Atlas Copco 1977

Above:
The Limno unit, which was designed to restore polluted lakes, has found an important new application area accentuated by the dry summer in Europe 1976. Outside Brussels, Belgium, a reservoir of 1 million cubic metres of fresh water has been created by installing a Limno unit for oxygenation of the water in an abandoned lime stone quarry.

Front cover:
One of the largest units in the XA compressor series, which was extended during 1977, is seen at a highway construction site near Stockholm. The crawler drill is a ROC 302 with dust collector and alignment instrument.

Atlas Copco
Annual Report 1977

Atlas Copco AB
Board of Directors

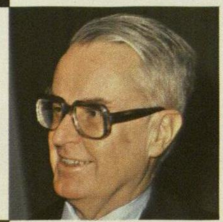
Elected by
the Annual General
Meeting

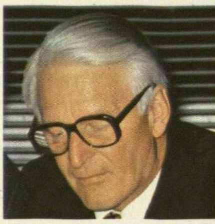
Peter Wallenberg
Chairman
Industrial Adviser
Skandinaviska
Enskilda Banken

Kurt-Allan Belfrage
Deputy Chairman
Man. Dir.
Atlas Copco AB
1957-70
Chairman Swedish
Export Council

Henry N. Sporborg
Dir. Hambro's Ltd.
England

Jan Hellner
Professor
Stockholm
University

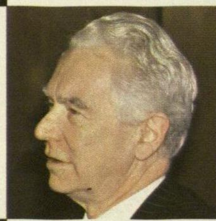




Sture Ödner
Man. Dir.
Saléninvest AB

Erik Johnsson
Dr Techn.
Man. Dir.
Atlas Copco AB
1970-75

Axel Iveroth
Dep. Chairman
Federation of
Swedish Industries



Ulf-C Bratt
Man. Dir.
Förvaltnings AB
Providentia

Curt G Olsson
Man. Dir.
Skandinaviska
Enskilda Banken

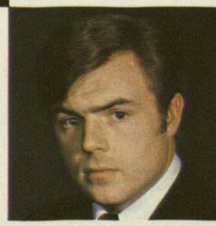
Tom Wachtmeister
Man. Dir.
Atlas Copco AB
since 1975

Employee
representatives

Bo Henning
Atlas Copco local of
Salaried Staff Union

Per-Erik Nyholm
Atlas Copco local of
Metal Workers' Union

Ingmar Berthelsen
Deputy
Atlas Copco local of
Graduate Eng. Union



Kjell Nordström
Deputy
Ecco Works' local of
Metal Workers' Union

Atlas Copco
Annual Report 1977

*) Separate US$ version available

Atlas Copco AB

Group Management Committee

Tom Wachtmeister, Man. Dir.
Bengt Andersson, Dep. Man. Dir., Finance, Administration
Einar Liwendahl, Dep. Man. Dir., Market operations – East
Göran Lundborg, Dep. Man. Dir., Manufacturing and Technical operations until Nov. 30, 1977, Man. Dir. Atlas Copco Tools AB from Dec. 1, 1977
Sven-Ingvar Svensson, Dep. Man. Dir., Market operations – West
Bo Gyllenberg, Production Dir.
Jan Holdo, Dir. of Research and Development
Rolf Lahnhagen, Personnel Dir.
Rune Back, Man. Dir., Atlas Copco MCT AB
Iwan Åkerman, Man. Dir., Atlas Copco Airpower N.V.
Theo Dietz, Man. Dir., Atlas Copco Tools AB until Nov. 30, 1977

Associate Directors

Anders Björk, Lennart Friberg, Hans Johnsson, Anders Kindahl, Olle Lundquist, Kalevi Söderlund

Special Advisers

Olof Landenius, Stig Unger

Auditors

Birger Sonesson, Athorized Auditor
Bertil E Olsson, Authorized Auditor
Karl-G Giertz, Deputy Auditor
Olof Orwander, Deputy Auditor

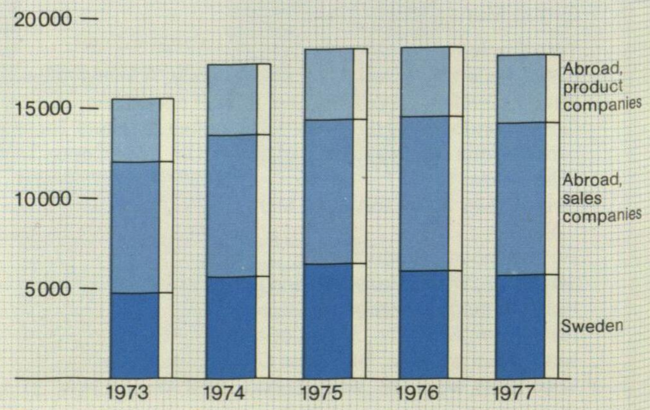
The Atlas Copco Group
Five years in summary

	1977	1976	1975	1974	1973
Invoiced sales, mill. Kr	4 157	3 791	3 385	2 949	2 213
Increase, %	9.7	12.0	14.8	33.3	19.7
Profit before extraordinary items and appropriations, mill. Kr	297	338	430	369	275
in % of invoiced sales	7.1	8.9	12.7	12.5	12.4
Total assets, mill. Kr	4 411	3 946	3 566	2 864	2 302
Return on total assets, %[1])	11.4	12.8	17.0	18.1	16.2
Adjusted profit after taxes, mill. Kr[2])	141	165	208	181	135
Return on equity, %[3])	9.7	12.3	17.4	17.4	15.3
Earnings per share, Kr[4])	11.35	14.48	17.71	12.94	9.51
Equity/total assets, %[5])	33.4	36.2	35.2	39.4	41.3
Investment in fixed assets, mill. Kr	169	153	174	142	93
Number of employees	18 032	18 271	18 236	17 392	15 473
Dividend per share, Kr[4])	6.00[6])	6.00	5.29	4.85	3.64
Stock market price, Kr[4]) high	156	183	175	146	119
low	89	144	122	95	83

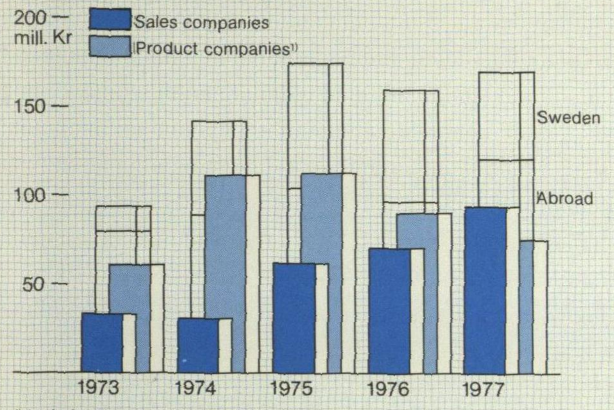
[1]) *Profit before extraordinary items, appropriations and interest paid in % of the assets as per the balance sheet.*
[2]) *Deductions have been made for a calculated tax (50 %) and minority interest.*
[3]) *Untaxed reserves are included in equity – after deduction for future tax liability.*
[4]) *Adjustments have been made for new issues for purposes of comparison.*
[5]) *Equity as defined in footnote 3 in % of total assets.*
[6]) *Board of Directors' proposal.*

Invoiced sales and orders received

Number of employees

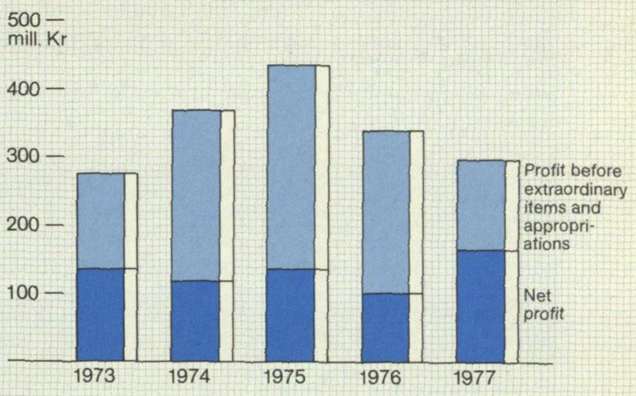


Investment in fixed assets

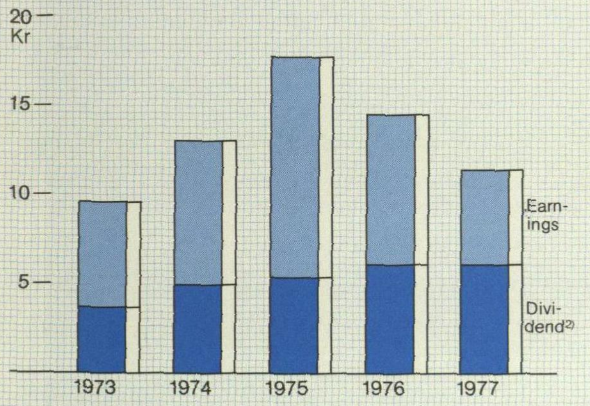


[1)] Includes the parent company.

Profit before extraordinary items and appropriations, net profit

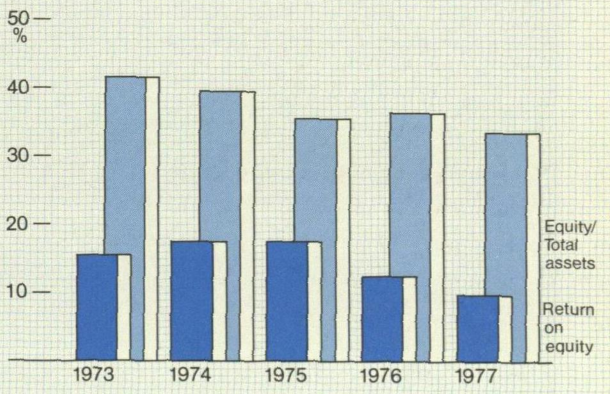


Earnings and dividend per share[1)]



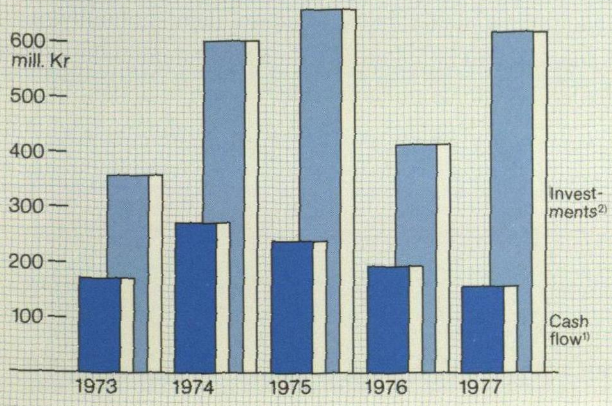
[1)] As defined on page 4.
[2)] 1977 as proposed by the Board of Directors.

Equity/Total assets ratio and return on equity[1)]



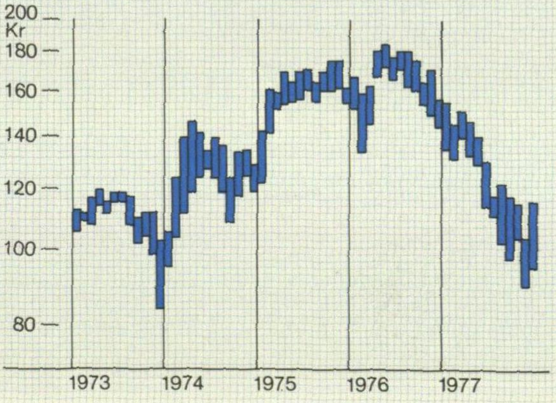
[1)] As defined on page 4.

Investments and cash flow



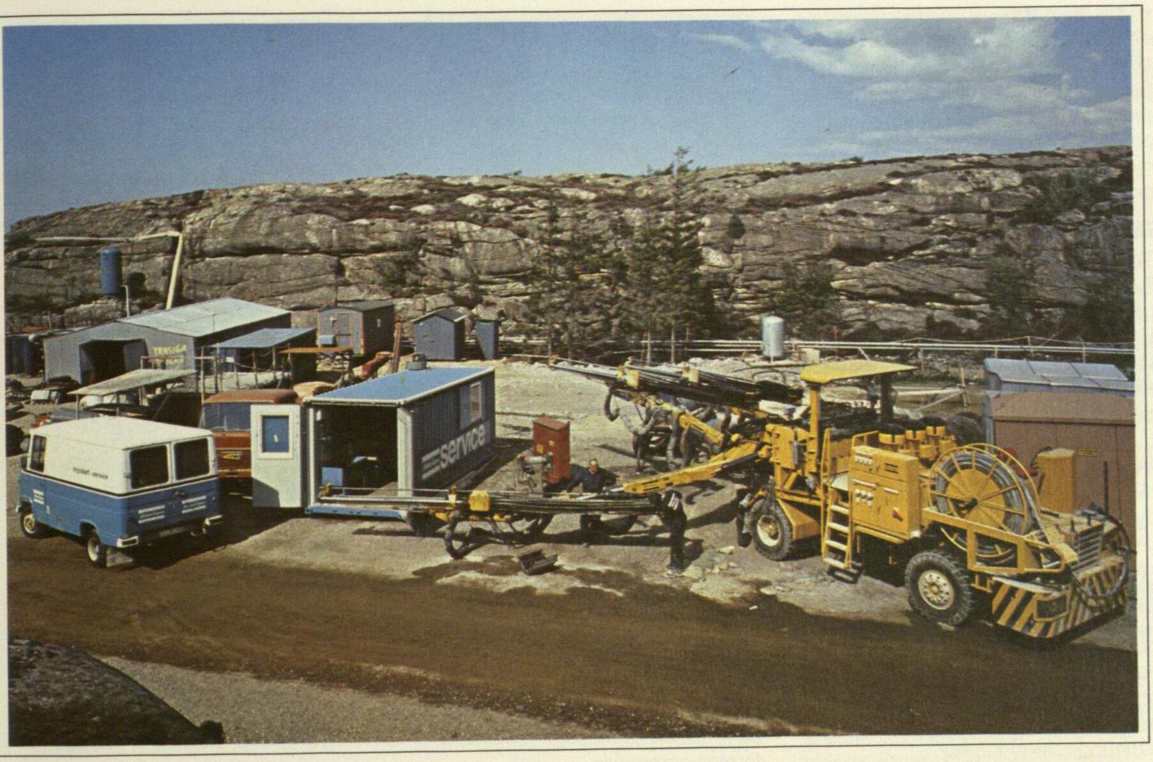
[1)] According to funds statement, page 13.
[2)] Investments in fixed assets, inventories and current receivables.

