# Annual Report 1984

AKZO

## Contents


1 Financial highlights

2 President's letter

5 Report of the Supervisory Council

6 Report of the Board of Management

6 The year in review

14 Product groups

15 Man-made fibers
19 Chemical products
26 Coatings
29 Pharmaceuticals
32 Consumer products
34 Miscellaneous products

37 Activities by geographic area

42 Organization of the Akzo Group

43 Management

45 Financial statements

45 Accounting policies used in preparing the consolidated financial statements
47 Consolidated financial statements of the Akzo Group
55 Supplementary information on the basis of current value
56 Financial statements of Akzo N.V.
60 Other information

62 Auditors' report

63 Ten-year financial summary

67 Principal companies of the Akzo Group


Translation: in the event of a conflict in interpretation, reference should be made to the Dutch version of this Annual Report.

The symbol ® indicates trademarks registered in one or more countries.

## Agenda

Agenda of the Annual Meeting of Stockholders to be held in Musis Sacrum, Velperplein, Arnhem, the Netherlands, on Thursday, April 25, 1984, at 10:30 a.m.

1 Opening

2 Report of the Board of Management for the fiscal year 1984

3 Approval of the financial statements; consideration of the dividend proposal

4 Determination of the number of members of the Supervisory Council; appointment and remuneration of members of the Supervisory Council

5 Proposal to designate the Board of Management as entitled to issue shares and to restrict or disregard the preemptive rights of stockholders

6 Proposal to authorize the Board of Management to acquire shares in the Company on behalf of the Company

7 Any other business

Akzo


Akzo N.V., 76 Velperweg/P.O. Box 186, 6800 LS Arnhem, the Netherlands
Phone (085) 66 44 33 Telex 45438

# Financial highlights

| | 1984 | 1983 | change |
|---|---|---|---|
| Millions of guilders | | | |
| Net sales | 16,520 | 15,085 | +10% |
| Operating income | 1,340 | 843 | +59% |
| Net income | 752 | 428 | +76% |
| Common stock | 789 | 663 | +19% |
| Stockholders' equity | 4,014 | 2,967 | +35% |
| Property, plant and equipment | | | |
| Expenditures | 784 | 625 | +25% |
| Depreciation | 576 | 584 | −1% |
| Per common share of Hfl 20, in guilders | | | |
| Net income | 19.06 | 12.91 | +48% |
| Dividend | 6.00 | 4.00 | +50% |
| Stockholders' equity | 101.80 | 89.48 | +14% |
| Key financial statistics | | | |
| Operating income, as % of net sales | 8.1 | 5.6 | |
| Operating income, as % of invested capital | 18.6 | 12.6 | |
| Net income, as % of stockholders' equity | 18.7 | 14.4 | |
| Number of employees at year-end | 66,100 | 66,300 | |



**Akzo**

*Akzo is an international group of companies with about 220 operations in almost 50 countries.*

*Akzo's product range includes man-made fibers, salt, commodity and specialty chemicals, coatings, pharmaceuticals, consumer products, engineering plastics, membranes, and miscellaneous industrial products.*

*Akzo's worldwide business activities are organized in the Enka, Akzo Zout Chemie, Akzo Chemie, Akzo Coatings, Akzo Pharma, and Akzo Consumenten Produkten divisions; its operations in the United States and Canada are integrated in Akzo America Inc.*

*In the Netherlands, Belgium, Brazil, and Japan, Akzo has central organizations which have a coordinating function or render services to local Akzo companies.*

# President's letter



In the fifteen years since 1969, the year of the formation of the Akzo Group, 1984 was easily the best. The Group achieved net sales in excess of Hfl 16.5 billion and a net income of more than Hfl 750 million, while the return on stockholders' equity advanced to almost 19%. Our financial position improved substantially during the year, in part because of new stock issues. Furthermore, it is gratifying to note that capital expenditures continued to increase.

The improved earnings performance was undeniably helped by economic expansion, particularly in the United States, and by the strong dollar, which sharpened our competitive edge. But the foundation on which our progressive recovery rests is the unflagging efforts over the past several years to restore the Group's health. Particularly for Enka, Akzo Zout Chemie, and Akzo Chemie these efforts have been an essential element in the improvement in earnings.

The Group's better financial condition now enables us to press on with the realization of our strategic goals. One major objective continues to be the reinforcement of our position in the field of marketing-intensive and high-technology products. Our best opportunities in this regard are in pharmaceuticals and coatings, but chemical specialties and certain activities of the Enka group also have considerable potential. Further penetration in the North American market is a key goal associated with these objectives. In an effort to strengthen our U.S. presence, we concentrated our interests in a new holding company, Akzo America Inc. Acquisitions will no doubt be necessary, but they are not our only option. Building on our strength, we will also invest money in-house to bolster our position. Examples of this kind of investment are projects by Akzo Chemie and Akzo Coatings in the fields of catalysts and car refinishes. Naturally we do not propose to neglect our vitally important positions in Europe, especially in the Netherlands and the Federal Republic of Germany, historically the centers of our know-how and technology.

Finally, I would like to mention the cooperation in Europe between Akzo Consumenten Produkten and Temana, Shell's consumer products organization, which was realized in early 1985. This combination represents a significant advance in the division's geographic and product diversification.

Technological advances and our broad knowledge in the field of polymers have created attractive prospects for what are known as the new materials. These materials (or composites) are chiefly used in high-technology industries such as aerospace, electrical/electronic engineering, and automotive manufacturing. As suppliers of reinforcing materials such as aramid, carbon, and glass fibers on the one hand, and of engineering plastics, membranes, and resins on the other, we are well placed for successful further penetration in these fields.

In the Group's organization, decentralization of responsibilities for operational activities remains one of the basic principles. Such decentralization has proved its value in the difficult years behind us. In the coming years, however, we will have to place particular emphasis on opportunities for intra-Group synergism, not only with respect to the development of management potential but also with respect to the development and application of new products and processes the knowledge of which is shared among several divisions. Synergism may also be a factor in the field of genetic engineering. Current research, which is primarily directed at uses within Akzo Pharma, has already resulted in early commercial success. But further down the road, recombinant-DNA techniques may eventually replace some of the more traditional chemical processes within the Group.

For some time now the Group has been giving special attention to its manufacturing operations. We seek to foster greater involvement of our production personnel in the organization and planning of their own work, believing that any increased efficiency and quality which may result will be crucial in the Company's ability to compete. As automation and information technology applications are widened, they may come to make a valuable contribution to efforts to heighten quality awareness. In addition to a skilled and highly motivated work force, which has the ability and willingness to bear greater responsibility than heretofore, the process of change will require executive staff with a flexible attitude.

Group employment remained virtually constant in 1984. There were slight reductions in the Federal Republic of Germany and in the United States, where a portion of the restructuring programs had not yet been completed as the new year began. A few divisions reported some employment growth. While any discussion of developments in the coming years must remain speculative, the conditions for improvement appear to be positive, and this is more than could have been said at any time during the past decade.

By shedding weak products and adding new ones, we strengthened our competitiveness and reduced—rather than ended—our exposure to economic cycles. We are thus better able to survive periods of economic recession. Furthermore, the Group has abundant opportunities left to improve its structural position.

I believe that 1985 has the potential to be another fine year for the Group, all the more so since the economy appears to be fractionally ahead of its projected performance.

A.A. Loudon

# Supervisory Council and Board of Management



**Supervisory Council**

G. Kraijenhoff, Chairman
J.R.M. van den Brink, Deputy Chairman
S.C. Bakkenist
A.G. van den Bos
F.H. Fentener van Vlissingen
A. Herrhausen
C.S. Ramsey
H.J. Schlange-Schöningen
H.A. van Stiphout
E.G.G. Werner
O. Wolff von Amerongen

**Board of Management**

A.A. Loudon, President
J. Veldman
H.J.J. van der Werf
H.G. Zempelin

Adviser: W.K.N. Schmelzer

**Secretary**

J.P. Huges

**Management Committee**

In addition to the members of the Board of Management, the Management Committee includes:

S. Bergsma
G.J. Coli
F.A.G. Collot d'Escury
M.W. Geerlings
J.R. Hutter
H.B. Jacobs
A.G.J. Vermeeren
M.D. Westermann
C. Zaal

# Report of the Supervisory Council



**Changes in the Supervisory Council**

At the Annual Meeting of Stockholders held on April 24, 1984, S.C. Bakkenist, J.R.M. van den Brink, Y. Scholten, and E.G.G. Werner, whose terms of office had expired, were reappointed to the Council.

F.H. Fentener van Vlissingen was appointed a member of the Council. Until mid-1984, Mr. Fentener van Vlissingen was President of the Board of Management of SHV Holdings N.V. and has since served on the Supervisory Council of that company.

We sincerely regret the untimely death on June 14, 1984, of Mr. Y. Scholten, Deputy Chairman of the Council. In 1967 he became a member of the Council of AKU and in 1977 he was appointed a deputy chairman of our Council. In Mr. Scholten the Council has lost an eminent lawyer, who will be remembered for his great personal commitment to the development of the Group. His great expertise in the field of Dutch and European company law, in particular, has been an invaluable asset to the Company.

At the Annual Meeting of Stockholders on April 25, 1985, J.R.M. van den Brink and S.C. Bakkenist will resign from the Council, both having reached the mandatory retirement age. At the same meeting C.S. Ramsey will also step down because his term of office is expiring and he will not be standing for reelection.

The Council wishes to acknowledge its great indebtedness to, and expresses its deep regret on the retirement of, its former Chairman J.R.M. van den Brink. Since 1953 the Company has had the benefit of his great personal involvement and wisdom. As a banker of international standing he made major contributions to the development of the Group by virtue of his expertise and diplomacy. He will be particularly remembered for his important role during the difficult period in the seventies when the fundamental issue was the preservation of the Group's unity.

The retirement of Mr. Bakkenist marks the end of a twenty-two year period of close involvement with the Company. For fifteen years he successively served Koninklijke Zwanenberg-Organon, Koninklijke Zout-Organon, and Akzo as a Board member and as Deputy President. He deserves great credit for his contributions to the development of the Akzo Group since its birth in 1969 and, in particular, to the formulation of the social policy of the Group in its troubled infancy. From its establishment in 1972, Akzo Nederland also had the benefit of his great knowledge in many areas through his service as a member of its Supervisory Council and, from 1976 onwards, as Chairman of the Council.

We are also grateful to Claude S. Ramsey, formerly President of Akzona Inc., for his willingness to serve on our Council following Akzo's 1982 acquisition of the full ownership of Akzona. He made many important contributions to the Group's development.

To fill two of the four vacancies we recommend appointment of C. van Veen, formerly Chairman of the Federation of Netherlands Industries, and A. Batenburg, previously President of the Board of Management of Algemene Bank Nederland N.V.

Adoption of this proposal will reduce the number of the members of the Council from 12 to 10.

**Supervision**

The Council has been following the Group's fine performance during the year with satisfaction. We owe a debt of gratitude to the Board of Management and all employees for their significant contributions to the results achieved. We are pleased that the decrease in the number of jobs has come to a halt in 1984.

We herewith submit to you for approval at the Annual Meeting of April 25, 1985, the financial statements for 1984 as prepared by the Board of Management. These financial statements, which were drawn up in conformity with the new legislation incorporated in the Dutch Civil Code, have been examined by Klynveld Kraayenhof & Co., *Registeraccountants*. Their report appears on page 62.

We have approved these financial statements and the Board of Management's proposal made therein with regard to the allocation of profit. Acceptance of this proposal by stockholders means that the 1984 dividend will be fixed at Hfl 6 per common share of Hfl 20, of which Hfl 1.50 was declared and made payable as an interim dividend in November 1984.

We recommend that you also approve the financial statements, thus discharging the responsibility of the members of the Board of Management for their conduct of the business and of the members of the Supervisory Council for their supervision.

Arnhem, March 11, 1985

For the Supervisory Council

G. Kraijenhoff
Chairman

# Report of the Board of Management

## The year in review



### General

#### Excellent year

1984 was an outstanding year for the Akzo Group. In the course of the preceding year, the factors which were later to provide a powerful stimulus to business had already become apparent. The restructuring plan for our Western European fiber activities, which was announced in 1981, had almost been completed, and brought substantial improvement in product range and cost structure. Shipments of our products increased, particularly to export markets, as a result of the cyclical upturn and the rising dollar. And, finally, wage moderation began to take effect.

At Hfl 752 million (1983: Hfl 428 million), net income for the year was the highest in the brief history of Akzo. To put this figure in perspective, it should be noted that the 1984 tax burden amounted to 35% compared with only 14% in 1983.

Expressed in guilders per common share of Hfl 20, net income increased from Hfl 12.91 in 1983 to Hfl 19.06 in 1984, while capital stock was raised from Hfl 663 million at December 31, 1983, to Hfl 789 million at December 31, 1984.

Net sales attained a level of Hfl 16.5 billion, representing a rise of Hfl 1.4 billion, or 10%, from the prior year. After elimination of the sales of Brand-Rex, divested in November 1983, the rise works out at 15%, 8 points of which were due to higher shipments.

Almost all product groups contributed to the improvement in income. In particular, the results of Enka and the chemical divisions showed a strong advance. Geographically, operations in the Netherlands and in the Federal Republic of Germany made the most important contributions to earnings growth.

We welcome the increase in capital investment. Expenditures for property, plant and equipment stood at Hfl 784 million (1983: Hfl 625 million), while the amount of authorizations was more than Hfl 1.0 billion versus nearly Hfl 0.9 billion in the prior year. Both capital expenditures and authorizations were well in excess of depreciation, whether considered on the basis of cost (Hfl 576 million) or of current value (Hfl 717 million). The increased investment activity reflects our determination to accelerate realization of strategic goals and to develop previously unexploited opportunities that exist in certain sectors.

During the year, the Company continued to improve its financial position. While making additions to Group equity by retaining Hfl 0.5 billion from net income and by attracting Hfl 0.5 billion in equity capital, we reduced debt by Hfl 1.1 billion.

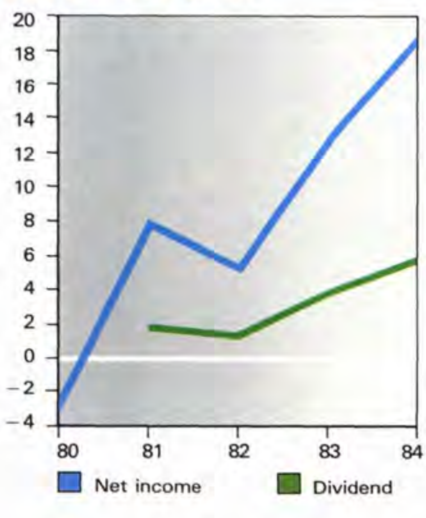
Net income on the basis of current value worked out at Hfl 645 million, or twice the amount for 1983. The effect of price rises on depreciation and inventory results was lower than in the prior year (see page 55).

#### Dividend proposal

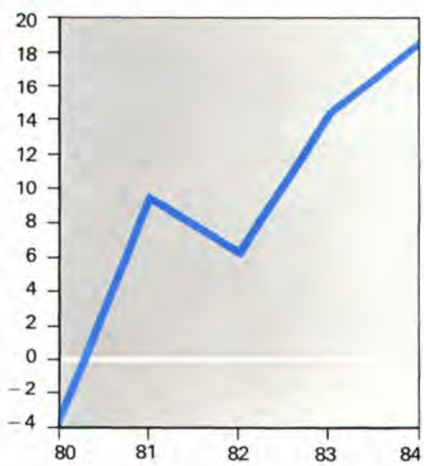
We will propose to the Annual Meeting of Stockholders that the 1984 dividend be fixed at Hfl 6 per common share of Hfl 20. Of this amount, Hfl 1.50 was declared as an interim dividend in November 1984.

If this proposal is adopted, Hfl 236 million of the total net income of Hfl 752 million will be distributed, and Hfl 516 million will be retained.

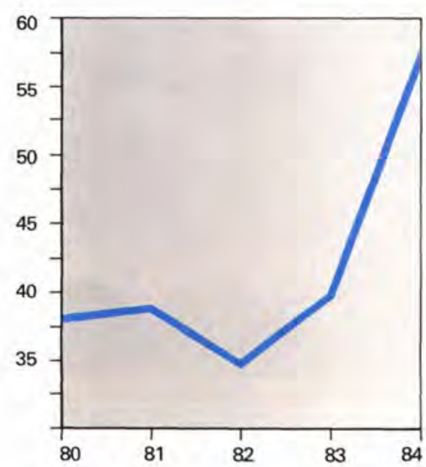
*Net income and dividend per common share of Hfl 20, in guilders*




*Net income as percentage of stockholders' equity*




*Group equity as percentage of debt*



### Economic climate

One indicator of the continued recovery of the economy was a surprisingly vigorous increase in world trade of approximately 9%.

The growth of the U.S. economy leveled off perceptibly in the third quarter but rallied in the fourth. On balance, it showed an impressive advance of nearly 7% from 1983. Although the U.S. economy afforded a significant stimulus, the European economies in the main possessed insufficient flexibility to match its performance.

We reiterate our plea, made on several previous occasions, that a high priority should be given to the abolition of all barriers to trade inside the European Common Market. Europe's competitive position absolutely requires measures promoting a better functioning of that market. The truth of this claim is demonstrated by the fact that Community unemployment is still rising.

