construction, Sandviken  
Manager: Anders Ilstam  
Tel. 026 26 51 00

AB Sandvik Tamrock Tools  
Manager: Anders Persson (Top hammer),  
Örjan Persson (Rotery)  
Tel. 026 26 20 00

Sandvik Tamrock AB, Sandviken  
Manager: Göran Carlbaum  
Tel. 026 26 20 00

KOPO AB, Haparanda  
Manager: Leif Tiensuu  
Tel. 0922 298 00

Roxon AB, Örebro  
Manager: Hans Sandqvist  
Tel. 019 12 41 10

AB Sandvik Steel, Sandviken  
Manager: Per Ericson  
Tel. 026 26 30 00

Sandvik Stål Försäljnings AB, Kista  
Manager: Björn Jonsson  
Tel. 08 793 05 00

AB Sandvik Calamo, Molkom  
Manager: Göran Gustafsson  
Tel. 0553 313 00

Edmeston AB, Gothenburg  
Manager: Christer Andersson  
Tel. 031 335 63 50

Guldsmedshytte Bruks AB, Guldsmedshyttan  
Manager: Åke Haglund  
Tel. 0581 451 00

Gusab Stainless AB, Mjölby  
Manager: Åke Axelsson  
Tel. 0142 822 00

Kanthal AB, Hallstahammar  
Manager: Harry Furuberg  
Tel. 0220 210 00

Kanthal Machinery AB, Hallstahammar  
Manager: Magnus Bergman  
Tel. 0220 210 00

Kanthal Norden AB, Hallstahammar  
Manager: Hans Södervall  
Tel. 0220 210 00

AB Sandvik Hard Materials, Stockholm  
Manager: Lars Wahlqvist  
Tel. 08 726 63 00

Sandvik Hard Materials Norden AB, Stockholm  
Manager: Johan Holm  
Tel. 08 726 63 00

AB Sandvik Saws and Tools, Sandviken  
Manager: Göran Gezelius  
Tel. 026 26 57 00

AB Sandvik Bahco, Enköping  
Manager: Åke Sundby  
Tel. 0171 227 00

Sandvik Bahco Norden AB, Enköping  
Manager: Per Törnell  
Tel. 0171 782 00

AB Sandvik Hand Tools, Bollnäs  
Manager: Karl-Erik Forsberg  
(through 31 March 1999)  
Tel. 0278 321 00

AB Sandvik Metal Saws, Lidköping  
Manager: Staffan Larsson  
Tel. 0510 827 00

AB Sandvik Process Systems, Sandviken  
Manager: Svante Lindholm  
Tel. 026 26 56 00

AB Sandvik International, Sandviken  
Manager: Roland Setterberg  
Tel. 026 26 26 00

AB Sandvik Service, Sandviken  
Manager: Björn Sköld  
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AB Sandvik Information Systems, Sandviken  
Manager: Peter Lundh  
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#### Switzerland

Sandvik AG, Spreitenbach  
Manager: Lennart Ek  
Tel. 056 417 61 11

Santrade Ltd., Lucerne  
Manager: Lennart Ek  
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#### Turkey

Sandvik Ticaret A.S., Istanbul  
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Tel. 216 309 15 15

#### Ukraine

Sandvik, Kiev  
Manager: Robert Hartinger  
Tel. 44 212 43 21

#### United Kingdom

Sandvik Ltd., Birmingham  
Manager: Kenneth Sundh  
Tel. 0121 504 50 00

Sandvik Coromant U.K., Birmingham  
Manager: Kenneth Sundh  
Tel. 0121 504 54 00

Dormer Tools Ltd., Sheffield  
Manager: Mike Walker  
Tel. 0114 251 26 00

Dormer Tools (Sheffield) Ltd., Sheffield  
Manager: Robert Hall  
Tel. 0114 251 27 00

Dormer Tools International, Sheffield  
Manager: Mike Walker  
Tel. 0114 251 26 00