Stock exchange quotation[1)]



[1)] Adjusted for issues. Logarithmic scale.

A major advance towards an improved working environment is embodied in Atlas Copco's new pneumatic screwdriver LUM 11 SS. An extremely low sound level (58 dB A) and minimum vibrations are advantages which have created demands from a large number of assembly industries. The photo is from SAAB-Valmet in Nystad, Finland.



The Atlas Copco Group in 1977

1977 was characterized by continuing low activity in world trade. The trend in most of our customer branches, in particular the mining industry, was weaker in 1977 than expected at the beginning of the year.

Despite these unfavourable conditions Group invoicing increased by 10 %. This means that the total sales volume of the Group has remained more or less unchanged after adjustments for price increases and currency fluctuations.

Production costs have been very high in Sweden, Belgium and West Germany, three of our most important manufacturing countries. The West German and Belgian currencies were strengthened during the year, which was one of the reasons for continuing high costs for products from these countries. The two devaluations of the Swedish Krona during the year have been utilized to increase the Group's competitive ability. The anticipated positive effects of these devaluations will not influence the results before 1978. With a view to maintaining employment on as high a level as possible, the Group has accepted orders at prices which have not always allowed satisfactory profit margins.

Since the cost trend has been particularly unfavourable in Sweden, considerable efforts have been made through reorganization and reductions in personnel to achieve a more acceptable cost level in Sweden.

Trends in Sweden during the year have clearly shown how strongly corporate business results affect the general standard of living. Through its considerable international business, Atlas Copco has been able to maintain activities in Sweden on a level which would otherwise have been impossible. In actual fact, most of the Group's Swedish manufacturing and sales units reported negative results.

Despite Sweden's dependence on business abroad, government investigations have been initiated – on political grounds – to restrict such activities in certain countries. For Atlas Copco, whose future development in the mining sector for example, is dependent on close collaboration with qualified mining companies, such as those in South Africa, such limitations – if realized – could create problems in the short and long-term perspective. The justifications for such actions are

The world's largest underground oil storage facility is being constructed at Brofjorden in Sweden. In order to provide service with a minimum loss of time, Atlas Copco has established a movable service station on the site. The drill rig in the photo is a hydraulic Promec TH 470.

all the more difficult to understand in view of the fact that Atlas Copco, like other Swedish-based companies in South Africa, is actively engaged in improving the wage trend, training opportunities, and the general employment conditions of underprivileged groups.

Results

Total invoicing for the Atlas Copco Group in 1977 was Kr 4 157 million (previous year Kr 3 791 million) or US$* 893 million, an increase of close to 10 %. Orders received amounted to Kr 4 249 million (3 685) or US$ 913 million, an increase of 15 %.

Group results before appropriations were Kr 297 million (338) or US$ 64 million, which is 12 % lower than the previous year. The profit margin dropped from 8.9 % to 7.1 %. Return on the total average capital was 11.4 % (12.8 %).

The Swedish sales company reported a loss. The sales companies outside Sweden increased their profit somewhat compared to 1976, mainly as a result of a favourable currency exchange development.

Atlas Copco Airpower, which generates a considerable share of the Group's net profit, reported a somewhat smaller margin than the previous year.

Although the Group's operating profit before appropriations and taxes dropped by Kr 41 million, net profit after taxes shows an increase of Kr 63 million compared to 1976. This is due to dissolution of inventory reserves mainly for tax reasons, since the inventories of some of the Swedish companies were reduced.

The tax burden was also more normal than in 1976, when the relation between taxes and profits was unfavourably affected by non-deductible, unrealized exchange losses abroad, among other factors. Interest paid less interest income and dividends increased by Kr 43 million to Kr 145 million. This is chiefly due to increased short-term borrowing in order to meet needs for working capital.

Financing

Of the total financing of Kr 603 million (467) funds generated internally amounted to Kr 157 million (192), which represents a lower degree of self-financing. The Group's equity/total assets ratio then declined during the year from 36 % to 33 %

An increase in inventory of Kr 289 million can mainly be referred to the foreign companies and to Atlas Copco Airpower.

Accounts receivable increased during the year by Kr 162 million, partly because of very high invoicing volume in December. Average customer credit periods are approximately the same as during the previous year.

Current liabilities increased by Kr 372 million (17) and long-term liabilities by Kr 74 million (154). Most of the short-term borrowing was made abroad.

Approximately one half of the total increase in liabilities of Kr 446 million can be attributed to changed conversion rates resulting from the development of the Swedish Krona during 1977.

In January 1978 a loan of Swiss Fr 40 million taken by the parent company, was redeemed before maturity to be replaced by medium term loans in foreign currencies.

During 1978 the parent company will float an issue of Swedish bonds amounting to Kr 100 million at an interest of 10 1/4 % with an interest adjustment clause. The loan, which carries a so called negative clause, will run for a period of 15 years.

Negotiations are in progress concerning the sale of 50 % of the shares in the Craelius Group to the British company Unicorn Industries Ltd., with an option for Unicorn to acquire the remaining shares in the future.

Investments

Investments in the sales companies were increased to Kr 94 million (65), while investments in manufacturing were limited to Kr 75 million (88), which indicates that investments in marketing have been given priority.

Investments in marketing facilities

Modernization and expansion of sales and service facilities were started and completed in several countries. In Sweden the regional offices in Norrköping and Gällivare moved to new premises. A new branch office opened in Oviedo in Spain. Atlas Copco Nederland began the expansion of the branch offices in Amsterdam and Zwijndrecht. In Norway and the Philippines the sales companies moved to new main offices. The Peruvian sales company began a move to new headquarters in Lima. Expansion work is also in progress at the main office of the German company in Essen.

Investments in production facilities

The goods terminal at the Nacka Works and the new high-rise storage building at the Arpic Works in Antwerp came into operation during the year. Other investments in production facilities were chiefly replacements, since production resources in the present market situation are judged to have adequate or more than adequate capacity.

Research and development

In 1977 a sum equivalent to about 4 % of the turnover was allocated for research and product development within the Atlas Copco Group.

The CERAC research laboratory, established in 1970, has now begun to produce results and these will find increasing use in new development projects at the product companies – the main divisions of the Group.

As early as in the 1950's the company introduced systems for utilizing heat from the cooling water of compressor installations. But with low energy prices these systems gained very little attention. In the current situation when energy prices are rising and it has become increasingly important to save energy, heat recovery from compressed air systems is the object of renewed, intensified interest. These systems have then been further developed and now permit the recovery of thermal energy corresponding to 70–80 % of the electric energy input to the compressor station. Customer interest is considerable. Other aspects of the energy complex are also under study.

Product responsibility is a concept which receives increasing importance in many countries. Atlas Copco's efforts have always been to develop and sell equipment characterized by high quality and efficiency combined with

** Conversion rate: US$ 1.00 = SKr 4.655*

During the year the Swedish royal couple honoured Atlas Copco by their presence at the inauguration of Airpower's high-rise store. Here Queen Silvia confirms the inauguration with her signature – in accordance with the Atlas Copco tradition – written with a pneumatic engraving pen. The Queen is assisted by the Managing Director of Atlas Copco Airpower, Iwan Åkerman.

maximum operator safety and reliability. Future legislation is expected to place additional demands on equipment suppliers. During the year the Group initiated a review of testing methods, calculation programs, the preparation of operating instructions and documentation routines for compiling technical information etc. to enhance our capacity to meet future requirements.

The automotive industry is one industrial sector with strong concerns for product responsibility. Of the approximately 3000 screw joints in an automobile, 300 are critical for the safety of the passengers and the performance of the vehicle. Today Atlas Copco can offer advanced solutions for tightening these critical joints in automobiles, and active development work continues. The Atlas Copco equipment consists of air powered nutrunner units with electronic monitoring systems which control and register the tightening angle and torque of the joint.

Atlas Copco has actively participated in the standardization work of the international branch organizations Pneurop and Cetop, the standardization organizations ISO and CEN, and through contacts with the EEC commission and Environmental Protection Agency (EPA) in the USA. An important goal in this work is to reduce or remove technical trade barriers.

One example of collaboration in which Atlas Copco has been engaged is a proposal for a European safety norm for hand-held grinders. This work will form the basis of an EEC directive to coordinate official regulations in Europe.

In addition to efforts toward greater efficiency and reliability, continued attention has been given to ergonomic and environmental matters related to Atlas Copco products.

For Atlas Copco's part 1977 as a whole was characterized by research and development activities in accordance with anticipated future requirements. The statement sometimes made, that current difficulties of Swedish industry can be blamed on unsatisfactory efforts in research and product development, cannot be considered valid for Atlas Copco.

Personnel

Heavy personnel costs, primarily in Sweden, and the structural weakening of the mining market have called for measures to reduce the number of employees. By means of early retirement offers combined with a ban on new employment, the average number of employees in Sweden was reduced by about 450, equally divided between office and factory workers. The preliminary notice given in mid-1977 concerning 450 employees was cancelled in early 1978 in conjunction with decisions about other steps to cut production. Efforts to reduce the number of employees will continue in 1978 as well, and new measures may have to be taken unless capacity utilization improves at the Swedish companies.

In accordance with Swedish legislation and traditions on the labour market, decisions to reduce production were taken after comprehensive negotiations with representatives of the trade unions.

The number of employees at production units outside Sweden remained largely unchanged. With a view to intensifying marketing efforts, sales companies abroad increased somewhat the numbers of their employees. In 1977 the total number of employees in the Group averaged 18 032 (18 271).

Consolidated balance sheet*

At December 31

Assets

	1977		1976	
	mill. Kr		mill. Kr	
Current assets				
Cash in hand and at banks	336.3		353.4	
Notes receivable	145.4		154.0	
Accounts receivable from customers	859.9		725.7	
Prepaid expenses and accrued income	45.8		24.3	
Other accounts receivable	145.4		130.2	
Inventories *(note 1)*	2 058.8	**3 591.6**	1 769.7	**3 157.3**
Blocked accounts		**18.7**		**35.7**
Fixed assets				
Shares and bonds *(note 2)*	5.8		6.4	
Other investments	81.1		83.4	
Construction work in progress	92.0		25.9	
Machinery and equipment *(note 3)*	197.7		210.5	
Buildings *(note 4)*	323.6		333.4	
Land *(note 4)*	100.0	**800.2**	93.5	**753.1**
Total assets		**4 410.5**		**3 946.1**

Liabilities

	1977		1976	
Current liabilities				
Notes payable	264.9		302.9	
Suppliers	325.6		264.5	
Bank loans	581.6		357.5	
Provision for taxes	100.9		118.4	
Accrued liabilities and prepaid income	62.3		60.6	
Other current liabilities	444.0	**1 779.3**	303.0	**1 406.9**
Long-term liabilities				
Mortgage and other long-term loans *(note 5)*	445.6		403.2	
Bond and debenture loans	211.9		219.3	
Provision for pensions *(note 6)*	216.7		181.2	
Other long-term liabilities	24.5	**898.7**	21.2	**824.9**
Total liabilities		**2 678.0**		**2 231.8**
Untaxed reserves				
General inventory reserves *(note 7)*	393.6		447.4	
Investment reserves *(note 8)*	28.5		25.8	
Working environment reserves *(note 9)*	11.6		19.6	
Special investment reserves *(note 10)*	6.8	**440.5**	16.9	**509.7**
Minority holdings		**37.6**		**28.9**
Shareholders' equity				
Restricted equity				
Share capital	310.4		310.4	
Legal reserves *(note 11)*	249.6		260.9	
Other reserves not available for distribution *(note 12)*	305.6	**865.6**	255.2	**826.5**
Non-restricted equity				
Contingency fund	38.8		38.8	
Surplus *(note 13)*	186.4		209.3	
Profit for the year	163.6	**388.8**	101.1	**349.2**
Total equity		**1 254.4**		**1 175.7**
Total liabilities and equity		**4 410.5**		**3 946.1**
Pledged assets *(note 14)*		354.0		310.5
Contingent liabilities				
Notes discounted		204.6		135.9
Other contingent liabilities		129.1		172.6

Consolidated profit and loss account*

	1977		1976	
	mill. Kr		mill. Kr	
Invoiced sales		4 157.2		3 791.2
Cost of goods sold, technical development, sales, administration etc		-3 630.3		-3 268.4
Operating profit before depreciation		526.9		522.8
Depreciation *(note 15)*				
Buildings	17.3		16.0	
Machinery and equipment	67.9	– 85.2	66.2	– 82.2
Operating profit after depreciation		441.7		440.6
Financial charges and other income				
Interest paid	-179.0		-142.2	
Interest income	+ 35.2		+ 36.6	
Dividends received	+ 0.3		+ 0.2	
Share in net result of non-consolidated companies	– 1.8	– 145.2	+ 2.8	– 102.6
Profit after financial charges and other income		296.5		338.0
Capital gain on buildings sold		–		+ 4.3
Profit before appropriations and taxes		296.5		342.3
Appropriations				
Additional depreciation on fixed assets	– 14.9		– 7.6	
General inventory reserves	+ 59.8		– 54.4	
Investment reserves	– 3.9		– 2.1	
Utilization of working environment and investment reserves	+ 18.5		+ 7.5	
Depreciation against environment and investment reserves	– 18.5	+ 41.0	– 7.5	– 64.1
Profit before taxes		337.5		278.2
Taxes *(note 16)*		– 166.6		– 172.9
		170.9		105.3
Minority interest		– 7.3		– 4.2
Net profit		163.6		101.1
Net profit mill. US $		35.1		21.7

*) Separate US $ version available.