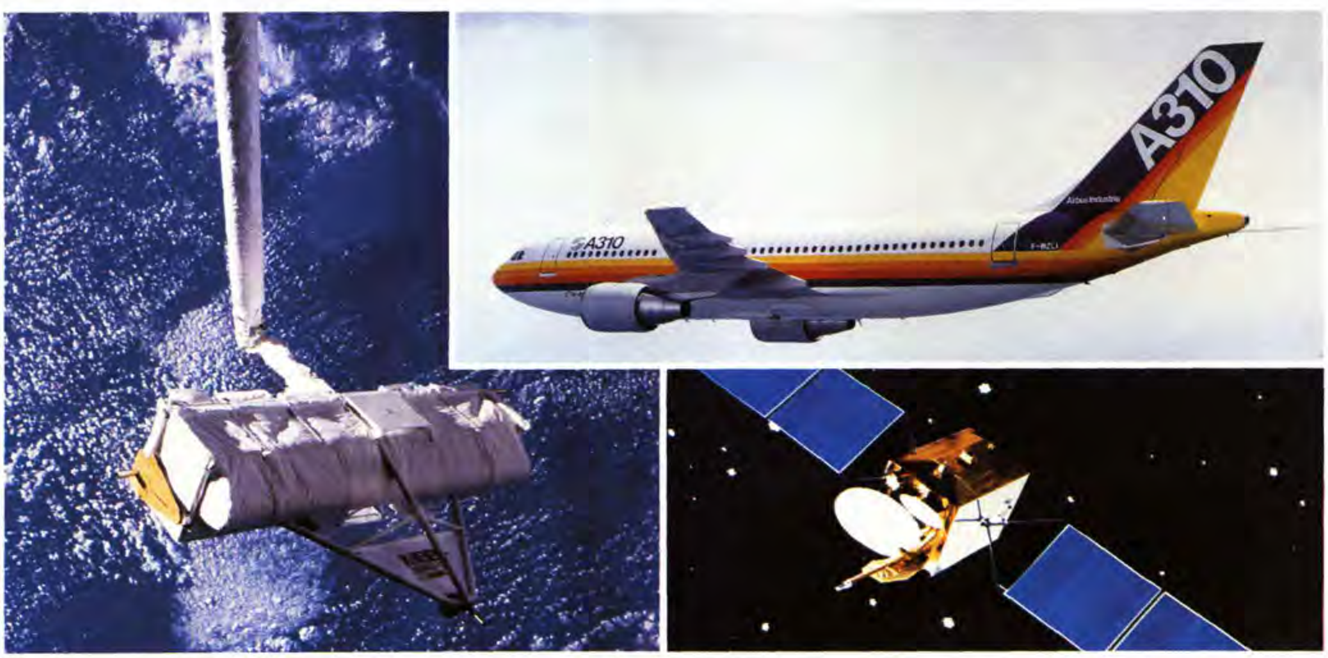
The weaker growth of the European economies was partially offset by the high exchange rate for the dollar. This latter factor also benefited certain of our Western European operations, especially the Dutch and German ones, and was reflected in less competition from American producers and in higher direct and indirect exports to the U.S. and other countries.

Aiding the Group's performance were low rates of inflation (notably in the Netherlands and the Federal Republic of Germany) and the wage moderation already referred to. The latter factor was especially prominent in the Netherlands and somewhat less so in the Federal Republic of Germany.

### Position significantly improved

The Group's continued existence ceased to be our primary concern several years ago; the emphasis now is on more aggressively implementing the corporate strategy, which calls for renewal of the product range and greater participation in the important North American market. This shift in focus naturally owes much to the brighter financial picture. The 1984 record reflects the new orientation: several initiatives were taken toward these objectives, and some concrete results have already been achieved.

One such initiative, which holds out great promise for the longer term, seeks to speed up development of knowledge and experience in the field of new materials by selective research efforts and acquisitions. Toward this end guidelines have been formulated to address application development in high-technology areas in a coordinated fashion. Some of the products concerned—such as engineering plastics, glass fibers, and membranes—again achieved high shipments growth. This was also true of carbon fibers, for which a production unit is currently under construction. Production of aramid fibers is to commence in the second half of 1985. Major investments were authorized for the production of glass fibers and membranes (capacity expansions) and for a




*The aerospace industry is an important customer of new materials such as carbon and aramid fibers.*

new family of di-isocyanates, raw materials for high performance polyurethanes.

The principal divisions involved in the creation of a stronger Akzo presence in North America were Akzo Chemie, Akzo Coatings, and Akzo Pharma.

Akzo Chemie moved to increase its interests on this continent in cracking catalysts, fatty amines (capacity expansion), and raw materials for organic glass. Akzo Coatings significantly enlarged the size of its car refinishes distribution network and acquired an aircraft coatings manufacturer. Akzo Pharma continued its gradual expansion of operations and started up a second biochemical plant. Future acquisition of, or cooperation with, a U.S. company in the fields of biotechnology, pharmaceuticals, and diagnostics remains a strategic objective.

The Group's better condition is also apparent in the (predominantly European) activities of Enka, Akzo Zout Chemie, and Akzo Consumenten Produkten.

Many years of restructuring gave Enka a much more balanced line of products. The company's dependence on the textile industry has been reduced, profitability of the fiber business has been improved, and the share of new products has been increased.

Through ROVIN, a joint venture with Shell, Akzo Zout Chemie has obtained a solid base for its salt, chlorine, and vinyl chloride operations, which are at the heart of the company's business. But the petrochemical activities, including methanol production, will be exposed in the coming years to competition from new producers. While petrochemicals are not a major product class to us, we expect to remain reasonably competitive on condition that steps are taken to prevent imports flooding the Western European market and upsetting its balance.

In January 1985, Shell brought its European consumer product interests into Akzo Consumenten Produkten and acquired a 49% share in that division. As a result, Akzo Consumenten Produkten improved both the composition of its product range and its geographic position in Western Europe.

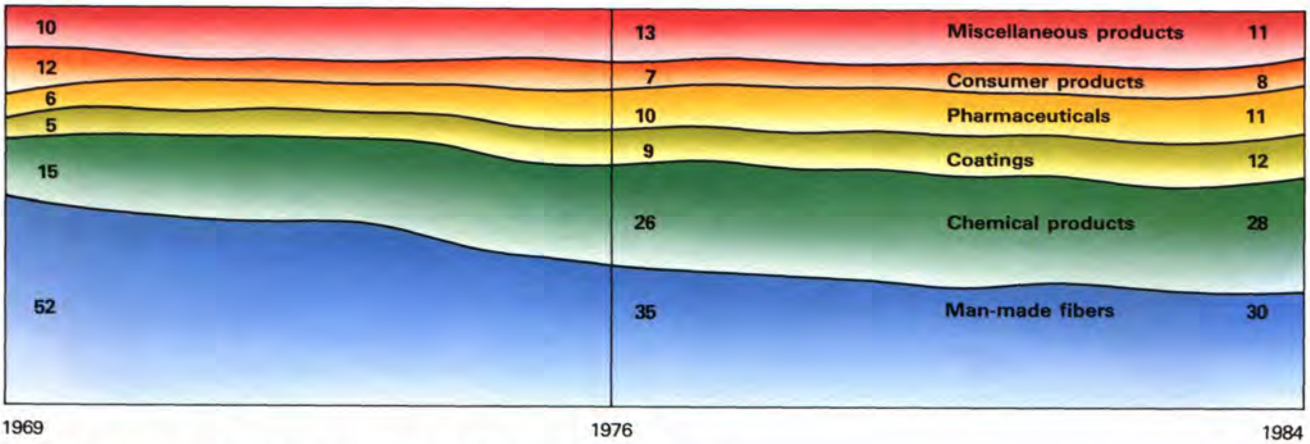
**Communication**

Akzo continues to foster good communication on its policies and activities with those who are directly or indirectly involved with the Group. In doing so, the Company is in harmony with the codes of corporate conduct established by the Organisation for Economic Co-operation and Development (OECD) and the International Labour Organisation (ILO), which we endorse.

**Results of operations**

A condensed version of the consolidated statement of income of the Akzo Group is presented opposite. Its format is not materially different from that adopted in previous years but some of the terminology has been changed.

*Product mix (as %)*




Net sales, in billions of guilders: 6.4 (1969), 10.8 (1976), and 16.5 (1984)

| Millions of guilders | 1984 | 1983 |
|---|---|---|
| Net sales | 16,520 | 15,085 |
| Operating costs | (15,180) | (14,242) |
| Operating income | 1,340 | 843 |
| Financing charges | (285) | (341) |
| Taxes on operating income less financing charges | (369) | (73) |
| Earnings from nonconsolidated companies | 123 | 110 |
| Group income from normal operations, after taxes | 809 | 539 |
| Extraordinary items after taxes | (35) | (102) |
| Group income | 774 | 437 |
| Minority interest | (22) | (9) |
| Net income | 752 | 428 |

The 10% rise in *sales* by approximately Hfl 1.4 billion was distributed uniformly over the year and was principally due to chemical products and man-made fibers.

Exclusive of the sales figure of Brand-Rex, divested in 1983, sales would have been up 15%. This satisfactory sales growth was in large measure the result of volume growth (8 points); the remaining 7 points of the increase is attributable to higher selling prices, including the effect of changes in exchange rates.

*Operating costs* were up 6.6%, trailing the increase in sales. Besides wage moderation in some important Akzo countries, high rates of capacity utilization in most plants were a major factor in limiting the increase in operating costs. At Hfl 4.3 billion, labor costs closely approximated the prior year's level, for a work force which was an average 7% down from 1983. Expressed as a percentage of sales, the share of labor costs decreased from 28.5% in 1983 to 26.0% in 1984. In 1984 as in 1983, the cost of raw materials and energy amounted to 44% of sales.

*Operating income* gained nearly 60% at Hfl 1,340 million, or 8.1% of sales (1983: 5.6%). Man-made fibers and chemical products between them accounted for the lion's share of this solid increase.

*Financing charges* were down 16% to Hfl 285 million, largely as a result of higher interest receipts. Financing charges in countries with very high rates of inflation, such as Brazil and Argentina, increased significantly.

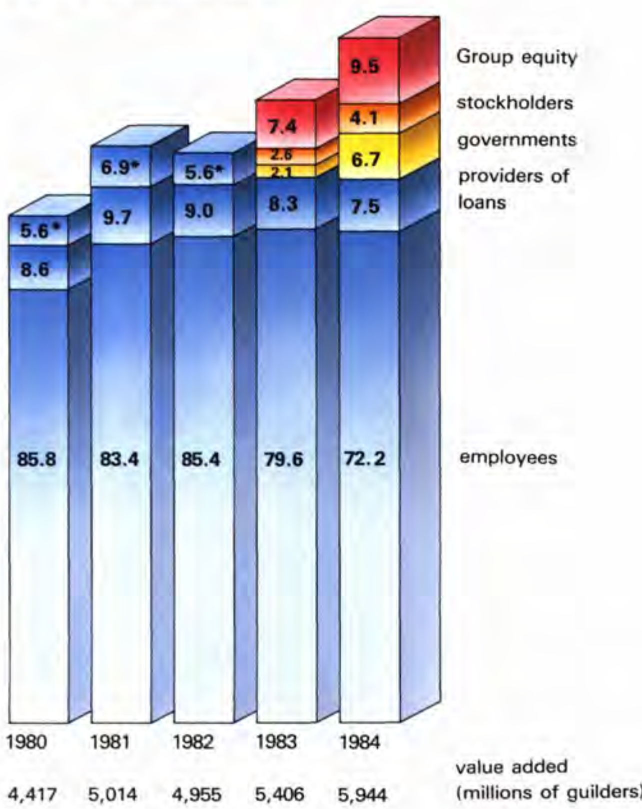
| Millions of guilders | Net sales 1984 | Net sales 1983 | Operating income 1984 | Operating income 1983 |
|---|---|---|---|---|
| First quarter | 4,172 | 3,617 | 355 | 136 |
| Second quarter | 4,106 | 3,760 | 339 | 200 |
| Third quarter | 3,924 | 3,754 | 296 | 238 |
| Fourth quarter | 4,318 | 3,954 | 350 | 269 |
| Total | 16,520 | 15,085 | 1,340 | 843 |

The *tax burden* stood at 35% and was thus substantially up from the previous year's 14%, due to fewer loss carryforwards and a nonrecurring peak in taxes in the Federal Republic of Germany.

*Earnings from nonconsolidated companies* amounted to Hfl 123 million, compared with Hfl 110 million in the prior year. The results of COBAFI (synthetic tire yarns and fabrics) in Brazil and Fibras Químicas (synthetic fibers) in Mexico exhibited a striking improvement. Silenka (glass fibers) succeeded in sustaining the rising trend in its results. Earnings in the methanol sector were adversely affected by the increased squeeze on the selling price and a rise in the feedstock price.

Among the major components of *extraordinary items after taxes* were the cost of the termination of acetic acid production in the Rotterdam Europoort area and the loss arising from the divestiture of our share in the Spanish acrylic fiber producer Cyanenka S.A.

*Shares in value added (as %)*




* Group equity, stockholders, governments

## Financing and capital expenditures

The summary statement given below shows the sources and applications of funds, supplemented with income from and expenditures for financial operations, on balance resulting in a change in cash, short-term investments, and marketable securities.

| Millions of guilders | | 1984 | | 1983 |
|---|---|---|---|---|
| *Sources of funds* | | | | |
| Group income | | 774 | | 437 |
| Depreciation | | 576 | | 584 |
| Other sources | | 236 | | 190 |
| | | 1,586 | | 1,211 |
| *Applications of funds* | | | | |
| Investments | 887 | | 759 | |
| Disposal of affiliated companies | (25) | | (471) | |
| | | 862 | | 288 |
| Increase in working capital | | 157 | | 138 |
| Dividends paid | | 163 | | 87 |
| Other applications | | – | | 3 |
| | | 1,182 | | 516 |
| Surplus | | 404 | | 695 |
| Issuance of stock and drawdowns, etc. | 814 | | 732 | |
| Repayment of borrowings, etc. | (1,357) | | (999) | |
| | | (543) | | (267) |
| Change in cash, short-term investments, and marketable securities | | (139) | | 428 |
| Cash, short-term investments, and marketable securities at December 31 | | 1,067 | | 1,206 |

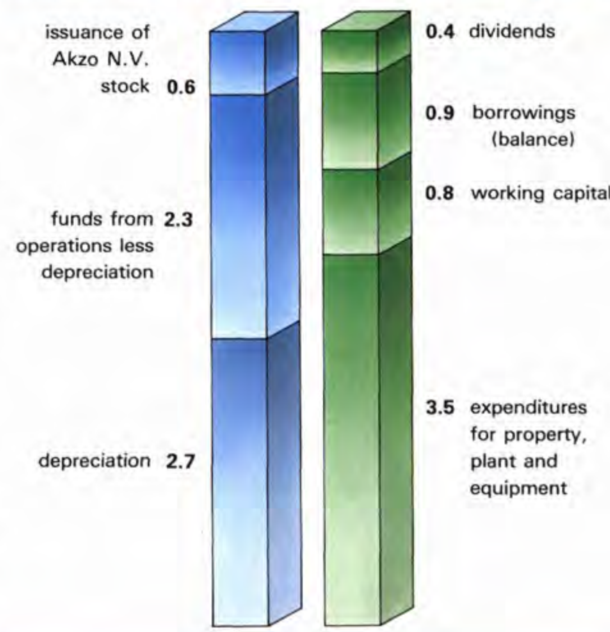
With business much improved, the amount of funds provided increased from Hfl 1.2 billion in 1983 to Hfl 1.6 billion in 1984. Against this, the 1984 amount of investments and dividend payments was significantly higher.

The 1983 funds surplus was boosted by the revenue from the divestiture of Brand-Rex.

The 1984 funds surplus (Hfl 0.4 billion) together with Hfl 0.8 billion in new capital from stock issues and loans enabled us to repay Hfl 1.4 billion in borrowings.

Cash and short-term investments were maintained at a high level.

*Sources and applications of funds, 1980-1984 (billions of guilders)*




### Increase in capital expenditures

Both capital expenditures and the aggregate amount of project authorizations were distinctly higher than in the previous year.

Expenditures for property, plant and equipment rose by 25% to Hfl 784 million. By product segment, most of the expenditures were for chemical products (37%). By geographic area, expenditures were focused primarily in the Netherlands (36%).

Projects authorized in 1984 (aggregate amount more than Hfl 1 billion) include:

| | |
|---|---|
| - Construction of a carbon fiber production plant at Oberbruch | Hfl 52 million |
| - Expansion of production of engineering-grade polyester plastics at Emmen | Hfl 22 million |
| - Expansion of hollow fiber production (membranes) at Wuppertal | Hfl 18 million |
| - Modernization of polyester textile filament production at Oberbruch (first phase of a project costing some Hfl 250 million) | Hfl 70 million |
| - Implementation of a new process for the production of high-viscosity cellulose-based industrial colloids (CMC) | Hfl 23 million |
| - Construction of fatty amine production units in Brazil (Hfl 28 million), Canada (Hfl 12 million), and the United States (Hfl 28 million) | Hfl 68 million |
| - Construction of a production unit manufacturing specialty di-isocyanates for high performance polyurethanes at Deventer | Hfl 34 million |
| - Various additions and improvements to storage and distribution facilities for coating products at Breda and Sassenheim | Hfl 31 million |

In 1984, our acquisition activities resulted in the purchase of the U.S. companies Lanchem (resins) and Bostik Finch (aircraft coatings), and of the Spanish company Legrain (toiletries). The activities of another Spanish company – Hermes (pharmaceutical products) – were also taken over.

In light of the 1984 amount of project authorizations, we expect a further rise in expenditures for property, plant and equipment in 1985.

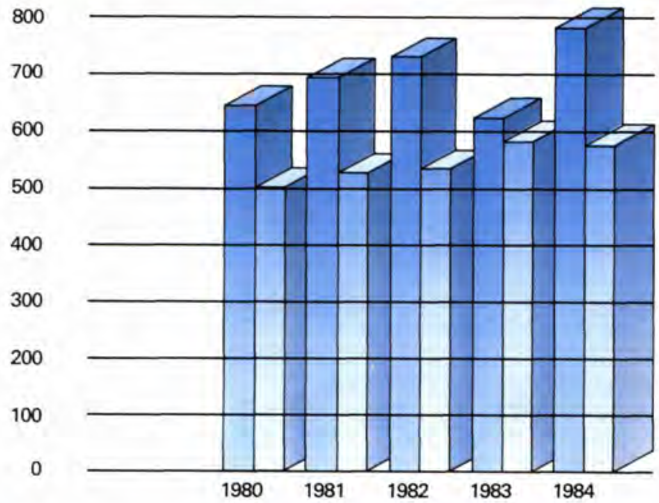
**Working capital**

Operational working capital (inventories and trade receivables, less accounts payable) expressed as a percentage of net sales showed little change from the prior year. This holds for both the total figure and its constituents. We continue to seek possibilities for a further relative decrease of working capital.

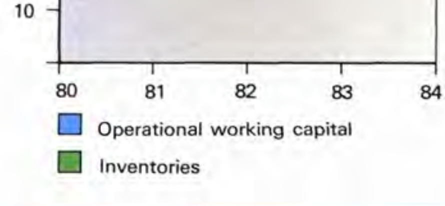
**Stock issues**

In March 1984, 3.3 million common shares of Hfl 20 were issued at a price of Hfl 93 per share. Also in 1984, the warrants attached to the stock issue of May 1983 were exercised. This added 3.0 million shares, at Hfl 60 per share, to equity capital, raising the total amount by Hfl 126 million to Hfl 789 million.