Titex Tools Ltd., Halesowen  
Manager: Frank Oak  
Tel. 0121 504 20 00

Eimco (Great Britain) Ltd., Gateshead  
Manager: John Hill  
Tel. 0191 487 72 41

Sandvik Steel U.K., Birmingham  
Manager: Bill Good  
Tel. 0121 504 51 00

Sandvik Metinox Ltd., Sheffield  
Manager: Hugh C. Firth  
Tel. 0114 263 31 00

RGB Stainless Ltd., Birmingham  
Manager: Peter Rose  
Tel. 0121 565 70 00

Sterling Tubes Ltd., Walsall  
Manager: Bill Good  
Tel. 01922 62 12 22

Saxon Blades Ltd., Rugby  
Manager: Gerald Haseldine  
Tel. 01788 54 23 80

Osprey Metals Ltd., Neath  
Manager: Gwyn Brooks  
Tel. 01639 63 41 21

Kanthal Ltd., Perth  
Manager: Richard Fareham  
Tel. 01738 49 33 00

S.H.M. Production U.K., Coventry  
Manager: Ernst-Åke Nylander  
Tel. 01203 85 69 00

Sandvik Hard Materials U.K., Coventry  
Manager: Derek Stradling  
Tel. 01203 85 69 00

Sandvik Saws and Tools U.K., Birmingham  
Manager: Marion Totney  
Tel. 0121 504 52 00

Sandvik Process Systems Ltd., Birmingham  
Manager: Gerald S. Garbett  
Tel. 0121 550 76 71

#### Yugoslavia

AB Sandvik International  
Representative Office, Belgrade  
Manager: Jim Stevenson  
Tel. 11 64 44 53

## NORTH AMERICA

#### Canada

Sandvik Canada, Inc., Mississauga, Ont.  
Manager: James T. Baker  
Tel. 905 826 89 00

Dormer Tools, Inc., Mississauga, Ont.  
Manager: Richard Tunstill  
Tel. 905 542 30 00

Sandvik Tamrock Canada Inc., Lively  
Manager: Thomas Söderqvist  
Tel. 705 692 58 81

Sandvik Tamrock Equipment., Burlington  
Manager: Lorne Massel  
Tel. 905 632 49 40

Sandvik Steel Canada, Arnprior, Ont.  
Manager: Tom M. Moylan  
Tel. 613 623 65 01

Sandvik Process Systems Canada, Guelph, Ont.  
Manager: Brian Spalding  
Tel. 519 836 43 22

#### United States

Sandvik, Inc., Fair Lawn, NJ  
Manager: James T. Baker  
Tel. 201 794 50 00

Sandvik Coromant Company, Fair Lawn, NJ  
Manager: James T. Baker  
Tel. 201 794 50 00

Dormer Tools, Inc., Asheville, NC  
Manager: Richard Tunstill  
Tel. 828 274 60 78

Union Butterfield Corporation, Asheville, NC  
Manager: Adrian Waple  
Tel. 828 274 60 70

Precision Twist Drill Co.,  
Crystal Lake, IL  
Manager: Tony Elfström  
Tel. 815 459 20 40

Sandvik Tamrock, Atlanta, GA  
Market area USA and Mexico  
Manager: J-G Coulombe  
Tel. 404 505 00 05

Driltech Mission LLC, Alachua, FL  
Manager: Olof Lundblad  
Tel. 904 462 41 00

Voest-Alpine Eimco, Bristol, VA  
Manager: Tim Shean (Mineral Tools),  
Dale Whitman (Chemical Products)  
Tel. 540 645 54 05

Eimco LLC, Bluefield, WV  
Manager: Garry Marsden  
Tel. 304 327 02 60

Sandvik Steel Company, Scranton, PA  
Manager: Edward R. Nuzzaci  
Tel. 570 585 75 00

Pennsylvania Extruded Tube Co. (PEXCO),  
Scranton, PA  
Manager: William P. Moore  
Tel. 570 585 77 77

Sandvik Special Metals Corp., Kennewick, WA  
Manager: Kirk P. Galbraith  
Tel. 509 586 41 31