Notes to the consolidated accounts

Principles of consolidation

The consolidated balance sheet and profit and loss account of the Atlas Copco Group cover all the companies in which the parent company directly or indirectly owns at least 50 %, plus companies over which the Group in some other way exercises decisive influence.

The balance sheet has been drawn up according to the *past equity method*, which means that the equity of acquired companies at the time of their acquisition – with the addition of subsequent new issues – has been eliminated against the book value of the shares. Differences due to the depreciation of subsidiaries' shares have been carried against the surplus. As of 1977 the 13.3 mill Kr overvalue in the Group has been distributed as follows: Buildings 8.4 mill Kr, machinery and equipment 2.6 mill Kr and general overvalue 2.3 mill Kr. The depreciation for the year amounting to 2.9 mill Kr has been charged to the operating profit. The general overvalue of 2.3 mill Kr has been charged to the surplus of the Group.

The share capital of founded subsidiaries has been eliminated against the book values of these shares in the parent company. Differences due to bonus issues in subsidiaries have been carried to the Group's restricted equity, while differences due to the depreciation of the subsidiaries' shares have been charged to the Group's surplus.

The balance sheets of foreign subsidiaries have been converted to Swedish Kr according to the *monetary/non-monetary method.* Properties (land and buildings), machinery and equipment, inventories and equity at exchange rates prevailing at the time of acquisition.

For the other items in the balance sheet the year-end exchange rate has been applied.

The profit and loss statements have been converted according to the average rate of exchange for the year, with the exception of depreciations, which have been converted at the exchange rate of the time of investment.

The conversion differences which arise due to the use of different exchange rates are given as the net figure. No negative difference has been charged to the operating profit for 1977.

Note 1 Inventories

Inventories have been valued at the lower of the cost or market value, in general according to the principle of "first in – first out", after depreciation for obsolescence.

Note 2 Shares and bonds (mill. Kr)

	1977	*1976*
Shares in non-consolidated companies owned by Atlas Copco AB, see page 20	5.7	5.8
Holdings of shares by other Group companies	–	0.5
Holdings of bonds by other Group companies	0.1	0.1
	5.8	6.4

Note 3 Machinery and equipment (mill. Kr)

	Machinery and equipment *1977*	*1976*
Cost value	672.7	626.7
Accumulated depreciation	475.0	416.2
Book value	197.7	210.5

Note 4 Buildings and land (mill. Kr)

	Buildings *1977*	*1976*	*Land* *1977*	*1976*
Cost value	485.1	465.1	100.0	93.5
Revaluation in connection with the 1973 bonus issue	20.0	20.0		
Accumulated depreciation	181.5	151.7		
Book value	323.6	333.4	100.0	93.5

Note 5 Mortgage and other long-term loans (mill. Kr)

	1977	*1976*
Atlas Copco AB	104.2	166.2
Atlas Copco MCT AB	57.4	53.3
Atlas Copco Airpower N.V.	59.0	39.9
Atlas Copco Tools AB	27.6	27.1
Other Group companies	197.4	116.7
	445.6	403.2

Note 6 Provision for pensions

Refers mainly to the Swedish companies and corresponds to the actuarially calculated amount for pension obligations under the agreed-on supplementary pension plan in addition to the general supplementary National Plan.

Note 7 General inventory reserves

Appropriations to these reserves are mainly made in the Scandinavian companies of the Group. Swedish legislation permits the depreciation of maximum 60 % of the inventory value after deduction for possible obsolescence.

Note 8 Investment reserves

Similar to the Swedish companies, chiefly the company in Spain makes appropriations in accordance with local regulations.

Swedish companies have the option of setting aside 40 % of the profit before appropriations and taxes for investment reserves. Such appropriations presuppose the deposit of 46 % of the appropriated amount on a non-interest-bearing account with Bank of Sweden.

Subject to special permission from government authorities the investment reserve may be utilized for the immediate depreciation of fixed assets. Such permission was obtained in 1977 by Atlas Copco Tools AB for a sum of Kr 0.4 million.

Note 9 Working environment reserves

In accordance with a temporary law from 1974 Swedish companies were obliged to set aside 20 % of their profit before appropriations and taxes to a working environment reserve. The amount, which was tax-deductible, was deposited in its entirety on a non-interest-bearing account with Bank of Sweden.

In 1977 Atlas Copco AB, Atlas Copco MCT AB, Atlas Copco Tools AB, Monsun-Tison AB and the Swedish sales company utilized funds from the working environment reserve with a total value of Kr 7.9 million.

Note 10 Special investment reserves

In addition to appropriation for the working environment reserve, Swedish companies were obliged to set aside 15 % of their profit before appropriations and taxes to a special investment reserve. The entire sum was deposited on a non-interest-bearing account with Bank of Sweden.

During 1977 Kr 9.8 million have been utilized for the construction of a goods terminal at Nacka and Kr 0.4 million have been used by the Swedish sales company.

Note 11 Legal reserves (mill. Kr)

Legal reserves 1976-12-31	260.9
Transferred from the surplus	+ 9.7
Transferred to the share capital	– 10.3
Reclassifications etc, net	– 10.7
Legal reserves 1977-12-31	249.6

Note 12 Other reserves not available for distribution (mill. Kr)

Other reserves not available for distribution 1976-12-31	255.2
Transferred from the surplus	+ 39.8
Reclassifications etc, net	+ 10.6
Other reserves not available for distribution 1977-12-31	305.6

These reserves consist mainly of profits which have been transferred to the share capital of the subsidiaries.

Note 13 Surplus (mill. Kr)

Surplus 1976-12-31	209.3
Net profit for the year 1976-12-31	+ 101.1
Dividends to shareholders	− 75.5
Transferred to the restricted equity	− 49.5
Various adjustments, net	+ 1.0
Surplus 1977-12-31	186.4

In evaluating the Atlas Copco Group's surplus and profit for the year it should be noted that a substantial amount was earned in companies abroad from which the transfer of profit to the parent company is in certain cases accompanied by taxes or is subject to restrictions.

Note 14 Pledged assets

Mortgaged properties amount to Kr 209.7 million (173.6). Trade mortgages represent Kr 94.4 million (92.6).

Note 15 Depreciation

Ordinary actuarial depreciation has generally been practised with the highest sum permitted by the tax legislation of each country. This agrees well with the *fixed-rate depreciation requirement* based on the following depreciation rates: Machinery and equipment 10 %, vehicles 20 % and buildings 3 %.

Estimated depreciation, based on the replacement values of the fixed assets, amounts for the Group to mill. Kr 103 (104) and thus exceeds the *ordinary depreciations* by mill. Kr 18 (24).

Special depreciation which is entered among appropriations refers mainly to the subsidiaries in Belgium and Norway, where accelerated depreciation on new investments may be practised.

In addition depreciation has also been made with the utilization of the following reserves (mill. Kr):

	1977	*1976*
Investment reserves (note 8)	0.4	2.7
Working environment reserves (note 9)	7.9	4.5
Special investment reserves (note 10)	10.2	0.3
	18.5	7.5

Note 16 Taxes

The net profit of the Atlas Copco Group has been reached after deduction of the taxes accruing thereto including coupon taxes on profit earned abroad, which have been paid to the respective parent company.

The tax burden was more normal in 1977 than in 1976, when the relation between taxes and profit was unfavourably affected by non-deductible, unrealized exchange losses abroad.

Source and application of funds

Source of funds

	1977	*1976*
Internal	mill. Kr	
Profit before extraordinary items and appropriations	296.5	338.0
Depreciation	+ 85.2	+ 82.2
Withdrawals from blocked accounts	+ 17.0	+ 8.7
Taxes	−166.6	−172.9
Dividend	− 75.5	− 63.6
	156.6	192.4
External		
New issue	−	103.5
Increase in		
long-term liabilities	73.8	154.0
current liabilities	372.4	17.3
Total funds generated	602.8	467.2

Application of funds

Increase in long-term receivables	− 2.9	3.3
Investment in land, buildings, machinery and equipment	168.6	152.8
Increase in current assets:		
Inventories	289.1	97.0
Short-term receivables	162.3	163.8
Sundry changes net	+ 2.8	+ 5.4
Total funds applied	619.9	422.3
Change in liquid assets	− 17.1	+ 44.9

Personnel data

Average number of employees

	1977		1976	
Sweden				
Prod.companies	5 022		5 502	
Sales companies	748	**5 770**	716	**6 218**
Abroad				
Prod.companies	3 771		3 695	
Sales companies	8 491	**12 262**	8 358	**12 053**
Total		**18 032**		**18 271**

Wages and other personnel costs

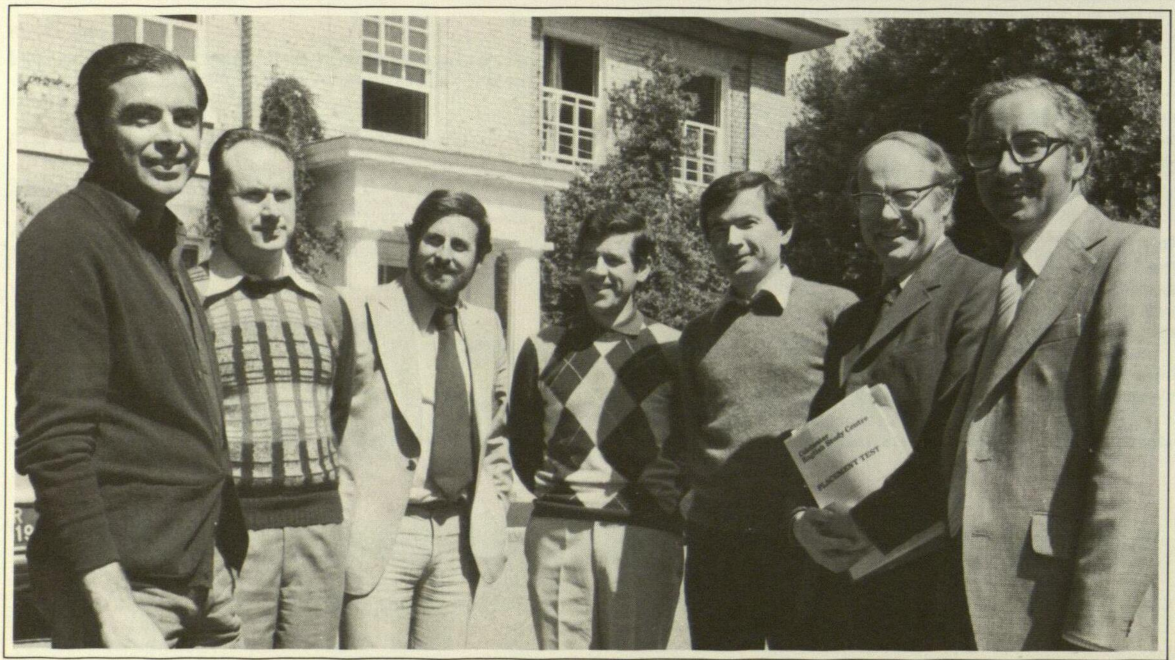
	1977		1976	
Sweden	mill. Kr		mill. Kr	
Prod.companies	468.7		443.9	
Sales companies	73.4	**542.1**	66.1	**510.0**
Abroad				
Prod.companies	276.1		239.9	
Sales companies	452.2	**728.3**	376.3	**616.2**
Total		**1 270.4**		**1 126.2**

Average number of employees in Sweden 1977

Municipality	Qty	Municipality	Qty
Stockholm	558	Bräcke	74
Nacka	2 290	Solna	68
Örebro	581	Sundsvall	41
Borås	443	Malmö	39
Skara	420	Norrköping	36
Smedjebacken	206	Skellefteå	29
Sundbyberg	165	Karlskrona	25
Falköping	162	Other	49
Kalmar	152		
Tierp	152	Total	5 770
Åmål	102		
Gävle	95		
Göteborg	83		

One of the many training programs within the Atlas Copco Group is the form of language training which was started in 1968 on the initiative of the then Managing Director K-A Belfrage.