*Expenditures for property, plant and equipment ■ and depreciation □ (millions of guilders)*




*Operational working capital and inventories as percentage of net sales*




**Interest-bearing borrowings**

To improve the Company's financial condition some of the funds generated were used to achieve a reduction in interest-bearing borrowings. The major repayment related to a U.S.$ 230 million multicurrency loan concluded by Akzo N.V. in 1980 with a group of international banks. As this repayment was made, a new agreement was concluded under which drawdowns of up to an amount of U.S.$ 130 million can be made. The life of this credit facility is 10 years.

The average rate of interest on loans outstanding at year-end increased from 8.5% to 8.8%.

The Group equity/debt ratio improved from 0.40 at the end of 1983 to 0.58 at the end of 1984.

### Liquidity

Down Hfl 139 million from the previous year, cash, short-term investments, and marketable securities amounted to Hfl 1,067 million at December 31, 1984. In addition to these funds, the Group had available unused medium-term and long-term credit facilities in the amount of Hfl 780 million (December 31, 1983: Hfl 750 million). This includes the U.S.$ 130 million principal amount of the multicurrency loan referred to above.

We thus have adequate means to finance the Group's development in the directions envisaged.

### Financing in 1985

With the 1983 and 1984 stock issues we were able to strengthen our financial position at an accelerated pace. During 1985 our financial policy will be principally aimed at a further improvement of the composition of our debt portfolio. Operations on the capital market will be primarily directed toward achievement of this goal, which our Euroguilder note issue in March 1985 also sought to advance. Issued at par, this 7% Hfl 150 million principal amount loan is for a term of five years.

## Research and technology

The cost of the corporate and divisional research institutes aggregated Hfl 638 million, compared with Hfl 620 million in 1983. After deduction of the cost of the operational support provided by these institutes, the net R&D expenditure was Hfl 587 million (1983: Hfl 574 million). At 4,920, the number of employees engaged in R&D at December 31, 1984, was almost unchanged from the prior year.

In May 1984, Dr. Harry Woolf, a director of the Institute for Advanced Studies at Princeton, United States, was appointed scientific adviser to the Board of Management.

For further data on developments and projects see the appropriate product group sections.

## Human resources

The 1984 number of employees of consolidated companies was only slightly lower. The divisional employment statistics did not show any material changes, as is evident from the following table.

| Number of employees, December 31 | 1984 | 1983 | change |
|---|---|---|---|
| Enka | 27,900 | 28,100 | −200 |
| Akzo Zout Chemie | 4,500 | 4,700 | −200 |
| Akzo Chemie | 5,000 | 4,900 | +100 |
| Akzo Coatings | 8,600 | 8,500 | +100 |
| Akzo Pharma | 9,400 | 9,100 | +300 |
| Akzo Consumenten Produkten | 3,200 | 3,100 | +100 |
| Other companies | 7,500 | 7,900 | −400 |
| Total | 66,100 | 66,300 | −200 |
| of which Akzo America | 8,800 | 9,100 | −300 |

The decreases for Enka and Akzo Zout Chemie were due to earlier announced restructuring and slimming-down measures. Enka shut down its staple fiber operations in Kassel, while early in the year Akzo Zout Chemie decided to terminate the production of acetic acid and some derivatives. In both cases much effort was made to offer alternative employment to the persons involved.

The increase in the labor force at Akzo Coatings and Akzo Pharma was mainly attributable to acquisitions.

For Akzo's work force in the Netherlands, which totals more than 22,000 employees, a shorter week averaging 38 hours was introduced effective July 1, 1984. The agreement sanctioning this cutback contained a clause imposing an overall wage freeze in 1983 and 1984. The organization converted to the 38-hour week without any change in actual operating time, while making due allowance for the specific circumstances prevailing in offices and locations. It would seem that as a result approximately 500 jobs have been saved and that approximately 400 more have been created. The cost of the additional jobs is only partially reflected in the 1984 figures. Its full impact will not become manifest until 1985.

It is still too early to draw conclusions about the effect of this 5% cutback in working time on our organization. Without having a clear insight into the organizational and economic consequences for our Dutch companies, it would not be wise to enter into agreements about a further reduction of working time.

We are most concerned over the serious problem of joblessness, particularly youth unemployment. We are therefore receptive to activities and plans that could result in young persons being offered training or employment in industry. In our Dutch companies we hope to enable 400 young people to attend training courses or gain part-time work experience. In the Federal Republic of Germany, where the apprenticeship system is well established, the number of apprenticeships in our companies will be raised by 10% to 770.

We wish to express our gratitude to all employees for their outstanding contributions to the significant progress in the development of the Group.

We trust that every employee is fully aware of the importance of a healthy and profitable enterprise which is well equipped to undertake innovative activities, thereby offering its employees a wider scope for personal development and advancement.

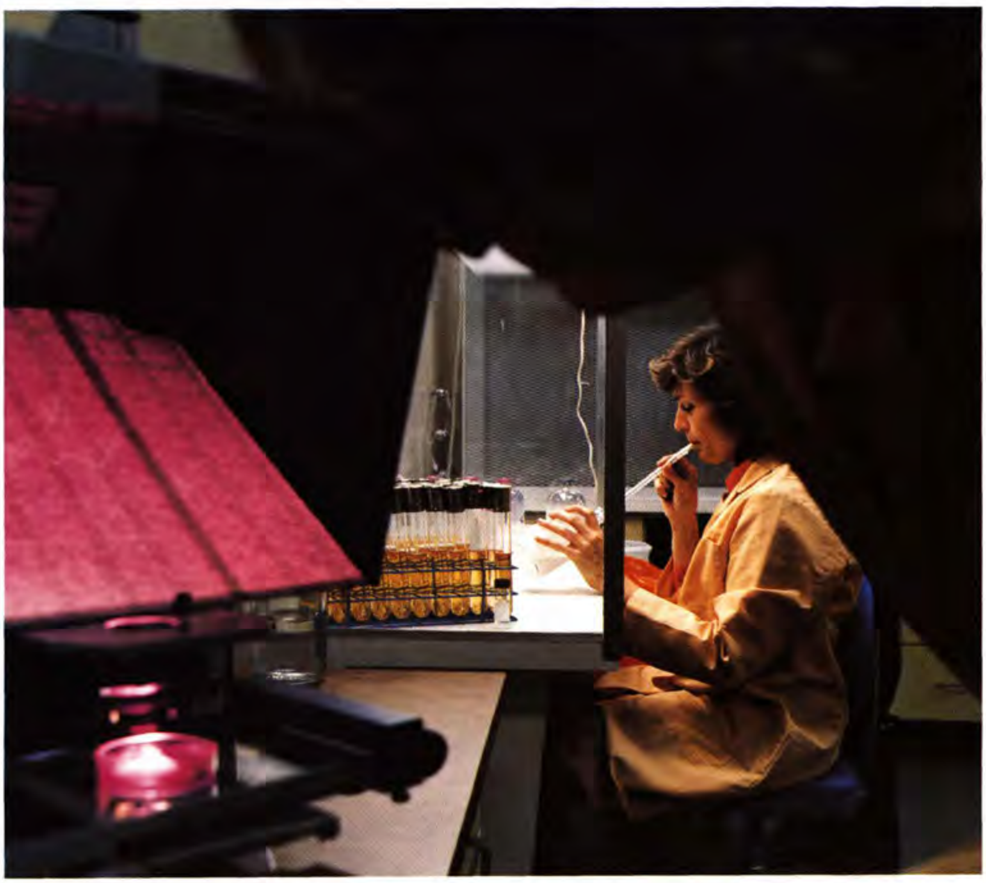
For 1985, we hope to maintain or even fractionally increase employment.

## Outlook for 1985

Building on a much improved position as regards product range and financial structure, the Group ended 1984 with excellent results.

Provided there are no major adverse developments in the economy and the dollar rate, we trust that the Group will again be able to achieve a satisfactory operating income—a projection based in part on the trend in the early months of 1985.

This also underlies our expectation that the Group should certainly be able to match the 1984 earnings performance.



*Quality control of poultry vaccines in the laboratory of Intervet America Inc., Millsboro, Delaware.*

# Product groups

14 The statistics presented below illustrate the relative importance of each of the six product groups in terms of net sales, operating income, invested capital, and expenditures/depreciation in respect of property, plant and equipment.

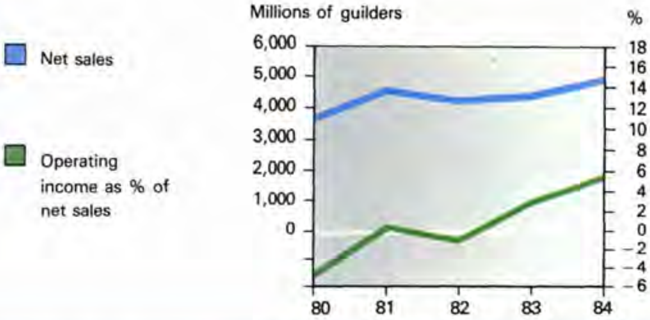
| Millions of guilders | Net sales 1984 | Net sales 1983 | Operating income 1984 | Operating income 1983 | Invested capital* 1984 | Invested capital* 1983 | Property, plant and equipment: Expenditures 1984 | Expenditures 1983 | Depreciation 1984 | Depreciation 1983 |
|---|---|---|---|---|---|---|---|---|---|---|
| Man-made fibers | 5,035 | 4,526 | 302 | 151 | 2,446 | 2,364 | 239 | 157 | 215 | 197 |
| Chemical products | 4,800 | 4,097 | 403 | 193 | 2,362 | 2,025 | 293 | 250 | 207 | 216 |
| Coatings | 1,973 | 1,796 | 144 | 143 | 738 | 653 | 73 | 45 | 41 | 34 |
| Pharmaceuticals | 1,849 | 1,647 | 306 | 260 | 809 | 772 | 63 | 66 | 44 | 43 |
| Consumer products | 1,302 | 1,080 | 69 | 59 | 366 | 315 | 26 | 23 | 21 | 23 |
| Miscellaneous products | 1,826 | 2,142 | 168 | 65 | 605 | 604 | 90 | 84 | 48 | 71 |
| Total | 16,785 | 15,288 | 1,392 | 871 | 7,326 | 6,733 | 784 | 625 | 576 | 584 |
| Intra-Group deliveries, nonallocated items | (265) | (203) | (52) | (28) | (123) | (67) | | | | |
| Total | 16,520 | 15,085 | 1,340 | 843 | 7,203 | 6,666 | 784 | 625 | 576 | 584 |

The terms and conditions for intra-Group deliveries are negotiated at arm's length and therefore are, in principle, identical with the ones used in transactions with third parties. International intra-Group deliveries and international deliveries within a single product group are made in accordance with standard procedures that take due account of tax, currency, and pricing regulations in force in the countries concerned.

| Financial statistics | Operating income as % of net sales 1984 | net sales 1983 | invested capital* 1984 | invested capital* 1983 | Net sales/invested capital ratio 1984 | 1983 | Expenditures/depreciation ratio 1984 | 1983 |
|---|---|---|---|---|---|---|---|---|
| Man-made fibers | 6.0 | 3.3 | 12.3 | 6.4 | 2.06 | 1.91 | 1.1 | 0.8 |
| Chemical products | 8.4 | 4.7 | 17.1 | 9.5 | 2.03 | 2.02 | 1.4 | 1.2 |
| Coatings | 7.3 | 8.0 | 19.5 | 21.9 | 2.67 | 2.75 | 1.8 | 1.3 |
| Pharmaceuticals | 16.5 | 15.8 | 37.8 | 33.7 | 2.29 | 2.13 | 1.4 | 1.5 |
| Consumer products | 5.3 | 5.5 | 18.9 | 18.7 | 3.56 | 3.43 | 1.2 | 1.0 |
| Miscellaneous products | 9.2 | 3.0 | 27.8 | 10.8 | 3.02 | 3.55 | 1.9 | 1.2 |
| Total | 8.1 | 5.6 | 18.6 | 12.6 | 2.29 | 2.26 | 1.4 | 1.1 |

* Total assets of consolidated companies less marketable securities, cash, and short-term investments, and less other current liabilities.

# Man-made fibers






## General

By and large, the development in 1984 was favorable.

Sales topped Hfl 5 billion. The 11% gain was composed of 2 points due to higher shipments and 9 points due to higher prices and exchange rate fluctuations. Operating income doubled to Hfl 302 million. Taking into account the harsh competitive conditions prevailing in the business, particularly in the textile sector, we are rather pleased with the rise in operating income from 3.3% of sales to 6.0%.

This substantial growth is entirely attributable to Enka. The higher dollar provided an additional impulse, both by boosting shipments to domestic customers with growing exports, and by raising revenue from our fiber exports. As a consequence, the Enka facilities in the Netherlands, the Federal Republic of Germany, Spain, and Brazil operated at near-capacity, while selling prices of the products exhibited a further improvement.

Dollar sales of American Enka were down somewhat from 1983. Operating income was significantly lower. This was due to a market deterioration for textile fibers and to the restructuring of the company's operations, which was not quite completed by year's end.

The following table shows the two companies' contributions to sales and operating income of man-made fibers.

| | Net sales | | Operating income | |
|---|---|---|---|---|
| Millions of guilders | 1984 | 1983 | 1984 | 1983 |
| Enka | 3,576 | 3,163 | 262 | 95 |
| American Enka | 1,459 | 1,363 | 40 | 56 |
| Total | 5,035 | 4,526 | 302 | 151 |

## Enka

*Man-made fibers for textiles and carpets*

Sales of these fibers advanced from Hfl 1,860 million in 1983 to Hfl 2,069 million in 1984. All products contributed to the major increase in operating income.

For man-made fibers, the Western European textile cycle peaked in mid-1984. The demand for man-made fibers was favorably influenced by the positive development of textile and apparel exports. As a consequence, capacity utilization of the fiber companies remained high throughout the year. After years in decline, the Western European textile industry recorded output growth of 4% in 1984. Consumer textile consumption failed to grow, while imports of textiles continued to expand.

The decrease in the overall demand for man-made fibers in the second half of the year was only partially reflected in our shipments, thanks to increased specialization in products which are less susceptible to cyclical influences. Also, selling prices remained stable in the last few months. This is indicative of a more balanced market situation for fibers due to the restructuring measures implemented by EEC producers over the past years.

In Western Europe, Enka is a market leader for *flat polyester textile filament*. Volume sales of this product developed favorably in 1984.

Last year we already remarked upon the brighter prospects for certain sectors of the Western European textile industry. The intervening months have strengthened our belief that a move to bolster our strategic position in flat polyester filament would be justified and make good economic sense. We accordingly decided to undertake a large-scale modernization project in our Oberbruch plant. Replacing obsolete production equipment, it will make for significantly lower costs and better quality.

Business for *textured polyester filament* in Western Europe remained disappointing. This particularly concerned the circular knitting sector. As international competition intensified, exports declined. In contrast, Polyenka in Brazil achieved significantly higher earnings for this product, with capacity utilization constant at the same high level.

Turning to the other textile fibers, business continued strong for *rayon filament* for use in lining fabrics and outerwear. The four plants in the Netherlands and the Federal Republic of Germany operated at capacity. More stringent emission control standards will require major capital investments in the coming years. The size of the Western European market for *polyamide filament* was reduced further by lower consumption and replacement by polyester. With exports up, however, we were able to attain reasonable utilization of our modest manufacturing capacity.

The trend in fashion toward cotton-type fabrics favors sales of *polyester staple*, and so do the relatively high cotton prices. With Kassel shut down, production is now concentrated in Emmen and Barcelona. The outlook for this product appears promising.

Shipments of our *polyamide carpet yarns*, oriented toward the relatively stable contract market (hotels, offices, etc.) and the quality-conscious upper end of the private consumer market, exceeded the 1983 level. Results were distinctly better, but further improvement is necessary.

*Man-made fibers for industrial uses*

The improvement in performance begun in 1983 increased in strength, due in part to higher exports.

Sales of industrial fibers were ahead Hfl 204 million to Hfl 1,507 million. All reinforcing materials contributed toward this gain. Demand for the majority of these products was so strong that it could not be fully met. In these circumstances results were distinctly higher.

*Casual wear made of Enka's* Diolen® *polyester staple fiber.*

*Rayon tire yarns* experienced a slight dip in demand, beginning in mid-1984, which was partly attributable to the strike in the German engineering industry. The last few months of 1984 saw a recovery, which caused 1983 shipments to be exceeded.

Results for *synthetic yarns* registered a further improvement. This was due to higher selling prices and lower costs stemming from further modernization of the production equipment.

*Steel cord* continues its satisfactory development, with Enka's proprietary cord construction a major contributory factor.

The synthetic material *Enkamat®*, which is used for such purposes as earth reinforcement and drainage, recovered from a sales depression in the first half of 1984, which had been brought on by a reduced flow of public contracts (retrenchments) and very bad weather.

Market development of the two new materials *carbon fibers and aramid fibers* is progressing well.

For the introduction of carbon fiber in the European market we procure material from the Japanese producers Toho Beslon with whom we concluded a licensing agreement. In 1984, sizable quantities were so obtained and marketed; further shipments growth is anticipated for 1985. In early 1986, the Oberbruch carbon fiber manufacturing facility will begin production with an initial capacity of 350 metric tons per annum. Enka, Toho Beslon, and Celanese (United States) have concluded an agreement regulating the exchange of know-how and expertise concerning the production process. Our carbon fibers are used notably in high-technology industries, such as aerospace, mechanical engineering, electronics, and automotive engineering.

**Joint ventures**

In the fall of 1985, Aramide Maatschappij v.o.f. is scheduled to begin production of *Twaron®* aramid fibers. Preparations for commercialization are in full swing. The product's extraordinary mix of properties—such as high strength and modulus, low weight, and high heat resistance

– permitted the development of novel uses not available with the traditional reinforcing materials. Examples of such uses are high-performance composites for aerospace products and friction materials for the automotive industry.

Part of Enka's fiber activities are organized in joint ventures with local partners, chiefly in Latin America and India. Sales of these joint ventures totaled Hfl 1,160 million, compared with Hfl 890 million in 1983. The 1983 figure was adjusted to exclude sales of Cyanenka S.A. In 1984, our interest in this Spanish acrylic fiber producer was sold.

Nearly all companies reported higher earnings. The leader was COBAFI (Brazil), which substantially improved its results. This joint venture, originally a producer of polyamide yarns and fabrics, has now also started production of polyester yarns and fabrics. Enka de Colombia and Enkador (Ecuador) are to expand production capacity for synthetic textile filament. Fibras Químicas (Mexico) has resumed work on a deferred expansion project. Century Enka (India) is likewise engaged in expanding production capacity, in this case of polyester textile filament.

