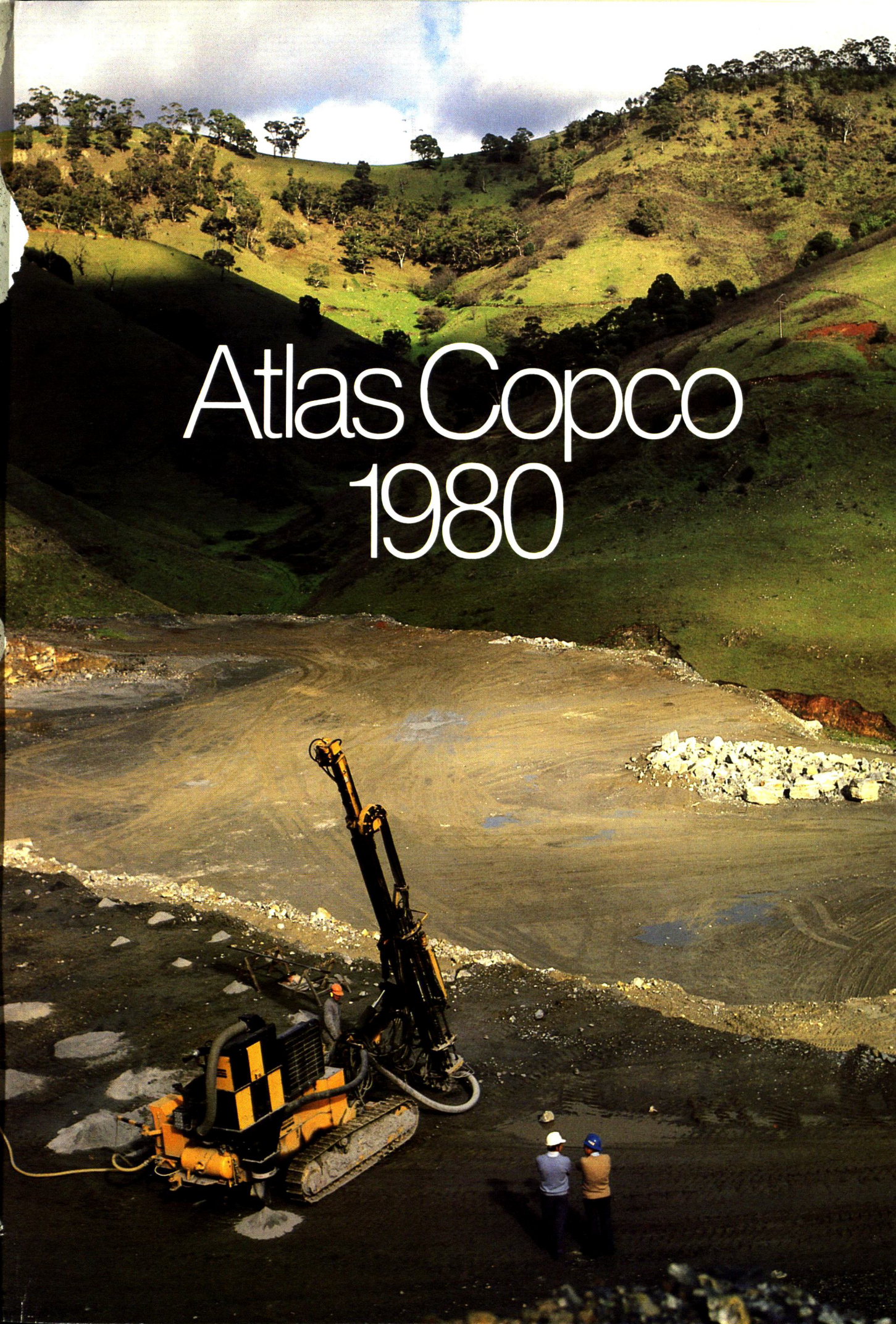


# Atlas Copco 1980



Cover picture

Atlas Copco's ROC 820H drill represents a breakthrough for a new technology. It is easy to move and maneuver while requiring a small amount of energy and operating at a low noise level. The drill in this photo is being used by the Ready Mix Group in a quarry outside Adelaide, Australia.

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FINANCIAL INFORMATION FROM  
ATLAS COPCO DURING 1981

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Atlas Copco will publish the following financial reports during 1981:

Report on year's operations	February
Annual Report	End of March
Report on first-quarter operations	Middle of May
Report on first six months' operations	End of August
Report on first nine months' operations	Middle of November

**Atlas Copco Annual Report 1980**  
(English)

**Tryckluft**  
Quarterly publication (Swedish) for Atlas Copco's shareholders. It is sent to shareholders who request it in writing.

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INTERNATIONAL GUIDELINES

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Atlas Copco welcomes the guidelines for multinational enterprises, formulated by the OECD, the organization for economic cooperation between the western industrialized countries. We believe that we conform with these guidelines in all essential respects.

We have observed the OECD guidelines in preparing this Annual Report, except for certain information which, for competitive reasons, we do not now feel that we can disclose.

The Company is also favorably disposed to the guidelines with respect to multinational companies and the labor market, prepared by ILO, the United Nations' organization for handling labor market questions.

In conformity with international standards, the following designations have been used in this Annual Report.

Currencies: SEK = Swedish kronor  
USD = U.S. dollars  
CHF = Swiss francs

Prefixes: k = thousands  
M = millions

Atlas Copco AB  
Mail address: S-105 23 Stockholm, Sweden  
Head Office: Sickla Industriväg 3  
Nacka (Stockholm)  
Telephone: 08-743 80 00

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## *THE YEAR IN BRIEF*

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- Sales of the Atlas Copco Group rose to SEK 6 227 M during 1980, a 17 percent increase, and order bookings totaled SEK 6 448 M, a 17 percent increase. Sales volume rose 7 percent.
- Profit after financial items but before appropriations and taxes increased 32 percent, totaling SEK 442 M, equal to 7.1 percent of invoicing.
- Return on total capital employed within the Atlas Copco Group increased from 14.2 percent to 16.9 percent.
- Turbonetics Inc. (U.S.) and Worthington's air compressor division in Holyoke, Mass. (U.S.) were acquired.
- Agreement was reached to acquire KSB's facility for the manufacture of compressors in Saarbrücken, West Germany.
- Investments in research and development amounted to SEK 160 M, a 10 percent increase.
- Earnings per share rose from SEK 10 to SEK 12.60.
- The Board of Directors proposes a dividend of SEK 6.50 per share, as against SEK 6.00 in 1979.

# BOARD OF DIRECTORS, AUDITORS, MANAGEMENT

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## BOARD

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Elected by the Annual General Meeting

**Peter Wallenberg**

Chairman of the Board (1970). Industrial Adviser, Skandinaviska Enskilda Banken and Vice Chairman of its Board. Also Chairman of the Board of SKF and Vice Chairman of the Boards of ASEA, Bergvik och Ala, Broströms, Electrolux, LM Ericsson, Saab-Scania, Stora Kopparberg and Swedish Match

**Kurt-Allan Belfrage**

Vice Chairman (1956). Managing Director, Atlas Copco AB (1957-70)

**Henry N Sporborg**

(1969). Director Hambros Ltd., England

**Jan Hellner**

(1969). Dr Jur, Professor Stockholm University

**Sture Ödner**

(1970). Managing Director, Saléninvest AB

**Erik Johnsson**

(1972). Dr Techn, Managing Director, Atlas Copco AB 1970-75

**Axel Iveroth**

(1975). Vice Chairman, Federation of Swedish Industries

**Curt G Olsson**

(1976). Managing Director, Skandinaviska Enskilda Banken

**Tom Wachtmeister**

(1975). Managing Director, Atlas Copco AB since 1975

Employee representatives

**Bo Henning**

(1973). Chairman, Atlas Copco local of Salaried Staff Union

**Per-Erik Nyholm**

(1973). Chairman, Atlas Copco local of Metal Workers' Union

**Ingmar Berthelsen**

Deputy member (1973). Chairman, Atlas Copco local of Graduate Engineers' Union

**Kjell Nordström**

Deputy member (1977). Chairman, Ecco Works local of Metal Workers' Union

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## AUDITORS

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**Birger Sonesson**, Authorized Public Accountant

**Bertil E Olsson**, Authorized Public Accountant

**Karl-G Giertz**, Authorized Public Accountant, Deputy

**Roland Valtersson**, Authorized Public Accountant, Deputy

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## GROUP MANAGEMENT COMMITTEE

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**Tom Wachtmeister**, Managing Director

**Olof Sjöström**, First Deputy Managing Director

**Einar Liwendahl**, Deputy Managing Director, Market Operations – East

**Sven-Ingvar Svensson**, Deputy Managing Director, Market Operations – West

**Jan Holdo**, Managing Director, Atlas Copco MCT AB

**Iwan Åkerman**, Managing Director, Atlas Copco Airpower N.V.

**Per Wejke**, Managing Director, Atlas Copco Tools AB

**William J Hogg**, Managing Director, Atlas Copco North America Inc.

**Bo Gyllenberg**, Production

**Hans Johnsson**, Communications and Public Affairs

**Rolf Lahnhausen**, Personnel

**Göran Lundborg**, Logistics

*Associated Directors*

**Anders Björk**, **Lennart Friberg**, **Anders Kindahl**, **Olle Lundquist**

*Special Advisers to Managing Director*

**Ambassador Olof Landenius**, **Ambassador Lennart Petri**,

**Ambassador Stig Unger**

*Upper row, from left:*

**Olof Sjöström**, **Peter Wallenberg**, **Tom Wachtmeister**, **Kurt-Allan Belfrage**, **Henry Sporborg**, **Jan Hellner**, **Axel Iveroth**.

*Bottom row, from left:*

**Sture Ödner**, **Erik Johnsson**, **Curt G Olsson**, **Bo Henning**, **Per-Erik Nyholm**, **Ingmar Berthelsen**, **Kjell Nordström**.



# BOARD OF DIRECTORS' REPORT ON 1980 OPERATIONS

## ATLAS COPCO GROUP

	1980	1979
Invoicing to end customers . . . . .	6 227	5 305
Income after financial items . . . . .	442	334

Total invoiced sales of the Atlas Copco Group to its end customers in 1980 amounted to SEK 6 227 m., an increase of 17 percent over 1979 invoicing of SEK 5 305 m. The volume of goods sold was approximately 7 percent higher than in 1979. Invoicing outside Sweden accounted for 91 percent of the total. Order bookings rose 17 percent, to SEK 6 448 m., compared with SEK 5 527 m. a year earlier.

Income of the Atlas Copco Group after financial income and expense but before appropriations and taxes amounted to SEK 442 m., or 7.1 percent of invoicing, as against SEK 334 m. in 1979.

## Market development

	1980	1979
Order bookings	6 448	5 527
Increase in value, percent . . . . .	+ 17	+ 13
Increase in volume, percent . . . . .	+ 7	+ 5

The economic upturn that began in 1979 continued during most of 1980. Growth was especially strong in Western Euro-

pean markets and in many non-European mining countries.

The volume of capital expenditures in Atlas Copco's markets increased 2 percent, on average, during the year. The Company's sales volume increased more rapidly, however, indicating larger market shares.

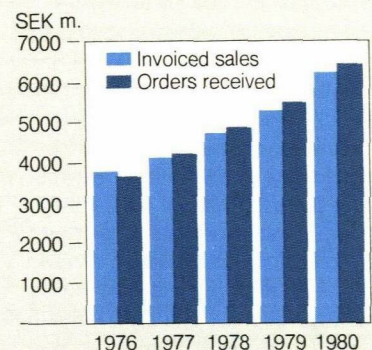
Declining industrial production in a number of markets during the second half of the year was reflected in somewhat lower order bookings during the fourth quarter. The volume of invoicing remained high throughout the year, however.

Major sales increases were noted in a number of the western European industrial countries, including Sweden, Finland, France, Italy, Portugal and West Germany. Notable markets among the non-European countries included Australia, Canada, India, Mexico, South Africa and the United States, as well as a number of South American countries.

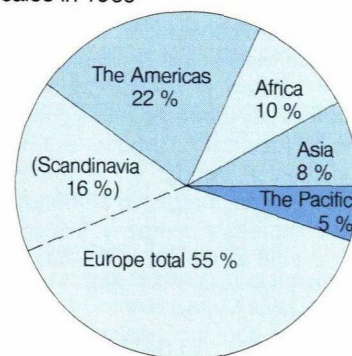
In the Swedish market, sales to both the contractors' equipment and engineering sectors developed favorably. In Italy, the medium-size companies were primarily the ones who increased their purchases. Operations in the French market were sustained by a favorable trend of investment. The sales increases in South Africa, Canada and Australia were due primarily to the strong mining economies in these countries. In Mexico the economy continued to expand as a result of rising income from oil.

Reduced demand in the controlled-economy countries was noted. In contrast, substantial success was recorded in certain north African countries, in Nigeria and in Southeast Asia.

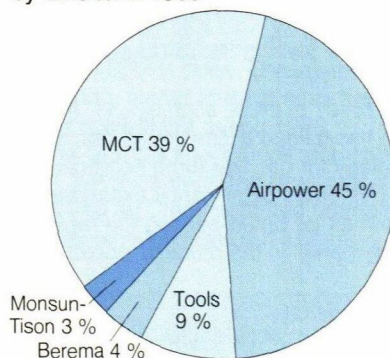
Invoiced sales and orders received



Geographic distribution of sales in 1980



Distribution of sales by division in 1980



Sundry products, mainly consisting of external products and standard spare parts for a total amount of SEK 448 m. have been distributed between the five divisions.



Many Atlas Copco sales companies have now been active for 25 years. Atlas Copco's chairman, Peter Wallenberg, right, talks to Mme Cecile Goor-Eyden (left) and M Jos. Chabert, both ministers of the Belgian Government, at the anniversary reception given by the Belgian sales company.

## Board of Directors' Report 1980

### Company acquisitions

A number of acquisitions were made in 1980.

Several companies were acquired in the U.S. The purchase of the air compressor business of Worthington Compressors, Holyoke, Mass., provided manufacturing resources and access to a comprehensive distribution network. A plant for the assembly of drilling equipment for surface operations has been added to the company, which is now known as Atlas Copco Holyoke Inc.

The acquisition of Standard Industrial Pneumatics Inc., which has specialized in automated compressed air systems for small and medium-size companies, gave Atlas Copco new sales opportunities in the small-compressor field.

Multifaceted cooperation was established with Mechanical Technology Inc. (MTI), in Latham, N.Y. Atlas Copco acquired minority interests in this company and in its subsidiary, Turbonetics Energy Inc. In addition, through the acquisition of an 80 percent interest in Turbonetics Inc., a compressor company, this company became a member of the Atlas Copco Group under the name of Atlas Copco Turbonetics Inc.

An agreement was reached with Klein, Schanzlin & Becker (KSB), a West German manufacturer of pumps and gas and air compressors, covering the acquisition of KSB's air and gas compressor plant in Saarbrücken as of January 1, 1981.

As a result of these acquisitions, Atlas Copco has gained access to advanced technology for gas and turbo compressors. This offers significantly expanded possibilities for better serving the rapidly growing market in the process industries.

### Sales companies

The emphasis on marketing through Atlas Copco's own sales companies was further developed during 1980. Sales companies, which now serve 45 countries, accounted for more than 90 percent of the Group's total invoiced sales in 1980.

About half of the value added of the Atlas Copco Group, and an equal percentage of Group income, are generated in sales companies, which also employ about half of the Group's total workforce.

A new organizational model adapted to the various business areas of the Group was introduced in a number of

### CONDENSED GROUP INCOME STATEMENT

	1980	1979
Invoiced sales	6 227	5 305
Cost of operations	- 5 428	- 4 699
Depreciation	- 124	- 101
Operating income	675	505
Net financial expense	- 233	- 171
Income after financial items	442	334
Extraordinary items	-	- 25
Appropriations	- 100	- 30
Taxes	- 222	- 129
Minority interest	- 12	- 2
Net profit	108	148

the larger sales companies during 1980. It has meant more effective customer contacts and at the same time the contact between the divisions and the corresponding marketing departments in the sales companies has been improved.

Operations in the sales companies that were established in Japan and Singapore in 1979 have gotten under way satisfactorily. In the Japanese market, the high-technology product lines in particular have attracted active customer interest.

The sales company in Iran, which maintained a low level of operations under the difficult conditions that have prevailed in recent years, was again able to increase its sales and customer service in 1980.

The political situation in Zimbabwe has made it possible for Atlas Copco to resume sales in this market through Atlas Copco Zimbabwe Ltd.

During the year it was decided to form a sales company in Hong Kong in association with the Group's former agent.

Earnings were distributed as follows, by quarters:

	1980	1979
First quarter	131	58
Second quarter	101	107
Third quarter	81	57
Fourth quarter	129	112
	442	334

Income for the first quarter of 1979 was adversely affected by delivery problems caused by the severe winter. The Swedish labor market conflict in the spring of 1980 affected income for the second quarter of the year.

The return on total capital employed, excluding non-interest-bearing current liabilities, was 16.9 percent (14.2). This improvement was attained by better utilization of capital, increased sales volume and higher utilization of capacity in both manufacturing and sales.

Profit generation in the Swedish

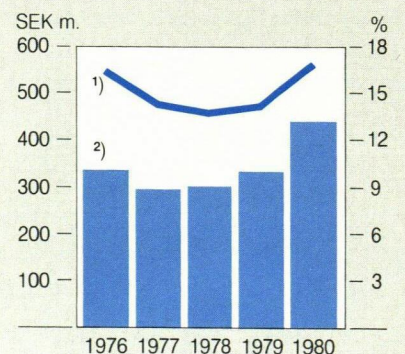
### Earnings

	1980	1979
Income as a percentage of invoiced sales	7.1	6.3
Percent return on total capital employed	16.9	14.2

For definitions, see page 14.

Group earnings after financial income and expense amounted to SEK 442 m., an increase of 32 percent.

### Earnings and return



1) Percent return on total capital employed (definitions see p. 14).

2) Group earnings after financial items, SEK m.

CONDENSED GROUP STATEMENT OF CHANGES IN FINANCIAL POSITION		
	1980	1979
Funds supplied internally	263	170
Funds supplied externally		
Change in interest-bearing liabilities	494	70
Change in other liabilities etc.	184	222
New issue of shares	—	124
Total funds supplied	941	586
Application of funds		
Investments in buildings and machinery	231	161
Increase in current assets	477	354
Other investments	29	66
Total funds applied	737	581
Change in liquid assets	204	5

manufacturing units improved, compared with the preceding year. Certain units did not show fully satisfactory earnings, however. As in 1979, the Airpower Division accounted for a substantial part of the Group's earnings.

With few exceptions, the sales companies showed improved earnings, compared with the preceding year. The Swedish sales company, as well as the companies in Australia, Brazil, France, Italy, Mexico, South Africa and West Germany recorded especially good increases. The sales companies in Switzerland, Portugal and Peru were notable among those in smaller markets that improved their earnings. The sales company in Iran, which recorded large losses during the preceding two years, was able to show a small profit in 1980.

A few markets – Great Britain, Spain and Denmark – showed weak earnings.

Exchange rate variations in relation to internal rates had a favorable impact of SEK 36 m. on total Group earnings, as against a loss of SEK 53 m. in 1979. The 1980 figure also includes unrealized exchange losses of SEK 2.5 m. on foreign loans of the Parent Company.