The photo shows a group of course participants from France, Mexico, Portugal, Spain, Turkey and Venezuela outside their language school in Colchester, England.



Atlas Copco AB
Directors' report to the shareholders

Profit and loss account of the parent company

The invoiced sales of the parent company amounted to Kr 349.8 million (457.7) or US$ 75 million. This invoicing, which is handled by the sales division for distributor and state foreign trade countries, concerns the markets where the Group is not represented by its own sales companies. Large deliveries were made to Yugoslavia, the Soviet Union, Saudi Arabia and Nigeria, but have not been sufficient to compensate for the invoicing following the final delivery in the Korea contract from 1974, which formed part of last year's figure.

In other costs and revenues are included net exchange losses of Kr 16 million, primarily due to the Swiss Fr loans taken during previous years. In this respect the year's exchange losses on the long-term loans have been distributed over the remaining duration of the loans.

As a result of the decentralization of certain functions to the product companies, as was mentioned in the previous Directors' Report, the administrative costs of the parent company have been appreciably reduced.

Financial costs and revenues show a net deficit amounting to Kr 50.3 million (24.8). The increase can be chiefly ascribed to increased interest costs on foreign loans.

After a dissolvement of the inventory reserve of Kr 24.0 million (9.0) and appropriations for taxes of Kr 2.0 million (13.5), the company reports a net profit of Kr 96.7 million (77.3).

Balance sheet of the parent company

Share-holdings in subsidiaries increased from Kr 354 million to Kr 410 million, or by Kr 56 million, as a result of new issues in Berema AB and Monsun-Tison AB and in the subsidiaries in Italy, West Germany and Great Britain.

Kr 9.8 million have been drawn from the special investment reserve for the construction of a goods terminal at the Nacka Works.

In the course of the year Kr 3.5 million from the working environment reserve have been transferred to Atlas Copco MCT AB, Atlas Copco Tools AB and Monsun-Tison AB

During 1978 a bond loan of Kr 100 million with an interest rate of 10 1/4 % will be issued on the Swedish market. The loan, which carries an interest adjustment clause, has a maturity of 15 years.

The average number of employees at the parent company during the year was 343 (724), all in Nacka.

The parent company had the following remuneration expenses:

	1977	1976
	mill. Kr	
Directors and Senior Management	3.1	2.5
(whereof bonus 1.1 (1.1))		
Others	29.0	52.5
	32.1	55.0

The Atlas Copco Group had the following remuneration expenses:

	1977	1976
	mill. Kr	
Directors and Senior Management	26.6	23.3
Others	897.9	795.1
	924.5	818.4

Further information about employees is given on page 14.

The company's purchases from subsidiaries amounted to 98 % of the total purchase value. The total invoicing of the parent company refers exclusively to outside customers.

Appropriation of profit

Additional details on the company's accounts and activity are given in the attached balance sheets and profit and loss accounts.

At the disposal of the annual general meeting are:

unappropriated earnings from the previous year	Kr 38 682 175
net profit for the year	Kr 96 655 142*)
	Kronor 135 337 317

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

in paying shareholders a dividend of Kr 6 per share	Kr 74 503 800
leaving a balance to be carried forward of	Kr 60 833 517
	Kronor 135 337 317

*) Net profit for the year mill US $ 20.8.

Atlas Copco's environment-oriented industrial program drew a great deal of attention at the 1977 Hanover Fair. Here the Group's Technical Director Jan Holdo assists the demonstrator in showing the dust extraction device on a grinder.

Atlas Copco AB

Balance sheet

At December 31

Assets

	1977		1976	
	mill. Kr		mill. Kr	
Current assets				
Cash in hand and at banks	198.1		262.0	
Notes receivable	18.7		126.3	
Accounts receivable from subsidiaries	280.0		237.7	
Accounts receivable from customers	159.9		144.9	
Prepaid expense and accrued income	12.6		3.3	
Tax claim	4.6		–	
Other accounts receivable	13.2		17.7	
Inventories	31.7	**718.8**	28.3	**820.2**
Blocked account with Bank of Sweden				
Working environment reserve	8.2		13.0	
Special investment reserve	4.0	**12.2**	13.8	**26.8**
Fixed assets				
Shares in subsidiaries *(see page 20)*	409.6		354.4	
Shares in other companies *(see page 20)*	5.7		5.8	
Notes receivable	10.5		4.4	
Long-term receivables from subsidiaries	24.5		24.6	
Other long-term receivables	61.9		65.6	
Construction work in progress	6.5		9.7	
Machinery and equipment *(note 17)*	5.1		5.9	
Buildings *(note 17)*	53.1		52.1	
Land *(note 17)*	23.5	**600.4**	20.7	**543.2**
Total assets		**1 331.4**		**1 390.2**

Liabilities

	1977		1976	
	mill. Kr		mill. Kr	
Current liabilities				
Liabilities to subsidiaries	150.3		127.6	
Suppliers	5.0		6.5	
Provision for taxes	–		13.1	
Accrued liabilities and prepaid income	18.8		27.2	
Other current liabilities *(note 18)*	145.8	**319.9**	125.7	**300.1**
Long-term liabilities				
Debenture loans *(note 19)*	13.3		18.4	
Bond loans *(note 19)*	198.6		200.9	
Mortgage and promissory notes *(note 19)*	104.2		166.2	
Provision for pensions, PRI	51.9		45.1	
Provision for pensions, other	7.4	**375.4**	7.1	**437.7**
Total liabilities		**695.3**		**737.8**
Untaxed reserves				
General inventory reserve	11.6		35.6	
Working environment reserve	8.3		13.0	
Special investment reserve	4.0	**23.9**	13.8	**62.4**
Shareholders' equity				
Restricted equity				
Share capital (12 417 300 shares, nom. value Kr 25) *(note 20)*	310.4		310.4	
Legal reserve	153.9	**464.3**	153.9	**464.3**
Non-restricted equity				
Contingency fund	12.5		12.5	
Unappropriated earnings *(note 21)*	38.7		35.9	
Profit for the year	96.7	**147.9**	77.3	**125.7**
Total shareholders' equity		**612.2**		**590.0**
Total liabilities and shareholders' equity		**1 331.4**		**1 390.2**
Pledged assets				
Mortgaged properties		34.9		30.2
Trade mortgages		48.3		48.4
Contingent liabilities *(note 22)*				
Notes discounted		17.0		3.7
Guarantees and other contingent liabilities, of which 404.7 (314.2) on behalf of subsidiaries		433.6		403.3
Capital value of pension obligation		10.5		9.0

Atlas Copco AB

Profit and loss account

	1977		1976	
	mill. Kr		mill. Kr	
Operating revenue				
Invoiced sales	349.8		457.7	
Commissions etc from subsidiaries	111.0		120.2	
Interest received from subsidiaries	20.3		17.5	
Interest paid to subsidiaries	– 3.2		– 4.5	
Dividends received from subsidiaries	72.5		55.3	
Other costs and revenue	– 21.9	**528.5**	– 41.2	**605.0**
Operating costs				
Cost of goods sold, technical development, sales, administration etc		**–399.6**		**–495.7**
Operating profit before depreciation		**128.9**		**109.3**
Depreciation				
Buildings	1.7		1.7	
Machinery and equipment	2.2	**– 3.9**	2.2	**– 3.9**
Operating profit after depreciation		**125.0**		**105.4**
Financial charges and other income				
Interest expense (excl. subsidiaries)	– 69.4		– 55.3	
Interest income (excl. subsidiaries)	+ 20.6		+ 27.5	
Dividends received (excl. subsidiaries)	+ 0.3		+ 0.2	
Share in net result of non-consolidated companies	– 1.8	**– 50.3**	+ 2.8	**– 24.8**
Profit after financial charges and other income		**74.7**		**80.6**
Extraordinary charges and income				
Capital gain on buildings sold		**–**		**+ 1.2**
Profit before appropriations and taxes		**74.7**		**81.8**
Appropriations				
General inventory reserve	+ 24.0		+ 9.0	
Utilization of working environment and special investment reserves	+ 11.0		–	
Depreciation against working environment and special investment reserves	– 11.0	**+ 24.0**	–	**+ 9.0**
Profit before taxes		**98.7**		**90.8**
Taxes		**– 2.0**		**– 13.5**
Net profit		**96.7**		**77.3**
Net profit mill US $		**20.8**		**16.6**

Notes to the accounts of the parent company

Information concerning financial loans and contingent liabilities for shareholders etc. (according to the Swedish Companies Act) (Kr 1 000)

	Loans		*Contingent liabilities*	
	1977	*1976*	*1977*	*1976*
Board of directors and Deputy members	–	–	–	65
Managing directors	39	53	–	–
	39	53	–	65

The above-mentioned loans and contingent liabilities predate the entry into force for the law restricting the right of companies to advance loans and assume contingent liabilities for shareholders etc.

Note 17 Machinery and equipment, buildings, land (mill. Kr)

	Machinery and equipment	
	1977	*1976*
Cost value	31.3	33.1
Accumulated depreciation	26.2	27.2
Book value	5.1	5.9

	Buildings		*Land*	
	1977	*1976*	*1977*	*1976*
Cost value	69.7	60.5	24.3	21.1
Revaluation in connection with the bonus issue 1973	20.0	20.0	–	–
Accumulated depreciation	36.6	28.4	0.8	0.4
Book value	53.1	52.1	23.5	20.7
Assessment value	55.7	54.2	48.4	45.7

Note 18 *Other current liabilities* (mill. Kr)

	1977	*1976*
Current portion of long-term debt	128.4	105.3
Employees' withheld taxes	3.7	5.2
Other current liabilities	13.7	15.2
	145.8	125.7

In the current portion of long-term debt is included a loan of Swiss Fr 40 million fully prior-redeemed in January 1978. The loan has been converted at the rate of exchange of the date of repayment.

Note 19 Long-term liabilities
Non-realized exchange losses on loans in foreign currencies have been provided for by creating an installment plan that is based on the exchange rates of Dec. 31, 1977 and the remaining period of maturity for the loans.

In 1977 11.8 mill. Kr have been charged against earnings. The difference between the conversion rates of Dec. 31, 1977 and those applied for the book value amounts to 72.7 mill. Kr.

Bond and debenture loans (mill. Kr)	*1977*	*1976*
4³/₄ % bond loan from 1963	5.1	6.0
5¹/₂ % debenture loan from 1963	–	2.4
7¹/₂ % debenture loan from 1967	13.3	16.0
9¹/₂ % US$ 20 million bond loan from 1970	55.4	60.5
7³/₄ % Swiss Fr 80 million bond loan from 1976	138.1	134.4
	211.9	219.3

Mortgage and promissory notes (mill. Kr)	*1977*	*1976*
9¹/₂ % Swiss Fr 40 million	–	67.2
8 % Swiss Fr 50 million	92.1	84.0
Other Swedish promissory notes	11.8	14.9
Mortgages	0.3	0.1
	104.2	166.2

Loan installments for 1978 are entered under other current liabilities.

Note 20 Share capital
The share capital after the new issue of 1976 is distributed among 12 417 300 shares, each with a nominal value of Kr 25. All shares issued are free. The number of shareholders totals about 40 000. The share capital has been raised since 1965 by means of bonus issues and new issues as follows:

				Increase in the share capital (mill. Kr)	*Total amount paid (mill. Kr)*
1965	Bonus issue	1:4		19.1	–
	New issue	1:4	Kr 60	19.1	46.0
1971	Bonus issue	1:10		11.5	–
	New issue	1:10	Kr 100	11.5	46.0
1973	Bonus issue	1:2		69.0	–
1974	New issue	1:4	Kr 25	51.7	51.7
1976	New issue	1:5	Kr 50	51.7	103.5

Note 21 *Unappropriated earnings* (mill Kr)

Unappropriated earnings 1976-12-31	35.9
Net profit 1976	77.3
Dividend decided by the annual general meeting 1977	– 74.5
Unappropriated earnings 1977-12-31	38.7

Note 22 Contingent liabilities
In addition to the stated contingent liabilities Atlas Copco participates as a partner in The Swedish Lamco Syndicate, Gränges AB & Co. in guarantees issued by the Syndicate for US$ 34.8 million. By the terms of the agreement Atlas Copco AB's share is US$ 11.2 million.