The Kanthal Corp., Bethel, CT  
Manager: Jack Beagley  
Tel. 203 744 14 40

H.P. Reid Co. Inc., Palm Coast, FL  
Manager: Valden Lichter  
Tel. 904 445 20 00

Cesiwid Inc., Niagara Falls, NY  
Manager: Jack Beagley  
Tel. 716 286 76 00

Sandvik Hard Materials Company, Troy, MI  
Manager: Garry Davies  
Tel. 248 458 41 00

Sandvik Saws and Tools Company, Scranton, PA  
Manager: Peter Renwick  
Tel. 717 341 95 00

Sandvik Milford Corp., Branford, CT  
Manager: William B. Lavelle Jr  
Tel. 203 481 42 81

Sandvik Windsor Corp., Milan, TN  
Manager: Karl-Erik Forsberg  
(from 1 April 1999)  
Tel. 901 686 40 00

Sandvik Process Systems, Inc., Totowa, NJ  
Manager: Walter Miller  
Tel. 973 790 16 00

## LATIN AMERICA

### Argentina

Sandvik Bahco Argentina S.A., Buenos Aires  
Manager: Michael Hermansson  
Tel. 011 4484 32 41

Sandvik Tamrock Argentina S.A., Buenos Aires  
Manager: Carlos P. Calvo  
Tel. 01 918 34 96

### Bolivia

Sandvik Tamrock Bolivia, La Paz  
Manager: Marcelo Clavijo  
Tel. 2 368 271

### Brazil

Sandvik do Brasil S.A., São Paulo  
Manager: José V. Parra  
Tel. 011 525 26 11

Sandvik do Brasil S.A. Wire, Mogi Guacu  
Manager: Flávio Benedini  
Tel. 019 861 98 00

Dormer Tools S.A., São Paulo  
Manager: Antonio Altobello Neto  
Tel. 011 56 60 30 00

Kanthal Brasil Ltda., São Paulo  
Manager: Lars Ericsson  
Tel. 011 445 38 11

### Chile

Sandvik Chile S.A., Santiago  
Manager: Hanns Knorr  
Tel. 2 623 54 43

Sandvik Tamrock Chile S.A., Santiago  
Market area Latin America  
Manager: Jouni Salo  
Tel. 2 623 83 31

### Colombia

Sandvik Colombia S.A., Bogotá  
Manager: Alejandro Quintanilla  
Tel. 1 262 56 00

### Cuba

AB Sandvik International  
Representative Office, Havana  
Manager: José F. Recio Pando  
Tel. 7 24 74 00

### Mexico

Sandvik de México S.A. de C.V., Mexico, D.F.  
Manager: Åke Nyberg  
Tel. 5 729 39 00

Sandvik Tamrock de México S.A. de C.V.,  
Tlaquepaque  
Manager: Arrien Westhuis  
Tel. 3 601 03 62

### Peru

Sandvik del Perú S.A., Lima  
Manager: Juan Retamozo  
Tel. 1 221 75 60

Sandvik Tamrock del Perú S.A., Lima  
Manager: Hans Neumann  
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### Venezuela

Sandvik Venezuela C.A., Caracas  
Manager: Jean-Pierre Maire  
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## AFRICA

### Algeria

Sandvik S.A., Bureau de Liaison, Algiers  
Manager: Mats Andersson  
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### Ghana

Sandvik Tamrock Ghana Ltd., Accra  
Manager: Jan Wichmann  
Tel. 021 76 58 02

### Ivory Coast

AB Sandvik International, Bureau de Liaison,  
Abidjan  
Manager: Salimatou Kéita  
Tel. 41 77 60

### Kenya

Sandvik Kenya Ltd., Nairobi  
Manager: Aileen Nkiria  
Tel. 2 53 28 66

### Morocco

Sandvik Maroc S.A., Mohammédia  
Manager: Youssef Ennaciri  
Tel. 03 32 53 16

### South Africa

Sandvik (Pty) Ltd., Benoni  
Manager: Göran Wijk  
Tel. 011 914 34 00

Sandvik Tamrock, Johannesburg  
Market Area Africa  
Manager: Chris Brindley  
Tel. 011 392 49 90