After allocations to inventory reserves and investment reserves totaling SEK 60 m. (30), and a statutory allocation of SEK 40 m. to the temporary profit reserve established by the Swedish Parliament, earnings before taxes were SEK 342 m. (279). The provision for taxes in 1980 was SEK 222 m. (130). The increased tax was due to the fact that the much higher production generated larger profits that were taxed at the

divisional level. Group reservations for unrealized internal profit in sales companies' inventories simultaneously reduced the Group's total earnings without a corresponding decrease in tax. After provision for taxes as described above, and after accounting for minority interest in earnings, net profit in 1980 was SEK 108 m., compared with SEK 148 m. in 1979.

### Financing

	1980	1979
Net financial expense	233	171
Degree of self-financing	101	75
Rate of risk-bearing equity capital	35.2	38.6

For definitions, see page 14.

The total financing requirements of the Atlas Copco Group in 1980 amounted to SEK 737 m., of which SEK 263 m. (170) was covered by funds supplied from operations.

Thanks to the good improvement in profits, the degree of self-financing increased. However, the larger borrowings during the year, related primarily to the company acquisitions in the U.S., resulted in a decrease in the rate of risk-bearing equity capital, from 38.6 percent to 35.2 percent.

Of the total funds supplied, amounting to SEK 941 m., SEK 231 m. (161) was used for investments in fixed assets, including SEK 55 m. for fixed assets in

newly acquired companies. SEK 468 m. (102) was used for increased inventories, which rose 22 percent, and SEK 29 m. (235) for an increase in trade receivables and notes receivable. These increased 2 percent, compared with 1979, substantially more slowly than invoicing.

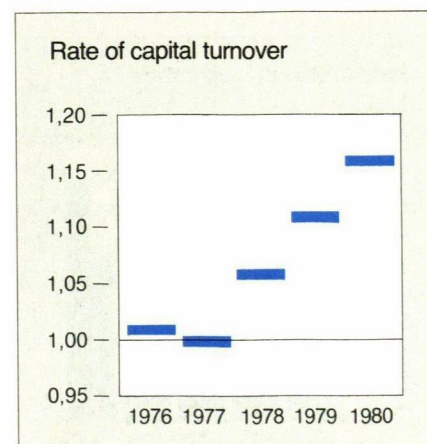
The rate of capital turnover, which is of vital importance to profitability, increased from 1.11 in 1979 to 1.16 in 1980.

To achieve, among other benefits, an improved balance of currencies within the Group, the terms of payment granted by the producing companies to the sales companies were tightened. This resulted in increased short-term borrowing by the sales companies and improved liquidity, on the part of the Divisions and the Parent Company in Sweden.

Interest-bearing liabilities rose by a total of SEK 494 m. (70), of which current interest-bearing liabilities increased by SEK 143 m. (137) and long-term interest-bearing liabilities rose by SEK 351 m., compared with a decrease of SEK 67 m. in 1979. The Parent Company's long-term loan in the amount of CHF 50 m. was repaid during the year. The Parent Company and Atlas Copco Airpower NV raised four long-term multicurrency loans in a total amount of USD 60 m., with average maturities of more than six years.

Net interest expense increased by SEK 59 m., to SEK 230 m., equal to 3.7 percent (3.2) of sales. The increase was caused by higher interest rates and the larger borrowings during 1980.

The Group's liquid funds increased by SEK 204 m., amounting at year-end to SEK 516 m. Credits granted but not utilized amounted to SEK 567 m.



For definitions, see page 14.

### Investments

	1980	1979
Investments in machinery and buildings . . . . .	231	161
Sweden . . . . .	51	42
Outside Sweden . . . . .	180	119
Total, as percent of invoiced sales . . . . .	3.7	3.0

Investments in the divisions amounted to SEK 135 m. (81), and in the sales companies to SEK 96 m. (80) during 1980. This represents an increase in the rate of investment, compared with immediately preceding years.

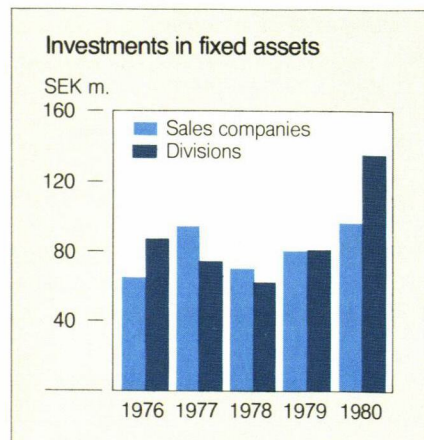
#### Investments in divisions

The acquisition of the plants in Holyoke, Mass. in the U.S. gave the Airpower Division new production resources for screw compressors. A plant for the assembly of track-mounted drilling equipment for surface operations has also been added to the Holyoke facility supplementing Atlas Copco MCT's production unit in Bremen.

The acquisitions of KSB's factory in Saarbrücken, West Germany, and of Turbonetics Inc. in the U.S. provide the Airpower Division with engineering and production resources for gas and turbo compressors.

The factories in Brazil, India and Mexico are being expanded.

Other investments in production machinery and equipment in 1980 were at about the level of 1979 investments and covered primarily the replacement of old machines by modern numerically controlled machines.



#### Investments in sales companies

Construction of a new head office building for the Swedish sales company was started. The new facility will be ready for occupancy at the end of 1981.

Notable large investment projects during the year included new service and storage facilities in Franconville, France.

The company in Chile gained new service resources through acquisition and conversion of an existing plant.

Other investments in the sales companies during the year were mainly for machinery and equipment.

### Research and development

	1980	1979
Number of employees in direct R&D work . . . . .	710	720
Investments in direct R&D work . . . . .	160	145

The acquisition of Turbonetics Inc. in the U.S. gave Atlas Copco access to the results of many years' knowledge and product development in the field of turbo technology. The minority holdings in MTI and Turbonetics Energy are also expected to yield substantial additions of knowledge in the area of energy technology.

A number of new products were introduced during 1980. These include a reflex-damped hydraulic superbreaker, a new hydraulic rock drill and small oil-free piston compressors.

Atlas Copco's water management program has been expanded. New methods of lake restoration, developed in cooperation with the University of Lund, have attracted substantial international attention.

Customer service is an important component in Atlas Copco's marketing profile. The DIALOG computer program is an interesting new development in this area. By means of this program customers can benefit from Atlas

*Dr. Marcus Wallenberg, right, presents the "Gold Cog" award to Erik Lavón for his work on the CRAC 200 water cannon for splitting rock. This award is given annually by a management group and business publication in Sweden for outstanding technical innovation.*

Copco's long experience in mining under varying conditions.

Systems specially tailored for customers are demanded increasingly in most of Atlas Copco's operating sectors. As a result, product development is taking place to an increasing extent in close cooperation with customers.

### Personnel

	1980	1979
Number of employees . . . . .	18 786	17 883
Head office . . . . .	231	227
Sales companies . . . . .	9 630	9 571
Divisions . . . . .	8 925	8 085

Group payments for salaries, wages and other remuneration were distributed as follows:

	1980	1979
Directors and senior executives . . . . .	27.5	23.1
Other employees . . . . .	1 351.5	1 146.5
	1 379.0	1 169.6

Information on the average number of employees and a specification of salaries, wages and other employee costs appears on page 17.





**PARENT COMPANY**

**Income statement**

Invoiced sales of the Parent Company amounted to SEK 441 m. (505) and pertain to sales in markets where the Group is not represented by its own sales companies.

Substantial deliveries were made to Nigeria, Saudi Arabia, Algeria and certain controlled-economy countries, among other markets.

Parent Company purchases from subsidiaries amounted to 96 percent of total purchases. The Company's invoicing involved non-Group customers exclusively.

The item "Commissions, etc. from subsidiaries" includes factoring fees which the Parent Company receives for taking over certain of the Swedish subsidiaries' receivables on the Group's sales companies.

"Other income and expense" includes unrealized exchange losses in the amount of SEK 2.5 m. pertaining to loans in foreign currencies.

All unrealized exchange losses incurred to year-end are covered, partly through the inclusion of unrealized exchange losses/gains in stated earnings on a continuing basis, and partly through the reserve for exchange losses which was set up in 1978 and which amounts to SEK 43 m.

Interest expense as a whole increased to SEK 103 m. (85), while interest received — partly from subsidiaries and partly from cash holdings — rose to SEK 45 m. (36).

The Parent Company received dividends in the amount of SEK 96 m. (87) from subsidiaries, of which SEK 12 m. (9) came from Swedish companies.

"Share in net result of non-consolidated companies" pertains to Atlas Copco's share in the Swedish Lamco Syndicate, among other holdings.

After receipt of Group contributions totaling SEK 60 m. and the allocation of SEK 37 m. to the compulsory investment reserve, the Parent Company reported a profit of SEK 124 m. (102) before taxes. After provision for taxes, stated net profit in 1980 was SEK 122 m. (101).

**Balance sheet**

During the year the shares in Jarva Inc. in the U.S. were transferred, by means of a non-cash issue of shares, to the American subsidiary Atlas Copco North America Inc. In connection with the Atlas Copco Group's acquisition of Atlas Copco Turbonetics Inc., Atlas Copco AB acquired minority interests in Mechanical Technology Inc. and in Turbonetics Energy Inc.

During the year the Parent Company raised three multicurrency loans totaling USD 40 m. with an average maturity of more than six years.

During the fall of 1980 the Parent Company effected a change in its organization that involves a division of personnel into Group staffs and Service staffs.

The objective of the new organization is to streamline the Parent Company's work relative to the operating divisions and sales companies.

The average number of employees in the Parent Company during the year was 368 (360).

Parent Company payments for salaries and other remuneration were distributed as follows:

	1980	1979
Directors and senior executives, including bonus payments of SEK 0.9 (1.1)	3.5	3.5
Other employees . . .	<u>46.6</u>	<u>42.2</u>
	50.1	45.7

**Appropriation of profit**

For information on the Company's financial position and its operations in general, reference is made to the accompanying income statement and balance sheet. The following funds are available for appropriation by the Annual General Meeting:

Unappropriated earnings from preceding year . . .	SEK	76 280 127
Net profit for the year . . . . .	SEK	<u>122 457 952</u>
	SEK	198 738 079

The Board of Directors and the Managing Director propose that these earnings be disposed of as follows:

To the shareholders, a dividend of 6.50 per share	SEK	107 616 600
To be retained in the business . . .	SEK	<u>91 121 479</u>
	SEK	198 738 079

Nacka, February 12, 1981

PETER WALLEMBERG  
Chairman

K-A BELFRAGE

JAN HELLNER

AXEL IVEROTH

BO HENNING

STURE ÖDNER

CURT G OLSSON

H N SPORBORG

ERIK JOHNSON

TOM WACHTMEISTER  
Managing Director

PER-ERIK NYHOLM

Our auditor's report relating to this annual report and the Group accounts was issued March 17, 1981

BIRGER SONESSON  
Authorized Public Accountant

BERTIL E OLSSON  
Authorized Public Accountant

# CONSOLIDATED INCOME STATEMENT

	1980		1979	
	SEK m.		SEK m.	
Invoiced sales .....		6 226.8		5 305.4
Cost of goods sold, technical development, sales, administration, etc .....		<u>-5 427.6</u>		<u>-4 699.0</u>
<b>Operating profit before depreciation</b>		<b>799.2</b>		<b>606.4</b>
Depreciation (Note 1)				
Buildings .....	24.5		23.6	
Machinery and equipment .....	85.0		74.1	
Goodwill .....	14.8	<u>- 124.3</u>	3.0	<u>- 100.7</u>
<b>Operating profit after depreciation</b>		<b>674.9</b>		<b>505.7</b>
Financial income and expense				
Interest received .....	+ 56.5		+ 40.5	
Dividends received .....	+ 0.4		+ 0.3	
Interest paid .....	-287.0		-211.2	
Share in net result of non-consolidated companies	- 2.8	<u>- 232.9</u>	- 1.1	<u>- 171.5</u>
<b>Profit after financial income and expense</b>		<b>442.0</b>		<b>334.2</b>
Extraordinary income and expense .....		<u>-</u>		<u>- 24.9</u>
<b>Profit before appropriations and taxes</b>		<b>442.0</b>		<b>309.3</b>
Appropriations				
Additional depreciation on fixed assets .....	- 6.3		- 15.5	
General inventory reserves .....	- 48.4		- 51.1	
Investment reserves .....	- 5.0		+ 15.1	
Compulsory investment reserves .....	- 40.0		-	
Change in reserve for exchange losses .....	-		+ 21.7	
Utilization of work environment and investment reserves .....	+ 4.5		+ 10.6	
Depreciation against work environment and investment reserves .....	- 4.5	<u>- 99.7</u>	- 10.6	<u>- 29.8</u>
<b>Profit before taxes</b>		<b>342.3</b>		<b>279.5</b>
Taxes (Note 2) .....		<u>- 222.1</u>		<u>- 129.6</u>
		120.2		149.9
Minority interest .....		<u>- 12.4</u>		<u>- 1.6</u>
<b>Net profit</b>		<b>107.8</b>		<b>148.3</b>

# CONSOLIDATED BALANCE SHEET

December 31

Assets	1980	1979
	SEK m.	SEK m.
<b>Current assets</b>		
Cash, bank and short term deposits (Note 3) .....	515.6	311.5
Notes receivable .....	133.4	173.6
Trade receivables .....	1 256.4	1 187.1
Prepaid expenses and accrued income .....	47.9	24.2
Other receivables .....	180.0	211.6
Inventories (Note 4) .....	<u>2 634.9</u>	<u>2 167.1</u>
<b>Blocked accounts in Bank of Sweden</b> .....	<b>5.7</b>	<b>5.9</b>
<b>Fixed assets</b>		
Shares and participations (Page 18) .....	22.6	8.2
Goodwill .....	47.8	54.2
Other investments .....	44.0	70.3
Construction work in progress .....	52.4	12.8
Machinery and equipment (Note 5) .....	245.0	203.5
Buildings (Note 6) .....	416.2	414.0
Land (Note 7) .....	<u>150.1</u>	<u>146.4</u>
<b>Total assets</b>	<b><u>5 752.0</u></b>	<b><u>4 990.4</u></b>
<b>Liabilities and shareholders' equity</b>		
<b>Current liabilities</b>		
Notes payable .....	142.6	154.8
Suppliers .....	359.8	374.9
Bank loans .....	1 046.3	903.6
Provision for taxes .....	109.7	73.4
Accrued expenses and prepaid income .....	180.1	99.2
Other current liabilities .....	<u>320.7</u>	<u>320.3</u>
<b>Long-term liabilities</b>		
Debenture and bond loans (Note 8) .....	269.8	299.2
Mortgage and other long-term loans (Note 8) .....	827.0	467.7
Provision for pensions (Note 9) .....	333.4	273.5
Other long-term liabilities .....	<u>66.4</u>	<u>44.7</u>
<b>Total liabilities</b>	<b><u>3 655.8</u></b>	<b><u>3 011.3</u></b>
<b>Untaxed reserves</b>		
General inventory reserves (Note 10) .....	364.6	316.2
Investment reserves (Note 11) .....	11.1	8.9
Work environment reserves (Note 12) .....	1.5	2.3
Special investment reserves (Note 13) .....	3.3	4.2
Compulsory investment reserves (Note 14) .....	40.0	-
Reserve for exchange losses .....	<u>43.3</u>	<u>43.3</u>
<b>Minority interest</b> .....	<b>71.5</b>	<b>50.9</b>
<b>Shareholders' equity</b>		
<b>Restricted equity</b>		
Share capital (Note 15) .....	413.9	413.9
Legal reserves (Note 16) .....	312.8	311.2
Other reserves not available for distribution (Note 17) .....	<u>389.0</u>	<u>375.1</u>
<b>Unrestricted equity</b>		
Contingency reserve .....	38.8	38.8
Retained earnings (Note 18) .....	298.6	266.0
Net profit for the year .....	<u>107.8</u>	<u>148.3</u>
<b>Total shareholders' equity</b>	<b><u>1 560.9</u></b>	<b><u>1 553.3</u></b>
<b>Total liabilities and shareholders' equity</b>	<b><u>5 752.0</u></b>	<b><u>4 990.4</u></b>
<b>Assets pledged (Note 19)</b> .....	<b>469.0</b>	<b>402.9</b>
<b>Contingent liabilities (Note 20)</b>		
Notes discounted .....	228.5	223.4
Other contingent liabilities .....	<u>322.9</u>	<u>213.2</u>

# STATEMENTS OF CHANGES IN FINANCIAL POSITION

	Atlas Copco Group		Atlas Copco AB	
	1980	1979	1980	1979
	SEK m.		SEK m.	
<b>Source of funds</b>				
<b>Internal</b>				
Profit before appropriations and taxes .....	442.0	309.3	101.8	75.3
Depreciation .....	+ 124.3	+ 100.7	+ 4.9	+ 5.2
Write-downs and write-ups .....	+ 32.3	-	-	-
Capital gain/loss on fixed assets sold .....	+ 0.2	- 23.0	-	-
Taxes .....	- 222.1	- 129.6	- 2.0	- 1.0
Minority interest in net profit .....	- 12.4	- 1.6	-	-
Withdrawals from blocked accounts .....	+ 0.2	+ 2.6	-	-
Dividend from Parent Company .....	- 99.3	- 86.9	- 99.3	- 86.9
Dividend to minority interests in subsidiaries .....	- 2.1	- 1.1	-	-
	<u>263.1</u>	<u>170.4</u>	<u>5.4</u>	<u>- 7.4</u>
<b>External</b>				
Sales of fixed assets .....	+ 17.8	+ 31.9	-	-
Change in interest-bearing liabilities .....	+ 494.3	+ 70.3	+ 32.1	+ 50.4
Change in other liabilities .....	+ 150.2	+ 195.7	+ 63.7	+ 23.9
Minority interest in shareholder's equity .....	+ 20.6	+ 2.9	-	-
New issue of shares .....	-	+ 124.1	-	+ 124.1
Change in composition of Group, etc. ....	- 4.5	- 8.9	-	-
<b>Total funds supplied</b>	<u>941.5</u>	<u>586.4</u>	<u>101.2</u>	<u>191.0</u>
<b>Application of funds</b>				
Investments in property, plant and equipment .....	230.5	161.4	13.0	5.6
Investments in other fixed assets .....	20.5	9.0	57.6	73.1
Goodwill acquired .....	8.4	56.5	-	-
Increase in inventories .....	467.8	101.5	28.3	- 9.6
Increase in current receivables .....	10.2	252.5	- 164.9	144.2
<b>Total funds applied</b>	<u>737.4</u>	<u>580.9</u>	<u>- 66.0</u>	<u>213.3</u>
Change in liquid funds .....	+ 204.1	+ 5.5	+ 167.2	- 22.3