Source and application of funds

Source of funds

	1977	*1976*
Internal	mill. Kr	
Profit before extraordinary items and appropriations	74.7	80.6
Depreciation	+ 3.9	+ 3.9
Withdrawals from blocked accounts	+ 11.1	–
Taxes	– 2.0	– 13.5
Dividend	– 74.5	– 62.1
	13.2	8.9
External		
New issue	–	103.5
Increase in		
long-term liabilities	–	118.8
current liabilities	19.8	79.2
Total funds generated	33.0	310.4

Application of funds

	1977	*1976*
Decrease in long-term receivables	62.3	–
Increase in long-term receivables	57.4	37.2
Investment in land, buildings, machinery and equipment	14.7	10.7
Change in current assets:		
Inventories	3.4	– 47.8
Short-term receivables	– 40.9	268.0
Total funds applied	96.9	268.1
Change in liquid assets	– 63.9	+ 42.3

Atlas Copco AB

Shares and participating rights

At december 31, 1977

	Number of shares/ part. rts	Par value, local currency	Book value mill. Kr
Product companies			
Atlas Copco MCT AB	300 000	100	30.0
Atlas Copco Tools AB	100 000	100	10.0
Atlas Copco ABEM AB	15 000	100	1.5
Berema AB	10 000	1 000	29.2
Monsun-Tison AB	140 000	100	32.9
Terratest AB	40 000	100	–
Atlas Copco Airpower N.V., Belgium	59 500	[1])	60.0
Atlas Copco Industrial S.A., Spain	95	10 000	–
Copco Nueva Montaña S.A., Spain	29 999	1 000	–
Atlas Copco Andina S.A., Bolivia	9 713	1 000	1.9
Sales companies			
Atlas Copco Svenska Försäljnings AB	200 000	100	15.0
Atlas Copco Belgium S.A.	99 998	1 000	5.0
Atlas Copco (Cyprus) Ltd.	99 998	1	0.7
Atlas Copco A/S, Copenhagen	11 997	1 000	6.9
Atlas Copco France S.A.	59 960	500	25.0
Atlas Copco Nederland b.v.	10 000	1 000	11.1
Atlas Copco Italia S.p.A.	539 998	10 000	28.2
Atlas Copco A/S, Oslo	2 498	10 000	14.2
Atlas Copco (Schweiz) A.G.	7 975	1 000	12.2
Atlas Copco S.A.E., Madrid	197 000	500	3.7
Atlas Copco Deutschland G.m.b.H.	5	[1])	25.2
Atlas Copco G.m.b.H., Vienna	29 990	1 000	5.0
Atlas Copco Inc., Wayne	1 925	[1])	47.0
Atlas Copco (Philippines) Inc.	48 995	100	2.0
Atlas Copco Paulista Ltda., São Paulo	269 999 940	[1])	7.1
Atlas Copco Venezuela S.A.	59	1 000	0.1
Atlas Copco Boliviana S.A.	2 400	1 000	0.5
Atlas Copco Iran AB, Stockholm	50	100	–
Atlas Copco Hellas A.E., Athens	6 400	10 000	–
Soc. Atlas Copco de Portugal Lda.	1	[1])	–
Atlas Copco Maroc S.A.	940	1 500	–
Atlas Copco Ticaret ve Sanayi T.A.S., Istanbul	1 140	500	–
Atlas Copco (India) Ltd.	482 000	10	–

	Number of shares/ part. rts	Par value, local currency	Book value mill. Kr
Atlas Copco Argentina S.A.C.I.	50 000 000	1	–
Atlas Copco Chilena S.A.C.	31 993 070	0.001	–
Atlas Copco Colombiana Ltda.	190	100	–
Terratest S.A. de Servicios, Buenos Aires	22 800	10	–
Craelius Terratest Peruana S.A.	528	10 000	–
Atlas Copco Terratest Ltd., Nairobi	14 999	100	–
Other subsidiaries			
Atlas Copco UK Holdings Ltd. Hemel Hempstead	3 623 666	1	32.6
Institut CERAC S.A., Ecublens	1 995	1 000	2.4
AB Sicklahus	2 000	100	0.2
Atlas Copco Data AB	125	100	–
Sicklaverken AB	50	100	–
AB Atlas Diesel	500	100	–
AB Elektrisk Malmletning	500	100	–
Svenska Diamantbergborrnings AB	500	100	–
AB Tryckluftverktyg	500	100	–
AB Avos	50	100	–
AB Eccoverken	50	100	–
			409.6
Other companies			
Atlas Copco Finans AB	12 000	100	1.0
The Swedish Lamco Syndicate Gränges AB & Co. Stockholm	9/28 of the capital	–	0.7
The Liberian American-Swedish Minerals Co., preference shares series A	2 722.5	100	1.5
Handelsbolaget Svenska Dagbladets AB & Co	100	1 000	0.1
Svensk Interkontinental Lufttrafik AB	14 100	100	0.7
AB Stadsfastigheter	6	1 000	–
AB SUKAB, Stockholm	40	100	–
Cockerill-Ougree-Providence et Espérance-Longdoz, Liège	1 420	[1])	0.2
ADELA Investment Co. S.A., Luxemburg	1 820	100	0.9
SIFIDA Investment Co. S.A., Luxemburg	25	5 000	0.6
Casa de Suecia S.A., Madrid	90	5 000	–
			5.7

[1]) = no par value

Auditors' report

We have examined the annual report, group accounts, accounting records and administration by the Board of Directors and the Managing Director for the year 1977. Our examination was carried out in accordance with generally accepted Swedish auditing standards.

The accounting records have been examined using sampling methods by Bohlins Revisionsbyrå AB.

Parent Company

The annual report has been prepared in accordance with the Swedish Companies Act. Separate statements of loan, pledged assets and contingent liabilities as called for by the Swedish Companies Act have been prepared.

The proposed dividend does not conflict with the regulations of the Swedish Companies Act, limiting the parent company's dividend in consideration of the financial position of the Group.

We recommend,

that the profit and loss account and balance sheet be adopted,

that the retained earnings be appropriated in accordance with the proposal in Directors' Report, and

that the Board of Directors and the Managing Director be granted discharge of responsibility for the year 1977.

Group

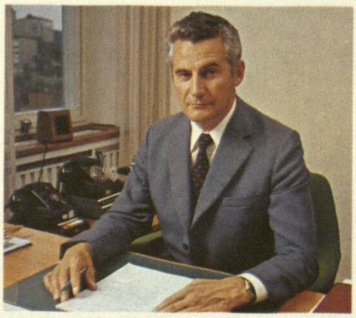
The group accounts have been prepared in accordance with the Swedish Companies Act.

We recommend that the consolidated profit and loss account and the consolidated balance sheet be adopted.

Stockholm in March 1978.

BIRGER SONESSON	BERTIL E OLSSON
Authorized Public Accountant	Authorized Public Accountant

Atlas Copco MCT AB



Rune Back, Managing Director Atlas Copco MCT AB.

Atlas Copco MCT AB was strongly affected in 1977 by the low level of activity in the mining industry around the world. Low metal prices and overfull stockpiles have resulted in poor profitability for most mining companies. Only tin and gold have displayed a positive trend among metals. This situation has created low capacity utilization in the mines and, consequently, unwillingness to make new investments.

In the construction industry fewer large-scale projects were started in 1977 than in 1976. But the projects which were initiated did entail good sales results for the company.

Results of sales to end-users were excellent in Norway, Australia, Canada, the USA, Zaire, India, South Africa, Venezuela and the Soviet Union.

Continued success was noted for

In the Mufulira mine in Zambia, mining is being conducted according to a new method. Three modified ROC 306 crawler drills are used for drilling the large diameter blast holes which are required. The mine reports high efficiency, lower costs and a better working environment than previously.

The 1977 winners of Atlas Copco's bursaries for mining students on a visit to Sandvik – Atlas Copco's partner for more than 30 years.
The picture is taken in Sandvik's test mine, Bodås, where master driller Palmer Johansson demonstrates grinding of Coromant bits.

hydraulic rock drilling equipment. A decrease was registered in the sales volume of compressed air powered rock drills.

The new series of paving breakers, which was introduced at the beginning of the year, contributed to increased market shares in several countries.

The new rigs for rotary surface drilling, Rotamec, have aroused a great deal of interest in prospecting, production drilling, and water well drilling sectors, especially in Australia and Portugal.

The new hydraulic crawler drill, ROC 810H, was introduced during the year and met a good reception on the market.

The sales of Hägglunds loading and hauling equipment, which gradually started during 1977, has resulted in a number of important orders, primarily for tunnelling projects.

In the Craelius sector the sales volume increased somewhat for diamond and rod products, while the sales of diamond core drills decreased.

In 1975 and 1976 mines reduced their large stocks of drill steel equipment, so that purchasing increased in 1977. Several important long-term contracts for Sandvik Coromant drill steel were signed.

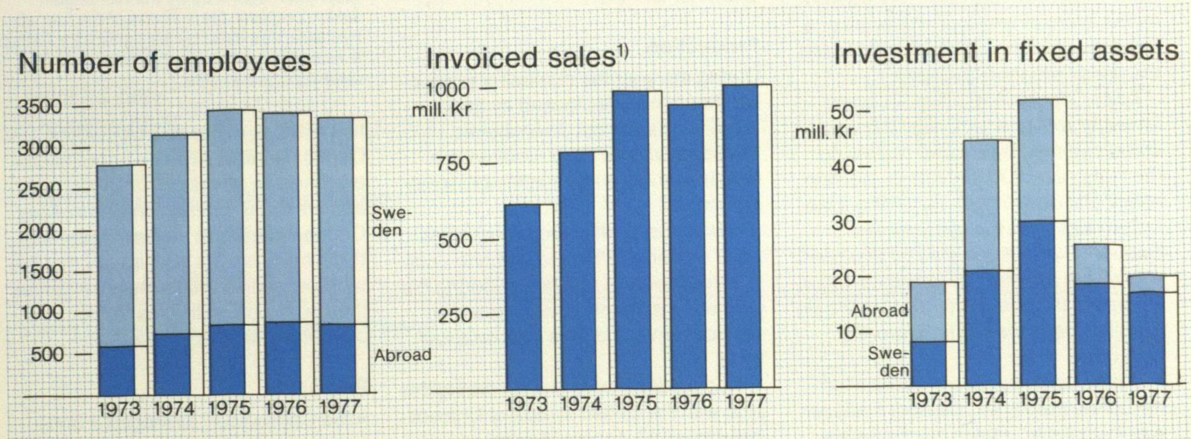
Product development

In 1977 hydraulics for percussive rock drilling continued its strong advance into new areas. A high-production drill rig for long-hole drilling, the Simba H 221, and a new three-boom rig for tunnelling, the Boomer H135, were introduced. The cabin on the Boomer rig is of a new design, giving the operator an excellent working environment.

A new hydraulic rotary rock drill, COP 420 R, for small-gauge drilling underground in coal and non-consolidated kinds of rock, completed its development stage and sales were started on several markets.

Atlas Copco's intensive development work in the sphere of hydraulic drilling has yielded experience which could be partially utilized in the development of a new pneumatic rock drill, COP 115, for drifter drilling and light bench drilling. The sound level of the drill is comparable with that of hydraulic rock drills. Similarly, it requires no lubricant in the operating air, so that the oil content of the exhaust air is reduced.

A new series of paving breakers, Super TEX, with four models, was developed in order to meet anticipated market demands for more effective



1) Mainly invoicing to Atlas Copco Sales Companies.

A large number of hydraulic drilling rigs have been delivered by the Norwegian sales company. Here is one of the four all-hydraulic rigs used by the contractor Astrup & Aubert for excavation work at a power station project in Osa.

noise and vibration suppression. A water separator has been developed for the breaker which prevents icing, a problem which has at times obstructed the use of silenced breakers.

Atlas Copco's extensive program for water well and bench drilling was complemented by another mobile rig, the Rotamec 1800 for high-production rotary and down-the-hole drilling. Like the smaller rig in the same series, Rotamec 1300, it can also be equipped with a high pressure compressor which increases the possibility of using the rig in drilling deep wells with down-the hole drills.

A new larger version of fullface tunnel boring machines, the Midi Fullfacer, was introduced. These machines are intended to cut out small and medium diameter tunnels.

Production

During the year the number of production hours was decreased by about 10 % in order to cut down stocks. These measures have resulted in a certain, although still insufficient stock reduction.

Savings and efficiency campaigns were started at all manufacturing units.

Investments in machinery during the year were primarily concentrated on replacements and thus kept on a low level.

Negotiations were started during the year with the British company Unicorn Industries Ltd. concerning the acquisition of 50 % of the shares in Atlas Copco Craelius AB. The negotiations also include an option for Unicorn to acquire the remaining shares in Atlas Copco Craelius at a future date. With this joint move it is anticipated that the two companies will further strengthen their positions on the market for diamond drilling equipment.

Personnel

Atlas Copco MCT averaged 3 300 employees during the year. The turnover in personnel was low.

An agreement was reached with the union in Nacka, where the company has its largest plants, on the introduction of job and qualifications evaluation for hourly paid workers.

Production was reduced at Nacka by means of a shorter working week, production halts and training.

Preliminary notice was given in late June to 211 industrial employees and 122 office employees at MCT plants in Sweden. After this notice the number of industrial employees decreased by 100 and of office employees by 41. Additional reductions in personnel are anticipated during the first quarter of 1978. The remaining office staff whose jobs were withdrawn were transferred to vacant positions. Some thirty employees were laid off at the Dala Works.

Training at MCT in Nacka engaged about 2 500 employees in 1977, representing a total of 4 500 course days. Subsidies were given by the regional employment board for half of the course days.

The training in the Swedish language for immigrants has now been completed. From the start in February 1974 more than 200 immigrants have received 240 or 160 hours of training. In response to the employment situation in the plants, the training was intensified in 1977.

Results

Orders received – which mainly come from the sales companies – amounted to Kr 1 068 million (958) and invoiced sales to Kr 992 million (931).

Profit before appropriations and taxes amounted to Kr 6.1 million, which represents a considerable decrease for the second year in a row. It has not proved possible to compensate fully for the great increase in costs at the Swedish manufacturing units through increases in prices and rationalization measures. The decrease, in terms of volume, of invoiced sales has also negatively affected profit, in part because of the low capacity utilization in the Swedish plants.

Investments in buildings amounted to Kr 3.8 million and in machinery and equipment to Kr 15.8 million. Kr 4.0 million of these investments were financed from the Working Environment Reserve.