Sandvik Tamrock South Africa (Pty) Ltd.,  
Johannesburg  
Manager: Chris Brindley  
Tel. 011 397 25 75

Voest-Alpine Eimco Ltd., Delmas  
Manager: G Vergeer  
Tel. 013 66 510 75

### Tunisia

Sandvik International  
Bureau de Liaison Tunisie, La Marsa Saf Saf  
Manager: Mats Andersson  
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### Zambia

Sandvik (Zambia) Ltd., Ndola  
Manager: Göran Wijk  
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Sandvik Tamrock Zambia Ltd., Kitwe  
Manager: Gary Hughes  
Tel. 02 21 03 55

### Zimbabwe

Sandvik (Private) Ltd., Harare  
Manager: James C. MacGregor-Sim  
Tel. 4 62 10 95

Sandvik Tamrock Zimbabwe (Pvt.) Ltd., Harare  
Manager: Adrian Smith  
Tel. 4 75 70 74



## ASIA

### Azerbaijan

AB Sandvik International  
Representative Office, Baku  
Manager: Askin Kaynarca  
Tel. 12 929 932

### China

Sandvik China Ltd., Beijing  
Manager: Anders Hägglund  
Tel. 10 65 90 86 00

Sandvik Tamrock China Ltd., Beijing  
Manager: Pekka Heikkilä  
Tel. 10 68 51 62 53

Sandvik Process Systems (Shanghai) Ltd.  
Manager: James Han  
Tel. 21 58 46 64 23

### Hong Kong, SAR

Sandvik Hongkong Ltd., Hong Kong  
Manager: Anders Hägglund  
Tel. 2 743 33 31

Sandvik Tamrock (Far East) Ltd., Hong Kong  
Manager: Björn Johansson  
Tel. 2 811 26 89

Kanthal Electroheat HK Ltd., Hong Kong  
Manager: Rolf Berthelius  
Tel. 2 735 09 33

### India

Sandvik Asia Ltd., Pune  
Manager: Hans Gass  
Tel. 0212 79 64 91-3

Titex India Pvt. Ltd., Pune  
Manager: Werner Kräher  
Tel. 0212 79 99 91

Sandvik Choksi Private Limited, Ahmedabad  
Manager: Patrick Henderson  
Tel. 027 648 33 13

Kanthal India Ltd., Hosur  
Manager: Per Gelang  
Tel. 4344 760 45

### Indonesia

PT Prok Indonesia, Jawa Barat  
Manager: Greg Smith  
Tel. 0254 38 03 74

### Japan

Sandvik K.K., Kobe  
Manager: Bo Zetterlund  
Tel. 078 992 09 92

Sandvik Tamrock, Yokohama  
Manager: Hiroshi Andoh  
Tel. 045 476 41 11

Kanthal K.K., Tokyo  
Manager: Åke Nilsson  
Tel. 03 34 43 18 23

Sandvik Process Systems, Nishinomiya  
Manager: Goro Okada  
Tel. 0798 43 10 01

### Kazakhstan

Sandvik Tamrock Representative Office, Almaty  
Manager: Juha Sorjonen  
Tel. 3272 68 47 42

## Korea

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Manager: Sören Wikström  
Tel. 02 785 17 61-8

Suh Jun Trading Co. Ltd., Seoul  
Manager: Dae-Rim Han  
Tel. 02 557 60 30

Sandvik Tamrock Service Korea Ltd., Seoul  
Manager: W J Lee  
Tel. 02 634 25 01

Kanthal Korea Ltd., Seoul  
Manager: Rolf Berthelius  
Tel. 02 515 14 31

## Malaysia

Sandvik Malaysia Sdn. Bhd., Kuala Lumpur  
Manager: Lawrence Kwok  
Tel. 03 756 21 36

## Philippines

Sandvik Philippines, Inc., Manila  
Manager: Emmanuel C. Malolos  
Tel. 02 807 63 72-74