The divestiture of Cyanenka marks our complete withdrawal from the acrylic fiber business. Its strategic value had become slight, in part because Enka possessed no know-how in this fibers segment.

**American Enka**

The company's restructuring was largely completed in 1984. Production of polyester textile filament and polyamide hosiery yarns was concentrated in a single location, and the unprofitable production of polyamide warpknit filament and textured polyester filament was discontinued. American Enka thus acted in conformity with its policy which seeks to accomplish increased orientation toward higher-return market segments.

Imports of textile products, including man-made fibers, into the United States were up by 40% from 1983. This strong growth of imports exerted a squeeze on prices and had a noticeable impact on our textile filament.

The campaign to raise quality awareness which was initiated in September 1983 is beginning to show positive results. In the highly competitive environment of the U.S. fiber market, quality is an important weapon to ensure the continuity of American Enka's operations.

*Polyester and polyamide textile filament* struggled through a dull year. Activities in this sector have been restricted to polyamide hosiery yarns and flat polyester filament. We expect that business will pick up in 1985.

*Polyamide carpet yarns and fibers* preserved the impetus of the advance begun in 1981. Shipments reached a record level.

Harsh competitive conditions in the U.S. *rayon staple* market depressed prices; however, American Enka's shipments were maintained at a strong level due to its good quality. Profitability should recover after completion of the first phase of the plant's modernization in 1985.



*Enkamat®* continued to perform satisfactorily.

**Research and development**

Quality enhancement and product adjustment to higher market requirements on the one hand, and process modernization to curtail costs on the other, remained the central issues in *synthetic fibers*. For *rayon filament*, the emphasis was on environmental management. Automation projects are prominent in both product sectors.

Other research activities were principally concerned with the new reinforcing materials, *aramid fibers and carbon fibers*. In the *aramid* (*Twaron®*) field, some successful product and process improvement work was completed in

*American Enka holds a good position in the U.S. carpet market. Carpet production by one of the customers.*

1984, and the necessary preparations were made for the start of production in 1985. Quantities from our pilot facility were distributed as planned.

For *carbon fibers*, most effort centered on promising applications in composites used in technologically advanced industries.

We developed *silica fibers*, whose high heat resistance (up to 1,100°C) and relatively low cost give them interesting potential for use in industrial filtration and in thermal insulation. A pilot plant is under construction at Obernburg.

**Outlook for 1985**

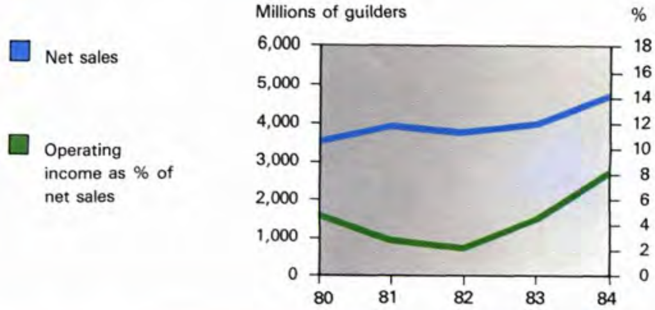
For Enka Europe we foresee slightly higher sales and a satisfactory operating income, which should approximate the level achieved in 1984. Such performance will be contingent upon the general economic picture and, in particular, upon the textile cycle in Western Europe; the movement of the dollar will also be an important factor.

American Enka expects an upturn in operating income. The company bases this projection on forecasts of modest growth of the textile and fiber sectors, and on higher penetration in business segments where it has strong strategic positions.

Turning to our fiber companies in Latin America and India, we anticipate a continuation of business at the present good levels.

*Silica fibers with high thermal resistance (up to 1,100°C) developed by Enka offer interesting prospects.*

# Chemical products




## General

*Chemical products* again recorded major gains in sales and results. This was true both for *salt and heavy chemicals* and for *specialty chemicals*. Sales increased 17% to Hfl 4,800 million. Higher shipments accounted for 11 points of this increase, and higher prices and exchange rate fluctuations for 6 points. Operating income doubled to Hfl 403 million, making chemicals the principal contributor to 1984 Group income.

The two segments of the chemicals business owe this favorable development particularly to cyclical recovery, the high dollar, and strict cost control and efficiency enhancing policies implemented in recent years.

## Salt and heavy chemicals

Sales were up from Hfl 2,001 million in 1983 to Hfl 2,302 million. A significant portion of this increase originated in our U.S. salt operations.

The favorable volume cycle for the products of Akzo Zout Chemie and International Salt, which ensured high rates of capacity utilization for virtually all our mining and manufacturing operations, contributed in large measure to 1984's good earnings performance.

The year saw the beginning of construction of two large-scale energy projects: a fluidized bed boiler in Hengelo and a cogeneration unit in Delfzijl. Much of the work for these projects was awarded to Dutch contractors who, in terms of both price and quality, are now an equal match for foreign industry.

### Salt

Western European sales of electrolytic *salt* were at a high level. This was due in part to deliveries to a salt producer plagued with production problems. It was decided to expand

*International Salt is the leading producer of rock salt in North America.*

the Delfzijl plant, which hitherto produced evaporated salt for electrolysis and ice control only, through addition of a salt drying installation and storage facilities. This should give us access to other markets, the United States included.

In the United States, weather conditions in the 1983/84 winter contributed to sales of highway salt and therefore to International Salt's performance. Modernization of mines, combined with restructuring measures begun in 1983, is beginning to show good results. Endeavors to expand the market share of water-softening and industrial salts are a major focus of attention.

**Chlor-alkali products**

Because of falling demand in the United States, competition from U.S. producers of *vinyl chloride* once again became a factor in the Far East from the middle of 1984, despite the high dollar. As a result, VC prices fell about 25% in that market. In Western Europe, prices declined by some 10%. Despite the persistence of overcapacity, volume sales of the VC/PVC joint venture ROVIN were not materially affected.

The production capacity of the electrolysis operations was almost fully utilized. This is also true of the membrane electrolysis plant in the Rotterdam Botlek area, whose operating efficiency was especially high. Demand for *chlorine* continued to be strong, due to improved export opportunities for a number of chlorine derivatives because of the high dollar. The anticipated shortage of *caustic soda* did not materialize but even so prices in most Western European countries and in the United States moved upwards by mid-1984.

*Soda ash* markets in Western Europe and overseas export areas staged an important recovery, although price increases were not realized until the end of 1984. This recovery was favored by such factors as diminished competition from countries in Eastern Europe and from the United States, and a marked rise in volume sales to the People's Republic of China.

The phased modernization of the Delfzijl soda plant will be completed in 1985. Meanwhile its cost control targets, in terms of energy consumption and environmental outlay, have already been achieved. The effective operating time of this round-the-clock operation was significantly extended.

In spite of its attractive energy conservation potential, the wet-calcining project for the manufacture of super-dense soda ash has been postponed, since energy prices are now at a lower level than was assumed at the time the project was conceived.

Akzo Zout Chemie furnished the know-how for the construction of a large soda manufacturing facility in India.

*The in-house developed brine concentrator at Hengelo uses low-grade waste heat of approximately 50°C for concentrating brine to its saturation point. In view of the low waste vapor pressure, 3-m dia. piping must be used.*
*This brine concentrator saves about Hfl 3 million per annum on fuel alone.*

**Other commodity chemicals**

Sales and results of this business segment were appreciably higher than in the prior year.

Modernization of the *acetic acid* plant in the Rotterdam Europoort area turned out to be ineffective as a means of assuring profitable operation in the longer term. Consequently, production of acetic acid and its derivatives had to be terminated.

The market for *monochloroacetic acid*, a raw material for such products as cellulose-based industrial colloids, improved. The transfer of Enka's industrial colloids to Akzo Zout Chemie at January 1, 1985, will advance a more integrated market approach for the product chain chlorine – monochloroacetic acid – carboxymethyl cellulose.

In *chlorinated hydrocarbons*, the capacity of the methylene chloride/chloroform facility will be considerably expanded for producing the chemical feedstock *chloroform*.

The market for *crop protection chemicals* firmed in 1984.


*Delamine, a joint venture of Toyo Soda (Japan) and Akzo Zout Chemie established at Delfzijl, has shown a healthy development in recent years. The company produces ethylene amines, which are used in oil additives, in the pharmaceutical industry, and as intermediates in the manufacture of auxiliary products for textiles and paints.*

**Joint ventures**

Sales of the joint ventures in the salt and heavy chemicals sector increased from Hfl 1,060 million in 1983 to Hfl 1,130 million in 1984.

Our joint ventures with Japanese partners—Delamine (*ethylene amines*) at Delfzijl and Denak (*monochloroacetic acid*) in Tokyo—posted higher earnings. So did Danish *salt* producer Dansk Salt. In the case of Delamine and Dansk Salt, the earnings gain was due to improvements in their respective market positions and to energy savings. Some time ago Dansk Salt converted its power generation facility to coal. In 1985, Delamine is scheduled to place in operation a unique heat transformer, which will produce substantial further economies.

Market conditions for *methanol* were on the whole adverse. Imports from new producers depressed prices, and with demand growth weak this situation is expected to persist for some time. Methanol in motor fuels offers prospects for substantial growth in volume sales. It has been clear for some time that this additive satisfies all appropriate requirements. The use of methanol or a methanol derivative to replace lead in gasoline keeps the fuel's octane number high. An important plus is the significant reduction in exhaust emissions of nitrogen oxides—one of the pollutants considered responsible for the dieback of forests. While we do not anticipate a breakthrough in the short term, we are confident that there are no technical or economic grounds to stop the eventual use of methanol in motor fuels.

**Research and development**

The research efforts of Akzo Zout Chemie are largely concentrated on process improvement and, where possible, process innovation of the kind that is likely to lower consumption of energy and raw materials.

In both inorganic and organic processes, important economies have already been realized by means of advanced techniques. Thus it is common practice to devise process models which are subsequently tested in the plant with the aid of in-house developed on-line automated analytical equipment. Such tests may be followed by prompt introduction of computer-controlled process management and process information systems.

## Outlook for 1985

While the chemical industry at large is still suffering from capacity excesses in Western Europe, Akzo Zout Chemie reduced its vulnerability to economic cycles by rationalization measures and improvements in cost structure. Therefore, sales should show a modest increase and operating income should be at a satisfactory level, trailing the 1984 figure.

International Salt expects to operate at near capacity, given normal weather conditions. Sales and operating income should show a further increase, aided by improved production conditions.

## Specialty chemicals

Specialty chemicals enjoyed a year of almost uninterrupted growth. Sales were up 19% to Hfl 2,498 million, with earnings rising at an even higher rate. All product sectors contributed to earnings growth but outstanding among them were process chemicals for the polymer industry and cracking catalysts for the petroleum industry.

In the context of endeavors to accelerate the development of Akzo Chemie's commercial and technological potential, capital investments expanded to a much higher level compared with the previous year.

The integration with Armak (now Akzo Chemie America) was completed.

### Products for plastic and elastomer manufacturers and processors

The 1983 recovery of the polymer industry continued in 1984 without losing strength. A higher rate of capacity utilization was achieved for our *organic peroxides*.

*Rubber chemicals*, particularly accelerators and white fillers, had a good year. Exports of these additives to the United States are being taken care of by our plants in the Netherlands and the Federal Republic of Germany.

*Nouryset® 200* organic glass monomer is doing very well in the American market. Introduced in 1983, with supplies from our new facility in the United Kingdom, it achieved such a high market penetration in 1984 that it was decided to build a production unit in the United States.

An intensification of marketing efforts is reflected in a greater demand for our specialty filler *EC black*. Production has meanwhile been resumed.

### Metal carboxylates

Sales and earnings were up from the previous year. In Europe, however, the shipments picture became less predictable, and initially margins for *stabilizers* used in the PVC industry were also under pressure from high raw material prices. In Brazil, volume sales of *lead-based stabilizers and of paint driers* exhibited substantial growth.

### Organic chemicals

Most organic chemicals performed well, with *paper chemicals, sequestrants, gluconates, and carbon disulfide and its derivatives* in the lead. The profit margin on *fatty acids* was adversely affected by the very high purchasing prices of oils and fats which, however, came down again in the second half of the year.

Paper chemicals (sizes) benefited from the fact that the papermaking industry's capacity was fully employed. A new and promising chemical, KE 50, was added to the range of *Cyclopal®* products. For both paper chemicals and

*Given the success of* Nouryset® 200 *in the U.S. market, it was decided to build a production facility for this organic glass monomer in Bayport, Texas.*

gluconates the possibilities of expansion in the American market are being studied.

Shipments of *chemicals for offshore oil and gas production* developed favorably. These chemicals serve such purposes as the prevention of chemical and bacteriological attack of platform legs, casing, and piping.

*Carbon disulfide derivatives* enjoyed a very good year. A new application emerged for *thiocyanates*, namely the removal of hydrogen sulfide from stack emissions.

### Fatty amines

Results continued to progress. By and large it was possible to adjust selling prices to strong rises in the prices of raw materials. The outlook for *fatty amines*—used mainly in the detergents industry, in asphaltic road construction, and in potash mining—remains good. Capital investment objectives in 1984 were the creation of fresh capacity (Canada, Brazil), extension of existing capacities (United States), and modernization (United Kingdom, Belgium).

For laundry softeners, the principal use of our fatty amines, we are seeing a trend toward softeners in powder form. It has been decided to build a manufacturing facility in Morris (United States) to supply the raw material for these softeners to the detergents industry.

### Catalysts

Compared with 1983, sales and earnings climbed steeply. This was largely a reflection of the excellent business performance of *Ketjencat® cracking catalysts*.

The world market for *Ketjenfine® desulfurization catalysts* continued sluggish in 1984, causing stagnation in volume sales to Japan, Europe, and the United States. We are hopeful of improving this situation with a new catalyst type launched successfully during the year.

*Chemical industry catalysts* made further advances, but results for *reforming catalysts* were on a lower level.

In late 1984, the new *fluid cracking catalyst (FCC)* facility in Bayport, Texas, was commissioned. The first shipments from the new production unit were en route to customers before year-end.

The capacity expansion of the Amsterdam plant was completed, as was the related wastewater treating unit, which required a capital outlay of Hfl 15 million. New FCC types were introduced commercially in early 1985.

There are plans to build an FCC plant in Brazil (at Santa Cruz near Rio de Janeiro), at a cost of U.S.$ 40 million. It is to be operated by a joint venture owned by Akzo (40%), Petroquísa (40%), and the Brazilian chemical

*Akzo Chemie supplies road construction companies with* Redicote® *emulsifiers based on fatty amines. These bitumen additives ensure proper adhesion of the asphaltic layer to the rock or gravel subbase.*

company Oxiteno (20%). Petroquísa is the chemical subsidiary of Petrobras, the state-owned petroleum company.

With FCC production facilities in the Netherlands, the United States, and Brazil, Akzo Chemie will have accomplished a sound geographic diversification, which should strengthen its important position in the world market.

**Other chemical products**

Both *silicates* and *sulfo products* showed further sales and earnings gains. Results from *sulfuric acid* operations were positive, but the earnings picture remained unsatisfactory.

Production capacities were expanded for *water glass*, one major use of which is as a carrier for catalysts, and for pure *ortho-sulfonamide*, a raw material for the manufacture of saccharin.

**Joint ventures**

Sales of the joint ventures in the specialty chemicals sector rose from Hfl 600 million in 1983 to Hfl 650 million in 1984. These joint ventures are mostly located in the Netherlands and in Japan. Among the Dutch ventures are Silenka (glass fibers) and Glucona (gluconates). The Japanese ones are Lion Akzo (fatty amines), Kayaku Noury (process chemicals), and Nippon Ketjen (desulfurization catalysts). Other joint ventures are to be found in Latin America, Italy, and Spain.

Silenka has been singled out for a little extra attention in this report because of its growing importance to our Group.

Silenka B.V. of Hoogezand (the Netherlands) is among the leading producers of *glass fibers* in Western Europe. Akzo Chemie, the U.S.-based PPG Industries, and the Dutch state-owned Noordelijke Ontwikkelingsmaatschappij each have a one-third share in this joint venture.

In the past, Silenka struggled through years of losses caused by unpropitious market conditions. Since 1982, however, the market has improved and there has been a corresponding positive development in results. For 1984, the company reported sales of Hfl 130 million and a net income of Hfl 21 million.

The year saw the completion of a drastic streamlining and modernization program (cost Hfl 30 million) which gave Silenka an efficient production structure. At the same time, production capacity was stepped up to 32,000 metric tons per annum. Prospects are such that in early 1985 a further major extension was decided upon.

Silenka concentrates its marketing efforts in areas where


*The cracking catalyst plant in Bayport, Texas, was completed at year-end. Akzo Chemie strives to achieve a leading position in the U.S. market of cracking catalysts, which accounts for about 50 percent of global sales.*

glass-fiber-reinforced plastics make a major contribution to energy conservation and product durability, at relatively low cost. Industries with a growing appetite for glass-fiber-reinforced plastics include the automotive and electronics industries. Silenka has the vital research capacity to participate actively in the rapid technological developments characterizing these markets.

**Research and development**

The Deventer Research Center is scheduled to gradually take over Amsterdam's research activities in the field of process development and small-scale production of organic chemicals. This concentration is expected to have a positive effect on the efficiency of the work.

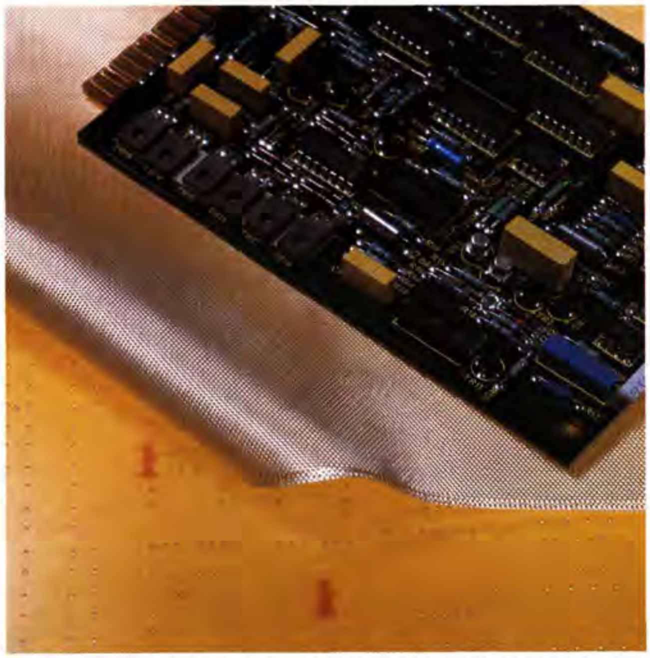
The position of the center should be bolstered by the construction of a pilot plant for the production of *specialty di-isocyanates*, a raw material for high performance engineering-grade polyurethanes. In the context of its program for the stimulation of "spearhead" technology, the Dutch government has made a development grant toward the project.