From the MCT Group accounts

	1977	1976
Balance sheet	mill. Kr	mill. Kr
Current assets[1])	131.4	96.4
Inventories	423.9	445.2
Fixed assets	101.6	105.6
	656.9	647.2
Current liabilities	237.4	240.0
Long-term liabilities	128.0	103.7
Untaxed reserves	194.3	221.8
Shareholders' equity	97.2	81.7
	656.9	647.2
Profit and loss account		
Invoiced sales	991.6	931.0
Operating profit	37.1	74.1
Depreciation	20.4	19.9
Financial items, net	– 10.6	– 8.7
Profit before appropriations and taxes	6.1	45.5
Average number of employees	3 313	3 384
Investment in fixed assets	19.6	30.0

[1]) *Mainly receivables on the Parent Company*

Atlas Copco Airpower N.V.

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

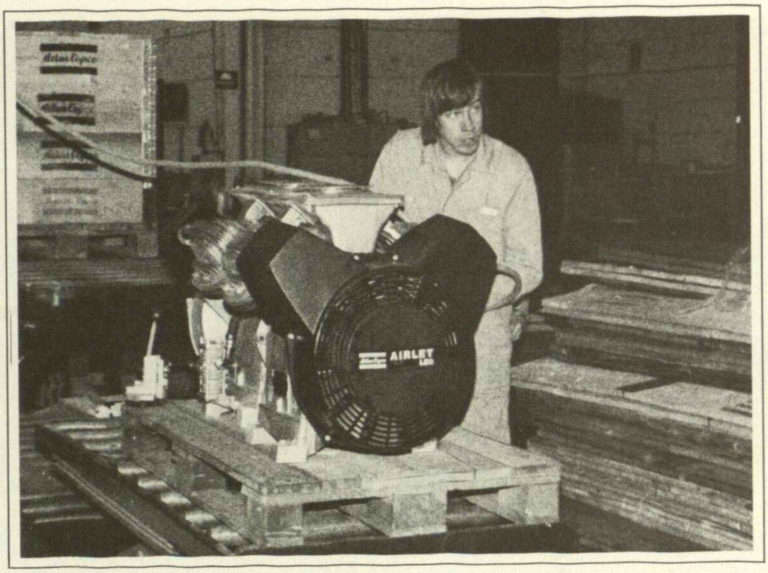
During 1976 several countries took measures to stimulate investments and improve the economical situation. The effects of these measures tended to decline during the first months of 1977. The contracting sector was the first to react positively to them, but also the first to show signs of weakening. Lower demand for portable compressors resulted in increased competition, while prices were negatively affected by fluctuations on the currency market.

New sizes and models of stationary oil-flooded screw compressors of the Pack type were launched during the year. Their introduction was favoured by a slight improvement in the industrial sector. High energy prices also contributed to a continued interest in the larger models of power-saving stationary piston compressors.

The demand for "quality air" – clean, dry, oil-free compressed air – con-

The environmental advantages of new, compact compressor plant reduce the need for separate compressor rooms. This example from a food industry in Portugal shows a GA Pack installed in the actual working area. If desired, the compressor heat can be recovered and utilized.

Airlet – the new series of small compressors manufactured at Airpower's Swedish plant in Åmål.



tinues to grow. Here Atlas Copco has a wide range of compressors and air treatment equipment. It is of particular interest to note that Atlas Copco's largest oil-free compressors, primarily developed for the automotive industry, were supplied in 1977 to mining, steel and process industries in Australia, Eastern and Western Europe, South America and the Middle East, as well as to automobile manufacturers, including those in North America.

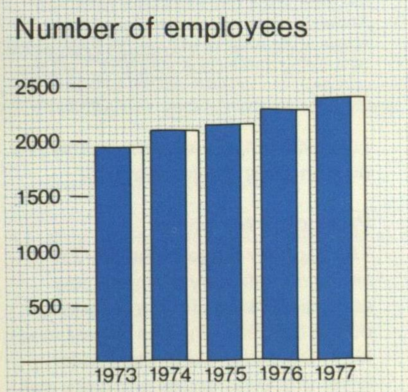
Good sales results were also achieved with stationary screw compressors in the lower capacity range, for example to the textile industry.

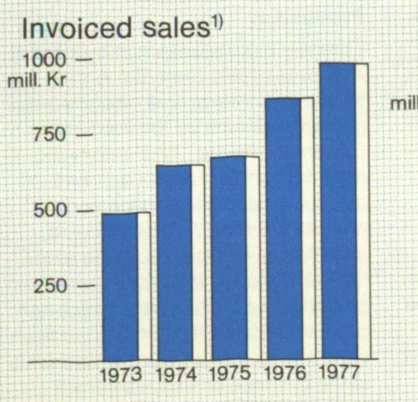
Considerable orders were received for stationary piston compressors for a large number of application areas – shipyards in the Far East, phosphate mines in Morocco, tyre manufacturers in the USA, a hydro-electric power station in Mexico, and the car and aircraft industries in Great Britain, to name but a few.

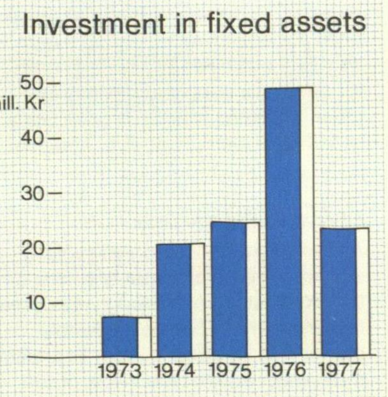
The new small compressors, which are manufactured in Airpower's new plant in Åmål, Sweden, were successfully launched during the year. These compressors are primarily used in garages and small workshops, and for integration in complete systems such as those for surface treatment

An up-to-date product range, which was further extended at the beginning of the year by a new series of portable screw compressors in the medium and high capacity range, made it possible for Atlas Copco to retain and in certain cases even increase its market share for portable compressors. The total market diminished and price competition from countries with weaker currencies increased.

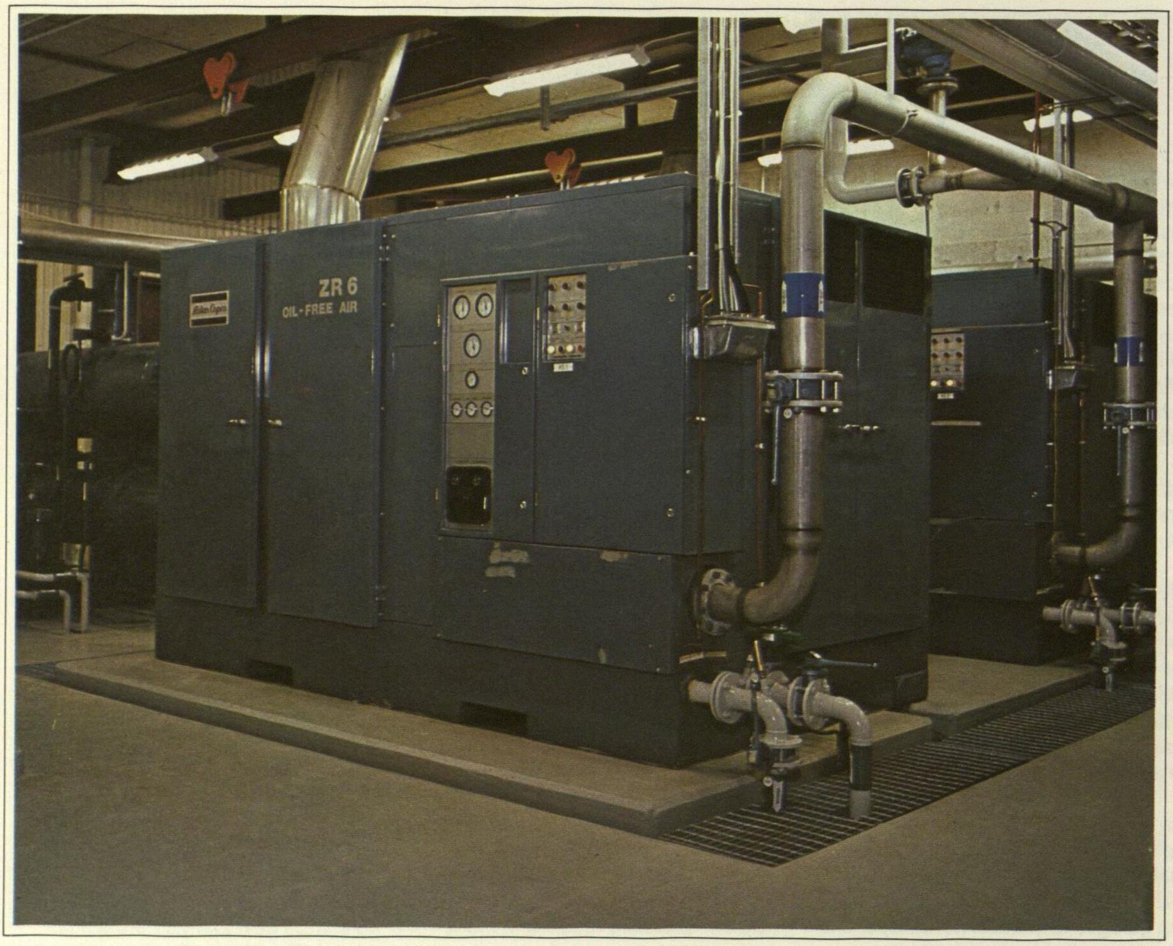
Low activity in the market for portable compressors resulted in many customers choosing to hire equipment rather than investing in machines of their own. Active sales efforts were then concentrated on plant hire companies. These companies, like other users with large machine plants, can more readily see the profit and advantages that the Atlas Copco product quality and service organization offers their business. Considerable deliveries were made, for example, to British plant hire companies, contracting companies in Canada, the Norwegian Highway Department, and to a large development project in Nepal. The Middle East was as previously one of the most important markets for portable compressors.







[1] Mainly invoicing to Atlas Copco Sales Companies.



Large capacity oil-free portable compressors – a type manufactured only by Atlas Copco – were again in demand. Especially in the USA these units are employed to a great extent as rental machines or stand-by units for quality air supply to process and other industries which are particularly sensitive to disruptions in operations.

Environmental equipment

A Limno lake restoration unit was installed in a Belgian water reservoir for the oxygenation of drinking water (see inside cover). In Sweden a bubble barrier was installed in order to protect fresh water against the inflow of salt water. Several new bubble barriers to protect against oil spills or to prevent ice formation were delivered.

Production

The new high-rise storage building at Airpower's main plant, the Arpic Works in Antwerp, was officially inaugurated in March by the King and Queen of Sweden. This automated material handling plant has freed valuable manufacturing space and permits a smooth, efficient flow of materials to workshops, at the same time as accurate inventory control can be maintained. The space which has been vacated by this facility has been used for the manufacture of new units in the G series of stationary Pack compressors and in the XA series of portable compressors, in quantity production since September 1977.

At one of the world's most modern glassworks, Pilkington Floatglass in Sweden, compressed air plays an important part in the production process.
Above is seen one of the four oil-free screw compressors of type ZR Pack which assure the continuous supply of compressed air.

Product development

The capacity range of the ZR/ZA series of stationary oil-free screw compressors was further extended during the year. The two largest models in the series were adapted for lower pressure ranges and were well received by the market. A vacuum pump version was successfully introduced. Development work continued on the Z series for application areas other than air compression.

Both the air-cooled and water-cooled versions of the G series of oil-flooded screw compressors were complemented by models for higher pressures, up to 20 bar.

In the portable compressor sector, the XA series was expanded during the year by a large number of models in both standard and silenced versions, and with several engine options according to market preference. XA compressors have also been adapted for work at high altitudes, e.g. in the Andean region. In collaboration with Atlas Copco MCT a special high pressure version was designed for use on the Rotamec drill rigs.

Personnel

Atlas Copco Airpower had an average of 2 370 employees during 1977. As a result of the uncertain economical situation the number of employees at the Arpic Works was maintained on an unchanged level by means of restrictive recruiting combined with a policy of internal transfer to fill vacancies.

The year's internal training program was concentrated mainly on sophisticated production and control equipment. The internal relations training program was extended towards middle management functions.

Results

Orders received – which mainly come from the sales companies – amounted to Kr 1 130 million (890). Invoiced sales totalled Kr 931 million (853). Profit before appropriations and taxes was Kr 105 million (126).

A combination of increased competition, primarily from manufacturers with production in countries with floating exchange rates, and increased costs has contributed to the poorer results.

Investments during the year in buildings, machinery and equipment amounted to Kr 23 million (48).

From the Airpower Group accounts

	1977	1976
Balance sheet	mill. Kr	mill. Kr
Current assets[1])	378.1	289.4
Inventories	329.0	217.9
Fixed assets	125.9	106.7
	833.0	614.0
Current liabilities	447.5	321.1
Long-term liabilities	62.6	48.9
Untaxed reserves	1.7	1.0
Shareholders' equity	321.2	243.0
	833.0	614.0
Profit and loss account		
Invoiced sales	930.7	853.1
Operating profit	148.9	164.2
Depreciation	23.6	19.3
Financial items, net	– 20.1	– 18.6
Profit before appropriations and taxes	105.2	125.8
Average number of employees	2 370	2 265
Investment in fixed assets	22.9	48.5

[1]) Mainly receivables on the Atlas Copco Sales Companies

Atlas Copco Tools AB

Göran Lundborg, Managing Director Atlas Copco Tools AB.