# INCOME STATEMENT

	1980		1979	
	SEK m.		SEK m.	
<b>Operating income</b>				
Invoiced sales .....	440.9		505.2	
Commissions, etc from subsidiaries .....	132.8		132.3	
Interest received from subsidiaries .....	23.3		18.3	
Interest paid to subsidiaries .....	- 10.5		- 13.5	
Dividends received from subsidiaries .....	96.5		86.9	
Other income and expense .....	+ 2.4	685.4	- 13.3	715.9
<b>Operating expense</b>				
Cost of goods sold, technical development, sales, administration, etc .....		-505.7		-558.7
<b>Operating profit before depreciation</b>		179.7		157.2
<b>Depreciation (Note 1)</b>				
Buildings .....	2.2		2.2	
Machinery and equipment .....	2.7	- 4.9	3.0	- 5.2
<b>Operating profit after depreciation</b>		174.8		152.0
<b>Financial income and expense</b>				
Interest received (excluding subsidiaries) .....	+ 21.6		+ 17.2	
Dividends received (excluding subsidiaries) .....	+ 0.4		+ 0.3	
Interest paid (excluding subsidiaries) .....	- 92.2		- 71.4	
Share in net result of non-consolidated companies .....	- 2.8	- 73.0	- 1.1	- 55.0
<b>Profit after financial income and expense</b>		101.8		97.0
<b>Extraordinary expense</b> .....		-		- 21.7
<b>Profit before appropriations and taxes</b>		101.8		75.3
<b>Appropriations</b>				
Intra-group transfers .....	+ 60.0		+ 5.0	
Compulsory investment reserve .....	- 37.3		-	
Change in reserve for exchange losses .....	-	+ 22.7	+ 21.7	+ 26.7
<b>Profit before taxes</b>		124.5		102.0
<b>Taxes</b> .....		- 2.0		- 1.0
<b>Net profit</b>		122.5		101.0

**BALANCE SHEET**

December 31

Assets	1980	1979
	SEK m.	SEK m.
<b>Current assets</b>		
Cash, bank and short term deposits ( <i>Note 3</i> ) . . . . .	272.7	105.5
Notes receivable . . . . .	36.7	48.8
Receivables from subsidiaries . . . . .	414.9	527.2
Trade receivables . . . . .	188.2	208.3
Prepaid expenses and accrued income . . . . .	13.9	8.2
Other receivables . . . . .	5.8	11.9
Inventories . . . . .	62.7	34.4
	<u>994.9</u>	<u>944.3</u>
<b>Blocked accounts in Bank of Sweden</b>		
Work environment reserve . . . . .	1.2	1.2
Special investment reserve . . . . .	2.0	2.0
	<u>3.2</u>	<u>3.2</u>
<b>Fixed assets</b>		
Shares in subsidiaries ( <i>Page 18</i> ) . . . . .	588.4	576.6
Shares in other companies ( <i>Page 18</i> ) . . . . .	22.6	8.2
Notes receivable . . . . .	3.8	7.2
Long-term receivables from subsidiaries . . . . .	87.2	57.0
Other long-term receivables . . . . .	51.6	47.0
Construction work in progress . . . . .	11.1	0.1
Machinery and equipment ( <i>Note 5</i> ) . . . . .	5.0	6.0
Buildings ( <i>Note 6</i> ) . . . . .	36.5	38.3
Land ( <i>Note 7</i> ) . . . . .	47.0	47.1
	<u>853.2</u>	<u>787.5</u>
<b>Total assets</b>	<u>1 851.3</u>	<u>1 735.0</u>

Atlas Copco AB

Liabilities and shareholders' equity	1980	1979
	SEK m.	SEK m.
<b>Current liabilities</b>		
Liabilities to subsidiaries .....	139.6	123.4
Suppliers .....	7.2	7.9
Provision for taxes .....	2.4	1.1
Accrued expenses and prepaid income .....	22.5	29.3
Other current liabilities .....	<u>39.5</u>	<u>171.5</u>
	211.2	333.2
<b>Long-term liabilities</b>		
Debenture loan (Note 8) .....	3.7	7.1
Bond loans (Note 8) .....	266.1	292.1
Mortgage and other long-term loans (Note 8) .....	334.9	142.6
Provision for pensions, PRI .....	85.4	75.3
Provision for pensions, other .....	<u>14.7</u>	<u>9.9</u>
	704.8	527.0
<b>Total liabilities</b>	<u>916.0</u>	<u>860.2</u>
<b>Untaxed reserves</b>		
Work environment reserve (Note 12) .....	1.2	1.2
Special investment reserve (Note 13) .....	2.0	2.0
Compulsory investment reserve (Note 14) .....	37.3	—
Reserve for exchange losses .....	<u>43.3</u>	<u>43.3</u>
	83.8	46.5
<b>Shareholders' equity</b>		
<b>Restricted equity</b>		
Share capital (16 556 400 shares nom. value SEK 25) (Note 15) .....	413.9	413.9
Legal reserve (Note 16) .....	<u>226.3</u>	<u>226.3</u>
	640.2	640.2
<b>Unrestricted equity</b>		
Contingency reserve .....	12.5	12.5
Retained earnings (Note 18) .....	76.3	74.6
Net profit for the year .....	<u>122.5</u>	<u>101.0</u>
	211.3	188.1
<b>Total shareholders' equity</b>	<u>851.5</u>	<u>828.3</u>
<b>Total liabilities and shareholders' equity</b>	<u>1 851.3</u>	<u>1 735.0</u>
<b>Assets pledged (Note 19)</b>		
Real estate mortgages .....	32.3	32.3
Trade mortgages .....	98.4	48.3
<b>Contingent liabilities (Note 20)</b>		
Notes discounted .....	8.7	—
Guarantees and other liabilities of which 522.3 (545.4) on behalf of subsidiaries .....	599.2	608.2
Capital value of pension obligation .....	26.6	20.4

# NOTES TO FINANCIAL STATEMENTS

## Accounting principles

(SEK millions unless otherwise noted)

### *Principles of consolidation*

The consolidated accounts of the Atlas Copco Group cover all companies in which the Parent Company, directly or indirectly, owns at least 50 percent of the shares and those companies in which the Group in some other way exercises decisive influence.

The balance sheet has been prepared in accordance with the purchase method, whereby the equity in acquired companies at the date of their acquisition, with the addition of subsequent new issues of shares, has been eliminated against the book value of the shares.

Differences between purchase value of subsidiaries' shares and equity at the time of acquisition have mainly been entered under goodwill. Excess value in the Group at year-end amounted to SEK 58.6 m., compared with SEK 62.9 m. a year earlier. This excess value has been distributed under the following headings in the balance sheet: buildings, SEK 7.8 m., machinery and equipment, SEK 3.0 m., and goodwill, SEK 47.8 m. The goodwill item pertains mainly to patents, manufacturing rights and know-how. Total depreciation of the excess value in 1980 amounted to SEK 15.8 m. See Note 1.

Companies acquired during the year have been included in the consolidated income statement from their respective acquisition dates.

The share capital of established subsidiaries has been eliminated against the book value of these shares in the Parent Company. Differences due to bonus issues in subsidiaries have been allocated to the Group's restricted equity.

### *Translation of foreign currencies*

The balance sheets of foreign subsidiaries have been translated to Swedish kronor in accordance with the monetary/non-monetary method. Real property (land and buildings), machinery and equipment, inventory and equity have been translated at the exchange rates at date of acquisition.

Other items in the balance sheet have been translated at year-end exchange rates.

The income statements have been translated at the average exchange rates during the year, except for depreciation, which has been translated at the exchange rate of the corresponding asset.

The translation differences arising from the use of different exchange rates have been credited to operating profit for the year in an amount of SEK 0.2 m.

As stated above, receivables and liabilities in foreign currency have been translated at year-end exchange rates. However, in those cases where forward contracts have been secured, the forward rate has been used.

A reserve for exchange losses amounting to SEK 65 m. was created in 1978 to cover the unrealized exchange losses on Parent Company long-term loans prior to 1978. At the same time the method of allocating the unrealized exchange losses over the remaining period of the loan was abandoned and the current period's losses were

charged in their entirety to profits for the year. To the extent that the unrealized exchange losses covered by the reserve of 1978 are realized, in connection with repayment of the loans concerned, this reserve will be liquidated and a corresponding amount will be charged against profit as an extraordinary expense.

## Definitions

### *Return on total capital employed*

Profit after financial income and expense plus interest paid as a percentage of average total assets less non-interest-bearing current liabilities.

### *Return on risk-bearing equity capital*

Profit after financial income and expense less a standard tax deduction (50 percent) and minority interest as a percentage of average shareholders' equity and untaxed reserves.

### *Return on shareholders' equity*

Profit after financial income and expense less a standard tax deduction (50 percent) and minority interest as a percentage of average shareholders' equity and 50 percent of untaxed reserves (deduction for latent tax liability).

### *Rate of risk-bearing equity capital*

Risk-bearing equity capital, as defined above, as a percentage of total assets.

### *Degree of self-financing*

Funds generated internally as a percentage of investments in total fixed assets.

### *Rate of capital turnover*

Invoiced sales divided by average total assets.

## Effects of inflation

Traditional accounting provides a picture of the Group's operating results and financial position that is incomplete in certain respects during periods in which there are sharp price changes, such as those that have occurred during 1980 in many of the countries where Atlas Copco operates. Accordingly, certain of the effects on Group earnings resulting from changes in monetary values should be noted.

The first step towards a measurement of results that is unaffected by changes in monetary values is the use of estimated depreciation on machinery and buildings. This means that the depreciation is based on the estimated replacement cost of the asset, rather than historical cost. Total estimated depreciation for the Atlas Copco Group in 1980 amounted to SEK 173 m. (133), as against ordinary cost depreciation totaling SEK 110 m. (98).

Group operating income includes profits of approximately SEK 100 m. (approx. 75) referable to price gains on inventory held at the beginning of the fiscal year and sold during the year. These realized profits are an effect of general price increases, or of increases that are specific to



## NOTES TO FINANCIAL STATEMENTS

certain industries, that occurred during the year which thereby permitted the sale of goods in inventory at higher prices.

Another effect of inflation is the change in buying power that arises with respect to so-called monetary assets and liabilities. With rising prices, increasingly less buying power is required to pay a company's debts, while the value of cash and customer receivables declines. During 1980 the Atlas Copco Group's liabilities (short- and long-term) exceeded its monetary assets, on an average, by approximately SEK 1.4 billion. Taking into account the specific net liability of each Atlas Copco Group company and the inflation prevailing in the respective country, this total monetary net liability gives an "inflationary profit" for the Atlas Copco Group during the year of approximately SEK 150 m. This amount is consequently not shown in the earnings reported in the income statements or balance sheets.

The monetary assets of the Brazilian subsidiary have been excluded in the calculation, as the effect of inflation has already been charged against earnings in accordance with the laws applicable in Brazil.

### 1. Depreciation

Normal depreciation has, in general, been taken in the highest amounts allowable under tax law in the respective countries and corresponds closely with cost depreciation based on the following rates: machinery and equipment, 7 to 10 percent; vehicles, 20 percent; and buildings, 2 to 4 percent.

Excess value depreciation for the Group amounts to SEK 15.8 m. and relates to the following assets:

	Group	
	1980	1979
Machinery and equipment	0.6	1.0
Buildings	0.4	0.4
Goodwill	14.8	3.0
	15.8	4.4

Estimated depreciation, which is based on the replacement value of the assets, amounted to SEK 173 m. for the Group, compared with SEK 133 m. a year earlier, and thus exceeded normal depreciation by SEK 63 m. in 1980 and SEK 35 m. in 1979.

Additional depreciation which is included among appropriations refers to subsidiaries in countries, where accelerated depreciation on new investments may be applied.

In addition to normal depreciation, depreciation was charged against the following reserves:

	Group	
	1980	1979
Investment reserves (See Note 11)	2.8	8.6
Work environment reserves (See Note 12)	0.8	2.0
Special investment reserves (See Note 13)	0.9	—
	4.5	10.6

### 2. Taxes

Consolidated net profit has been arrived at after deducting taxes thereon, including coupon taxes on profits earned outside Sweden which have been distributed to the respective parent companies.

### 3. Cash, bank and short-term deposits

	Group		Parent Company	
	1980	1979	1980	1979
Liquid funds	436.9	311.5	228.7	105.5
Other short-term deposits	78.7	—	44.0	—
	515.6	311.5	272.7	105.5

### 4. Inventories

Inventories have been valued at the lower of cost or market value, generally in accordance with the first-in/first-out method, after depreciation for obsolescence.

The main flow of inventory within the Group is from the divisions to the Group's sales companies which, in turn, sell to the final customer. The internal profit arising from intra-Group transactions has been eliminated in the consolidated accounts. Internal pricing between companies is based as far as possible on comparable market prices.

Group inventories at December 31, 1980 were distributed as follows:

	1980	1979
Raw materials	118.2	82.6
Products under manufacture	288.4	235.7
Semi-finished goods	554.4	432.9
Finished goods	1 673.9	1 415.9
	2 634.9	2 167.1

### 5. Machinery and equipment

	Group		Parent Company	
	1980	1979	1980	1979
Cost	920.1	794.8	39.3	37.9
Accumulated depreciation	675.1	591.3	34.3	31.9
Book value	245.0	203.5	5.0	6.0

### 6. Buildings

	Group		Parent Company	
	1980	1979	1980	1979
Cost	675.0	649.3	79.0	78.7
Write-up	10.0	10.0	—	—
Accumulated depreciation	268.8	245.3	42.5	40.4
Book value	416.2	414.0	36.5	38.3
Tax value			63.5	63.5

Group figures include a write-up of SEK 10 m. in connection with bonus issue in a subsidiary. Depreciation of this amount began in 1980.

## NOTES TO FINANCIAL STATEMENTS

### 7. Land

	Group		Parent Company	
	1980	1979	1980	1979
Cost .....	115.1	111.4	27.0	27.1
Write-ups .....	35.0	35.0	20.0	20.0
Book value .....	150.1	146.4	47.0	47.1
Tax value .....			50.7	50.7

A write-up of SEK 20 m. was made in connection with the 1973 issue of shares in the Parent Company. The value shown for the Group also includes a write-up of SEK 15 m. in connection with issue of bonus shares in a subsidiary.

### 8. Long-term loans

	1980
<i>Debenture loan</i>	
Parent Company	
1967 7 1/2 % loan in the amount of SEK 35 m., amortization period 1968–1982 .....	3.7
1981 maturity paid in 1980 .....	—
Parent Company and Group debenture loan as shown in balance sheet .....	3.7

Debenture loan interest expense in 1980 was SEK 0.5 m.

#### *Bond loans*

Parent Company	
1963 4 3/4 % loan, SEK 15 m., amortization period 1964–1983 .....	3.2
1970 9 1/2 % loan, USD 20 m., amortization period 1971–1985 .....	35.7
1976 7 3/4 % loan, CHF 80 m., amortization period 1981–1991 .....	154.7
1978 10 1/4 % loan, SEK 100 m., amortization period 1979–1993 .....	86.6
Less: 1981 maturities .....	-14.1
Bond loans of the Parent Company and Group, as shown in balance sheets .....	266.1

Interest expense for bond loans in 1980 amounted to SEK 28.8 m.

#### *Mortgage and other long-term loans*

Parent Company	
1978 multicurrency loan, USD 20 m. ....	87.4
1979 loan, USD 10 m. ....	43.7
1979 multicurrency loan, USD 0.7 m. ....	3.0
1980 multicurrency loan, USD 20 m. ....	87.4
1980 multicurrency loan, USD 10 m. ....	43.7
1980 multicurrency loan, USD 13.4 m. ....	58.6
National Pensions Fund loan .....	11.4
Other mortgage and long-term loans .....	1.7
Less: 1981 maturities .....	-2.0
Parent Company mortgage and other long-term loans, as shown in balance sheet .....	334.9
1980 interest expense for Parent Company mortgage and other long-term loans amounted to SEK 36.9 m.	

#### Subsidiaries

Atlas Copco MCT .....	62.2
Atlas Copco Airpower .....	116.6
Atlas Copco Tools .....	33.3
Berema .....	34.0
Monsun-Tison .....	13.2
Other subsidiaries .....	306.7
Less: 1981 maturities .....	-73.9
	827.0

### 9. Provision for pensions

This item pertains mainly to the Swedish companies and corresponds to the actuarially calculated amount of pension obligations under the negotiated supplementary pension plan in excess of the National Supplementary Pension Plan.

### 10. General inventory reserves

Allocations to these reserves are made principally in the Group's Scandinavian companies. Swedish legislation permits a write-down of a maximum of 60 percent of the value of inventory after a general deduction for obsolescence.

	Group
General inventory reserves, December 31, 1979	316.2
Allocation to inventory reserves .....	60.0
Liquidation of inventory reserves .....	-11.6

General inventory reserves, December 31, 1980 364.6  
Unutilized rights for allocations to inventory reserves in the Swedish companies amount to SEK 140 m.

### 11. Investment reserves

Swedish companies have the option of setting aside 50 percent of their profits before appropriations and taxes to investment reserves. This requires that 50 percent of the amount allocated be deposited in an interest-free account in the Bank of Sweden. Subject to special permission from Government authorities, the investment reserve may be used for the direct write-down of fixed assets.

### 12. Work environment reserves

In accordance with a temporary law adopted in 1974, Swedish companies were obliged to allocate 20 percent of their profits before appropriations and taxes to a work environment reserve.

### 13. Special investment reserves

In addition to allocations to a work environment reserve, Swedish companies were in 1974 required to allocate 15 percent of their profits before appropriations and taxes to a special investment reserve.

### 14. Compulsory investment reserves

Swedish companies reporting a profit before certain appropriations and taxes for 1980 exceeding SEK 1.0 m. are required to allocate 25 percent of this profit to a special compulsory investment reserve.

## NOTES TO FINANCIAL STATEMENTS

### 15. Share capital increases 1965–1980

	Increase in share paid in capital	Amount paid in capital
1971 Bonus issue 1 for 10	11.5	–
New issue 1 for 10 ... SEK 100	11.5	46.0
1973 Bonus issue 1 for 2	69.0	–
1974 New issue 1 for 4 ... SEK 25	51.7	51.7
1976 New issue 1 for 5 ... SEK 50	51.7	103.5
1979 Bonus issue 1 for 6	51.7	–
New issue 1 for 6 ... SEK 60	51.7	124.1

### 16. Legal reserves

	Group	Parent Company
December 31, 1979	311.2	226.3
Transferred from retained earnings	1.6	–
Legal reserves		
December 31, 1980	312.8	226.3

### 17. Other reserves not available for distribution

	Group	Parent Company
December 31, 1979	375.1	–
Transferred from retained earnings	7.3	–
Reclassifications, etc., net	6.6	–
Other reserves not available for distribution,		
December 31, 1980	389.0	–

The reserves consist mainly of profits transferred to the share capital of subsidiaries.

### 18. Retained earnings

	Group	Parent Company
December 31, 1979	266.0	74.6
1979 net profit	148.3	101.0
Dividends paid	–101.4	–99.3
Transferred to legal reserves	– 1.6	–
Transferred to other reserves not available for distribution	– 7.3	–
Reclassifications, etc., net	– 5.4	–
Retained earnings,		
December 31, 1980	298.6	76.3

In evaluating the Atlas Copco Group's retained earnings and profit for the year it should be noted that a substantial portion was earned in companies outside Sweden, from which the transfer of profit to the Parent Company is in certain cases subject to taxes or restrictions.