The capacity of the pilot facility for the production of *telomeric acids and derivatives* was expanded to meet growing demand from producers of lubricants.

With further market expansion of *cracking catalysts* a policy target, research capabilities in the Netherlands and the United States will be enhanced.

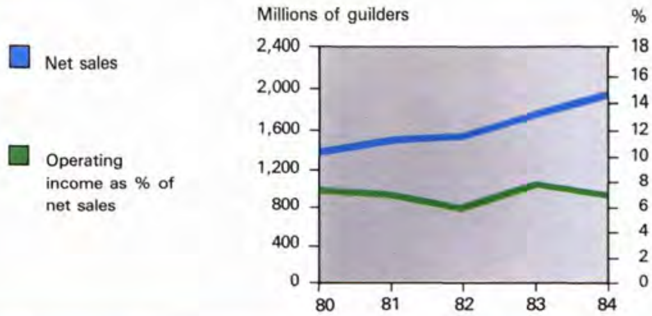
**Outlook for 1985**

Sales should show a modest increase, while operating income should approximate the very good level of 1984. The ultimate income figure will depend on developments in key Akzo Chemie markets in the United States and on the movement of the dollar.



*Glass-fiber-reinforced print boards for the electronics industry are a fast growing area of application for Silenka's glass fibers.*

# Coatings






## General

Sales increased 10% over the prior year to Hfl 1,973 million; 2 points of this increase were due to volume gains. At Hfl 144 million, operating income remained at virtually the same level. A marked increase in earnings for Sikkens Benelux was offset by lower revenue for Astral (France) and Montesano (Brazil). In addition, the expense of further market penetration was quite substantial, particularly in the United States. At Astral, measures are being implemented to improve profitability.

In line with our expectations expressed last year we were able to strengthen our position in various market segments. In Europe there was stagnation in volume growth, while fiercer competition exerted downward pressure on profit margins. In the United States, however, we capitalized on the increasing momentum in the automotive and related industries.

Our coatings activities in South America and Africa were adversely affected by the depressed economic climate there.

## Decorative paints and D-I-Y paints

The *construction* market in Europe continued very weak during 1984. Despite intensifying price competition, we were able to maintain our sales volume.

Very gratifying was the increasing sales volume of our translucent wood finish *Cetol Filter® 7*, introduced in 1983. Further product improvement offers attractive opportunities for application in countries with diverse climatological conditions.

In the *D-I-Y* market there is a continuing shift in distribution channels away from the traditional paint retail store to the superstore, resulting in greater pressure on margins. In France, we have taken steps to reduce the number of brands and accepted the consequences of a decreasing volume. Additionally, selling prices could not be raised sufficiently to compensate inflationary cost increases.

In both markets we are concentrating on technologically advanced products, which should improve our market position and profitability. We successfully developed fire-retardant paints and a highly elastic ceiling finish.

## Automotive finishes; car refinishes

In contrast to auto sales in the United States, sales growth in Europe declined, which was due in part to the strike in the German engineering industry and the depressed auto market in France. Nevertheless, we were able to realize a slight volume growth for *automotive finishes* in a number of European countries.

A second generation of water-thinnable *fillers* was developed and introduced in the European automotive industry. In this market sector we were successful in supplying solid colors for the *basecoat/clearcoat* paint system.


*In the spring of 1984 a new wing of Sikkens' research building at Sassenheim was taken into use. It houses the polymer laboratory and the research laboratories for automotive and aircraft finishes.*

*Car refinishes* continued to show high growth rates, and we are particularly pleased with the significant increase in exports to countries outside Europe. Thus, we registered substantial volume growth in the Middle East, to which our *Autofine*® air-drying, one-component acrylated finish made a key contribution. Penetration of the U.S. market proceeded as planned.

*Clearcoat finishes* were further enhanced, resulting in increased durability and easier application. In view of the growing trend toward the use of plastic components, we successfully developed *Plastoflex*®, a universal primer for plastics.

In our market approach we attach great importance to giving expert support to car refinishers. One way of doing this is by offering special courses in our training centers. In addition to the centers in the most important European markets, new ones were opened in the United States and Brazil.

**Other products**

We improved our position in *coil coatings* in the United States and France. Shipments of *Zincromet*®, an anticorrosion primer for the automotive industry, increased considerably in the United States. We have concluded an agreement with our U.S. partner so as to advance the development of the *Zincrometal*® system.

In the sector of *coatings for the wood-working, metal-working and plastics-processing industries* earnings gains were posted for *plastics coatings*, which are supplied to ancillary automotive equipment industries and other customers. The product line was expanded with one- and two-component systems.

We obtained customers' approval for our *Cortek*® one-layer *electrophoresis coating* for the finishing of household appliances. Meanwhile, this product has been launched successfully.

*Philadelphia training center for specialist support to auto sprayers in U.S. body shops.*

For the *anticorrosion coatings* segment a product line was developed for internationally operating customers. Great attention was paid to efficiency improvements in the application of our paint systems.

We developed the patented *Gritkote®* system for the simultaneous blasting and primary coating of steel surfaces, which was very well received by customers. In addition, high-grade *glassflake coatings* for the protection of desulfurization plants were added to the product range.

As a supplier of *aircraft coatings*, Sikkens won a place on the EASE (European Agency for Supplier Evaluation) list of approved suppliers for the European aircraft industry. The company is thus also automatically included in the list of approved suppliers to the American aircraft industry. In the United States we acquired the Bostik Finch division of Emhart Corporation, specializing in aircraft coatings.

Both Synthese (*resins*) and Talens (*artists' colors*) turned in satisfactory performances, although margins for coatings resins came under some pressure. For radiation curing products quality improvements were realized. A new generation of hard resins was developed for printing inks.

**Research and development**

Most of the R&D results achieved in 1984 have been mentioned above. In general, the improved or novel products and technologies are the outcome of science-based R&D carried out in the laboratories of Akzo Coatings in cooperation with Akzo Corporate Research.

In the technological field licenses were granted to various companies, notably in the United States and the Far East.

**Outlook for 1985**

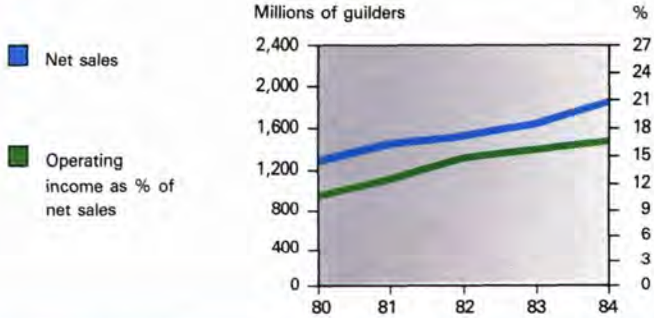
In the year ahead the market situation in Europe is not expected to show significant changes, while growth in the United States will level off.

Even under these circumstances we will pursue our strategy of further market penetration, but our efforts will be primarily focused on selective areas and on geographic expansion in countries whose economies tend to be fairly stable. Within the scope of this policy we will initiate a large number of projects for the modernization and improvement of production and distribution facilities.

For 1985 we foresee a further increase in sales and an operating income which should be much the same as in 1984.


*Akzo Coatings America makes regular additions to the number of depots for Sikkens car refinishes.*
*Pictured here is the Los Angeles depot.*

## Pharmaceuticals






### General

In 1984, sales and operating income again showed a favorable development. Sales were up 12% to Hfl 1,849 million, primarily due to volume gains. On balance, the negative effect of currency translations was less than in previous years. Operating income rose by 18% and topped the Hfl 300 million mark. All sectors of Akzo Pharma contributed to the company's higher sales, with growth of 15% and more being posted by Chefaro, Diosynth, Intervet, and Organon Teknika.

During the year major efforts were made to realize further expansion of the activities in the United States. Clinical development efforts targeted at the U.S. market were stepped up. Akzo Pharma has also vigorously been pursuing its objective of strengthening the earnings base in the United States through cooperation with, participation in, or acquisition of companies which are active in the fields of biotechnology, pharmaceuticals, and diagnostics. A search for similar opportunities to broaden our base was on in Japan. In the year ahead these activities will be aggressively continued.


*Volume sales of our* Cordium® *angina pectoris preparation in France are showing a healthy development. Applications for health registration have been filed in some important Akzo countries, including the United States.*

Within the scope of our search for new products, biochemical research efforts based on recombinant-DNA will be stepped up. Where desirable and possible, cooperation with universities—both in the Netherlands and in other countries—will be intensified.

The recent U.S. law on "Drug Price Competition and Patent Term Restoration" affords longer protection in the United States to pharmaceutical companies which conduct their own research. Such protection can take the form of an extension of the patent life or an exclusive official registration for a given term. In Western Europe the first attempts are being made to restore the effective patent term but progress is likely to be slow unless a bolder attitude is adopted.

### Ethical drugs

Sales increased by 5% but were under pressure from unfavorable conditions in some markets where volume growth did not match expectations. This was due to government measures in the Federal Republic of Germany and Japan as well as to import restrictions in Nigeria. Despite these adverse factors, Organon surpassed 1983's operating income.

The very good acceptance of our *Marvelon*® oral contraceptive in Northwestern European countries resulted in strong and sometimes even leading market positions for this product, notably in the Federal Republic of Germany, Belgium, the Netherlands, and Finland. In 1984 the product was launched in Southern Europe and in its first South American markets.

The position of our *Cordium*® angina pectoris preparation in France was further strengthened. Applications for official health registration of this new preparation were filed in the most important other European countries, while FDA registration in the United States was initiated by our licensee. As from 1986 this product is also expected to make major contributions to sales outside France.

The position of our best selling *Tolvon*® antidepressant was further enhanced.

The base of our Spanish activities was broadened through the acquisition of the Hermes ethical product range (cough and cold preparations and antirheumatic drugs).

In 1984, several license contracts were concluded in order to strengthen our product ranges in a number of countries.

The R&D efforts in selective areas continued unabated. Much attention was focused on the compilation of the international registration files for *Cordium*® and for *Livial*®, a new product for the treatment of menopausal disorders.

### Hospital products

Organon Teknika performed well in 1984. As a result of substantial sales growth the position in various market segments improved significantly. Operating income rose to a very satisfactory level.

For clinical laboratories the *Micro-Elisa system* was further extended to include tests for the detection of hepatitis-B core antigen as well as for rubella and toxoplasmosis. The position in *pregnancy tests* was bolstered by ongoing international introductions and further penetration of monoclonal pregnancy tests.

An addition to Organon Teknika's product range for blood banks was an entirely new system for *donor plasmapheresis* consisting of a *Plasmapur®* membrane filter and a microprocessor-controlled monitor. This system permits more efficient and cost-effective collection of human plasma.

Another newcomer was the *PosID Sampler*. Developed together with a Dutch blood bank, this apparatus automatically pipettes and identifies blood samples with the aid of a computer system, thus preventing inadvertent exchanges.

*Chefaro launched a new* Predictor® Color *pregnancy test for home use. Within a few days after a missing period the test can show whether a woman is pregnant or not. A color change in the test tube indicates pregnancy with near absolute certainty.*


A contract was concluded with a company in the United States regarding our AIDS diagnostic, which will become available to the medical profession in early 1985.

In the nephrology sector Organon Teknika was the first in the world to introduce an artificial kidney using hollow fibers with a wall thickness of not more than 5 microns, thus permitting a further reduction in dialysis time.

A foothold was gained in Japan for the sale of artificial kidneys.

In the United States, approval from the Food and Drug Administration (FDA) was obtained for the sale of *Norcuron®*. This new short-effect muscle relaxant, which has now been introduced in the United States, is expected to make major contributions to further sales growth there as well as in other countries.

### Nonprescription products

Chefaro can look back on an excellent year which was characterized by significant gains in sales and earnings.

During the year the development of an entirely new *pregnancy test* was completed. This new diagnostic color test was launched in a number of countries including the United States, Italy, the Federal Republic of Germany, and in Scandinavia. In the face of keener competition Chefaro was able to maintain or improve its positions in this sector in nearly all countries. Volume sales to customers in the United States, in particular, were increased considerably. In Brazil, however, the public's decreasing spending power exerted continuous downward pressure.

In 1984, Chefaro's earnings base in Spain was considerably expanded with Hermes' nonprescription products, including *Multidermol®* medicated liquid soap. The positions in the Federal Republic of Germany, the United Kingdom, and Belgium were improved, while growth in the Netherlands was stagnant.

### Raw materials for the pharmaceutical industry

Because of sustained demand for virtually all products, Diosynth again registered gains in both sales and operating income. Capacity utilization was high and costs were kept under stringent control. Additionally, it was possible to achieve a slight increase in selling prices.

The *alkaloids* sector was able to hold its ground in the *codeine* market. An unexpected boost to results was provided by higher revenues from narcotine, basically an opium-derived alkaloid.

In the *biochemicals* sector the positions of the important products *heparin, insulin, and gonadotrophic hormones* were improved. Large fluctuations occurred in the price of pork pancreas. In order to meet the sustained demand for biochemicals a second biochemical plant was brought on stream in Sioux City (United States).

Gains in sales were also posted for *chemical products*. Margins for this group of products improved as a result of further rationalization of manufacturing processes.

### Veterinary products

With an increase in sales of more than 20%, Intervet again strengthened its position in the market for veterinary products. Operating income also showed a significant increase and reached a gratifying level.

New proprietary products remain the determining factor for this success. With the launching of *Nobi-Vac® longworm*, a vaccine against parasites in calves developed by Intervet research, a new market segment was opened up.

In the United States, Intervet enjoyed a good year. Two years after introduction of its poultry vaccines Intervet has become one of the market leaders nationwide. Building on this sound basis, efforts will be made to expand our business.

### Outlook for 1985

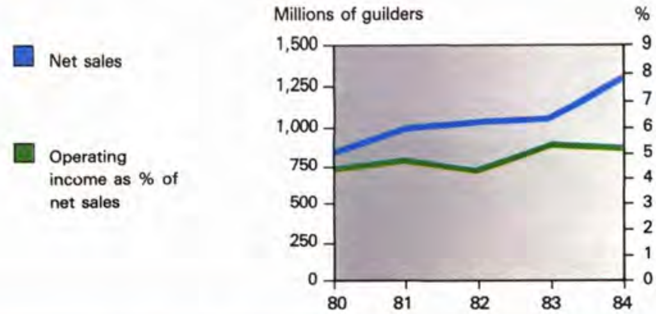


The outlook for 1985 is hopeful. We anticipate further sales growth, although this will be less than in 1984, reflecting the adverse effect of weaker currencies compared with the previous year.

Barring unforeseen circumstances, operating income is expected to show an increase approximately matching the rise in sales.


*Intervet's substantial know-how and important position in the field of poultry vaccines were major factors in the rapid penetration of the U.S. market, where Intervet now is one of the market leaders.*

# Consumer products






## General

Sales were up 21% to Hfl 1,302 million, which was primarily caused by price hikes of oils and fats.

Margins of branded consumer articles continued to be squeezed by vigorous competition. Private label and "B" brands captured a larger slice of the market in specific sectors.

Nevertheless, operating income increased by 17% to Hfl 69 million.

All product sectors contributed to the positive development.

## Food

In the face of keen competition, earnings achieved in this sector were distinctly higher than in the prior year. In general, market shares were maintained or increased.

In the first half of the year Mayolande (France) was confronted with lower margins on mayonnaise and sauces due to strongly rising edible oil prices and the government's ban on passing these price increases on to consumers. In the second half of the year margins largely recovered, so that earnings for the whole year were higher than those realized in 1983. With its *Bénénuts®* (nuts) and *Bénédicta®* (mayonnaise and sauces) brands Mayolande maintains strong positions in the French market. Growing sales in the United Kingdom occasioned Mayolande to establish a subsidiary there under the name of Mayolande U.K. The aim of this company is to broaden the earnings base in the food sector in this country.

In the Dutch market Duyvis Recter also showed an improved performance. The market position of nuts and cocktail snacks, which are sold under the *Duyvis®* brand, was further consolidated. Under more adverse market conditions *Roosvicee®* rose hip products turned in a reasonable performance. California (*soups and bouillon products*) achieved very satisfactory results, both in the Netherlands and in Belgium. ROMI (*edible oils, fats, and margarine*) did well, due to higher margins and high plant operating rates.

## Nonfood

The nonfood sector performed better than in 1983. This was primarily due to continued recovery of Kortman Redipro and Kortman Intec (Belgium). Ashe Laboratories (United Kingdom), Blumøller (Denmark), and Tomten (Norway) also achieved good results. *Biotex®* sales in the United Kingdom showed promising growth. In the Netherlands the market position of *Biotex®* improved. Reintroduction of the modified *Driehoek® Wasbuiltje®* detergent in sachet form, suitable for laundering at 60°C, gives rise to guarded optimism.

The integration within Grada Productiebedrijven in Apeldoorn of the activities of Aerofako (Apeldoorn) and


*A well-known line of insecticidal products from Temana's range.*

Grada (Amsterdam) was successfully completed. Owing to the difficult market position of *liquid detergents and cleaning agents*, earnings did not match expectations.

In view of the increasing demand for herbal medicines, a line of *herbs* was added to Intec's range of products.

In 1984 the fragrance sector of Boldoot Intec was sold. This sale included the tradename, trademarks, and organization of Boldoot.

In spite of considerable economies in the government and health sectors, the results of Otarès (*cleaning systems* for institutional and industrial users) surpassed those achieved in 1983. Key contributors to these better results were the operations in the Netherlands and Denmark.

**Broadening the geographic earnings base**

Early in 1985, Akzo Consumenten Produkten and Shell's subsidiary Temana pooled their European activities in the field of consumer products. Temana sells products such as *insecticides, air fresheners, and industrial cleaning agents* (annual sales approximately Hfl 250 million) and is represented in a number of markets, including France, the United Kingdom, and Scandinavia.

The new combination, in which Akzo participates for 51% and Shell for 49%, is managed by Akzo Consumenten Produkten. The objective of the cooperation is to achieve a broader geographic earnings base for the activities within Europe.