Expectations for an upswing in international business in 1977 were not met. The trend in the first six months was a further weakening in Western Europe resulting in stagnation and decline in production in the manufacturing industry. Low capacity utilization caused very weak investment activity.

Despite this, both orders received and invoicing to customers increased on a number of markets.

But the high cost level could not be compensated for by the desired increases in prices, and for that reason the increase in turnover from sales to end-users did not yield a corresponding increase in profit.

Marketing efforts were strengthened on several markets by increased sales support and branch or product-oriented activities, and by the development of alternative distribution channels.

Anti-corrosion treatment of the open interior spaces in automobile bodies with the Ecco Timer method at the Fiat Cassino plant, one of the six Fiat factories in Italy which have installed Atlas Copco anti-corrosion equipment.

The new 2000-series, mainly sold through resellers, has been designed and produced for light intermittent operation.

Atlas Copco's position as an important supplier of advanced assembly equipment to the international automotive industry was consolidated. Multiple nutrunners with electronic monitoring and registration systems were delivered to automobile manufacturers in the USA among other countries. These systems make a valuable contribution to the customer companies' work to improve safety, an increasingly pressing demand in today's automotive industry.

A large number of symposiums with lectures and demonstrations were also directed toward the automotive industry.

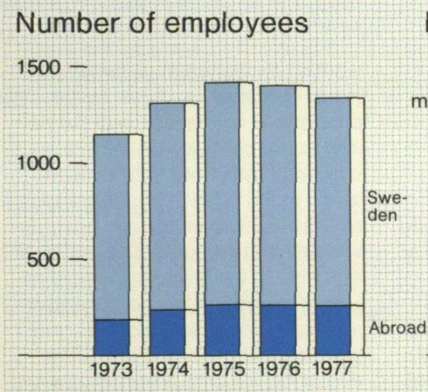
The decentralized manufacture of multiple nutrunners was expanded and this proximity to customers contributed actively to improved service and greater customer confidence.

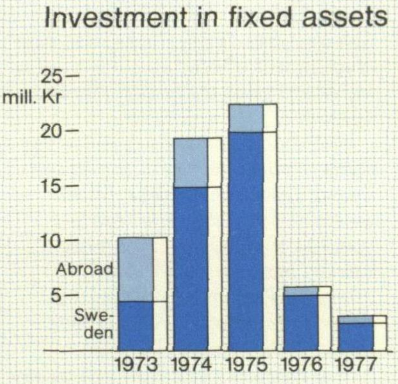
In the course of the year the range of hand tools received a very welcome addition in the form of a new screwdriver with considerably lower vibration and sound levels than have earlier been possible with pneumatic tools. The screwdriver was introduced at the Hanover Fair and attracted a great deal of attention, particularly from major electronics companies. A number of these now plan to introduce the screwdriver as a standard tool. With a sound level of only 58 dBA the machine is considered a valuable step towards an improved working environment.

Additions were made during the year to the series of grinders with dust extraction. An increasing number of countries and companies have indicated their interest in this type of environmental improvement.

A new series of hand tools was also introduced. This series forms a complement to the heavy-duty machines, intended for continuous production, traditionally manufactured by Atlas Copco. The aim is to cover applications characterized by light duty or intermittent operations. Marketing will be carried out mainly through established resellers.

Sales to the automotive industry were also successful in the case of surface treatment equipment. The method for anti-corrosion treatment, which was introduced in 1976, has now been sold to a number of European automobile manufacturers. Considerable orders were also received during the year for electrostatic spray painting equipment.





1) Mainly invoicing to Atlas Copco Sales Companies.

The Norwegian company Norlett was able to increase its production of lawnmowers by 40 % and improve the working environment of the plant by installing automatic assembly stations from Atlas Copco.

The sales of spray painting products through resellers rose strongly in France, Great Britain and the Netherlands. The new, complete spray painting units, Spray Packs, also won a very positive reception, which led to increased sales of paint pumps and heaters.

The strong increase in 1976 in the sales of pneumatic components continued. Collaboration with certain equipment manufacturers made a special contribution to this trend. A training package for self-teaching, "Practical Pneumatics", was introduced in connection with the participation in the Hanover Fair.

The range of lubrication-free valves, which was introduced in the course of the year, was very well received in all countries. Certain selective introduction activities contributed to increased market shares.

Product development

The development of equipment and systems matched to customer requirements is becoming more important for all parts of the company's production program. A large-scale allocation of resources was thus made during the year for the development of the systems knowhow which is required, for example, in the construction of multiple spindle tightening units with electronic monitoring. An overall view of systems development requires that standardization, flexibility and the working environment all be kept in mind. This view has been successfully practised in connection with the development of equipment for the spot suction of dust from grinders and saws. In the surface treatment sector several painting units have been developed and introduced as complete systems. In order to complete Atlas Copco's systems for mechanization and automation, an electronic, programmable control unit was introduced for use with pneumatic valves and cylinders.

Several new products have been developed in order to meet demands for lower sound levels in hand-held pneumatic tools. A good example is a new straight grinder with a silencer which practically eliminates the noise emitted when starting and stopping.

Product development has also been conducted as a means of reducing manufacturing costs. These efforts have primarily been directed towards tools manufactured in long series. With the present cost situation, such efforts are vital in retaining the competitiveness of a product range.

Production

The capacity utilization at the plants was low in 1977. This applied equally to machinery and premises, and to personnel. But through voluntary resignations and early retirement the workforce could to a certain extent be matched to requirements. Investments were therefore intended not to raise production capacity but chiefly to reduce production costs.

Two numerically controlled multi-operation machine tools were installed at the Injector and Ecco Works. An industrial robot was installed at the induction hardening station at the Tierp Works. Thereby monotonous work could be completely mechanized, and considerable cost savings could be obtained.

Important environmental improvements were achieved in the plants and offices on the basis of proposals worked out jointly by employee representatives and the company, with funds from the Working Environment Reserves.

Personnel

The average number of employees was 1 331 during the year, which represents a decrease for both office and factory workers.

During the first half of the year a very restrictive recruiting policy was practised and at mid-year, after consultation with trade unions, a total of 50 employees at the Stockholm and the Skara plants were given preliminary notice. The reduction in personnel has for the greater part been achieved by voluntary resignations, early retirement and transfers.

A large number of courses were conducted for personnel in the sales companies. Internal training in Sweden has to a great extent been directed toward administration and management/staff relations.

Language training in Swedish for immigrants is now in its final phase. Other language training has mainly been in English.

Results

Orders received – which mainly come from the sales companies – amounted to Kr 201.3 million (202.9). Invoiced sales totalled Kr 204.6 million (206.4). Profit before appropriations and taxes was Kr 0.2 million (4.1).

The decline in results can be attributed to the low capacity utilization in the plants and to cost increases which could not be fully covered by rationalizations and price increases.

Investments in buildings, machinery and equipment amounted to Kr 3.3 million (5.8), of which Kr 0.8 million were financed from the Working Environment Reserve.

From the Tools Group accounts

	1977	1976
Balance sheet	mill. Kr	mill. Kr
Current assets[1]	11.7	35.6
Inventories	151.6	125.1
Fixed assets	30.1	30.5
	193.4	191.2
Current liabilities	53.3	52.5
Long-term liabilities	46.7	41.9
Untaxed reserves	73.3	77.2
Shareholders' equity	20.1	19.6
	193.4	191.2
Profit and loss account		
Invoiced sales	204.6	206.4
Operating profit	9.2	14.4
Depreciation	5.6	6.9
Financial items, net	–3.4	–3.4
Profit before appropriations and taxes	0.2	4.1
Average number of employees	1 331	1 401
Investment in fixed assets	3.3	5.8

[1]) Mainly receivables on the Parent Company

Atlas Copco ABEM

Atlas Copco ABEM AB is a company specializing in measuring technique and electronics. The product range includes geophysical equipment and electronics for the prospecting of natural resources, measuring equipment for various industrial purposes, and electronic and precision mechanical units for incorporation in Atlas Copco products.

Sales are conducted through both the company's own network of distributors and the Atlas Copco sales organization.

Market development

The market share for both geophysical instruments and measuring equipment for industry remained largely unchanged, although the overall market volume shrank. The devaluation of the Swedish Krona had a positive effect on orders received towards the end of the year. Invoiced sales amounted to Kr 10.8 million (11.4).

Product development

Research and development capacity was fully employed during the year. In addition to the further development of existing products, priority was given to a range of new instruments for ground investigation (seismic refraction measurement), water prospecting (resistivity measurement) and industrial registration.

Production

The entire company moved to new premises in May 1977 with a workshop area of about 1760 m², an increase of 40 %. The new workshop offers excellent working environment.

ABEM had an average of 58 employees during the year.

Atlas Copco ABEM AB

	1977	1976
	mill Kr	
Invoiced sales	10.8	11.4
Profit before appropriations and taxes	0	0.5
Average number of employees	58	61
Investment in fixed assets	0.1	0
Total assets	10.0	8.5

Berema

Berema's manufacturing program, chiefly petrol driven drills and hydraulic truck cranes, is marketed through the company's own sales companies in West Germany, Norway and the USA, and through distributors in an additional large number of countries. The motor drills are also marketed by Atlas Copco

Market development

Invoiced sales increased by Kr 33 million to Kr 120 million. This increase is fully matched by an increase in orders received and the order stock remains unchanged compared to the preceding year.

The increase in sales refers mainly to products of the company's own manufacture. The development has been positive for the company's major product, the Pionjär motor drill, but also for Tico products. Considerable increases were also noted for Honda power products, which include generators, pumps and cultivators, and are marketed in Sweden and Norway.

Berema has considerable export sales to Eastern Europe. During the year a wholly owned sales company was formed in Austria, primarily to negotiate barter transactions with East European states and thus promote the export of Berema's own products,

Product development

During the year Berema acquired design rights to a smaller motor drill which directly complements the existing range. Sales of the new machine has been started on a limited scale in the Scandinavian countries. The development has been favourable and this complement to the program increases the possibilities of further strengthening the company's coverage of the market for petrol-driven drills.

Production

At the factory in Kalmar, Sweden, the foundry has been dismantled in connection with the change over to press casting the magnesium parts of the Pionjär drill. Production has been further rationalized, e g by investing in numerically controlled machine tools.

The capacity utilization at the Tico shops has been considerably improved by the increased sales of their own products, while contract manufacture was reduced.

Personnel

Despite the increase in volume, the total number of employees went down, chiefly among industrial workers, because of modifications and new investments in production facilities. The average number of employees was 420.

Berema Group

	1977	1976
	mill Kr	
Invoiced sales	119.5	86.9
Profit before appropriations and taxes	7.7	3.8
Average number of employees	420	427
Investment in fixed assets	1.0	6.7
Total assets	92.4	72.4

Monsun-Tison

Monsun-Tison is the Group's special company for hydraulic and pneumatic regulating technique. In hydraulics the company is fully responsible for development, manufacture and marketing in Sweden and abroad, while pneumatic components are marketed by Atlas Copco.

Market development

The demand for the company's products on the Swedish market has been weak. The last five years' efforts to broaden the company's export activity, have formed the basis for the company's expansion.

Sales increased by 13 % and amounted to Kr 96 million.

Product development

Monsun-Tison has followed up and further developed its products for remote control and has today an almost complete range of pilot control systems for both proportional regulation and on/off control of the pneumatic, hydraulic and electro–hydraulic type.

Today Monsun-Tison can remote-control both its own directional valves and other equipment.

The pneumatics range has been developed and now includes new valve sizes for lubrication-free operation.

Production

In the course of the year the company made further investments in numerically controlled machine tools and processing groups for certain high volume components. In addition, investments in automatic testing tables have contributed to higher productivity and more uniform quality.

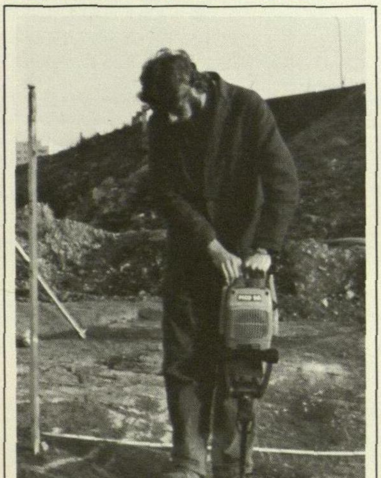
Personnel

The training of both factory and office employees on various levels and in various sectors has been intensive, and entirely directed towards improving and strengthening the company's export sales. During the year Monsun-Tison employed an average of 582 persons.