Sandvik Tamrock Philippines Inc.,  
Muntinlupa City  
Manager: Hannu Virtanen  
Tel. 02 850 15 54

## Singapore

Sandvik South East Asia Pte. Ltd., Singapore  
Manager: Sven Flodmark  
Tel. 265 22 77

Kanthal Electroheat (S.E.A.) Pte. Ltd., Singapore  
Manager: Rolf Berthelius  
Tel. 778 55 33

## Taiwan

Sandvik Taiwan Ltd., Taipei  
Manager: Wendell Wang  
Tel. 02 22 99 34 27

Sandvik Hard Materials Taiwan Pty. Ltd.,  
Chung Li  
Manager: Rudy Lu  
Tel. 03 452 31 72

## Thailand

Sandvik Thailand Ltd., Bangkok  
Manager: Pisuth Tantivejsak  
Tel. 02 379 46 61-5

## United Arab Emirates

Sandvik Tamrock Representative Office, Dubai  
Manager: Arto Metsänen  
Tel 4 31 83 00

## AUSTRALIA-NEW ZEALAND

### Australia

Sandvik Australia Pty. Ltd., Sydney  
Manager: John Armitage  
Tel. 02 98 28 05 00

Sandvik Tamrock Pty. Ltd., Brisbane  
Manager: Jack Thomson  
Tel. 07 38 33 03 00

Voest-Alpine Eimco, Tomago  
Manager: Dennis Pomfret (Eimco),  
Manfred Fuchs (VAB)  
Tel. 02 49 85 26 25

Prok Group Limited, Mackay  
Manager: George Nuttall  
Tel. 079 49 52 14 00

Prok Group Limited, Perth  
Manager: Asko Kankaanpää  
Tel. 08 93 47 85 00

Kanthal Australia Pty. Ltd., Victoria  
Manager: Cesare Colaluca  
Tel. 03 94 01 12 22

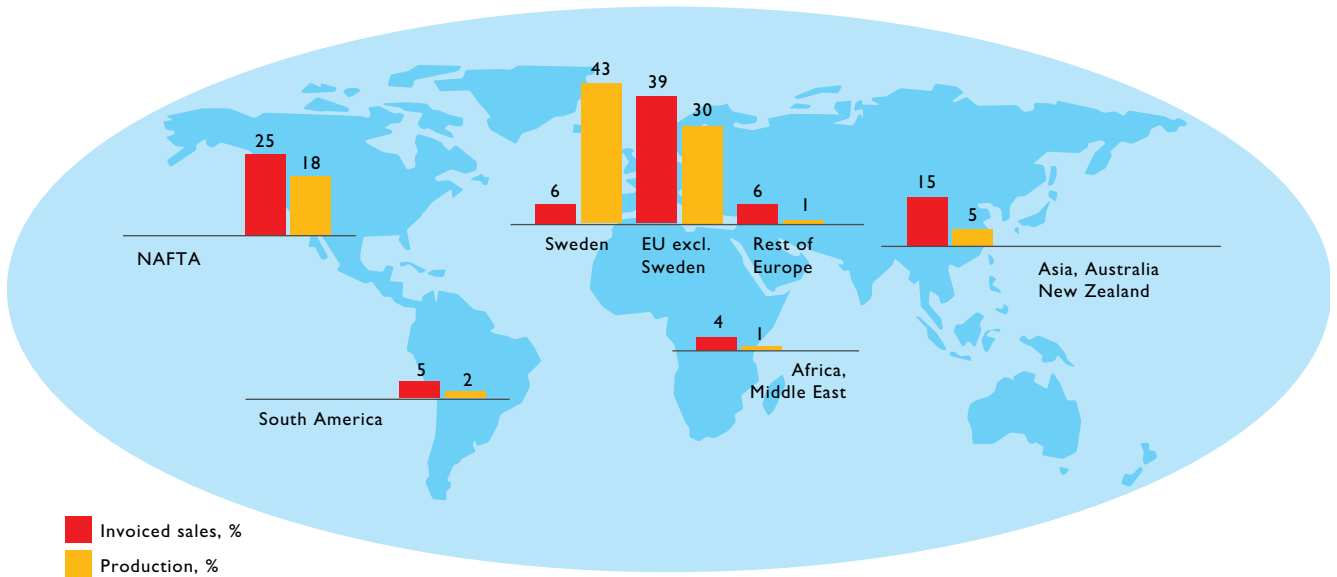
Sandvik Hard Materials Pty. Ltd., Newcastle  
Manager: David MacDonald  
Tel. 049 24 21 00