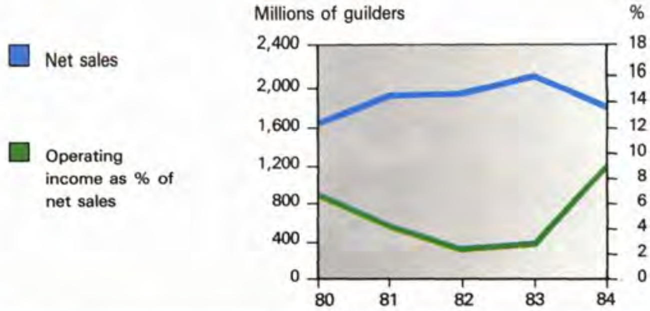
At the end of 1984, Legrain S.A. in Barcelona, a company active in the field of *toiletries*, was acquired.

**Outlook for 1985**

Even if Temana and Legrain are not considered in the totals, we expect further gains in sales and operating income for 1985. The trend toward structurally lower margins can be reversed by continuing efforts to enhance efficiency, in particular in the manufacturing processes.


*With its toiletries, Legrain (Barcelona) holds an attractive position in the Spanish market.*

# Miscellaneous products






### General

Owing to the divestiture of Brand-Rex in November 1983, sales were down to Hfl 1,826 million (1983: Hfl 2,142 million). If the figures for Brand-Rex are eliminated, sales rose by 25%, principally due to increased volume. Sales in 1984 consisted almost exclusively of Enka products.

After the sale of Brand-Rex, miscellaneous products registered a significant improvement in margins, aided by a substantial increase in earnings for Barmag Barmer Maschinenfabrik, Akzo Plastics (mainly engineering plastics), and Enka's membrane operations.

### Machinery and other engineering products

The Barmag group had a very good year. Sales rose by 37% to Hfl 612 million. The parent company in the Federal Republic of Germany, whose production capacity was fully utilized, was able to maintain the high share of exports at well over 80%. The subsidiaries in Switzerland, the United States, Brazil, and Hong Kong also recorded better performances.

Barmag's key activities are in the area of *machinery and equipment for spinning and processing of man-made fibers*, where the company has achieved a prominent technological and commercial position worldwide. The international improvement in the business environment for capital goods, together with the strong dollar, particularly favored this product sector. The steps taken in 1984 to expand the geographic earnings base resulted in new custom from a few countries, including the People's Republic of China.

In addition, Barmag is stepping up its diversification efforts in the field of *machines for the plastic industry, hydraulic systems, and pumps for the automotive industry*.

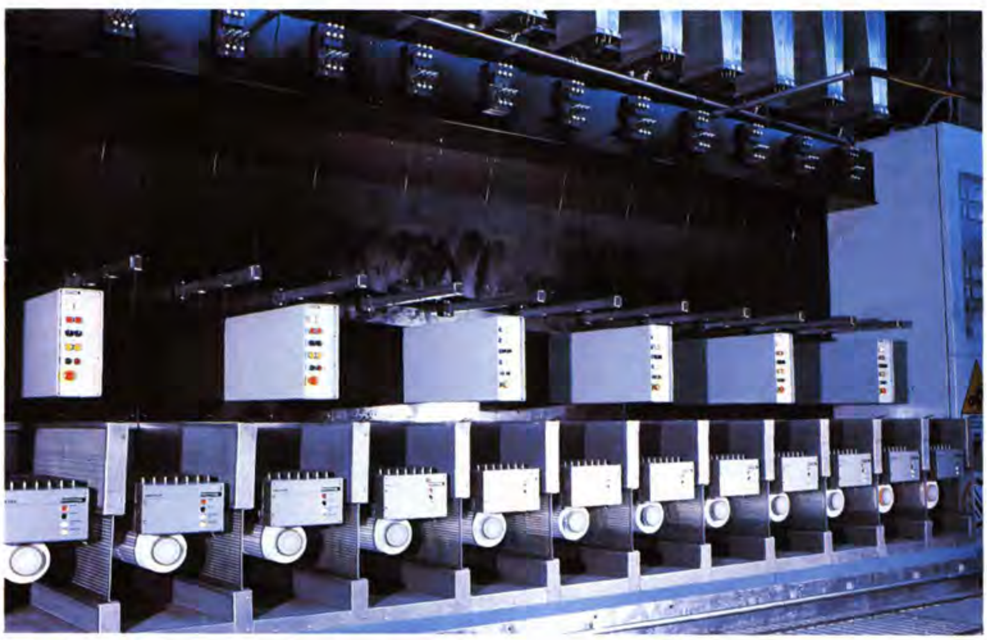
There are good prospects that the positive sales trend will continue, although the very high level of 1984 is not expected to be reached in the year ahead because of the usual fluctuations in the engineering industry.

### Plastics

Akzo Plastics again turned in an excellent performance. Sales increased by about one-third to Hfl 421 million, chiefly as a result of volume gains. The increase in earnings was comparatively higher.

With its five basic polymers—polyamides 6 and 6.6, PETP and PBTP polyesters, and polyester-based thermoplastic elastomer—Akzo Plastics mainly operates in the Western European market. Major industrial end users, for which a comprehensive range of *engineering plastics* is manufactured, are the automotive, electrical, electronic, and packaging industries.

To this growing market for specialty plastics we increasingly supply customer-specified products, in addition to our standard grades. A significant part of this line of products is compounds: plastics reinforced with materials



*Barmag Barmer Maschinenfabrik had an exceptionally good year because of great demand for technologically advanced spinning and processing equipment for synthetic yarns. Shown here is the SW4 high-speed spinning machine.*

such as glass fibers, carbon fibers, and minerals. Attention is now also being given to the development of plastic alloys.

Akzo Plastics is among the largest suppliers of polyester (*Arnite®*) to the bottle industry. With the market for plastic carbonated beverage bottles growing fast, a major production capacity expansion was realized at the Emmen plant. The use of our polyester material in other packaging applications, such as ovenproof menu trays, offers very interesting prospects.

Growth opportunities are also being created by our proprietary thermoplastic elastomer *Arnitel® S*. This material features attractive properties, making it preeminently suitable for a large variety of applications. A production facility is under construction in Emmen.

The results of the *spinning granules* business were gratifying in 1984.

**Other Enka products**

Sales of *membranes, industrial colloids, nonwovens, and household products* grew a further 14% to Hfl 435 million. The increase in earnings was comparatively higher due to the healthy performance of membranes for medical applications.

**Membranes**

Membranes for kidney dialysis remain the key product of the membrane range. *Cuprophan®* hollow fibers currently are the major membrane material. Volume sales of hollow fibers are showing such growth that it was decided to expand production capacity. Hollow fibers, which are normally supplied on bobbins, can now to a limited extent also be supplied ready-bundled.

Our research successfully completed the development of ultra-thin membranes (8 microns, 6.5 microns, and even 5 microns), which were made available for market introduction. Possessing a higher efficiency of purification, such membranes permit the use of smaller, less expensive artificial kidneys, resulting in lower treatment costs. This strengthens our competitive position, in light of the trend in the United States away from single-use to reusable artificial kidneys.

Our company-developed membranes for use in an oxygenator which is capable of taking over the lung function during heart surgery will be introduced in 1985. Also in 1985, we will launch our membranes for donor plasmapheresis (separation of blood cells from blood plasma).

Membranes and modules for industrial applications are in the stage of development or introduction. One recent introduction is our Trans Membrane Distillation process, which uses *Accurel®* synthetic hollow fibers. The TMD process is particularly suitable for the separation of solids from aqueous solutions, e.g. in desalination and concentration of process solutions. In such areas as the preparation of boiler feedwater and the production of vinegar we are working together with others.

The microfiltration of wine and beer presents interesting opportunities.

Licenses have been granted to a number of interested parties.

**Cellulose-based industrial colloids**

Shipments of our *industrial colloids* rallied in 1984. The strong recovery was reflected in distinct earnings gains, particularly in the second half of the year.

The increase in gas and oil well drilling resulted in higher volume sales of drilling mud additives. Successful trials with our *Peridur®* ore pelletizer in the American steel industry

*Enka's Trans Membrane Distillation process is used to concentrate aqueous solutions by means of* Accurel® *membranes that are permeable to water vapor. The process is based on temperature differences.*
*Fields of application include water purification (desalination, demineralization) and concentration of process solutions.*

have already led to higher sales of this organic binder. There are good hopes that we can realize a strong market position with this product in North America.

Satisfactory sales volume was recorded for our products for the food and cosmetic sectors and for our superabsorbent.

**Nonwovens/household products**

Colbond's *industrial nonwovens* showed sustained growth in sales and operating income, particularly in roofing where our nonwovens are used as carriers for bitumen. A healthy performance was also recorded for our nonwovens that are used as substrate for tufted carpeting in specific sectors.

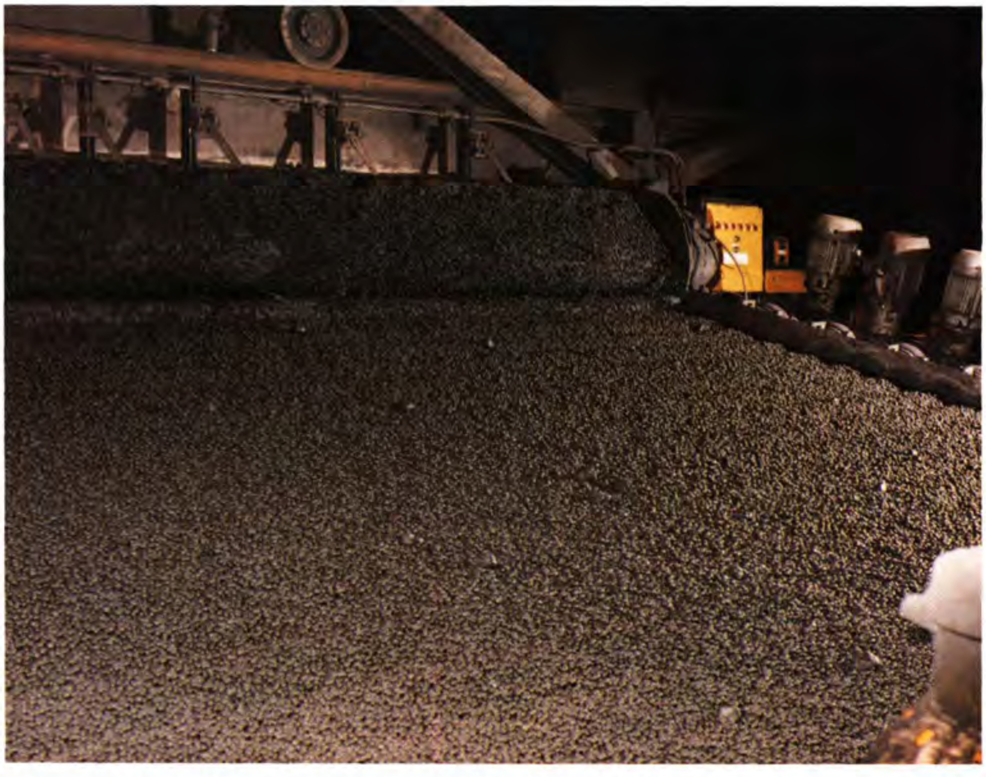
The market position of *household products* (viscose sponge products, synthetic chamois leather, and various sponge cloths) was strengthened both in the consumer sector and in the industrial sector. Despite higher sales, earnings were lower.

**Leather**

Our expectation that Armira's performance would improve considerably after a period of restructuring was not fulfilled. The position of U.S. leather companies is weak because of structural overcapacity, which is due in part to high imports of leather and leather goods.

**Outlook for 1985**

For miscellaneous products we expect a resumption of sales growth and again a satisfactory operating income.



*The use of* Peridur®, *an organic binder for making fine iron ore into smooth pellets, brings energy savings in blast furnaces.*
*The photo shows an ore pelletizing plant in Minnesota (United States).*

# Activities by geographic area



The statistics presented below give geographic information on the activities of the Group's consolidated companies.

| Millions of guilders | Net sales* 1984 | Net sales* 1983 | Operating income 1984 | Operating income 1983 | Invested capital** 1984 | Invested capital** 1983 | Expenditures for property, plant and equipment 1984 | Expenditures for property, plant and equipment 1983 | Number of employees, December 31 1984 | Number of employees, December 31 1983 |
|---|---|---|---|---|---|---|---|---|---|---|
| The Netherlands | 5,772 | 5,106 | 453 | 229 | 2,414 | 2,293 | 286 | 283 | 22,400 | 22,000 |
| Federal Republic of Germany | 4,130 | 3,580 | 370 | 178 | 1,562 | 1,694 | 157 | 110 | 18,400 | 18,700 |
| Other EEC countries | 1,662 | 1,491 | 135 | 112 | 744 | 650 | 67 | 53 | 6,700 | 6,800 |
| Rest of Europe | 808 | 735 | 80 | 62 | 308 | 242 | 33 | 24 | 4,400 | 4,200 |
| North America | 3,353 | 3,462 | 166 | 123 | 1,853 | 1,510 | 217 | 136 | 8,800 | 9,100 |
| Other regions | 795 | 711 | 136 | 139 | 322 | 277 | 24 | 19 | 5,400 | 5,500 |
| Total | 16,520 | 15,085 | 1,340 | 843 | 7,203 | 6,666 | 784 | 625 | 66,100 | 66,300 |

* By origin, i.e. sales of consolidated companies established in the geographic area.

** Total assets of consolidated companies less marketable securities, cash, and short-term investments, and less other current liabilities.

| Financial statistics | Operating income as % of net sales 1984 | Operating income as % of net sales 1983 | Operating income as % of invested capital 1984 | Operating income as % of invested capital 1983 |
|---|---|---|---|---|
| The Netherlands | 7.8 | 4.5 | 18.8 | 10.0 |
| Federal Republic of Germany | 9.0 | 5.0 | 23.7 | 10.5 |
| Other EEC countries | 8.1 | 7.5 | 18.1 | 17.2 |
| Rest of Europe | 9.9 | 8.4 | 26.0 | 25.6 |
| North America | 5.0 | 3.6 | 9.0 | 8.1 |
| Other regions | 17.1 | 19.5 | 42.2 | 50.2 |
| Total | 8.1 | 5.6 | 18.6 | 12.6 |

In appraising the relatively favorable figures for our companies in the "Other regions", due allowance should be made for the fact that operating income is to be reduced by high financing charges as a result of strong inflation.

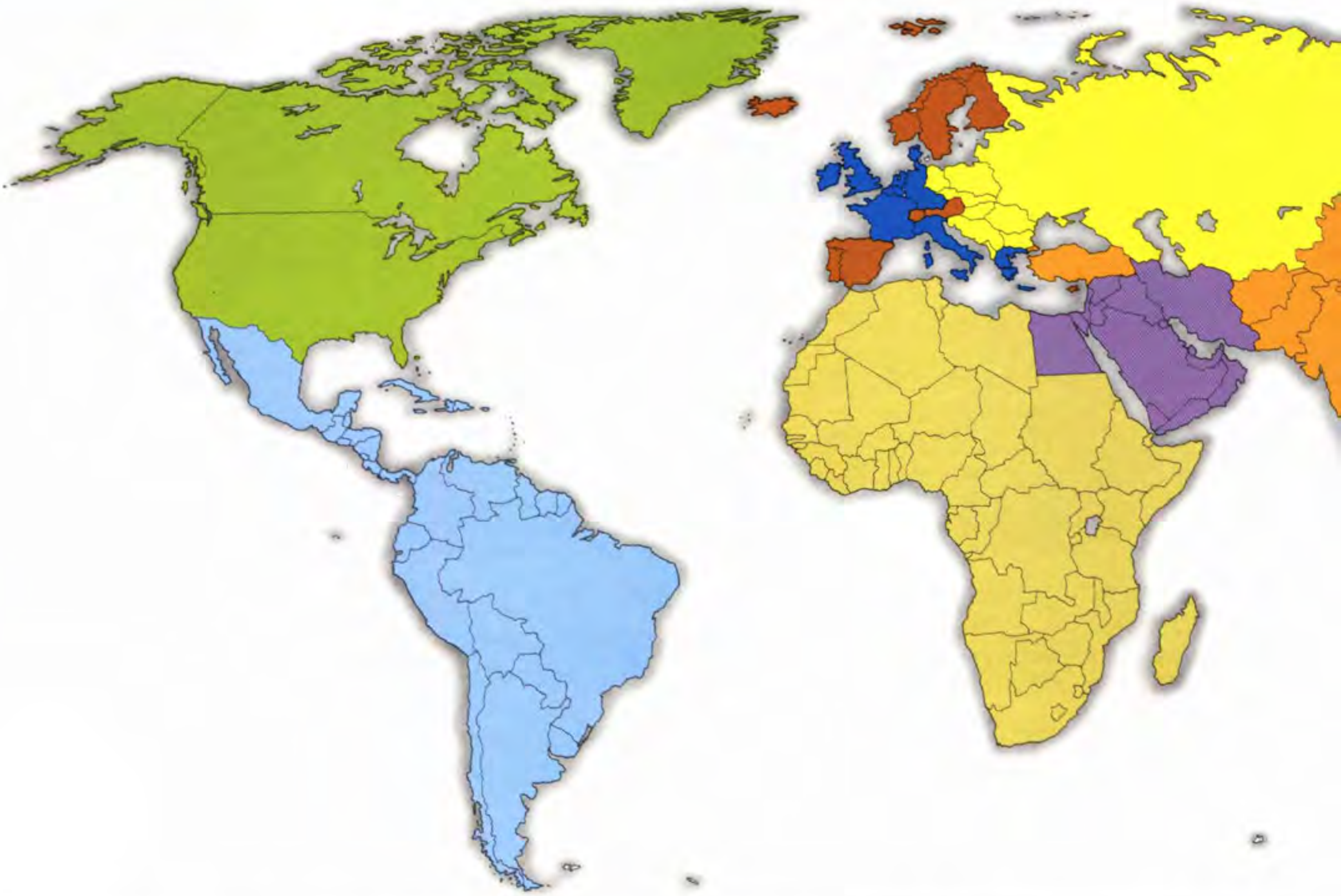
**International operations**

Akzo is an international group of companies with more than 220 operations in nearly 50 countries. The above data show that the Netherlands, the Federal Republic of Germany, and North America are the main centers of activity, together accounting for about 80% of the Group's net sales and invested capital, and for about 75% of the total number of employees.

This concentration of Group activities is also apparent from the table accompanying the world map on page 38, which shows invested capital and number of operations for some important Akzo countries.