### 19. Assets pledged

	Group		Parent Company	
	1980	1979	1980	1979
Real estate mortgages	269.6	265.3	32.3	32.3
Trade mortgages	179.9	111.3	98.4	48.3
Other assets pledged	19.5	26.3	–	–
	469.0	402.9	130.7	80.6

### 20. Contingent liabilities

In addition to the contingent liabilities shown, Atlas Copco AB participates as a partner with unlimited liability in guarantees of USD 19.8 m. pledged by the Swedish Lamco Syndicate, Gränges AB & Co. In accordance with the commercial agreement, Atlas Copco AB's share of these guarantees are USD 4.8 m.

### 21. Personnel data, Atlas Copco Group Average number of employees\*)

	1980		1979	
<b>Sweden</b>				
Headquarters	231		227	
Divisions	4 864		4 556	
Sales companies	818	5 913	800	5 583
<b>Outside Sweden</b>				
Divisions	4 061		3 529	
Sales companies	8 812	12 873	8 771	12 300
<b>Total</b>	18 786		17 883	

\*) The average number of employees in Sweden has been calculated in accordance with the principles established for reporting to the National Social Insurance Board.

### Wages, salaries and other employee costs

	1980		1979	
	SEK m.		SEK m.	
<b>Sweden</b>				
Headquarters	66.5		53.2	
Divisions	525.9		449.2	
Sales companies	104.4	696.8	91.8	594.2
<b>Outside Sweden</b>				
Divisions	450.5		356.7	
Sales companies	757.9	1 208.4	652.9	1 009.6
<b>Total</b>	1 905.2		1 603.8	

A detailed presentation showing the average number of employees and wages, salaries and other remuneration paid, prepared in conformity with the Swedish Companies Act, is included in the Annual Report filed with the National Patent & Registration Office in Sweden.

## SHARES AND PARTICIPATIONS

December 31, 1980

	Number of shares	Per- cent held	Par value loc cur	Book value SEK m.		Number of shares	Per- cent held	Par value loc cur	Book value SEK m.
<b>Divisions</b>									
Atlas Copco MCT AB	300 000	100	100	30.0	Atlas Copco Gade- lius KK, Tokyo	150 000	60	1 000	7.0
Atlas Copco Tools AB	100 000	100	100	10.0	Atlas Copco (HK) Ltd., Hong Kong	3 000	80	1 000	2.1
Berema AB	20 000	100	1 000	39.2	<b>Other subsidiaries</b>				
Monsun-Tison AB	140 000	100	100	32.9	Atlas Copco ABEM AB	15 000	100	100	1.5
Atlas Copco Airpower N.V., Belgium	119 000	99	1)	125.0	Terratest AB	40 000	100	100	—
<b>Sales companies</b>					Atlas Copco Andina S.A., Bolivia	18 713	50 <sup>2)</sup>	1 000	3.7
Atlas Copco Svenska Försäljnings AB	200 000	100	100	20.0	Copco Nueva Montaña S.A., Spain	29 999	50	1 000	—
Atlas Copco Belgium S.A.	99 998	100	1 000	10.0	Terratest S.A., Spain	75 000	100	800	—
Atlas Copco (Cyprus) Ltd.	99 998	100	1	0.7	Atlas Copco UK Holdings Ltd.	3 623 664	100	1	32.6
Atlas Copco A/S, Copenhagen	12 000	100	1 000	6.9	Atlas Copco Industrial S.A., Spain	95	50 <sup>2)</sup>	10 000	—
Atlas Copco France S.A.	79 960	100	500	35.2	Institut CERAC S.A., Switzerland	1 995	100	1 000	2.4
Atlas Copco Nederland b.v.	10 000	100	1 000	13.0	AB Sicklahus	2 000	100	100	0.2
Atlas Copco Italia S.p.A.	539 998	100	10 000	28.2	Atlas Copco Data AB	125	25 <sup>2)</sup>	100	—
Atlas Copco A/S, Oslo	3 998	100	10 000	16.6	10 dormant companies	—	—	—	0.3
Atlas Copco (Schweiz) A.G.	7 975	100	1 000	12.2					<b>588.4</b>
Atlas Copco S.A.E., Madrid	197 000	99 <sup>2)</sup>	500	3.7	<b>Other companies</b>				
Atlas Copco Deutschland G.m.b.H.	9	95	1)	40.5	Atlas Copco Finans AB	24 000	40	100	2.2
Atlas Copco Ges.m.b.H., Vienna	29 990	100	1 000	5.0	Mechanical Technology Inc.	140 000	5	1	9.8
Atlas Copco North America Inc., Wayne, N. J.	3 675	50 <sup>2)</sup>	1)	77.2	Turbonetics Energy Inc.	200	20	1	3.8
Atlas Copco (Philippines) Inc.	121 995	100	100	3.0	The Swedish Lamco Syndicate	9/28 of the capital	32	—	0.7
Atlas Copco Brasil Ltda.	1 249 999 832	100	1)	20.0	Gränges AB & Co.				
Atlas Copco Venezuela S.A.	3 599	60	1 000	3.5	The Liberian American- Swedish Minerals Co., Series A pref. shares	2 722.5		100	1.5
Atlas Copco Boliviana S.A.	5 498	100	1 000	2.1	Handelsbolaget Svenska Dagbladets AB & Co	100	2	1 000	0.1
Atlas Copco Ecuatoriana S.A., Quito	3 000	60	1 000	0.6	Svensk Interkontinen- tal Lufttrafik AB (SILA)	16 920	2	100	0.7
Atlas Copco Iran AB, Nacka (Stockholm)	3 500	100	100	0.3	AB Stadsfastigheter	6	0	1 000	—
Atlas Copco Hellas A.E., Athens	6 400	97 <sup>2)</sup>	10 000	—	AB SUKAB	40	0	100	—
Soc. Atlas Copco de Portugal Lda.	1	100	1)	—	Cockerill-Ougree-Pro- vidence et Espérance- Longdoz, Liège	1 420	0	1)	0.2
Atlas Copco Maroc S.A.	940	50	1 500	—	ADELA Investment Co. S.A., Luxembourg	3 640	0	100	1.7
Atlas Copco Ticaret ve Sanayi T.A.S., Istanbul	1 130	100	500	—	SIFIDA Investment Co. S.A., Luxembourg	25	1	5 000	0.6
Atlas Copco (India) Ltd.	964 000	40	10	—	Casa de Suecia S.A., Madrid	90	0	5 000	0.1
Atlas Copco Argentina S.A.C.I.	1 500 000 000	100	1	1.0	Employment Conditions Abroad Ltd.	100	2	1	—
Atlas Copco Chilena S.A.C.	9 154	100	1 000	—	Näringslivets Utbildnings AB	170	8	1 000	0.2
Atlas Copco Colombiana Ltda.	190	100	100	—	Bilspedition AB	8 000	1	100	1.0
Terratest S.A. de Servi- cios, Buenos Aires	22 800	100	10	—	Tekniska Röntgen- centralen AB	24	0	500	—
Craelius Terratest Peruana S.A.	528	100	10 000	—					<b>22.6</b>
Atlas Copco Kenya Ltd.	14 999	100	100	—					
Atlas Copco (South- East Asia) Pte. Ltd., Singapore	1 500 002	100	0.3	1.8					

1) No par value

2) Remaining holding owned by other Group companies

# AUDITORS' REPORT

We have examined the Annual Report, the Group accounts, the financial statements and the administration of the Company by the Board of Directors and the Managing Director for the year 1980. Our examination was carried out in accordance with generally accepted auditing standards.

The accounts have been examined on a test basis by Bohlins Revisionsbyrå AB.

#### Parent Company

The Annual Report has been prepared in accordance with the Swedish Companies Act.

We recommend:

that the income statement and balance sheet be adopted,

that the net profit of the year be disposed of in accordance with the proposal in the Board of Directors' report, and

that members of the Board of Directors and the Managing Director be granted discharge of responsibility for the year 1980.

#### Group

The Group accounts have been prepared in accordance with the Swedish Companies Act.

We recommend that the consolidated income statement and the consolidated balance sheet be adopted.

Stockholm, March 17, 1981.

BIRGER SONESSON  
Authorized Public Accountant

BERTIL E OLSSON  
Authorized Public Accountant

# ATLAS COPCO SHARES

## Dividend policy

Dividend per share during the financial years 1974 to 1979 has increased by an average of 8.4 percent per year. The average annual increase over the most recent ten year period was 13.1 percent. In Sweden, the average annual decrease in the value of money was 9.7 percent for the five year period and 8.5 percent for the ten year period.

The Board of Directors' intent is that shareholders should receive a reasonable share of Atlas Copco Group's profit improvement. In this respect the goal is, also in the future, to cover the major portion of dividends paid with dividend income from foreign subsidiaries.

## Data per share

	1976	1977	1978	1979	1980
Earnings <sup>1)</sup> .....	11.98	9.39	9.67	9.99	12.60
Dividend .....	4.96	4.96	5.79	6.00	6.50 <sup>2)</sup>
Highest stock market price ..	151	129	117	98	85
Lowest stock market price ..	111	74	88	68	60
Average stock market price ..	135	101	100	78	70
Direct yield <sup>3)</sup> .....	3.7	4.9	5.8	7.7	9.3
Price/earnings ratio <sup>4)</sup> .....	11.3	10.7	10.4	7.8	5.6

For comparison between years, figures have been adjusted to reflect new issues of shares.

<sup>1)</sup> Profit after financial income and expense less a deduction for calculated tax of 50 percent divided by the number of shares.

<sup>2)</sup> In accordance with Board of Directors' proposal.

<sup>3)</sup> Dividend as percent of average stock market price during year.

<sup>4)</sup> Average stock market price during year in relation to earnings per share as defined in note 1.

## Who owns Atlas Copco?

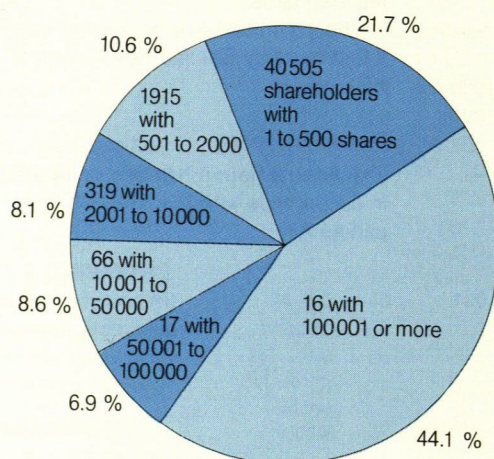
### The largest shareholders

The share capital of Atlas Copco, SEK 413.9 m., consists of 16 556 400 shares, each with a par value of SEK 25. All shares outstanding are unrestricted, representing one vote each. There were 43 000 shareholders as of August 1980, the largest of whom are shown in the following table:

	Number of shares	Percent of total
1. Förvaltnings AB Providentia .....	2 112 257	12.76
2. Swedish Staff Pension Society .....	879 895	5.31
3. AB Investor .....	800 000	4.83
4. General Pension Plan, Fourth Board ..	778 234	4.70
5. Livförsäkrings AB Skandia .....	571 963	3.45
6. Trygg Ömsesidig Livförsäkring .....	375 000	2.26
7. Försäkrings AB Skandia .....	255 857	1.55
8. Skandinaviska Banken Pension Fund ..	250 000	1.51
9. Folksam Ömsesidig Sakförsäkring ..	221 000	1.33
10. AB Industrivärden .....	207 000	1.25

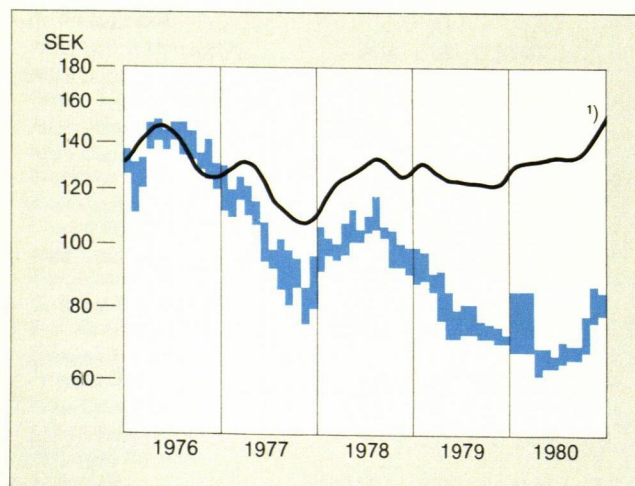
## Ownership structure

The area within the circle represents the total number of shares. Each sector shows the various shareholders' portion of the Company's share capital.



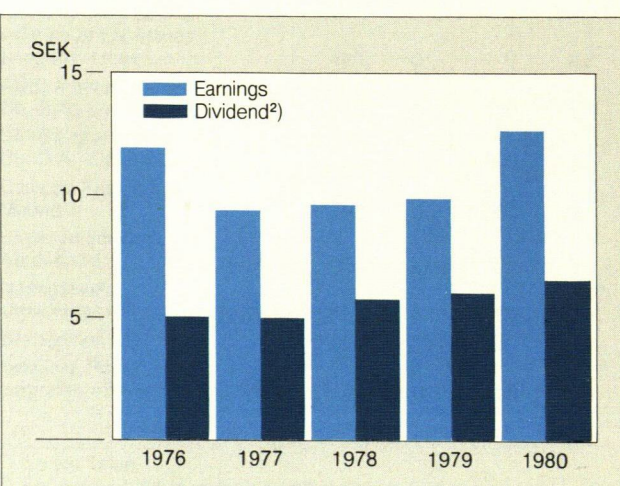
In addition to being listed on the Stockholm Stock Exchange, Atlas Copco AB shares are also listed on the exchanges in Frankfurt am Main, Düsseldorf and Hamburg.

## Trend of stock exchange prices



<sup>1)</sup> General index

## Earnings and dividend per share



<sup>2)</sup> Dividend for 1980 in accordance with Board of Directors' proposal.

# A SIGNIFICANT YEAR

It is with great pleasure that I note that our forecasts and plans for 1980 held up rather well. Thanks to the great efforts made throughout the Group, and to our successes in the sales area, we even achieved somewhat higher invoicing than had been expected during the second half of the year despite the fact that the world economy, as anticipated, weakened at the same time towards year-end.

We are certainly feeling the recession in some areas but to date we have succeeded in compensating for this through increases in others. As a result of our geographical spread and a wide technology base, we are serving so many different branches of industry that we have good prospects of managing this balancing act. Company acquisitions, the restructuring of production, new organizational patterns and investments in marketing during 1980 were additional factors that helped give us a broadened base from which to operate. These changes have all contributed to making 1980 a significant year in Atlas Copco's development.

## Confidence in the Company

It is also gratifying at this time to be able to note the expression of confidence in the Company that the employees' strong support of Atlas Copco's share savings program represents. Spreading the share ownership in this manner provides many active points of contact between the Company and its employees, which is something the management welcomes warmly. Atlas Copco shares are already spread among 43 000 shareholders, more than twice the total number of employees in the Group. Adding those who are "indirect" shareholders as a result of having interests in investment companies, insurance companies and pension funds, the number of persons with ownership interests in Atlas Copco is probably many times larger.

## Development stage with interesting opportunities

As a Company, we are in an active development stage at a time when the world around us is struggling with difficult financial and political problems. Under certain conditions, however, this situation can offer Atlas Copco very interesting opportunities in the years immediately ahead.

Energy problems will remain an uncertain and restrictive factor in the next few years. This also means, however, that substantial efforts will be made to develop alternative sources of energy and new methods of saving it. Atlas Copco has opportunities to participate in this work with technology and products.

The Southern Hemisphere and East Asia are already in a stage of rapid development which should continue throughout the Eighties, provided that the political balance between power blocs does not deteriorate again.

Atlas Copco and many other Swedish companies are today prepared to participate in this development. Projects often become gigantic, however, and international consortia battle for the contracts. In certain cases, the financing and the risk involved may then become considerable.

## Risks and opportunities

Risk-taking requires good profitability. We have previously stated that minimum good profitability can be defined as a return on capital employed that exceeds the inflation factor by 5 percent. In the case of Sweden in 1980, this would have required a return of between 18 and 19 percent. Only a few Swedish companies reached that goal. Atlas Copco suc-



ceeded in achieving a return of 16.9 percent, which is good under the circumstances.

Unfortunately, it is still a fact that unnecessary trade barriers are created for Swedish companies. South Africa and Latin America are currently attracting great interest in some circles. A less prejudiced view of the true facts would be helpful in creating greater understanding of the conditions facing companies that operate internationally.

Swedish official aid to certain developing countries is substantial. The Government's cooperation with the export industry has increased but could be even better. The continuing cooperation of private companies with the developing countries is the best guarantee for development. Support for risk-taking of this type is a rational form of aid to developing countries.

## Outlook for 1981

In terms of the general economy, 1981 can be expected to be a difficult year. Despite this, I consider the opportunities for Atlas Copco to be good. Our efforts during 1981 will, among other things, be directed towards aggressive programs wherever possible, with a high degree of preparedness to reduce speed wherever necessary. Continuing adaption of the organization and its resources to new conditions in the market place will be required. By adapting in this way, and with the expanded base that was established during 1980, it should be possible for the Company to compensate for the weakening of the economy and to continue its positive development.

A handwritten signature in blue ink, reading "Tom Waalström". The signature is fluid and cursive, written in a professional style.

The Boomer H170 hydraulic rock drilling rig was introduced in the market in 1980. Upper photo shows rig being used in construction of power station at Skollenborg, Norway, where it is being used with three hydraulic drills to prepare drifts of 5.5 meters in diameter.

Lower left: to simultaneously reduce costs and increase productivity in demolition work (from breaking up asphalt or concrete to

splitting smaller rocks in quarries and mines), Atlas Copco introduced the TEX 300 HM hydraulic, reflex-damped superbreaker during 1980.

Lower right: Boltec is an ergonomically attractive rock bolting machine by means of which the operator can handle all work by remote control, with no danger of being hit by falling rock.



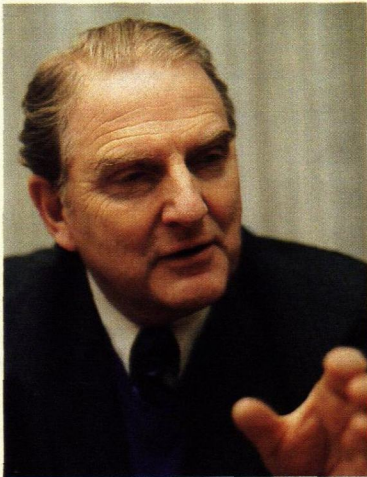


# HYDRAULICS DEVELOPING RAPIDLY

**Sales:** SEK 2 186 m.  
to end customers

**Return:** 15 %  
on total capital employed

Atlas Copco MCT (Mining and Construction Technique) develops, manufactures and markets pneumatic and hydraulic rock drills, loaders, mine winches, tunnel boring machines, track-mounted drills, tunnel driving rigs, compressed air drills, pumps and other equipment. MCT markets Sandvik Coromant drill steel products throughout the world. Sales to end users are made principally through Atlas Copco sales companies. MCT has its head office in Nacka (Stockholm). MCT products are manufactured at plants in Sweden, Brazil, Canada, Great Britain, India, South Africa, the U.S. and West Germany.