### New Zealand

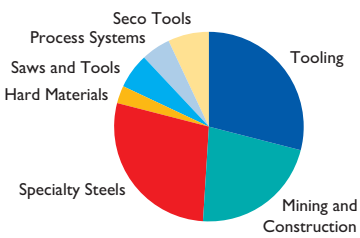
Sandvik New Zealand Ltd., Pakuranga  
Manager: Mark Thompson  
Tel. 9 367 21 07

This data refers to March 1999.

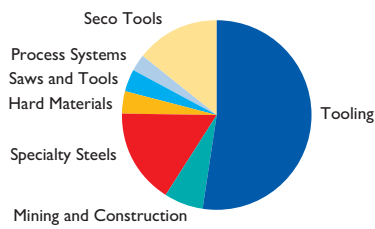
# Key figures



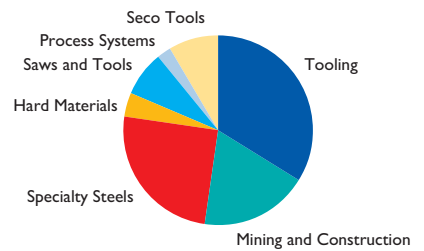
INVOICED SALES BY BUSINESS AREA



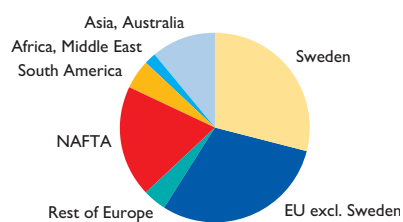
EARNINGS BY BUSINESS AREA



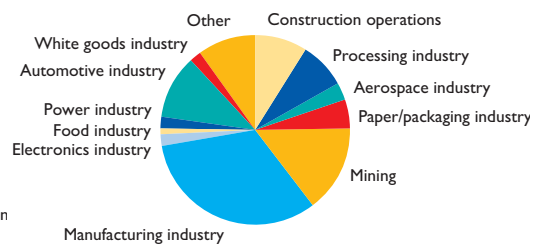
NUMBER OF EMPLOYEES BY BUSINESS AREA



NUMBER OF EMPLOYEES BY MARKET AREA



INVOICED SALES BY CUSTOMER AREA



	1998	1997	1996	1995	1994	1993	1992
Invoiced sales, SEK M	42 400	34 119	28 265	29 700	25 285	21 770	17 217
Profit after financial income and expenses, SEK M	3 935	4 205	4 453	5 620	3 811	1 764	1 486
as % of invoicing	9	12	16	19	15	8	9
Net profit for the year, SEK M	2 095	2 725	3 114	3 727	2 436	1 069	1 112
Earnings per share, SEK	8.10	10.15	11.20	13.40	8.75	3.85	4.05
Dividend per share (1998: as proposed), SEK	7.00	7.00	6.50	6.00	3.75	2.25	1.90
Payout ratio, %	86	69	58	45	40	58	47
Shareholders' equity, SEK M	18 621	17 414	20 035	18 503	16 013	14 364	13 538
Equity ratio, %	47	47	64	64	59	60	59
Debt/equity ratio, times	0.5	0.5	0.2	0.1	0.2	0.2	0.2
Rate of capital turnover, %	104	96	86	101	95	89	75
Liquid assets, SEK M	1 800	2 494	5 557	6 893	6 591	5 171	4 864
Return on shareholders' equity, %	11.9	14.3	16.2	21.6	16.0	7.7	8.5
Return on net assets, %	16.3	17.7	20.2	28.0	21.7	12.0	10.4
Investment in property, plant and equipment, SEK M	2 811	2 353	2 486	2 050	1 229	886	886
Total investments, SEK M	3 202	6 644	4 414	2 092	1 575	964	1 311
Net financing from operations, SEK M	4 595	4 984	3 866	984	1 400	2 441	2 642
Cash flow, SEK M	-560	-2 035	-1 682	164	1 215	1 142	1 645
Number of employees, 31 Dec.	37 520	38 406	30 362	29 946	29 450	26 869	28 617