The map color-codes destinations of sales to illustrate the relative importance of each of the geographic areas where the Group is active. Akzo's products find their way to more than 120 countries. The Netherlands and the Federal Republic are the main exporters. Over the past few years their position has been bolstered by the rising dollar. In 1984, exports of the consolidated companies in these two countries aggregated Hfl 5.6 billion, compared with Hfl 4.7 billion in 1983. Expressed as a percentage of sales of our operations in these countries, the share of exports was 56% in 1984, versus 54% in 1983.

Sales in the Netherlands and the Federal Republic, which



accounted for more than 25% of total Akzo sales, are approximated by sales in North America. Well behind the leaders come Asia and Latin America, where the Group's prospects remain promising.

For the next few years we do not anticipate any major autonomous shifts in the geographic distribution of the Group's activities. The relative importance of the North American area may possibly be enhanced through acquisitions.

**Europe**

The Group's performance was exceptionally favorable in *the Netherlands*, where net sales increased by 13% and operating income doubled. Operating income as a percentage of net sales rose from 4.5% in 1983 to 7.8% in 1984. All divisions contributed to these gains. Akzo Zout Chemie and Enka were the key contributors—an eloquent demonstration of their significant recovery.

The economic upswing, the upward movement of the dollar, and wage moderation together boosted exports, which were Hfl 0.5 billion (15%) ahead of the prior year.

Both capital expenditures and project authorizations continued at a high level. Major investment activities are being undertaken by some joint ventures, including Aramide Maatschappij v.o.f. in Delfzijl and Emmen, and Delesto B.V. (cogeneration plant) in Delfzijl.

The number of employees showed a slight increase to 22,400 at December 31, 1984, which was due in part to the introduction of a shorter working week effective July 1, 1984.

In the *Federal Republic of Germany* net sales and earnings were also up considerably. Net sales rose by 15%, and operating income doubled compared with 1983.

**Akzo worldwide**

For consolidated and nonconsolidated companies together, the table on the left presents 1984 net sales to nine regions (color-coded on the world map); the table on the right shows the number of operations (**a**) and invested capital as % (**b**) around the world. All of the net sales and invested capital of nonconsolidated companies are included.

| | Billions of guilders | % |
|---|---|---|
| EEC countries | 9.9 | 49.8 |
| Other European countries | 1.4 | 7.0 |
| Eastern European countries | 0.5 | 2.5 |
| Europe | 11.8 | 59.3 |
| North America | 3.9 | 19.6 |
| Latin America | 1.8 | 9.0 |
| Asia | 1.4 | 7.0 |
| Africa | 0.5 | 2.5 |
| Middle East | 0.4 | 2.0 |
| Oceania | 0.1 | 0.6 |
| Net sales | 19.9 | 100.0 |

| | a | b |
|---|---|---|
| The Netherlands | 39 | 31.7 |
| United States | 34 | 20.5 |
| Federal Republic of Germany | 24 | 17.9 |
| Brazil | 6 | 4.6 |
| France | 18 | 3.5 |
| Mexico | 3 | 3.5 |
| Spain | 7 | 3.2 |
| India | 3 | 2.2 |
| Belgium | 6 | 2.1 |
| Japan | 6 | 1.8 |
| Colombia | 1 | 1.8 |
| United Kingdom | 9 | 1.6 |
| Italy | 13 | 1.6 |
| Other countries (35) | 55 | 4.0 |
| | 224 | 100.0 |
| Invested capital at December 31, 1984 | | Hfl 8.8 billion |

Operating income as a percentage of net sales increased from 5% to 9%.

Enka achieved an excellent performance, with Barmag Barmer Maschinenfabrik enjoying a particularly good year. Net sales were up Hfl 0.4 billion to Hfl 3.0 billion. Operating income showed a strong increase, reaching a margin of 8.7% in relation to net sales (1983: 4.1%). Major investment projects are the carbon fiber plant currently under construction and the modernization project for polyester textile yarn which was recently authorized and is now being implemented.

The activities in the fields of salt and heavy chemicals, specialty chemicals, coatings, and pharmaceuticals also achieved a significant gain in earnings.

In *Spain* there was a substantial recovery in results, which was mainly attributable to the improved performance of La Seda de Barcelona. The consequences of Spain's entry into the Common Market will be a special focus of attention for this fiber company. Apart from Enka, our Coatings, Pharma, and Consumenten Produkten divisions are especially well represented in Spain, due in part to an active acquisition policy pursued over the past few years.

Most of our operations in the other European countries showed a positive development, turning in better overall performances than in 1983.

**North America**

In North America the results of our operations did not match our expectations. At sales of U.S.$ 1,060 million (1983: U.S.$ 1,250 million), an operating income of U.S.$ 50 million (1983: U.S.$ 40 million) was achieved. Lower 1984 sales were due to the divestiture of Brand-Rex (1983 sales: U.S.$ 240 million).

American Enka's performance was disappointing because of substantially increased imports of man-made fibers and textile products. Sales were somewhat down to U.S.$ 455 million, while operating income showed a considerable decrease. The effect of the almost completed restructuring of certain operational activities was not yet fully reflected in the results.

The 1984 improvement in earnings was attributable to International Salt, which benefited from favorable weather conditions for deicing salt and from the streamlining of operations. Its sales rose from U.S.$ 165 million in 1983 to U.S.$ 209 million in 1984.

Developments in the sectors in which we seek to expand our position in the American market were gratifying. Aggregate sales of specialty chemicals, coatings, and pharmaceuticals were up from U.S.$ 330 million in 1983 to U.S.$ 360 million in 1984 at an operating income that was slightly ahead of the prior year. However, the expansion of market positions requires large capital outlays, which may depress earnings in the sectors concerned for many years. Cases in point are the market introductions of Sikkens car refinishes and Intervet's poultry vaccines. The expansive development of specialty chemicals in the United States and Canada is especially reflected in the construction or extension of production facilities (fatty amines, cracking catalysts, organic glass monomer).

**Other regions**

In Latin America, *Brazil* is the most important country where the Group has operations. Despite the huge burden of international debt and high domestic inflation, the economy in the country is staging a recovery.

With aggregate sales of Hfl 438 million (1983: Hfl 378 million) all consolidated companies, save our coatings company Montesano, contributed to an improved performance. Leading the way were Polyenka (man-made fibers) and Poliquíma (specialty chemicals). The nonconsolidated company COBAFI (synthetic tire yarns) posted a gain of almost 40% in volume sales, resulting in full capacity utilization.

Plans are well under way to construct a cracking catalyst plant together with Brazilian partners. Poliquíma is building a production facility for fatty amines.

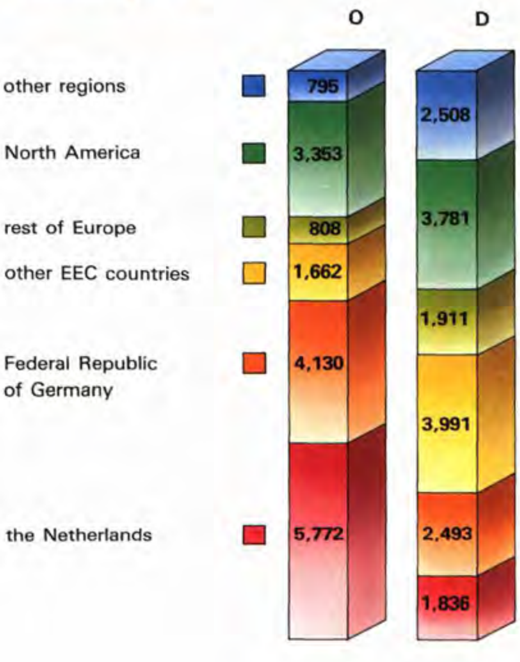
Our other operations in Latin America are mainly man-made fiber plants; without exception they achieved good results in 1984.

In *Japan* we hold interests in chemical and pharmaceutical joint ventures, notably in the field of specialty chemicals. In *India*, additions are regularly being made to the production capacity of synthetic fibers at Century Enka, in which we hold a minority interest.

Arnhem, March 11, 1985

The Board of Management

*Net sales 1984, by origin (**O**) and by destination (**D**) - millions of guilders*




*Production of polyamide tire fabric at COBAFI in Camaçari (Brazil). This company has also commenced production of polyester yarns and fabrics.*


*Denak is a joint venture of Denki Kagaku Kogyo and Akzo Zout Chemie established at Omi (Japan). The company produces monochloroacetic acid, which is mainly used for the production of cellulose-based industrial colloids. The results of this company show an upward trend.*

*Enka's exports of reinforcing materials to the United States are showing healthy growth.*

# Organization of the Akzo Group



| | | |
|---|---|---|
| | **Akzo N.V.**<br>Arnhem<br>Netherlands<br>Akzo | Central staff departments<br>Central service organizations |
| Divisions and products | **Enka**<br>Wuppertal<br>Federal Republic of Germany | Man-made fibers for industrial uses and textile uses including carpets, machinery, engineering plastics, membranes, nonwovens, various industrial products |
| | **Akzo Zout Chemie**<br>Hengelo<br>Netherlands | Salt, chlorine, alkali products, VC, methanol, industrial colloids, petrochemicals |
| | **Akzo Chemie**<br>Amersfoort<br>Netherlands | Products for plastic and elastomer manufacturers and processors, and for the paint industry; functional chemicals such as sizes for the papermaking industry, sequestrants, and surfactants; catalysts for the oil, petrochemical, and chemical industries |
| | **Akzo Coatings**<br>Hoofddorp<br>Netherlands | Paints, stains, synthetic resins for industrial, professional, and consumer uses |
| | **Akzo Pharma**<br>Oss<br>Netherlands | Ethical drugs, nonprescription products, hospital supplies, diagnostic aids, raw materials for the pharmaceutical industry, veterinary products |
| | **Akzo Consumenten Produkten**<br>The Hague<br>Netherlands | Detergents and cleaning products for household and industrial uses, insecticides, air fresheners, health and bodycare products, foodstuffs |
| | **Akzo America**<br>Enka N.C.<br>United States | Man-made fibers for textile uses including carpets, specialty chemicals, coatings, leather, salt, pharmaceuticals, various industrial products |
| National organizations | Netherlands | Akzo Nederland, Arnhem |
| | Belgium | Akzo België, Brussels |
| | Brazil | Akzo Indústria e Comércio, São Paulo |
| | Japan | Mercator Internationaal, Tokyo |

# Management

March 1985



### Board of Management of Akzo N.V.

The Board of Management consists of four members who are jointly responsible for directing the Akzo Group. In addition, the members are individually entrusted with a number of management tasks. Their main tasks and responsibilities are listed below.

A.A. Loudon, President

Responsible for strategic planning, financial and social policies, coordination of Group activities in the United States

J. Veldman

Supervision of Akzo Coatings, Akzo Pharma, and Akzo Consumenten Produkten; responsible for the effective functioning of staff departments and services within the Group

H.J.J. van der Werf

Supervision of Akzo Zout Chemie and Akzo Chemie; responsible for research, technology, and energy policies

H.G. Zempelin

Responsible for the Enka Group

### Management Committee

The Board of Management is assisted in policy-making by a Management Committee, which includes the members of the Board.

| | |
|---|---|
| A.A. Loudon | Chairman |
| J. Veldman | Deputy Chairman |
| H.J.J. van der Werf | Deputy Chairman |
| H.G. Zempelin | Deputy Chairman |
| S. Bergsma | Financial Affairs |
| G.J. Coli | President of Akzo America |
| F.A.G. Collot d'Escury | President of Akzo Zout Chemie |
| M.W. Geerlings | Research and Technology |
| J.R. Hutter | Deputy President of Enka |
| H.B. Jacobs | President of Akzo Consumenten Produkten |
| A.G.J. Vermeeren | President of Akzo Pharma |
| M.D. Westermann | President of Akzo Chemie |
| C. Zaal | President of Akzo Coatings |

### Secretary

J.P. Huges is secretary to the Supervisory Council and to the Board of Management.

### Adviser

W.K.N. Schmelzer acts as adviser to the Board of Management, specifically in relation to international affairs and issues of a general social nature.

## Managements of divisions

*Enka*

| | |
|---|---|
| H.G. Zempelin | President |
| J.R. Hutter | Deputy President |
| U.G. Stark | |
| H. Stöhr | |
| G. Tückmantel | |
| | |
| M. Schütze | |
| R. van den Berg | |

*Akzo Zout Chemie*

| | |
|---|---|
| F.A.G. Collot d'Escury | President |
| A. van Es | |
| H.A. van Karnebeek | |

*Akzo Chemie*

| | |
|---|---|
| M.D. Westermann | President |
| J.C.E. Fuller | |
| J.C.P. van Oosterom | |
| | |
| H.C. Bijvank | |
| M.E. Hartman | |
| J. den Hoed | |
| A. Moolenburgh | |
| H.A. Praetorius | |
| E. Snoeck | |

*Akzo Coatings*

| | |
|---|---|
| C. Zaal | President |
| K. Bakker | |
| H.C. Ekker | |
| W.L.W. Ludekens | |
| J. Mainçon | |
| K.G. Schultze | |

*Akzo Pharma*

| | |
|---|---|
| A.G.J. Vermeeren | President |
| P.K. Brons | |
| B.H.M. van Dommelen | |
| W. Smit | |
| F.L. Vekemans | |

*Akzo Consumenten Produkten*

| | |
|---|---|
| H.B. Jacobs | President |
| P.B. van Hulst | |
| A.M. van der Linden | |
| R.S. Schortinghuis | |
| J.E.H. Sikkink | |

*Akzo America*

| | |
|---|---|
| G.J. Coli | President |
| V.A. Parsons | |

## Managements of coordinating national organizations

*Akzo Nederland*

| | |
|---|---|
| J.W. Berghuis | President |

*Akzo België*

| | |
|---|---|
| F.C.L. De Deken | President |

*Akzo Indústria e Comércio, Brazil*

| | |
|---|---|
| J.W. Bootz | President |

# Accounting policies used in preparing the consolidated financial statements



### Changes in the financial statements

*With effect from the 1984 fiscal year the Dutch legislation on the Financial Statements and Annual Report implementing the 4th Directive of the Council of the European Communities of July 25, 1978, has entered into force.*
*For Akzo the adaptations resulting from this legislation mainly relate to the presentation of the information. The determination of stockholders' equity and income is not materially affected. The 1983 figures have been restated for comparison.*
*The major adaptations are set forth below.*
*– The formats of the balance sheet and the statement of income have been modified to conform with the new legislation. For its consolidated statement of income Akzo has adopted the format based on cost analysis by function.*
*– Earnings of affiliated companies retained after 1983 are stated as a statutory reserve which cannot be distributed to stockholders.*
*In the interest of a true and fair view, some other changes have been introduced, the principal ones of which are presented below.*
*– Stockholders' equities and earnings of affiliated companies established in hyperinflation countries are now determined on a guilder basis instead of on a local currency basis.*
*– The consolidated statement of changes in financial position no longer shows an increase (decrease) in working capital but a change in cash, short-term investments, and marketable securities.*
*– The current portions of long-term receivables and long-term debt are no longer stated under receivables and other current liabilities, respectively.*
*– In the determination of net income on the basis of current value the adjustment of operating income to current value no longer takes account of taxes but includes a gearing adjustment recognizing the extent to which fixed assets and inventories are considered to be financed with debt. As in the past, the determination of stockholders' equity on the basis of current value makes due allowance for deferred taxes arising from the revaluation of fixed assets and inventories not yet realized.*

### Consolidation

The consolidated financial statements include the accounts of Akzo N.V. and all companies in which the interest of Akzo N.V. or any of its majority-owned subsidiaries separately or jointly exceeds 50% of the subscribed stock. Partnerships ("Vennootschappen onder firma") in which the interest of Akzo N.V. or any of its majority-owned subsidiaries separately or jointly equals or is less than 50% are not included in consolidation because of the absence of a controlling vote. Therefore, the balance sheets, with notes, of such partnerships are in principle included in "Other information".
All of the assets, liabilities, and results of the consolidated companies are included. Minority interest in Group equity and Group income is shown separately.

### Valuation

The principles of valuation and determination of income used in the consolidated financial statements shown on pages 47 through 54 are based on historical cost. Current-value data are furnished by way of supplementary information on page 55.

### Translation of foreign currencies

In the balance sheet, amounts in foreign currencies are translated into guilders at rates virtually equaling the rates of exchange in force at year's end. The valuation in guilders of the U.S. dollar convertible debentures is based, however, on a rate of U.S.$ 1 = Hfl 3.60.

In the statement of income, amounts in foreign currencies are translated into guilders at rates of exchange fixed for each quarter as typical of the rates then applicable. Foreign exchange differences are included in income, except for foreign exchange differences resulting from translation into guilders of stockholders' equities of affiliated companies outside the Netherlands; the latter differences are directly added to, or deducted from, Group equity.
Stockholders' equities and earnings of affiliated companies established in hyperinflation countries, however, are determined on a guilder basis rather than on the basis of local currencies. To this end, property, plant and equipment are revalued on the basis of the historical cost in guilders. This convention prevents the occurrence of translation differences in such stockholders' equities due to changes in exchange rates.

### Principles of valuation of assets and liabilities

*Intangible fixed assets*
Preparation and start-up expenses of large investment projects are capitalized and charged against operating income in not more than five equal annual installments after the facilities concerned have been put into service.
Other intangibles are not capitalized but are charged against operating income.
Purchased goodwill is charged directly against Group equity.

*Property, plant and equipment*
Property, plant and equipment are valued at cost less depreciation.
Cost includes the financing charges of capital investment

projects under construction. Government grants, etc. are deducted from cost of acquisition.
Depreciation is computed by the straight-line method based on estimated life, which in the majority of cases is 10 years for plant equipment and machinery, and which ranges from 20 to 30 years for buildings. In cases where the book value so computed exceeds the value to the business additional write-offs are made.

*Financial fixed assets*
Investments in nonconsolidated companies are stated at the amount of Akzo's share in stockholders' equity. The calculation of stockholders' equity is based as much as possible on the Akzo principles of valuation.
Loans to nonconsolidated companies are carried at face value less such provisions as are deemed necessary.
The other financial fixed assets are valued at the lower of cost or market.

*Inventories*
Inventories are stated at the lower of cost or net realizable value. Cost is defined as the full manufacturing cost related to the stage of processing.
Cost is determined by the first-in first-out (FIFO) method.
Provisions are made for obsolescence.
In the valuation of inventories, profits arising from transactions between consolidated companies are eliminated.

*Receivables*
Receivables are stated at face amounts less such provisions as are deemed necessary.

*Marketable securities*
Securities are carried at the lower of cost or market value.