Jan Holdo, Managing Director,  
Atlas Copco MCT AB

## MANAGEMENT COMMITTEE

Jan Holdo  
Managing Director

Tord Berggren  
Marketing

Bo Lemcke  
Engineering

Stig Wählberg  
Finance

Olaf Meyer  
Sector Surface drilling

Lars Lindberg  
Sector Contractor tools  
and Sector Drill steel

Gösta Fernström  
Sector Underground equipment

Lars-Olof Calmered  
Sector Rock drills

### Sales

Invoiced sales of MCT Division products by Atlas Copco sales companies to customers amounted to SEK 2 186 m. in 1980, an increase of 16 percent, of which 7 represented increased volume. Incoming orders from customers amounted to SEK 2 296 m. (1 922), up 19 percent; the increase in volume was 10 percent.

### Earnings

The return on Atlas Copco MCT's total capital excluding non-interest-bearing current liabilities amounted to 15 percent in 1980, compared with 14 percent in 1979; these figures include the Division's share in Atlas Copco sales companies.

The improvement was principally attributable to the sales companies, but increased volume and greater utilization of plant capacity were contributing factors. The increase was achieved although increased amounts of capital were tied up in production and in the sales companies.

Profits after financial income and expense, but excluding the share in Atlas Copco sales companies, amounted to SEK 58.3 m. (83.0).

### Investments

Investments in land and buildings within the Division amounted to SEK 4.4 m. during 1980, compared with SEK 7.4 m. a year earlier. Capital expenditures for machinery and equipment totaled SEK 13.9 m., as against 21.1 m. in 1979.

### Market development

The price increases for many base and precious metals appear to have reached their summit during 1980. As a result of the surplus profitability achieved by many mining companies during 1979,

demand continued to be satisfactory for production hole-drilling equipment, loaders and drill steel.

The construction market developed unevenly, however, and was notably weaker in the latter half of the year.

MCT increased its product sales volume in most markets during 1980. The company reinforced its traditionally strong position in the field of rock drilling, particularly as a result of increasing demand for hydraulic machinery. The increase was largest in Sweden, Italy, Canada, Mexico, Peru, Australia and India. In Norway and South Africa the Division maintained its strong position from 1979.

Price competition was severe in most markets.

### Surface drilling

One of the notable orders during the past year was for Rotamec well-drilling equipment which was delivered to India on behalf of the Swedish International Development Authority (SIDA). Rotamec production hole-drilling equipment was also ordered by a number of Australian coal mines.

Demand for the type of drilling equipment used in quarrying, surface mining and highway construction was so substantial that delivery problems occurred in the Bremen works.

During 1981, Atlas Copco Holyoke Inc. in the U.S. will also begin manufacturing such equipment at its facility in Massachusetts.

The surface drilling sector received important orders from Brazil and South Africa for ROC 820HE track-mounted hydraulic equipment, powered by electricity, for surface drilling. Due to rising energy costs, this equipment is coming into increasing demand. The medium-sized track-mounted ROC 712H hy-

## Atlas Copco MCT

draulic unit was successfully launched in Sweden, Norway and Finland.

Invoiced sales to customers including drill steel amounted to SEK 798.7 m.

### Underground equipment

During 1980 Atlas Copco MCT gained a foothold for its underground equipment on the Japanese market. Two of Japan's largest construction contracting companies ordered a total of eight tunnel driving rigs, four of which were assembled by Atlas Copco in Japan.

Significant success was achieved in selling underground equipment to the South African mining industry. Atlas Copco moved into the foreground with these products in both the metal mining and construction industries.

The two most outstanding product leaders of 1980 were the Boomer H115 drill rig for the mining industry and the Boomer H170 for the construction industry.

For Atlas Copco, the increased interest in coal has resulted in rapidly rising sales of equipment to coal mines.

The cooperation project with Wagner Mining Equipment Co. in the U.S. in marketing Wagner diesel-powered loaders for underground work was terminated, by mutual agreement, due to low profitability.

Invoiced sales to customers including drill steel totaled SEK 1 029.6 m.

### Contractor tools

TEX 300HM, a new, medium-weight rig-mounted hydraulic breaker, was successfully introduced during 1980.

Similarly, the new CRAC 200 rock-splitting system, using high-pressure water instead of explosives, aroused keen interest in the market.

Invoiced sales to customers including drill steel amounted to SEK 328.3 m.

### Drill steel

The drill steel sector continued its successful introduction of button drill bits and also launched the new drill head for raise boring with great success.

### Tunnel boring (Atlas Copco Jarva Inc.)

During 1980, three tunnel boring machines were delivered from Atlas Copco Jarva Inc. in the U.S. The company was acquired in 1979. The first two orders for these machines were received from European contractors for delivery during 1981.

Invoiced sales to customers amounted to SEK 29.4 m. Operations in this sector resulted in a substantial deficit.

### Outlook for 1981

The volume of invoicing is expected to be about the same as in 1980. Price increases may not fully keep pace with the inflation rate and some narrowing of the profit margin can therefore be expected.

The sectors producing underground rigs, surface equipment and loaders have backlogs of orders for the first half of 1981. Lower order bookings are expected during the latter part of the year.

### Product development

The objectives of the MCT Division's research and development activities have included development of new products and technologies and follow-up of products already introduced in the market.

Components used in surface and underground equipment are being standardized. Thus it will be possible to offer customers a broad product line based on a small number of components. New versions of hydraulic drilling



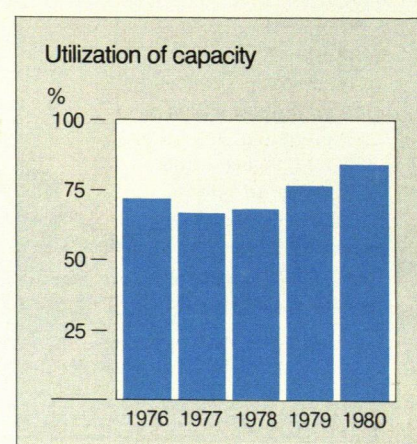
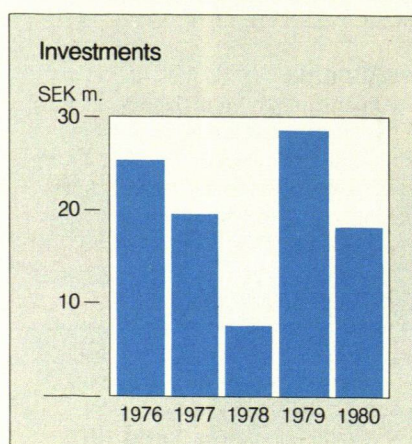
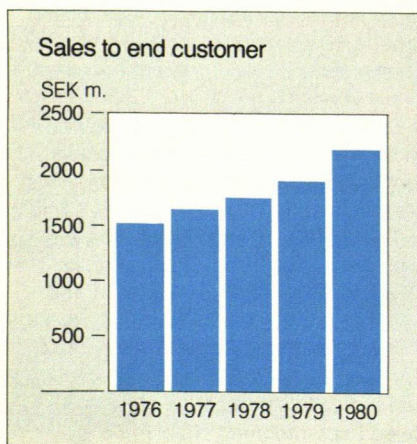
The Sandvik Coromant raise boring drillhead means a new technique for raise driving. The drillhead, introduced during 1980, is being marketed throughout the world by Atlas Copco.

systems for surface and underground use have been developed. In addition, a new, fully hydraulic system for drilling and loading has been developed, especially for use in small tunnels.

The line of compressed air machines is undergoing continuous modernization in order to conform as closely as possible with environmental and energy requirements. Despite the significant progress made with hydraulic drilling machines, pneumatic rock-drilling equipment still plays an important role in MCT's program.

### Production

Capacity utilization in the Division's plants increased to 84 percent, as compared with 76 percent in 1979, and was especially high at the Bremen plant in West Germany. Because of the dif-





difficulties stemming from short supplies of certain components, it was difficult in some instances for deliveries to keep pace with demand.

In order to strengthen the company's ability to compete in the U.S., a new manufacturing unit was opened in Southampton, Mass. This unit, which is affiliated with Atlas Copco Holyoke, will mainly assemble track-mounted surface rigs for the North American market.

Experience from a similar assembly unit for underground rigs in Montreal has been highly positive.

Rationalization efforts are being continued in the plants. Substantial investments have been made in numerically controlled machines, particularly in

Nacka and Örebro, Sweden, and in Hemel Hempstead, Great Britain.

### Personnel

The MCT Division employed an average of 2 703 persons during the year, as against 2 615 a year earlier. Of this number, 2 036 were based in Sweden, compared with 1 986 a year earlier. Employee turnover remained largely unchanged from 1979, except in Nacka, where a sharp increase in the workforce occurred during the latter half of 1980. Employee turnover and absenteeism in the Swedish units – considerably higher than in plants in other countries – affected the cost picture in Sweden.

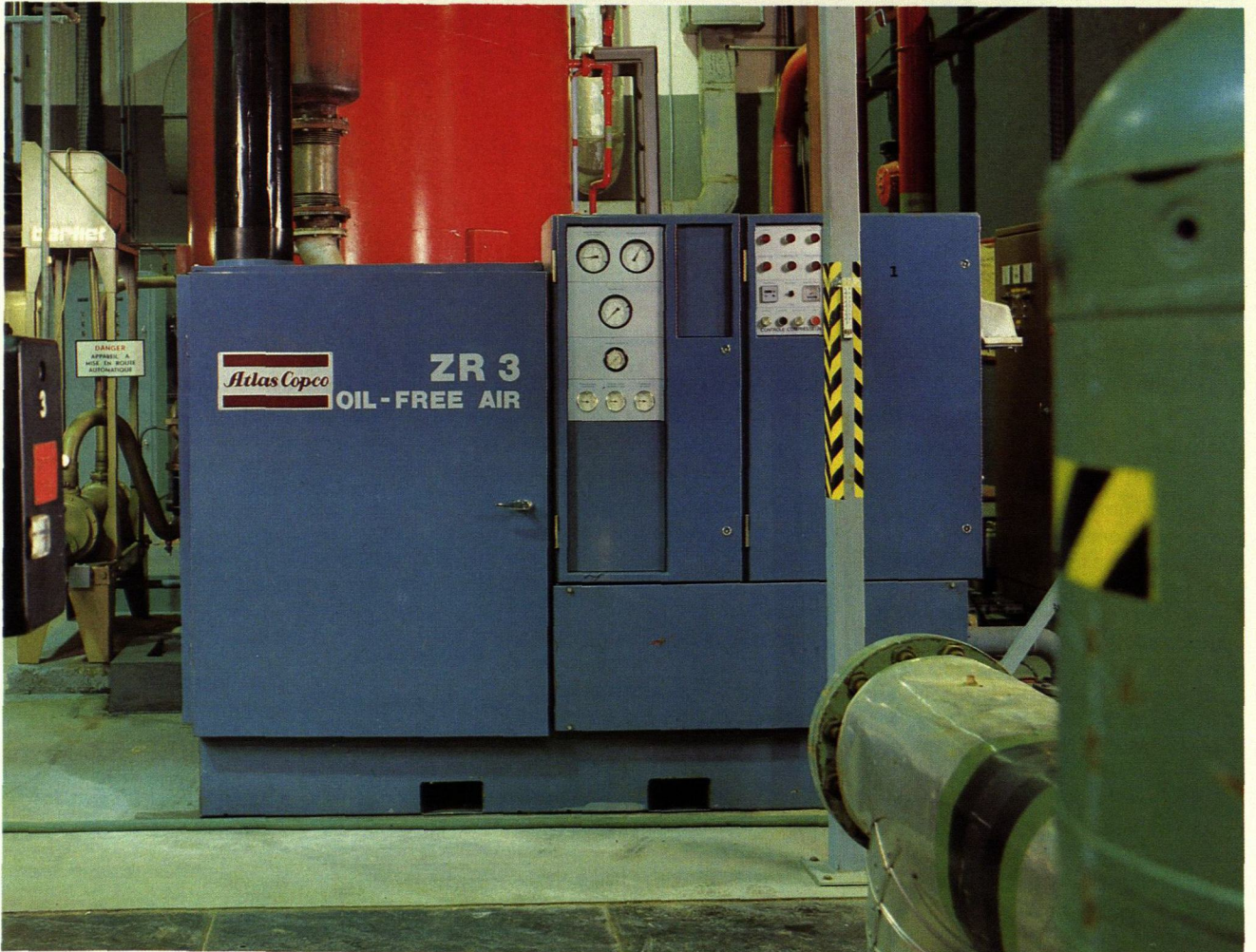
*Coal is once more on its way to becoming one of the world's most important energy resources, resulting in increased demand for Atlas Copco equipment. Two Rotamec units are used in the Warkworth coal mine in New South Wales, Australia. The Rotamec 2202 in the foreground can drill more than 50 holes 13 meters deep in a two-shift work day.*

At the Hemel Hempstead plant, efficiency measures enabled further reductions to be made in the workforce, while the volume of production was kept unchanged. Employee turnover and absenteeism were low.

At the Bremen plant it proved difficult to recruit qualified craftsmen and other key personnel during the year. Employee turnover rose, but a certain improvement was noted towards year-end.

Atlas Copco's portable screw compressors (top) are used in many interesting applications throughout the world. These include the operation of cement mixers and pumps in connection with construction projects, drilling from tracked equipment in quarries and mines, drilling freshwater wells, and industrial processes.

Stationary screw compressors (bottom picture) have come into widespread usage in the cosmetics industry to supply factories with oil-free air in connection with the production of perfumes and beauty aids.



# ACQUISITIONS FOR FUTURE GROWTH

**Sales:** SEK 2 608 m.  
to end customers

**Return:** 22 %  
on total capital employed

Atlas Copco Airpower develops, manufactures and markets portable and stationary screw, piston and centrifugal compressors for air and gas, air dryers, after-coolers and automatic control systems. The product program also includes equipment to restore the quality of the water in lakes, to prevent ice formation and to create bubble barriers against oil spills in water. Sales to end customers are handled mainly through Atlas Copco sales companies.

The Division has its head office and largest factory in Wilrijk, outside Antwerp, Belgium, with additional manufacturing units in Sweden, Italy, France, the U.S., Brazil, Bolivia, Spain, Turkey and in some other countries.



Iwan Åkerman, Managing Director,  
Atlas Copco Airpower N.V.

## MANAGEMENT COMMITTEE

**Iwan Åkerman**  
Managing Director  
**Louis Dierckx**  
External relations  
**Carl Johansson**  
Finance  
**Erik Lebrocqy**  
Personnel  
**Gaston Moisse**  
Marketing  
**Sven-Åke Rosell**  
Engineering  
**Gunnar Ruding**  
Production

### Sales

The Airpower Division's sales to end customers increased 17 percent during 1980 and totaled SEK 2 608 m., compared with SEK 2 224 m. in 1979, representing a volume increase of 5 percent. Order bookings from customers rose from SEK 2 356 m. in 1979 to SEK 2 655 m. in 1980.

### Earnings

The return on Airpower's total capital excluding non-interest-bearing current liabilities amounted to 22 percent, as against 17 percent a year earlier. The Division's share in Atlas Copco sales companies is included in these figures.

Improved profit margins and increased sales contributed to the rise in earnings.

Profit after financial income and expense, excluding the share in Atlas Copco sales companies, amounted to SEK 190 m., as against SEK 127 m. in the preceding year.

### Investments

Investments in buildings, machinery and equipment rose from SEK 19 m. in 1979 to SEK 88 m. in 1980. Investments during the year include SEK 47 m. for fixed assets in acquired companies.

### Market development

During the year the Division strengthened its leadership position throughout the world for its high technology product range, notably oil-free screw compressors.

Increased energy costs adversely affected industrial investments in many areas but also accelerated rationalization within such sectors as the automobile industry. Boom conditions prevailed in a large number of markets during the first six months of the year, and demand substantially exceeded sales forecasts.

In contrast, the latter six months were marked by a decline in demand in many of the most important industrial markets – with the exception of Australia, Japan, Mexico and South Africa, where it remained strong. The marketing development efforts in the U.S. continued to meet with substantial success, especially as regards oil-free screw compressors. The rising exchange rates for the British pound, the U.S. dollar and the Japanese yen improved Airpower's position relative to its British, American and Japanese competitors.

### Stationary compressors

Substantial orders for oil-free stationary compressors and compressed air dryers were booked within the pharmaceutical, chemical and food industries. New market segments were developed with considerable success. Large orders were received, for example, for screw compressors for railway braking systems and for starting systems for airplanes.

The automobile industry's rationalization of its production methods resulted in substantial sales of screw compressors. In Canada, large orders were also obtained for hydroelectric power stations. The renewed interest in coal led to increased sales of booster compressors for underground coal mining.

As an additional service to customers, medium- and long-term service contracts were introduced, primarily for major users of compressed air equipment.

Improved profitability was recorded for larger stationary compressors during 1980.

Despite a certain weakening of the market during 1980, the profitability of small compressors was on the whole maintained.

### Portable compressors

Due to the slump in the building in-

dustry, invoicing increased despite the fact that fewer portable compressors were sold than in 1979. Deliveries of portable high-pressure compressors for oil drilling and pipeline testing, and notable bulk shipments to leasing companies contributed to the improvement.

The trend towards hydraulic rock drilling techniques had a negative effect on sales of larger portable units for normal pressure.

Profitability improved within this product group during 1980.

**Water conservation equipment**

Atlas Copco's environmental conservation equipment – bubble barriers to contain oil spills, and Limno oxygenation units for restoration of lake water – underwent further development.

The oxygenation project in Tegeler Lake, Berlin, was expanded during 1980 through the addition of 12 more Limno units. The operation began in 1979 when the first three Limno units were installed.

A major oxygenation project was completed at the Ghent-Terneuzen canal in Belgium.

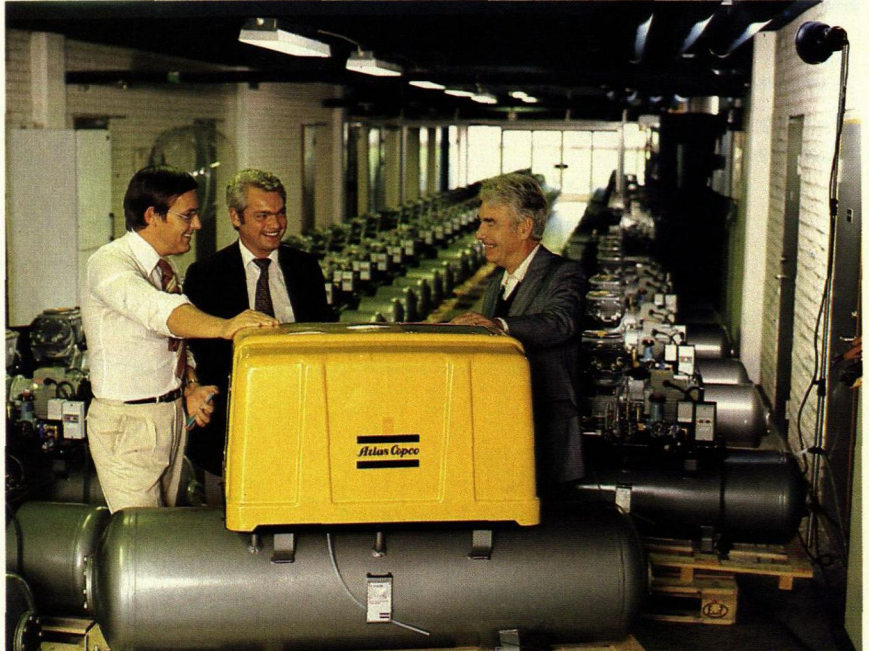
**Outlook for 1981**

The demand for Airpower Division products is expected to be low during the first half of 1981, with some improvement during the latter half of the year.