Additional per-share data is presented in the section on the Sandvik share, pages 8-9.

#### DEVELOPMENT BY BUSINESS AREA

	Invoiced sales			Operating profit					
	1998 SEK M	1997 SEK M	1996 SEK M	1998		1997		1996	
				SEK M	%	SEK M	%	SEK M	%
Sandvik Tooling	12 121	10 803	9 211	2 544	21	2 094	19	2 031	22
Sandvik Mining and Construction*	9 379	3 582	2 003	340	4	234	7	220	11
Sandvik Specialty Steels**	11 687	10 780	8 980	770	7	921	9	1 203	13
Sandvik Hard Materials	1 455	1 361	1 209	180	12	148	11	133	11
Sandvik Saws and Tools	2 694	2 787	2 517	205	8	239	9	161	6
Sandvik Process Systems	1 892	1 873	1 836	132	7	80	4	-24	-1
Seco Tools	3 151	2 889	2 475	677	22	575	20	402	16

\* Including Tamrock from November 1997.

\*\* Including Kanthal from July 1997.

## Annual General Meeting

The Annual General Meeting will be held at Jernvallen in Sandviken on Thursday, 29 April 1999, at 3:00 p.m.

Shareholders wishing to attend the Meeting must notify the Board either by letter addressed to Sandvik AB, Legal Affairs, SE-811 81 Sandviken, or by telefax +46(0)26-26 10 86, or by telephone +46(0)26-26 10 81. Notification must reach Sandvik AB not later than 3:00 p.m. on 26 April 1999 at the latest. In order to qualify for attendance, shareholders must also have been entered in the Share Register kept by the Securities Register Center (Värdepapperscentralen VPC AB) not later than

19 April 1999. Shareholders whose shares are registered as held in trust must have them temporarily re-registered with the VPC in their own names not later than 19 April 1999 to establish their right to attend the Meeting.

When making notification of intent to attend the Meeting, please state your name, personal or organization number, address and telephone number.

If you plan to be represented at the Meeting by proxy, such notice must be made known to Sandvik AB prior to the Meeting ●

## Payment of dividend

The Board and the President recommend that the Meeting declare a dividend of SEK 7.00 per share for 1998.

The proposed record date is 4 May 1999. If this proposal is adopted by the Meeting, it is expected that dividends will be ready for remittance by 11 May 1999. Dividends will be sent to those who, on the record

date, are entered in the Share Register or on the separate List of Assignees, etc. Dividends will be remitted from the Securities Register Center. To facilitate the distribution, shareholders who have moved should report their change of address to their bank in good time before the record day ●

## Financial information 1999/2000

First-Quarter Report	29 April 1999
Semi-Annual Report	11 August 1999
Third-Quarter Report	3 November 1999
Report on Operations in 1999	17 February 2000 (proposed)
Annual Report for 1999	April 2000
Annual General Meeting	4 May 2000 (proposed)

Financial information can be ordered from Sandvik AB, Group Information, SE-811 81 Sandviken, Sweden  
Tel. +46 (0)26-26 10 47  
Fax. +46 (0)26-26 10 43  
or from

Sandvik AB, Investor Relations, SE-811 81 Sandviken, Sweden  
Tel. +46 (0)26-26 10 25  
Fax. +46 (0)26-26 10 45

[www.sandvik.com](http://www.sandvik.com)







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