Monsun-Tison Group	1977	1976
	mill Kr	
Invoiced sales	96.1	85.1
Profit before appropriations and taxes	7.7	9.9
Average number of employees	582	631
Investment in fixed assets	3.5	3.4
Total assets	86.0	79.2

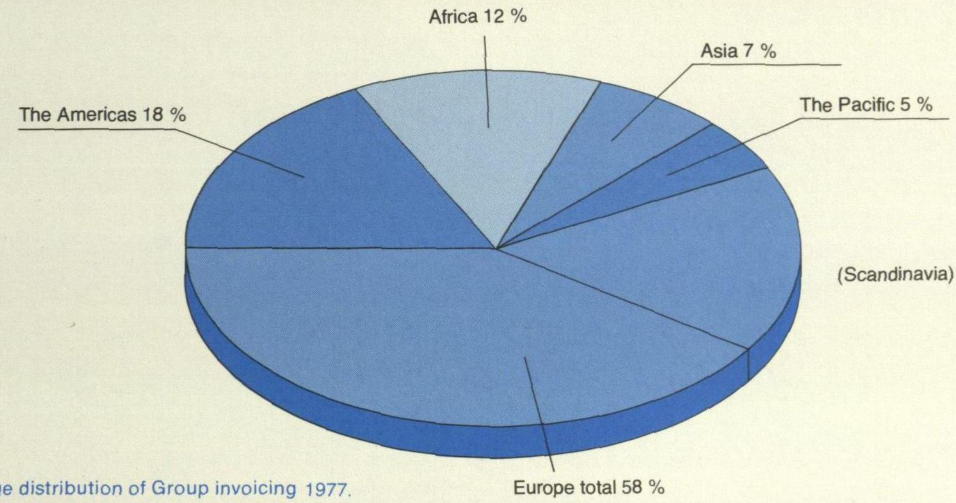
Monsun-Tison's new directional valve HV7 is used in the hydraulic systems of trucks, cranes, loaders etc. One example is this forestry machine called the "Wood Ant".

Berema's new motor drill Pico 20 weighs only ten kilos. The machine is an important addition to the Pionjär and Cobra lines.



The new fullface tunnel boring unit Midi Fullfacer is lowered into the starting shaft before boring a tunnel under the Niagara River for fresh water supply of the city of Buffalo. The contractor reports savings of almost half a million dollars compared to conventional drilling and blasting.

A view of the market



Percentage distribution of Group invoicing 1977.

Recovery in the world economy has been slow. The total investment in machine plant on Atlas Copco's markets rose somewhat in volume, but the picture was far from uniform.

Because of the low metal prices, mines generally refrained from making new investments to raise production. But many mines in Africa, Australia and South America had to make replacements of certain equipment, which favourably affected the sales development in these areas. Deliveries of hydraulic equipment and Coromant drill steel increased.

For civil engineering contractors the year also brought problems. On many important markets the governments – chiefly in consideration of the prices and balance of payments – were reluctant to give the construction sector the stimulus which the situation on the labour market actually required. The fact that the Group could maintain its sales volume to contractors refers mainly to successes with hydraulic drill rigs and tunnelling equipment.

Portions of the manufacturing industry (textiles, pulp and paper, steel, ship-building) experienced a critical year. The development was more favourable in, for example, the food and pharmaceutical industries, for manufacturers of machinery and electrical equipment, and for the automotive industry. Here the Group noted certain advances with stationary air and gas compressors, pneumatic tools and components.

As previously, Sweden was the largest national market. But in overall terms it was the markets abroad which expanded, while the Swedish market weakened due to the recession. The Swedish share of Group turnover was 9 % (10 %).

Sales figures displayed only moderate growth in Western Europe's four largest countries, while sales in Belgium, the Netherlands, Norway and Austria advanced strongly. The Group also did well on several overseas markets: the USA, Venezuela, Brazil, Australia and India.

Facing 1978

It appears that the slow recovery of the last two years will continue to mark the global economic situation in 1978. No improvement is anticipated in the mining sector, while the construction sector will probably experience a somewhat stronger development. The future of the manufacturing industry is difficult to foresee.

Market reports

The selections of markets in the following brief presentation has been made with a view to giving examples of the varying conditions facing the Group's marketing organization.

Brazil

Brazil has come a long way in its industrialization. For many years the production volume grew by about 10 % annually. Large-scale state investments in power stations, mines and steelworks laid the foundation for progress. Concurrently, the private sector built up a many-sided processing industry: textile goods and forestry products, chemicals, automobiles, household appliances and machine tools. In many branches Brazil is the only market in Latin America large enough to support industrial mass production. However, the export of coffee and other agricultural products still remains important.

As a result of frost damage to the coffee crops, the increasing cost of oil imports, and the interest due on foreign loans, a strained payments situation prevailed from 1975 to 1977. The government is attempting to limit imports by compulsory deposits, demands for local manufacture, state-

sponsored saving programs, and a credit halt. This has checked inflation and has strengthened the trade balance, but has lowered the growth in GNP to about 5 % per year.

Atlas Copco contributes to the country's development by supplying and servicing bench drilling equipment, rock drills – now also hydraulic units –, Coromant drill steel, and compressors. This equipment goes to projects such as the gigantic Itaipú power station, new railways, and the mines of Minas Gerais. In addition, industries are purchasing pneumatic tools, spray guns and stationary compressors.

Atlas Copco Brasileira has established a very strong position on the market, but is feeling the effects of import restrictions. The company has then started the local assembly of both portable and stationary screw compressors. Manufacturing will also include other products, with an increasing share of Brazilian components. The company has a total of 800 employees, of which the majority are in the sales and service sector. The head office and factory are in São Paulo. There are also branch offices in eight cities.

The Netherlands

The Netherlands is no large market for traditional Atlas Copco products. There are no mines, no mountains and very little underground construction work. But Dutch contractors purchase equipment such as crawler drills and portable compressors, mainly for use abroad.

Assembling crash barriers on the motorway between São Paulo and Santos with the aid of a UT 85 compressor and a Wasp plug-hole hammer. Atlas Copco's impact wrench and pile hammer are also used in this project.

The largest market for Atlas Copco is to be found in the manufacturing industry which is currently in a phase of automation and rationalization. Particularly active branches are the food, chemical and electronics industries, and automobile plants. In 1977 industrial investments increased more strongly than in any other European country, a development which the Atlas Copco sales company turned to good profit. Oil-free screw compressors were sold to the food production industry, which makes stringent demands on air quality, and gas

A new railway line, about fifty kilometres shorter than the previous one, is being built between Rome and Florence. Two all-hydraulic Atlas Copco Promec rigs, built in co-operation with the contractor consortium Vianini-Manfredi, are used for driving the tunnel.

compressors went to the chemical industry. These branches also purchased pneumatic components in order to automate their production processes. Sales to industry were greatly stimulated by technical seminars, where Atlas Copco showed how the company's products could solve customers' production problems.

Atlas Copco Nederland has just over 200 employees. The main office is in Zwijndrecht, and there are three regional offices.

Italy

The Italian economy developed better in 1977 than anticipated. The OECD and other expert bodies counted on declining investments and industrial production. The actual result was instead moderate growth.

Atlas Copco has long had a strong position on the market. Considerable deliveries of industrial compressors, tools and spray painting equipment were made during the year to many of the Fiat plants. An important customer group is the large Italian contracting companies which are building roads, railways, canals and harbours, both at home and in international projects. They purchased both compressors and MCT products, for example hydraulic bench drilling equipment.

Atlas Copco Italia has its main office in Milan, and seven regional offices. The Group has more than 600 employees in the country. Included in this figure are the employees of Atlas Copco Airpower's factory in Turin for small compressors, which are also exported to other countries.

Soviet Union

The Soviet Union's economy is diversified enough to offer a potential market for the entire Atlas Copco program. The major deliveries from the Group in the last ten years have gone chiefly to mines and power projects (tunnelling rigs, rock drills, loaders, and drill steel equipment). Other sectors of the economy, not given the same priority, have had greater difficulty in obtaining the funds necessary for purchases from the West.

In order to maintain contacts with end-users Atlas Copco participates in exhibitions and technical symposiums, although purchasing is effected through state trade organizations. This means that a mine's requirements for new equipment take considerable time to be converted into a tender inquiry. Technical and economical committees then evaluate the tenders, so that a single contract may be the fruit of several years' work. The excellent sales results from 1977 illustrate the confidence Atlas Copco's underground equipment enjoys among Soviet mines and civil engineering bodies.

Nigeria

Nigeria has more inhabitants than any other African nation and now also the largest GNP thanks to the huge oil revenues. These are being used to build up the infrastructure and industry. Nigeria is making great efforts to build a transport network, remedy illiteracy and eliminate the opposition between the different ethnic groups.

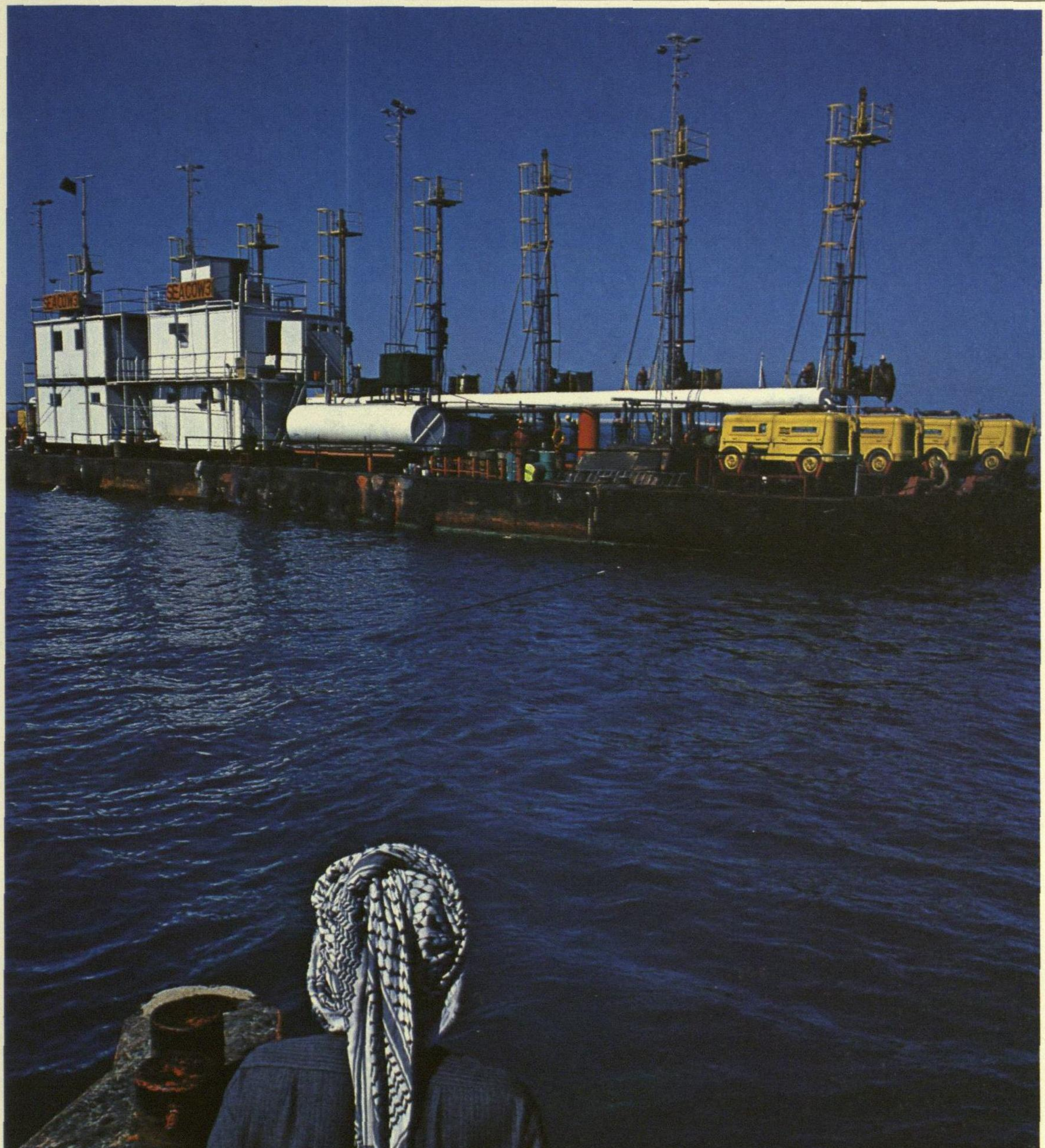
In the near future the controlling interest in all companies will be transferred to Nigerian hands, a policy which has already affected Atlas Copco's distributor, R.T. Briscoe (Nigeria) Ltd. The Group's sales through the distributor have primarily been equipment for the construction industry such as portable compressors, crawler drills and breakers. The growing local manufacturing industry has also shown great interest in stationary screw compressors.

Saudi Arabia

Saudi Arabia is employing a large portion of its oil revenues to develop the country's infrastructure: highways, harbours, airfields, oil and water pipelines, power and telephone networks etc. The country is one of the world's leading markets for construction equipment for such projects. But it is not the seller's market as in the past, since the government has begun to curtail expenses in order to check inflation. And in this connection improvements are being made in the process of choosing equipment as concerns evaluating price, performance, service and the availability of spare parts.

Atlas Copco's exclusive distributor since fifteen years is General Contracting Company, with its main office in Al Khobar. In the more demanding market situation which became very noticeable in 1977, the distributor could, with the support of Atlas Copco experts, maintain his leading position on the portable compressor market and could advance in the market for rock drilling equipment.

Standardized equipment and careful training contribute to the uniform high quality of Atlas Copco service around the world. Below a screw compressor is overhauled at the Atlas Copco distributor in Nigeria, work which requires both skill and advanced technical knowledge.



Above:
Saudi Arabia is making immense efforts to develop the infrastructure of the country. The expansion of the harbour at Jubail is one of these efforts. This huge drilling platform carries eight PR compressors and eight BBE rock drills at work.

Back cover:
The Latin American mining and construction industry has long been an important market for the Atlas Copco Group, both for large drill rigs and for light, handheld equipment, such as the rock drill BBD 12.

Atlas Copco

Printed in Sweden. Davidsons, Växjö. Design Hellmans, Stockh