**Company acquisitions**

The company acquisitions made in 1980 have a far-reaching strategic impact on research and development, product lines, manufacturing resources and sales channels.

The acquisition of Worthington's air compressor division – now Atlas Copco Holyoke Inc., U.S. – improves Airpower's possibilities to cover the Ameri-



*During 1980 the Swedish Civil Defense took delivery of 700 alarm units equipped with small, compact Airlet compressors that will supply compressed air to operate the sirens.*

can market thanks to local manufacture and access to established sales channels.

During recent years Atlas Copco has developed its resources within the field of gas and process technology. The company's technological base within these areas was broadened through the acquisition of Turbonetics Inc., U.S., formerly a subsidiary of Mechanical Technology Inc. (MTI). Now known as Atlas Copco Turbonetics, the company manufactures centrifugal compressors.

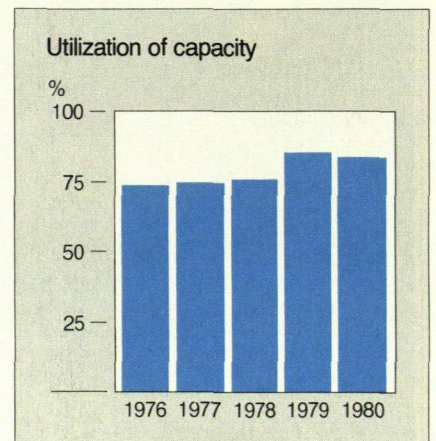
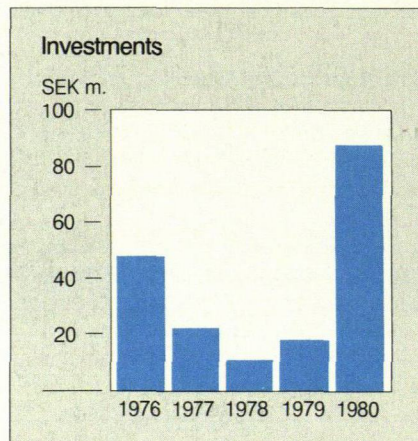
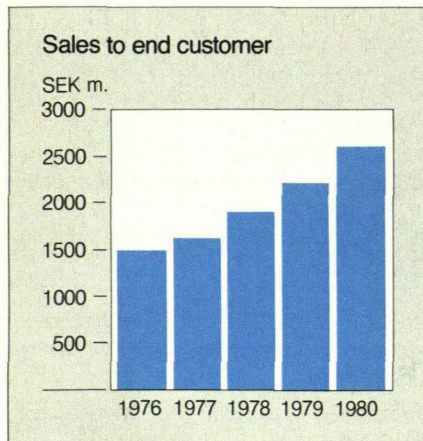
An agreement signed in West Germany to take over the compressor division of Klein, Schanzlin & Becker (KSB) in Saarbrücken became effective January 1, 1981. This unit principally engineers and manufactures heavy-duty piston

and centrifugal compressor systems for the gas and process industries.

The addition of this new technology to Atlas Copco's product line, plus the acquisition of related manufacturing and marketing resources in the U.S. and Europe, has meant a rapid expansion of Atlas Copco's product program.

**Product development**

Research and development work in the Airpower Division has focused not only on new products but also on redesigning existing products to meet require-





the year. The continued improvement in sales of small compressors resulted in better utilization of capacity at the plants in Åmål, Sweden, and Mauguière, France.

The Emac unit in Italy, which manufactures small, inexpensive compressors, moved into larger and more modern premises.

The compressor plant in Yugoslavia, built as a joint venture involving Atlas Copco, Univerzal and Fagram, was officially opened.

Series production of oil-injected portable and stationary compressors replaced the earlier piston compressors program at Atlas Copco Andina, in Bolivia, and at Enerco in Mexico.

### Personnel

An average of 3 281 persons were employed during 1980 at the facilities for which Airpower is operationally responsible. This figure includes the personnel at the newly acquired facilities in the U.S. Of the total workforce, 2 046 persons were employed at Airpower's largest facility in Wilrijk, Belgium, as compared with 2 000 a year earlier. Employee turnover remained low – around 6 percent.

Technical personnel underwent training in Wilrijk in order to prepare for new applications of electronics in industry and to raise product quality further. Training of personnel employed at the production units outside Europe – principally at Atlas Copco Andina in Bolivia, Enerco in Mexico and Poona in India – was arranged in the respective countries, and at the Wilrijk plant.

ments of new applications. Special attention was devoted to the completely oil-free Z-compressors and their auxiliary equipment.

The stationary oil-lubricated screw compressors were further improved as regards energy consumption and starting efficiency. They now also satisfy the high requirements for use as locomotive brake compressors.

Small oil-free compressors in three new sizes were added during the year. As a result of the acquisition of KSB's compressor division, a further vertical expansion of the oil-free piston compressor program is possible.

*Production of portable compressors is now under way in Atlas Copco's Holyoke, Massachusetts plant in the U.S. The first compressors have been delivered to the market.*

Research continued within the field of energy conservation through recovery of surplus heat from compressor installations.

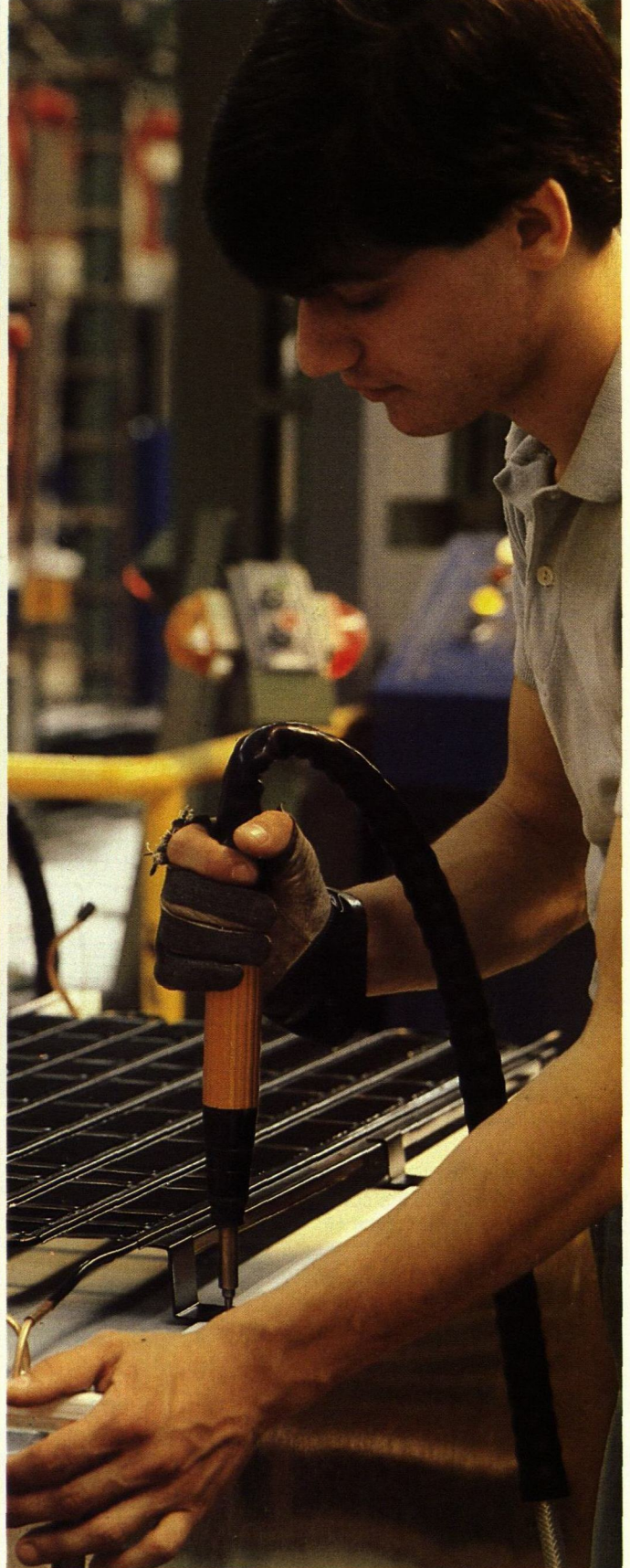
### Production

Capacity utilization was high at the production facilities in Wilrijk, Belgium. Overall capacity utilization remained at approximately the same level as during 1979, even though the work week was shortened during the last two months of

Power tools made by Atlas Copco Tools are used for many applications within the engineering industries, where they lighten the operator's work and boost productivity.

In a truck manufacturing plant in West Germany (top left), compressed air tools are used in cutting operations and assembly work. The tools have been adapted to work environment requirements.

Bottom, left: a virtually vibration-free chisel hammer being used. Right: an exceptionally silent screwdriver at work.





# POWER TOOLS GAIN MARKETS

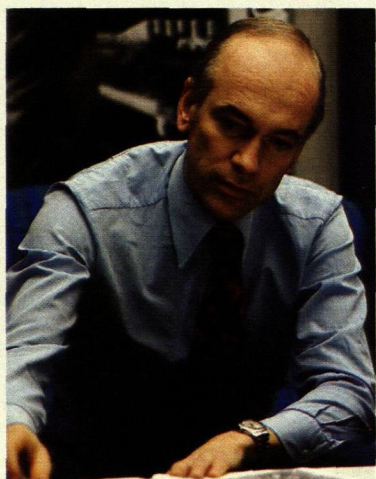
**Sales:** SEK 545 m.  
to end customers

**Return:** 7 %  
on total capital employed

Atlas Copco Tools develops, manufactures and markets power tools and systems for industrial production. The product range consists of four main lines: Hand tools for machining, assembly, handling and mechanization; Advanced assembly systems; Air line accessories; Finishing equipment.

Sales to end customers are conducted chiefly through Atlas Copco sales companies.

The Division's main production facilities are in Sweden, with the head office in Stockholm. Production is also carried out in Finland and Denmark.



Per Wejke, Managing Director,  
Atlas Copco Tools AB

## MANAGEMENT COMMITTEE

**Per Wejke**  
Managing Director

**Ulf Bärjegård**  
Finance

**Kurt Eriksson**  
Marketing support

**Gösta Henningsson**  
Finishing technique

**Nils-Åke Jenstav**  
Personnel

**Kurt Ottosson**  
Marketing

**Lennart Thörn**  
Production

## Sales

Atlas Copco Tools' sales to end customers rose from SEK 479 m. in 1979 to SEK 545 m. in 1980 – an increase of 14 percent. About 6 percent of this increase represented volume growth. Order bookings amounted to SEK 582 m., as against SEK 490 m. in 1979, an increase of 19 percent. Foreign markets accounted for 85 percent of total sales, mainly conducted through Atlas Copco sales companies.

## Earnings

The return on total capital, excluding non-interest-bearing current liabilities, amounted to 7 percent, as against 1 percent in 1979. This figure includes the Division's share in Atlas Copco sales companies.

The improvement in earnings was due primarily to higher capacity utilization in the workshops. A review of the product line and production facilities is under way with a view to strengthening profitability.

Profit after financial income and expense, excluding the share in Atlas Copco sales companies, amounted to SEK 14.3 m., compared with SEK 5.9 m. in 1979.

## Investments

Investments within the Division in buildings, machinery and equipment amounted to SEK 14.2 m., compared with SEK 11.1 m. in 1979. Of this amount, SEK 1.7 m. was withdrawn from the investment reserve. Production equipment accounted for the major part of the investment.

## Market development

The great majority of the Tools Division's customers are in industry, especially in the mechanical engineering and automotive industries. In 1980, industrial

production rose approximately 2 percent in Atlas Copco Tools' markets. Most countries in Western Europe and certain developing countries recorded industrial growth. On the other hand, the market stagnated in the U.S., Great Britain and the controlled-economy countries. During 1980 the industry was characterized by strong price competition in a market with excess production capacity.

### Hand tools

Among the above-mentioned four product lines, hand tools showed a good sales trend. The weakening industrial economy in Western Europe towards the end of the year resulted, however, in stagnant sales during the last quarter.

### Assembly systems

Assembly systems accounted for the greatest sales increase, largely due to capital expenditures by the automotive industry.

### Air line accessories

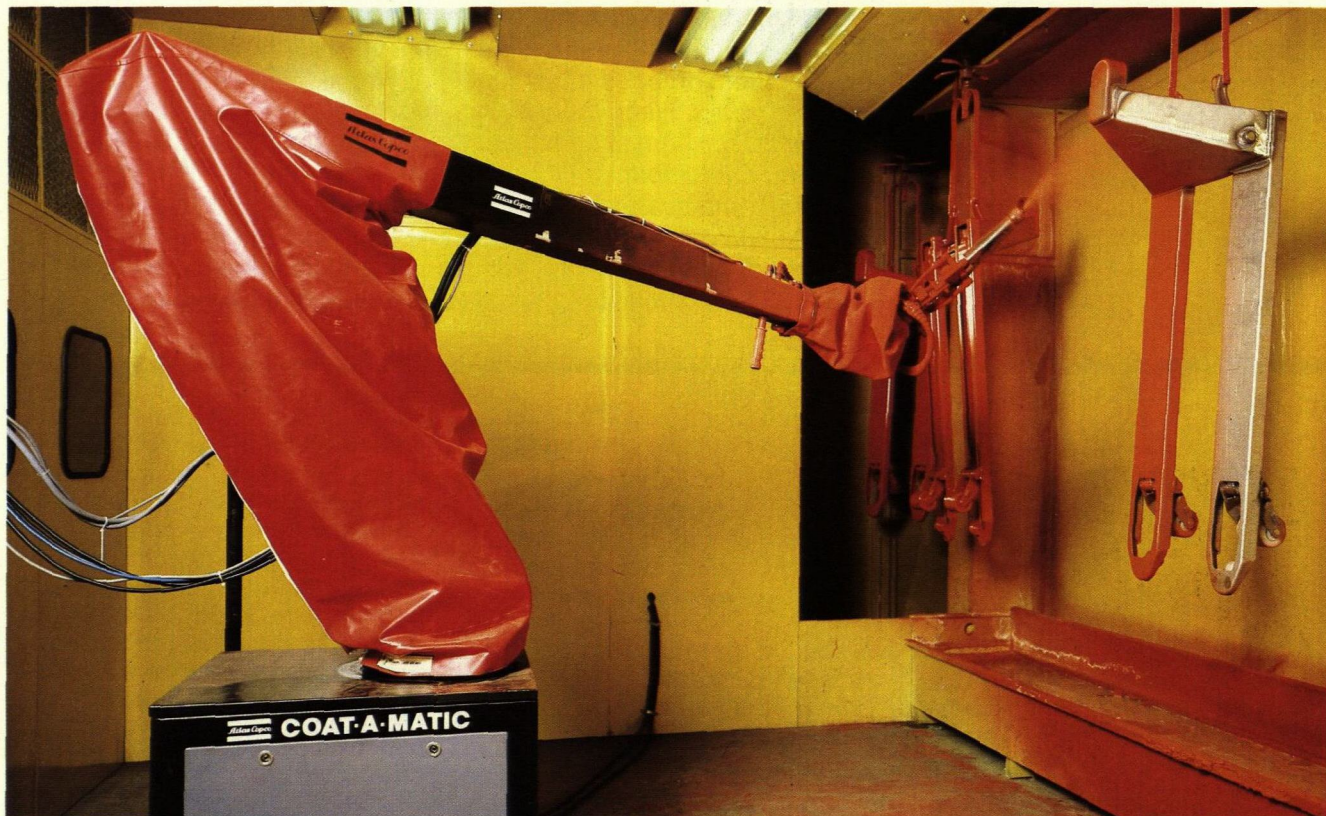
Fittings comprising quick couplings, lubrication systems, valves, etc., showed moderate growth. This product line is a vital and profitable supplement to the Tools Division's other products.

### Finishing equipment

The Finishing sector grew somewhat more quickly than the average. Especially good order bookings were noted for rust prevention installations, electrostatic equipment and medium-size pumps.

The sector's alternative sales channel in the important West German market – J. Wagner GmbH – showed a large increase in sales, especially of pumps.

The sales companies concentrate their direct sales efforts on customers requiring specialist advice on production methods and techniques. At the same time, there are customers in other



*Coat-a-matic is a robot used for spray painting, grinding and plastering operations where the environment is often dangerous to health. The robot is well suited for heavy, monotonous and stressful work.*

branches of industry who individually buy minor amounts of compressed-air equipment but whose combined requirements are substantial. Such customers are increasingly taken care of by the sales companies through resellers specializing in selling standard tools in a certain branch of industry or in a certain region.

**Outlook for 1981**

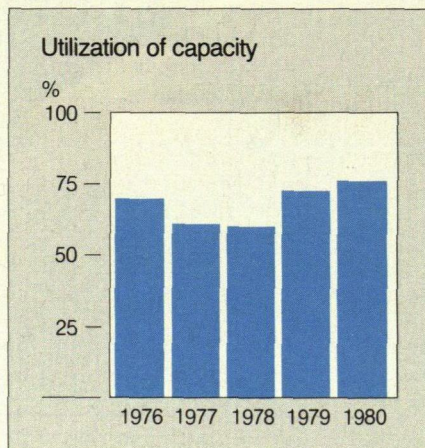
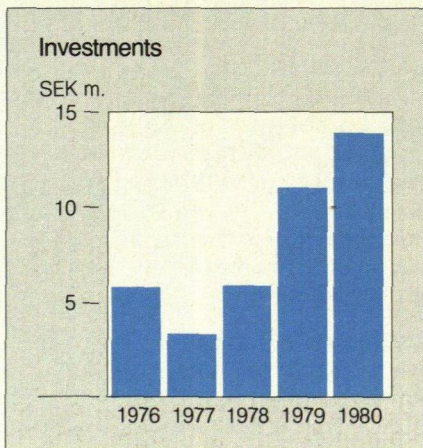
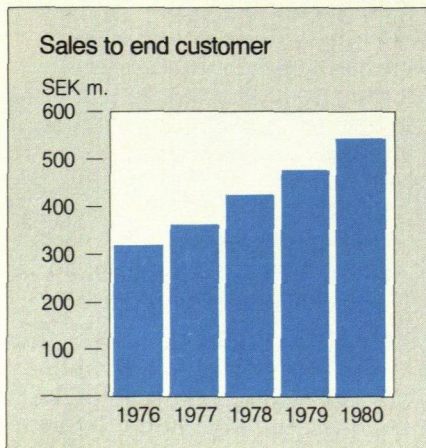
1981 will probably be a year of stagnant or declining industrial production in many markets. Some increase in sales

volume is anticipated, however. In a longer-term perspective there are great possibilities for expansion, especially in the largest industrial countries, where the company's market shares are still modest.

**Technical development**

Technical development efforts continued during the year with the aim of attaining a high technological level for leading products. Among them are the systems for tightening screw joints. The MACS (Monitoring And Control System)

microcomputer-based equipment for the monitoring and control of nutrunners, introduced in the market in 1979, was developed further and used in robotized assembly operations, and in other applications. In this connection, nutrunner systems continued to be adapted to the



high technological and safety demands of the automotive industry.

The newly developed Ecco Meter, an appliance for automatic dose dispensing in the rust-preventive treatment of cars, represents another high-technology area.

The performance of certain products, which have already been successful in the market, was improved by further technical development. Notable exam-

ples include a series of angle nutrunners and a super-silenced screwdriver of improved design for the assembly industry.

The development work also aims at meeting work environment requirements concerning noise, vibration, dust and safety. One example is the series of vibration-damped riveting hammers developed for the aircraft industry.

## Production

The increased demand during 1980 resulted in higher capacity utilization, but this is still at an unsatisfactory level, particularly in the Danish factory.

Continued investment in numerically controlled machines is contributing substantially to increased efficiency.

To supplement its own product range, the Tools Division buys a number of finished high-quality products from outside suppliers. This applies to some standard Japanese and West German equipment as well as to air line accessories.

The organization was strengthened by a materials management unit to meet the demands for rational utilization of capital tied up in current assets. This unit was given total responsibility for the inventory of finished products, accessories and spare parts, and also for the flow of material between the Tools Division and the sales companies.

## Personnel

The number of employees in the Division averaged 1 322 (1 283) during the year; of these, 246 were outside Sweden.

The restrictive recruitment policy contributed to higher productivity, expressed in terms of a larger sales volume per employee.

Labor costs increased overall by about 8 percent.

Personnel turnover at the production units outside Stockholm was moderate among collective-agreement and salaried employees, but high among collective-agreement employees in Stockholm.



*Multiple nutrunners are used primarily in the automotive industry. Atlas Copco has scored substantial marketing successes with these machines. They are often equipped with built-in controls and supervisory systems that permit savings of material, lower production and service costs, and – not least – increased product reliability, important for the traffic safety of the vehicles.*

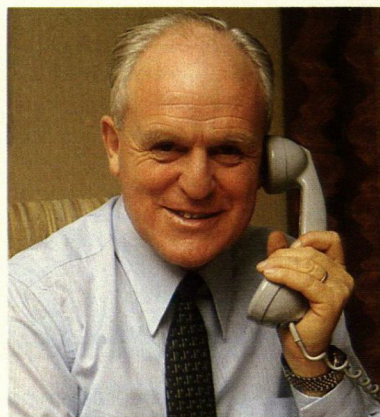
# AN EXPANSIVE YEAR

**Sales:** SEK 235 m.  
to end customers

**Return:** 22 %  
on total capital employed

*Berema develops, manufactures and markets gasoline-powered drills. The products are marketed partly through distributors and Berema's own sales companies and partly through Atlas Copco sales companies worldwide. The Berema subsidiary, AB Tico, manufactures and markets hydraulic truck cranes and accessories; another subsidiary, Toolex Alpha AB, manufactures and markets fully automatic record presses. Berema is the general agent in Sweden and Norway for Honda Power Products.*

*Berema's head office is located in Solna (Stockholm) and its production facilities are situated in other localities in Sweden.*



Lars Åsell, Managing Director,  
Berema AB

## MANAGEMENT COMMITTEE

**Lars Åsell**  
Managing Director  
**Arne Gerold**  
Finance and Administration  
**Per Hallström**  
Marketing

### Sales

Berema's invoiced sales to end customers showed an increase during the year, rising by 34 percent to SEK 235 m., compared with SEK 175 m. in 1979. This increase was due in part to the acquisition of Toolex Alpha AB, which reported sales of SEK 43 m. in 1980. The broadening of the original product program also contributed to the higher invoicing.

The demand for the company's products during the past financial year was satisfactory. Order bookings amounted to SEK 246 m., as against SEK 177 m. in 1979 – a 39 percent increase.

### Earnings

The return on total capital, excluding, non-interest-bearing current liabilities amounted to 22 percent for Berema, compared with 21 percent in 1979, including Berema's share in Atlas Copco sales companies.

Toolex Alpha is included for eight months in the year's accounts. This, together with continued rationalization, contributed to Berema's improved return.

Berema's profit after financial income and expense, excluding its share in Atlas Copco sales companies, amounted to SEK 28.7 m., as against SEK 17.9 m. in 1979.

### Investments

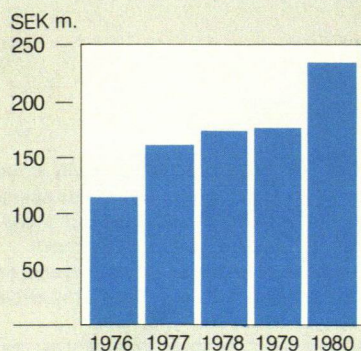
Investments in machinery and equipment during the year amounted to SEK 6.9 m., compared with SEK 2.6 m. in 1979, and were partly financed from the investment reserve.

### Market development

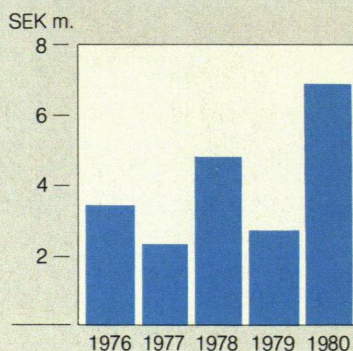
Sales of motor drills developed favorably during 1980. The fact that it was possible to maintain sales to markets in the Middle East at the same level as in the previous year was a contributory factor.

Berema continued its efforts in the North and South American markets, achieving a substantial increase in sales volume. A new and more efficient motor drill produced at the Kalmar (Sweden) factory, was introduced during the year. This should further enhance Berema's strong position in this product area. The small PICO motor drill was introduced in a number of additional export markets.

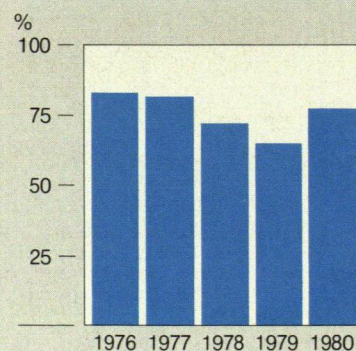
### Sales to end customer



### Investments



### Utilization of capacity



The PICO 20 light motor drill machine was successfully used in a project for stringing cable in the German Alps at an altitude of 2 000 meters. Thanks to the drill's light weight, the work of implanting 102 clamps in the rock to carry 600 meters of steel cable was completed in only six days.



Hydraulic truck cranes, marketed by Tico, reported increased demand during the year, particularly in non-European markets. Profitability was less satisfactory, however.

The Honda program was supplemented in the Swedish and Norwegian markets with lawn mowers and snow blowers.

### Outlook for 1981

A certain increase in sales volume is anticipated in 1981.

### Company acquisition

Berema acquired Toolex Alpha AB, Sundbyberg (Stockholm), in the spring of 1980. This company mainly manufactures and markets fully automatic presses for the phonograph-record industry.

The company sells mostly in export markets – primarily the U.S., Japan and Great Britain.

This acquisition has given Berema a supplementary export-oriented and expansive activity, which improves the Group's profitability and spreads its risks more widely.

### Product development

Motor drill development concentrated on the energy and environmental aspects.

A new model, adapted to increased environmental requirements, was introduced in the market.

### Production

To cope with the increased production of motor drills without major personnel reinforcements, the company made substantial investments in labor-saving machines. Manufacture of a new motor drill was begun in the highly efficient Kalmar factory. Investment in numerically controlled machines continued in the company's factory for hydraulic cranes.

### Personnel

The average number of employees during the year increased from 375 in 1979 to 543, of whom 50 were outside Sweden. This increase was due entirely to the newly acquired company, which employs 175 persons. Personnel turnover during the year was low.

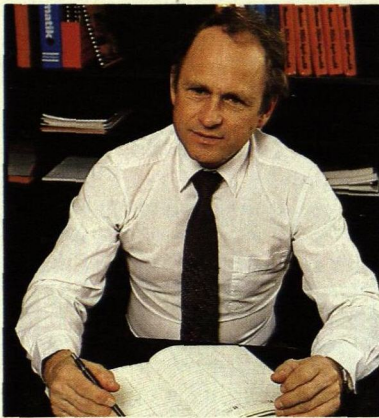
# EXPORTS INCREASED GREATLY

**Sales:** SEK 206 m.  
to end customers

**Return:** 5 %  
on total capital employed

Monsun-Tison develops, manufactures and markets hydraulic and pneumatic components and control systems. Hydraulics are marketed through Monsun-Tison's own sales companies in Denmark, West Germany, France, Great Britain, the U.S., and Canada to manufacturers of mobile machines, such as cranes, forest machinery and mining machinery. The pneumatic product line is marketed through Atlas Copco sales companies in various parts of the world to manufacturers of packaging machinery, transportation equipment, etc.

Monsun-Tison's head office is located in Borås (Sweden) and its production facilities are located in Borås and Falköping (Sweden).



Eric Bursvik, Managing Director,  
Monsun-Tison AB

## MANAGEMENT COMMITTEE

Eric Bursvik, Managing Director  
Anders Perning, Finance  
Gunnar Lundin, Production  
Roland Lundberg, R & D - Hydraulics  
Folke Johansson, R & D - Pneumatics  
Torgny Segerberg, Marketing Hydraulics  
Conny Cronqvist, Marketing Pneumatics

### Sales

Monsun-Tison's invoiced sales to end customers amounted in 1980 to SEK 206 m., compared with SEK 168 m. in 1979 - a 13 percent increase in volume. Order bookings amounted to SEK 216 m., as against SEK 212 m. in 1979 - a 6 percent decrease in volume.

### Earnings

The return on total capital, excluding non-interest-bearing current liabilities amounted to 5 percent for Monsun-Tison, as against 1 percent in 1979, including the Division's share in Atlas Copco sales companies.

Overall responsibility for pneumatic components was transferred to Monsun-Tison in the autumn of 1980.

The labor market conflict in Sweden during the spring of 1980, combined with increased financial expense, affected the return adversely.

Monsun-Tison's earnings after financial income and expense, excluding its share in Atlas Copco sales companies, amounted to SEK 7.8 m., compared with SEK 6.6 m. in 1979.

### Investments

Investments in machinery and equipment amounted to SEK 7.8 m., compared with SEK 7.2 m. in 1979.

### Market development

Monsun-Tison showed good growth in the Swedish market, with a 29 percent increase in invoicing in the past financial year. This was largely the result of the success of Swedish customers in exporting machinery containing Monsun-Tison components.

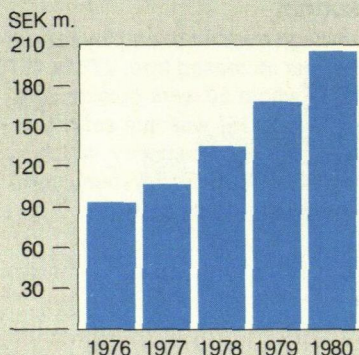
Monsun-Tison's own export sales also showed continued success during 1980, with an increase of 17 percent.

### Hydraulics

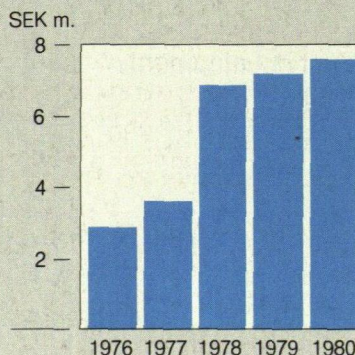
In the area of hydraulics, sales of directional and remote-control valves to manufacturers of excavating machinery and frontloaders contributed primarily to this sales increase.

Thanks to its success in recent years, Monsun-Tison has become a well-known make for mobile hydraulics in Sweden and in the major export markets of Western Europe and North America. The sales trend in West Germany has been especially strong.

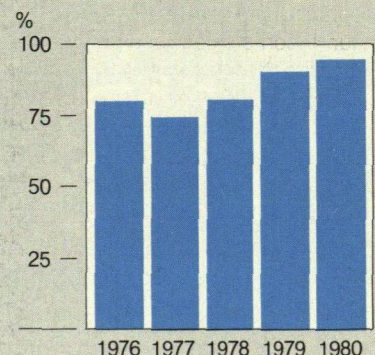
### Sales to end customer



### Investments



### Utilization of capacity



Monsun-Tison supplies the electrical/hydraulic control system used by Östbergs Fabriks AB for installation in a forest harvester which fells, trims and saws trees to lengths – all mechanically. The electrohydraulic remote control is characterized by "flexible" response and offers an attractive, noise-free environment for the operator.



The demand for hydraulics – supplied primarily to manufacturers of mobile machines – was satisfactory for the greater part of the year in all the company's markets.

Profitability for this product group continued to be good during the year.

#### *Pneumatics*

In the field of pneumatic components, Monsun-Tison's sales rose partly through direct selling via Atlas Copco sales companies, and partly through delivery of components to successful Swedish manufacturers in such fields as packaging machinery and conveyor systems – products that are mostly exported.

The profitability of pneumatic products improved during 1980 but is not satisfactory.

Changes that will lead to a concentration of selling and production resources,

and to a streamlining of the product range, are currently under way in order to strengthen profitability.

#### **Outlook for 1981**

Despite a weakening of the economy, a certain increase in volume is anticipated during 1981 for both hydraulic and pneumatic products.

#### **Product development**

##### *Hydraulics*

The increased use of hydraulics led to better-informed users in this field, which in turn resulted in increasing demands with respect to the performance and efficiency of the products. The trend towards "load-sensing" valves for lower energy consumption continued. Increasing demands for productivity and for improvements in the operator's environment led to further development of

remote-control valves. To meet these requirements, the company designed an electrohydraulic variant with three proportional control possibilities in the same hand lever.

##### *Pneumatics*

An entirely new cylinder series, adapted for electronic use and for internationally standardized installation dimensions, was introduced during the year.

#### **Personnel**

Monsun-Tison employed an average of 808 persons during 1980, compared with 719 in 1979. Of the 1980 total, 55 were outside Sweden.

The product-oriented organization was largely implemented during the year.

A continued buildup of the Division's own sales companies – chiefly in West Germany and Great Britain – proceeded during the year.

# TECHNOLOGY FOR THE FUTURE

As an engineering company, Atlas Copco has attracted attention on account of its successful international marketing. The sales successes are based on a continual process of technological change, carried on consistently to enable Atlas Copco companies to maintain their leading technical position.

The time required from basic concept to finished product is long – sometimes 10 years. Three different phases can be distinguished:

- *Development of knowledge* – studies of basic phenomena
- *Development of techniques* – testing of principles for products
- *Development of products* – mostly designing products adapted to the market and to production.

## Knowledge – the foundation

Atlas Copco has long been making vigorous efforts to link technical and product development to greater in-depth knowledge concerning basic technical phenomena, to general trends in science, and to the technical problems of customers.

Atlas Copco thus has extensive know-how in such fields as rock mechanics, vibration and noise damping, gas and liquid dynamics. The Company acquires knowledge not only through in-house work but also through close contact with researchers at universities and institutes of technology. In this way, important possibilities for development are noted at an early stage.

Atlas Copco has assigned its basic technology work mainly to the Group's research institute, CERAC, outside Lausanne in Switzerland, and to the Central Laboratories in Nacka (Stockholm), attached to the MCT Division.

CERAC was established in 1971 to concentrate its operations on long-term technical development. Establishing the Institute in Switzerland facilitated international recruiting of researchers. Their work has been increasingly concentrated on problems that are of interest for the various product divisions.

The direct impetus given by CERAC's research to product development is exemplified by the CRAC 200 rock-splitting system. This product, which cracks rocks by means of a "water cannon", was introduced in 1979. The idea for this revolutionary product was born in the course of research at CERAC in the beginning of the 1970s. The technique was subsequently developed at the

Central Laboratories in Nacka, after which the technicians of the MCT Division converted it into a marketable product.

The wide range of CERAC's research sometimes leads to the development of side results. An example of this is the unique "Dynamic Powder Compaction" metallurgical process, whereby powders are compressed to alloys by a piston. The piston strikes the powder at very high speed, and completely new, advanced alloys can be obtained.

*In recent decades technological advances within the Atlas Copco Group have resulted in new products which have often given the Group a lead over competitors.*

## Technical development is of strategic importance

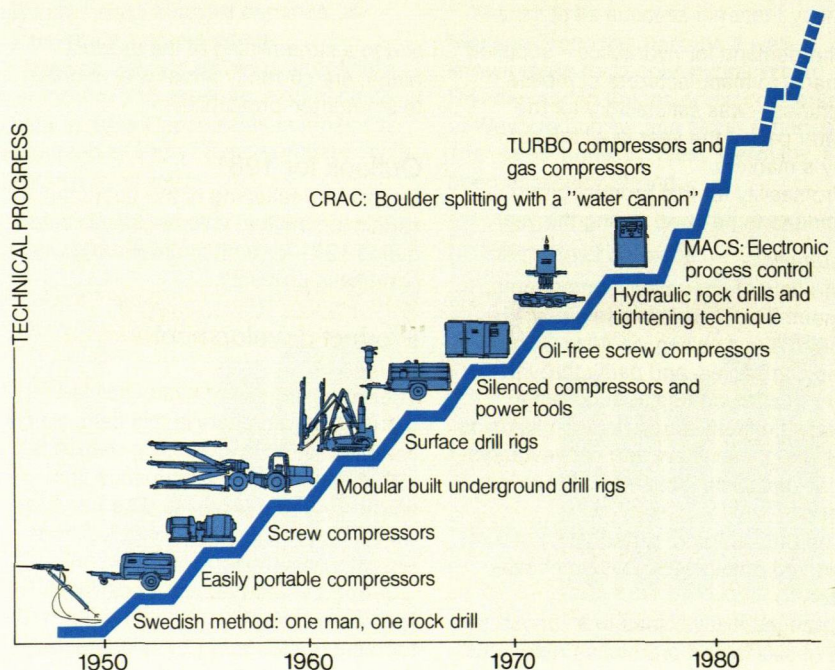
Ideas for solutions to problems and for new products are tested under conditions of secrecy. This development work is of great strategic importance since it may lead to important changes for the Company.

Large portions of the technical development work have been increasingly oriented towards the business lines of the various divisions. For example, several uncommon, advanced methods of rock destruction are currently being tested.

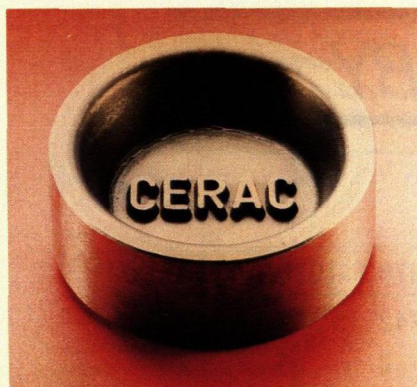
Another way of attaining a high technical standard is by purchasing technological know-how. Corporate acquisitions can thus supplement the company's own technical development.

In 1979 Atlas Copco widened its technical know-how in the field of tunnel driving by acquiring Jarva, Inc., in the U.S. The Group continued its purchase of technological know-how in 1980 by acquiring a minority interest in the U.S. development company, Mechanical Technology, Inc. MTI provides Atlas Copco with technical know-how related to advanced systems and processes in energy conversion.

Atlas Copco Turbonetics, a company affiliated with MTI, develops and manufactures advanced centrifugal-type turbo







Components with complicated shapes can now be made with advanced alloys, using Dynamic Powder Compaction, a powder metallurgical process recently developed at CERAC, Atlas Copco's R&D center in Switzerland. The process is suitable for the production of highly durable precision cog-wheels as well as turbine parts made of superalloys to withstand high mechanical and thermal stresses.

compressors. This has already put Atlas Copco in the position of being able to offer compressors of higher capacity than formerly and adapted for gases other than those previously used. In the longer term, turbo technology can open new markets in the attractive energy sector. The acquisition of the KSB unit

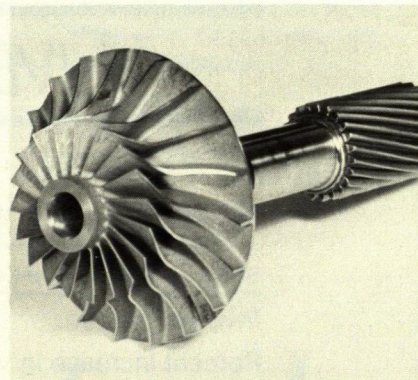
in Saarbrücken, West Germany, which will become the Group's European center for gas compressors, is also a step in the same direction.

### Product development – offensive tactics

Product development consists primarily of design work and the testing of new products. This constitutes the main part of Atlas Copco's total R&D and is principally consigned to the divisions.

The great majority of the Company's new products are improvements of earlier ones. New products incorporating new techniques are introduced at quite regular intervals. (See adjoining diagram.)

Technical and product development is carried out in many cases to satisfy the market requirements of a hard-to-assess future. Some products may, at one point, appear to be failures but, after a few years, when the market has ripened, they may become great sales successes. The hydraulic rock drill and silenced compressors are examples of such projects.



Atlas Copco Turbonetics' high-speed centrifugal compressors have very good aerodynamic performance characteristics and provide high pressure in few stages. The rotor in the picture is the moving part in a compressor stage. The impeller is precision-cast in a single piece. The pinion is machined directly off the shaft.

Many new products have been tested in Atlas Copco's own "mine" under the factory area in Nacka before being released into the market. In recent years, however, various designs have also been undergoing long-term laboratory tests under computer-simulated operating conditions. This reduces development time and costs.

Some of Atlas Copco's most profitable development projects relate to measuring and simulating equipment designed to improve and reduce the costs of its own product development.

### Well-balanced development

The results of R&D cannot always be accurately measured. Accordingly, Atlas Copco has to feel its way forward on the basis of a balanced mix of in-house development and acquired technological know-how, of exciting new developments, and of the more mundane work of improvement. Increased emphasis is currently being placed on long-term development work.

The cylinders used in the CRAC 200 water cannon are subjected to long-term durability tests in Atlas Copco's Central Laboratory in Nacka, outside Stockholm. In order to be able to guarantee high reliability, long-term operations are simulated by exposing a cylinder to computer-controlled, pulsating pressure. Several years' operations can be simulated in a short time.



Back cover:  
 Very high precision is an absolute requirement in a turbo vane in order to achieve good aerodynamic performance, high stage pressure ratio and high efficiency. The picture shows an impeller for a centrifugal compressor being checked at Atlas Copco Turbomechanics, Inc. in the U.S.

# FIVE-YEAR SUMMARY

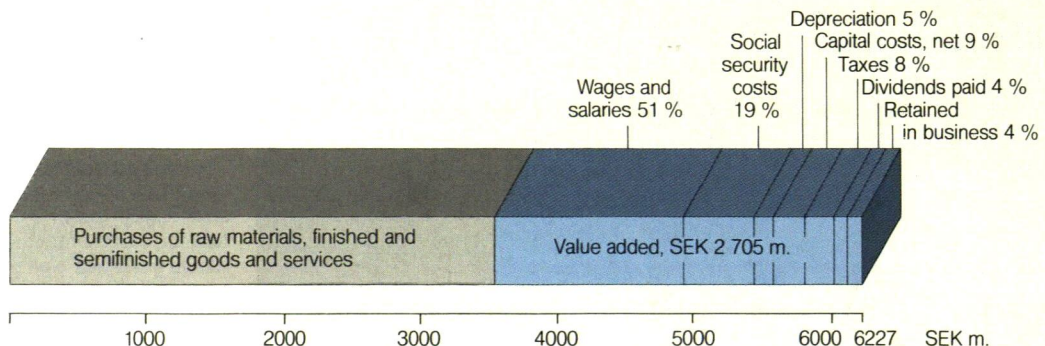
## ATLAS COPCO GROUP

SEK millions unless otherwise noted	1976	1977	1978	1979	1980
Invoiced sales . . . . .	3 791	4 157	4 742	5 305	6 227
Percent increase in volume . . . . .	—	3	2	5	7
Percentage of sales outside Sweden	90	91	92	92	91
Profit after financial income and expense . . . . .	338	297	301	334	442
As percent of invoiced sales . . . . .	8.9	7.1	6.3	6.3	7.1
Return on total capital employed . . . .	16.6	14.4	13.9	14.2	16.9
Percent return on risk-bearing equity capital . . . . .	10.4	8.3	8.4	9.0	10.5
Percent return on shareholders' equity . . . . .	12.3	9.7	9.5	10.0	11.8
Rate of risk-bearing equity capital . . .	42.7	38.4	38.6	38.6	35.2
Investments in machinery and buildings . . . . .	153	169	133	161	231
As percent of sales . . . . .	4.0	4.1	2.8	3.0	3.7
Degree of self-financing, percent . . .	123	95	159	75	101
Ratio of current assets to current liabilities . . . . .	2.2	2.0	2.3	2.1	2.2
Average number of employees . . . . .	18 271	18 032	17 664	17 883	18 786
Sales per employee, SEK 1000s . . . . .	207	231	268	297	331

For definitions, see page 14.

## VALUE ADDED BY THE ATLAS COPCO GROUP

Value added is an expression of the Company's production effort, that is, the increase in the value of goods arising from such operations as handling and processing. The diagram shows the relationship between the value added and Group sales as well as the proportion of value added that is attributable to the various components.

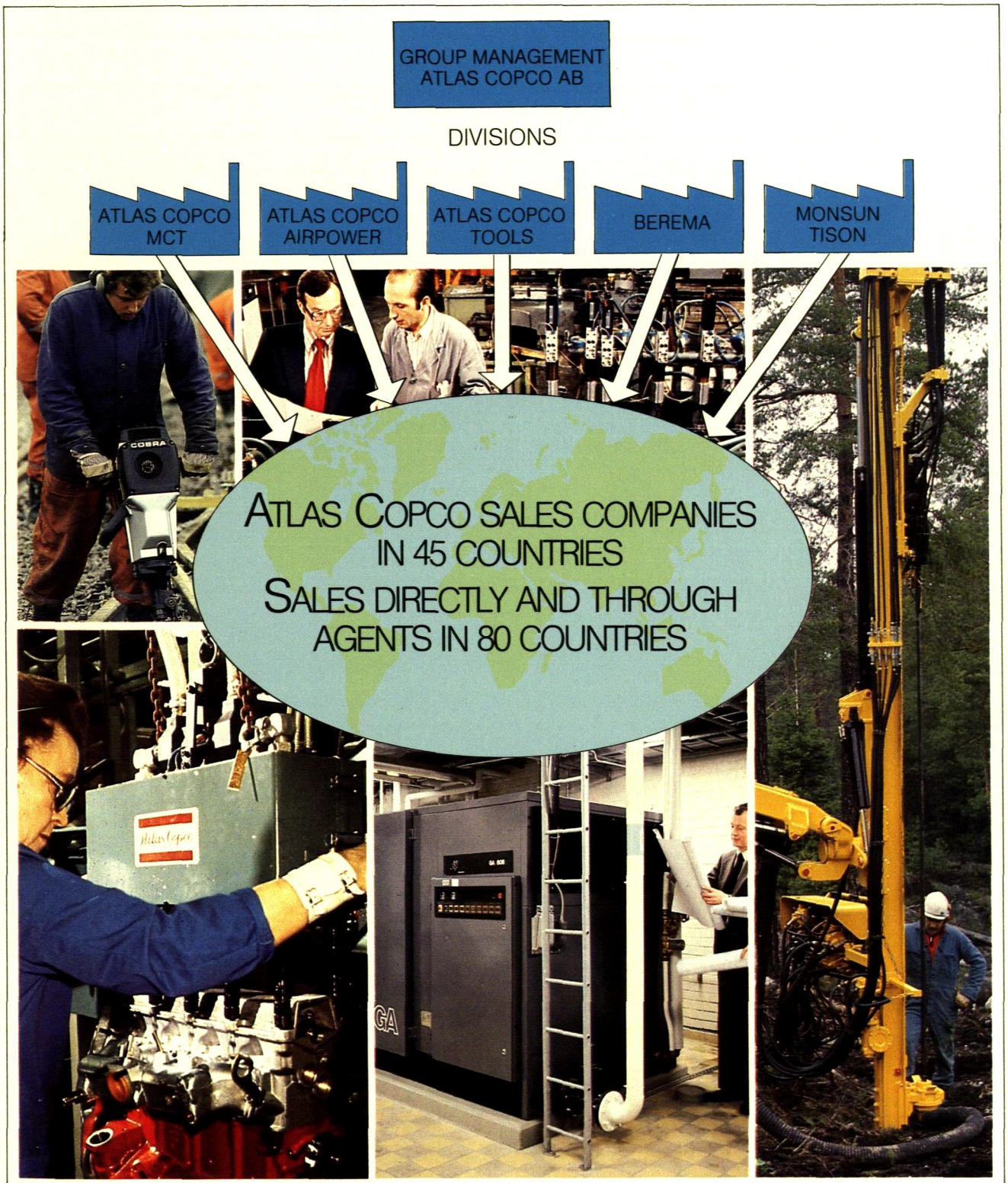


Atlas Copco Group

# ORGANIZATION

The five divisions of the Atlas Copco Group – MCT, Airpower, Tools, Berema and Monsun-Tison – market their products and systems partly through the Group's sales companies and partly through distributors and agents.

A characteristic of Atlas Copco is that it concentrates on its own sales companies since this makes for close contact with customers and users of the Company's products.

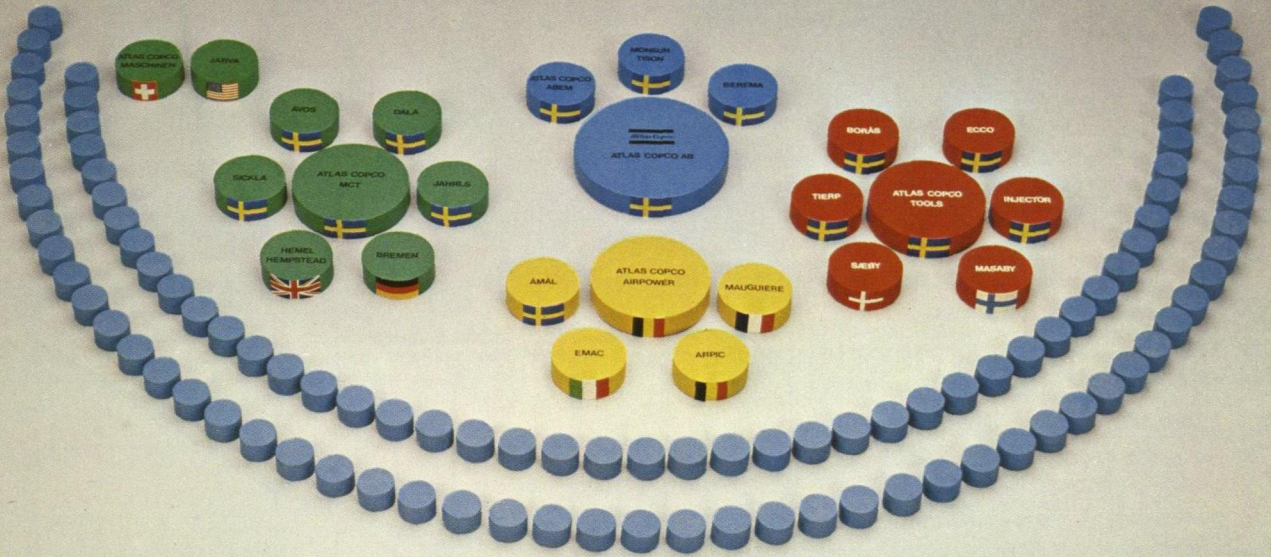




*Atlas Copco*

Atlas Copco

# Atlas Copco 1980



## The Atlas Copco Group

*The heart of the Group is the parent company, Atlas Copco AB, and the three product divisions MCT, Airpower and Tools, together with their manufacturing units and associated companies.*

*The Group's sales force is represented in more than 110 countries either by our own companies or authorized distributors.*

Atlas Copco, one of Sweden's major industrial companies, is also one of the largest in the world engaged in modern compressed air technique.

Although we have made our name as compressed air specialists, we are actively engaged in many other fields as well.

Our specialization is »pressure energy» — the technique of using gases or liquids to transfer energy and put it to useful work.

As you might expect, most of our 3 000 or so products are designed for compressed air. Some also incorporate hydraulics, while others are fully hydraulic, e.g. certain rock drilling rigs. And we do not hesitate to make use of other technologies to meet our customers' requirements.

## The Group Management

The Group Management, located at the parent company **Atlas Copco AB**, is mainly concerned with strategic management and general Group policy, as well as with financing, long-term planning, long-range research and communications.

For handling sales via distributors and through state trade organizations there is a special division at the parent company with specialists in technique, finance and marketing.

*Independent subsidiaries of Atlas Copco AB are:*

**Atlas Copco ABEM** in Sundbyberg (Stockholm) which manufactures and markets geophysical and industrial measuring equipment.

**Berema**, with three manufacturing units in Sweden. Manufactures and markets motor drills and hydraulic, truckmounted cranes.

**Monsun-Tison**, with its three manufacturing units in Sweden. Develops, manufactures and markets hydraulic and pneumatic components and systems.

## The Product Divisions

The three Product Divisions engage in product development, manufacture, sales support, etc. As required, they also assist the sales companies with design and adaptation of products and methods to meet the special needs of customers.

### **Atlas Copco MCT .**

MCT (Mining and Construction Technique) has its Head Office and main manufacturing units in Nacka, Stockholm. It develops and manufactures Group products for the mining and construction industry.

Around its central management this Division has five different sectors: Surface Drilling, Underground Equipment, Drill Steels, Rock Drills, and Contractor Tools.

The Division's range of products includes light and heavy rock drilling equipment (pneumatic and hydraulic), loading and transportation equipment (incl. products from Håglund & Söner), winches, tunnel boring machines, 1979 reinforced by the acquisition in Jarva Inc., crawler drill rigs, paving breakers, sheeting drivers, pumps etc. The marketing of Sandvik Coromant drill steel equipment is an important part of the sales program.

### Atlas Copco Airpower

This Division, with Head Office at its main plant in Antwerp, Belgium, manufactures and markets piston and rotary screw compressors, portable as well as stationary, and equipment for installation, such as air dryers, aftercoolers. Airpower is also responsible for Atlas Copco equipment for lake restoration, ice prevention on waterways and the containing of oil spills on water ("bubble barriers").

### Atlas Copco Tools

The Group's Product Division for industrial technique is located in Stockholm, adjacent to one of its manufacturing units.

The division is responsible for development, production and marketing of mainly airpowered industrial tools for assembly and materials removal, production systems and finishing equipment. The range also includes airmotors, hoists and accessories for compressed air preparation and distribution.

### The Sales Companies

Atlas Copco is represented in the market by our own sales companies in 44 countries. Each has a local sales and service organization, and in some cases also manufacturing units.

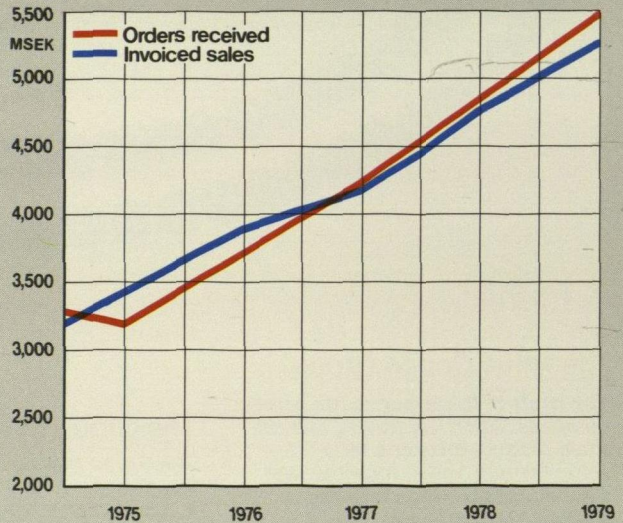
In another 70 countries the Group's products and techniques are marketed through distributors with the same function as the sales companies. The activities in most of these countries are supported and coordinated by the Export Sales Division of Atlas Copco AB.

### Facts in brief

- Company founded in 1873
- Atlas Copco sales companies in 44 countries
- Distributors in another 70 countries
- Equipment in operation in 136 countries
- Nineteen manufacturing units in Sweden and nineteen abroad
- Markets more than 3 000 different products
- 18 000 employees in five continents
- Group invoicing for 1979: MSEK 5 300
- Share capital: MSEK 413.9
- More than 90% of the Group sales go outside Sweden

### The Atlas Copco Group

— invoicing and orders over five years.



### Group Headquarters:

Atlas Copco AB, S-105 23 Stockholm, Sweden.  
Phone 08-743 80 00. Telex 19940.

### Product Divisions:

Atlas Copco MCT AB,  
Fack, S-102 60 Stockholm 4, Sweden.  
Phone 08-743 80 00. Telex 17320.

Atlas Copco Airpower N.V.,  
Boomse Steenweg 957,  
B-2610 Wilrijk, Belgium.  
Phone 031-87 68 70. Telex 31118

Atlas Copco Tools AB,  
Fack, S-104 60 Stockholm 20,  
Sweden.  
Phone 08-44 99 20. Telex 17130

### Board of Directors

Elected by shareholders:

**Peter Wallenberg**  
Chairman  
**Kurt-Allan Belfrage**  
Deputy Chairman  
**Henry N Sporborg**  
**Jan Hellner**  
**Sture Ödner**  
**Erik Johnsson**  
**Axel Iveroth**  
**Curt G Olsson**  
**Tom Wachtmeister**  
Managing Director

Employee representatives:

**Bo Henning**  
**Per-Erik Nyholm**  
**Ingmar Berthelsen**  
(Deputy)  
**Kjell Nordström**  
(Deputy)

### Group Management Committee

**Tom Wachtmeister**  
Managing Director

**Einar Liwendahl**  
Deputy Managing Director  
Market Operations — East

**Sven-Ingvar Svensson**  
Deputy Managing Director  
Market Operations — West

**Bo Gyllenberg**  
Director Production

**Hans Johnsson**  
Director Communications

**Rolf Lahnhausen**  
Director Personnel

**Kalevi Söderlund**  
Director Finance, Administration

**Jan Holdo**  
Managing Director  
Atlas Copco MCT AB

**Iwan Åkerman**  
Managing Director  
Atlas Copco Airpower N.V.

**Göran Lundborg**  
Managing Director  
Atlas Copco Tools AB