*Cash and short-term investments*
Cash and short-term investments are carried at face value, with the exception of marketable private borrowings. The latter are valued at the lower of cost or market.

*Provisions*
Provisions for deferred taxes are stated at face value.
Dividend taxes for which no compensation is available are taken into account to the extent of earnings expected to be transferred by affiliated companies in the new fiscal year.
The provisions in respect of pension rights are generally computed on an actuarial basis.
Provisions for commitments and risks whose extent is uncertain but which can reasonably be estimated, and provisions made to equalize expenses among several fiscal years are shown in the aggregate under "Other provisions". The amounts of these provisions are fixed in relation to the liabilities and risks concerned and are stated at face value.

*Long-term debt and current liabilities*
Long-term debt and current liabilities are stated at face value. Discount on borrowings and cost of negotiating loans are capitalized and charged against income over the period until maturity.

**Principles of determination of income**

The determination of income is closely associated with the valuation of assets and liabilities.
In addition, a number of specific principles are observed in the preparation of the statement of income, which are set forth below.
- Net sales is defined as the revenue from the sale and delivery of goods and services, net of rebates, discounts, and similar allowances, and net of sales tax.
- Cost of sales comprises the manufacturing cost of the goods and services sold and any inventory write-downs to lower net realizable value.
Manufacturing cost includes such items as:
. the cost of raw materials and supplies, energy, and other materials;
. depreciation and the cost of maintenance of the assets used in production;
. salaries, wages, and social charges for the personnel involved in manufacturing.
- Taxes on income comprise both current and deferred taxes. No tax deductions are made from income to the extent that this income can be offset against losses incurred in prior years. From losses, taxes are deducted to the extent that they can be offset against taxes charged to income in previous years.
- Income from nonconsolidated companies consists of the Group's equity in earnings of these companies and interest received on loans granted to them, with due allowance being made for taxes on these items.

# Consolidated balance sheet of the Akzo Group

after allocation of profit

See notes on pages 50 through 52.



| Millions of guilders, December 31 | | 1984 | | 1983 |
|---|---|---|---|---|
| **Assets** | | | | |
| Fixed assets | | | | |
| Property, plant and equipment | | 4,207.7 | | 3,840.4 |
| Financial fixed assets | | | | |
| Nonconsolidated companies | 444.6 | | 451.7 | |
| Other financial fixed assets | 165.9 | | 158.8 | |
| | | 610.5 | | 610.5 |
| | | 4,818.2 | | 4,450.9 |
| Current assets | | | | |
| Inventories | 2,653.2 | | 2,457.1 | |
| Receivables | 2,892.9 | | 2,701.5 | |
| Marketable securities | 188.4 | | 114.2 | |
| Cash and short-term investments | 878.5 | | 1,091.6 | |
| | | 6,613.0 | | 6,364.4 |
| Total | | 11,431.2 | | 10,815.3 |
| **Group equity and liabilities** | | | | |
| Group equity | | | | |
| Akzo N.V. stockholders' equity | 4,014.5 | | 2,967.0 | |
| Minority interest | 169.6 | | 119.8 | |
| | | 4,184.1 | | 3,086.8 |
| Provisions | | 1,729.3 | | 1,535.5 |
| Long-term debt | | | | |
| Subordinated loans | 202.6 | | 220.6 | |
| Other long-term debt | 2,169.3 | | 3,132.7 | |
| | | 2,371.9 | | 3,353.3 |
| Current liabilities | | | | |
| Debt to credit institutions | 429.8 | | 348.7 | |
| Other current liabilities | 2,716.1 | | 2,491.0 | |
| | | 3,145.9 | | 2,839.7 |
| Total | | 11,431.2 | | 10,815.3 |

# Consolidated statement of income of the Akzo Group

See notes on page 53.



| Millions of guilders | | 1984 | | 1983 |
|---|---|---|---|---|
| Net sales | | 16,520.1 | | 15,084.5 |
| Cost of sales | | (11,405.1) | | (10,746.0) |
| Gross margin | | 5,115.0 | | 4,338.5 |
| Selling expenses | (2,505.2) | | (2,224.2) | |
| Research and development expenses | (587.4) | | (573.5) | |
| General and administrative expenses | (688.6) | | (692.8) | |
| Other revenue from operations | 6.1 | | (5.3) | |
| | | (3,775.1) | | (3,495.8) |
| Operating income | | 1,339.9 | | 842.7 |
| Interest received and similar income | 160.1 | | 110.5 | |
| Interest paid and similar expenses | (444.8) | | (451.4) | |
| Financing charges | | (284.7) | | (340.9) |
| Operating income less financing charges | | 1,055.2 | | 501.8 |
| Taxes | | (369.6) | | (72.5) |
| Earnings of consolidated companies from normal operations, after taxes | | 685.6 | | 429.3 |
| Earnings from nonconsolidated companies | | 123.4 | | 109.9 |
| Group income from normal operations, after taxes | | 809.0 | | 539.2 |
| Extraordinary gains | 3.8 | | 16.3 | |
| Extraordinary losses | (96.6) | | (164.6) | |
| Extraordinary items before taxes | (92.8) | | (148.3) | |
| Taxes | 57.6 | | 45.8 | |
| Extraordinary items after taxes | | (35.2) | | (102.5) |
| Group income | | 773.8 | | 436.7 |
| Minority interest | | (22.2) | | (8.6) |
| Net income | | 751.6 | | 428.1 |
| Salaries, wages, and social charges | | 4,292.4 | | 4,302.8 |
| Depreciation of property, plant and equipment | | 576.0 | | 584.1 |

# Consolidated statement of changes in financial position of the Akzo Group

See notes on page 54.



| Millions of guilders | 1984 | 1983 |
|---|---|---|
| **Sources of funds** | | |
| Group income | 774 | 437 |
| Depreciation | 576 | 584 |
| Income retained by nonconsolidated companies | (52) | (56) |
| Changes in provisions | 205 | 89 |
| Other sources | 83 | 157 |
| | 1,586 | 1,211 |
| **Applications of funds** | | |
| Expenditures for property, plant and equipment | 784 | 625 |
| Acquisitions | 97 | 125 |
| Investments in other financial fixed assets | 6 | 9 |
| Disposal of affiliated companies | (25) | (471) |
| Net expenditures for fixed assets | 862 | 288 |
| Changes in working capital* | 157 | 138 |
| Dividends paid | 163 | 87 |
| Other applications | – | 3 |
| | 1,182 | 516 |
| **Balance of funds provided and funds used** | 404 | 695 |
| Add to this balance the proceeds from: | | |
| Issuance of stock | 474 | 174 |
| Drawdowns | 251 | 558 |
| Increase in short-term debt to credit institutions | 89 | – |
| | 1,218 | 1,427 |
| These funds were appropriated as follows: | | |
| Repayment of borrowings | (1,357) | (783) |
| Decrease in short-term debt to credit institutions | – | (216) |
| **Change in cash, short-term investments, and marketable securities** | (139) | 428 |

* Inventories and receivables less other current liabilities, exclusive of dividends.

# Notes to the consolidated financial statements of the Akzo Group



## General

**Affiliated companies**

The principal affiliated companies at December 31, 1984, are listed on pages 67 and 68.
A list of affiliated companies, drawn up in conformity with Book 2 of the Dutch Civil Code, section 379, paragraph 1, and using paragraph 3, has been filed at the Trade Registry of Arnhem.

**Changes in consolidated companies**

In 1984, the accounts of Legrain S.A. (Spain) were included in consolidation.
There were no other material changes.

**Exchange rates of key currencies**

The principal exchange rates used in drawing up the balance sheet and the statement of income are:

| | Unit | Balance sheet Dec. 31, 1984 | Balance sheet Dec. 31, 1983 | Statement of income 1984* | Statement of income 1983* |
|---|---|---|---|---|---|
| U.S. dollar | 1 | 3.55 | 3.08 | 3.22 | 2.87 |
| Deutsche mark | 1 | 1.13 | 1.12 | 1.13 | 1.12 |
| Pound sterling | 1 | 4.13 | 4.43 | 4.27 | 4.32 |
| French franc | 1 | 0.37 | 0.37 | 0.37 | 0.38 |
| Swiss franc | 1 | 1.37 | 1.41 | 1.36 | 1.36 |
| Spanish peseta | 100 | 2.06 | 1.96 | 2.00 | 2.00 |
| Braz. cruzeiro | 100 | 0.11 | 0.33 | 0.19 | 0.54 |

* Average exchange rates.

## Consolidated balance sheet

**Property, plant and equipment**

| Millions of guilders | Total | Buildings and land | Plant equipment and machinery | Other equipment | Construction in progress and prepaid projects | Assets not used in the production process |
|---|---|---|---|---|---|---|
| **Situation at December 31, 1983** | | | | | | |
| Cost of acquisition | 11,481.7 | 2,470.3 | 7,677.1 | 838.1 | 281.2 | 215.0 |
| Depreciation | (7,641.3) | (1,253.7) | (5,651.0) | (591.2) | – | (145.4) |
| Book value | 3,840.4 | 1,216.6 | 2,026.1 | 246.9 | 281.2 | 69.6 |
| **Changes in book value** | | | | | | |
| Changes in consolidated companies | 59.5 | 21.6 | 37.7 | 0.1 | | 0.1 |
| Capital expenditures | 783.8 | 79.9 | 476.6 | 97.1 | 127.1 | 3.1 |
| Depreciation | (576.0) | (85.6) | (417.7) | (64.5) | | (8.2) |
| Disposals | (35.4) | (3.7) | (18.9) | (4.8) | | (8.0) |
| Additional write-offs | (17.2) | (29.4) | 17.9 | (0.2) | | (5.5) |
| Changes in exchange rates | 171.4 | 52.3 | 108.1 | 10.0 | | 1.0 |
| Other changes | (18.8) | (42.0) | 17.3 | (5.9) | | 11.8 |
| Total changes in 1984 | 367.3 | (6.9) | 221.0 | 31.8 | 127.1 | (5.7) |
| **Situation at December 31, 1984** | | | | | | |
| Cost of acquisition | 12,271.5 | 2,576.4 | 8,059.3 | 917.3 | 408.3 | 310.2 |
| Depreciation | (8,063.8) | (1,366.7) | (5,812.2) | (638.6) | – | (246.3) |
| Book value | 4,207.7 | 1,209.7 | 2,247.1 | 278.7 | 408.3 | 63.9 |

Purchase commitments not included in the consolidated balance sheet totaled Hfl 168.2 million at December 31, 1984 (at December 31, 1983: Hfl 149.2 million).
The book value of property, plant and equipment financed by installment buying and leasing was approximately Hfl 45 million at December 31, 1984 (at December 31, 1983: approximately Hfl 33 million).

Given their comparatively slight magnitude, preparation and start-up expenses, carried at Hfl 12.8 million at December 31, 1984 (at December 31, 1983: Hfl 16.0 million), were included in property, plant and equipment.

**Financial fixed assets**

| Millions of guilders | Total | Nonconsolidated companies | Loans to nonconsolidated companies | Other financial fixed assets |
|---|---|---|---|---|
| Situation at December 31, 1983 | 610.5 | 426.8 | 24.9 | 158.8 |
| Investments | 14.7 | 8.0 | 1.2 | 5.5 |
| Disposals | (22.8) | (22.8) | | |
| Equity in 1984 earnings | 130.3 | 130.3 | | |
| Dividends received | (78.1) | (78.1) | | |
| Changes in exchange rates | 3.2 | 1.6 | | 1.6 |
| Other changes | (47.3) | (47.3) | | |
| Situation at December 31, 1984 | 610.5 | 418.5 | 26.1 | 165.9 |

**Inventories**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Raw materials and supplies | 738.7 | 638.7 |
| Work in process | 586.7 | 583.0 |
| Finished products and goods for resale | 1,317.9 | 1,225.0 |
| Inventory prepayments | 9.9 | 10.4 |
| | 2,653.2 | 2,457.1 |

**Receivables**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Trade receivables | 2,630.6 | 2,447.6 |
| Receivables from nonconsolidated companies | 90.3 | 58.6 |
| Other receivables | 490.0 | 476.9 |
| | 3,210.9 | 2,983.1 |
| Discounted portion | (318.0) | (281.6) |
| | 2,892.9 | 2,701.5 |

**Marketable securities**

Substantially all of these securities are listed on stock exchanges.

**Cash and short-term investments**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Short-term investments | 689.4 | 932.5 |
| Cash on hand and in banks | 189.1 | 159.1 |
| | 878.5 | 1,091.6 |

The short-term investments consist of cash loans, time deposits, and marketable private borrowings.

**Credit facilities**

The total amount of medium- and long-term credit facilities arranged by Akzo but not yet utilized was approximately Hfl 780 million at December 31, 1984 (at December 31, 1983: approximately Hfl 750 million).

**Group equity**

| Millions of guilders | |
|---|---|
| Situation at December 31, 1983 | 3,086.8 |
| Issuance of stock | 474.2 |
| Retained earnings | 531.1 |
| Changes in minority interest in Group companies | 19.2 |
| Goodwill resulting from acquisition of companies | (46.6) |
| Changes in exchange rates | 132.3 |
| Other changes | (12.9) |
| Situation at December 31, 1984 | 4,184.1 |

For a specification of changes in Akzo N.V. stockholders' equity see the note to the Akzo N.V. balance sheet on page 58.

**Provisions**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Deferred taxes | 289.1 | 238.2 |
| Pension rights | 733.6 | 549.7 |
| Other provisions | 706.6 | 747.6 |
| | 1,729.3 | 1,535.5 |

The current portion of provisions amounted to approximately Hfl 168 million (at December 31, 1983: approximately Hfl 189 million).

*Provisions in respect of pension rights*

Most Group companies have arranged appropriate pension plans for their employees, with due observance of the statutory regulations and customs in the countries concerned. The provisions in respect of pension rights relate to rights not covered by independent pension funds or by third parties.
At December 31, 1984, as at December 31, 1983, the accumulated pension benefits were on balance fully covered by these provisions and by contributions paid into independent pension funds or to third parties.

*Other provisions*

The principal provisions are for the restructuring of activities. Other provisions also include amounts to offset liabilities in respect of guarantees, and to provide coverage for losses, not otherwise insured, contingent upon the outcome of litigation.

**Subordinated loans**

This item is composed of the amounts borrowed in respect of subordinated loans arranged by Akzo Nederland B.V., together with either Enka B.V. or Akzo Zout Chemie Nederland B.V.
Akzo N.V. has agreed to be jointly and severally liable for these loans. They are subordinated to all third-party debts of the companies named.
The interest rate averaged 11.1% (1983: 11.1%). Repayment is scheduled to be made in 1985 (Hfl 18.0 million), 1986 through 1989 (Hfl 100.4 million), and after 1989 (Hfl 84.2 million).

**Other long-term debt**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Convertible debentures | 125.5 | 147.6 |
| Other debentures | | |
| Issued by Akzo N.V. | 625.7 | 693.3 |
| Issued by consolidated companies | 160.2 | 172.1 |
| Private borrowings | 466.5 | 619.6 |
| Debt to credit institutions | 656.0 | 1,318.5 |
| Other debt | 135.4 | 181.6 |
| | 2,169.3 | 3,132.7 |

Aggregate maturities are as follows:

| Millions of guilders | 1985 | 1986-1989 | after 1989 |
|---|---|---|---|
| Convertible debentures | 24.8 | 100.7 | |
| Other debentures | | | |
| Issued by Akzo N.V. | 58.0 | 342.0 | 225.7 |
| Issued by consolidated companies | 4.8 | 6.3 | 149.1 |
| Private borrowings | 69.2 | 240.1 | 157.2 |
| Debt to credit institutions | 77.5 | 540.8 | 37.7 |
| Other debt | 24.6 | 64.5 | 46.3 |
| | 258.9 | 1,294.4 | 616.0 |

The average interest rate was 8.8% (1983: 8.5%).
Private borrowings have been secured to an aggregate amount of Hfl 122 million (at December 31, 1983: Hfl 149 million) by means of mortgages, etc.
For details on convertible debentures and other debentures issued by Akzo N.V. see the notes to the Akzo N.V. balance sheet on page 58.

**Other current liabilities**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Prepayments by customers | 48.4 | 71.6 |
| Debt to suppliers | 1,333.4 | 1,246.4 |
| Debt to nonconsolidated companies | 41.1 | 66.0 |
| Taxes and social security contributions | 349.3 | 297.7 |
| Dividends | 179.0 | 99.5 |
| Pensions | 25.0 | 25.4 |
| Other liabilities | 739.9 | 684.4 |
| | 2,716.1 | 2,491.0 |

**Liabilities not shown in the balance sheet**

*Long-term liabilities in respect of leasehold, rental, operating leases, etc.*

Long-term liabilities were contracted in the aggregate amount of Hfl 449 million. Of these liabilities an amount of Hfl 78 million will fall due in 1985.

*Guarantees*

Guarantees in behalf of nonconsolidated companies and third parties aggregated Hfl 252 million.

**Net sales**

*Product groups*

| Millions of guilders | 1984 | 1983 |
|---|---|---|
| Man-made fibers | 5,035 | 4,526 |
| Chemical products | 4,800 | 4,097 |
| Coatings | 1,973 | 1,796 |
| Pharmaceuticals | 1,849 | 1,647 |
| Consumer products | 1,302 | 1,080 |
| Miscellaneous products | 1,826 | 2,142 |
| | 16,785 | 15,288 |
| Intra-Group deliveries | (265) | (203) |
| | 16,520 | 15,085 |

*Regions*

| Millions of guilders | 1984 | 1983 |
|---|---|---|
| The Netherlands | 1,836 | 1,675 |
| Federal Republic of Germany | 2,493 | 2,340 |
| Other EEC countries | 3,991 | 3,449 |
| Rest of Europe | 1,911 | 1,682 |
| North America | 3,781 | 3,744 |
| Other regions | 2,508 | 2,195 |
| | 16,520 | 15,085 |

**Financing charges**

Interest paid decreased by Hfl 29 million (1983: Hfl 26 million) due to the capitalization of financing expenses of capital investment projects under construction.

**Taxes on operating income net of financing charges**

Taxes averaged 35% (1983: 14%). Because of loss compensation facilities a portion of income was not included in taxable income.

**Earnings from nonconsolidated companies**

Earnings from nonconsolidated companies are net of taxes in the amount of Hfl 28.3 million (1983: Hfl 40.1 million).

**Extraordinary items**

On balance, extraordinary items showed a loss after taxes of Hfl 35.2 million, which was primarily due to the divestiture of some operations.

**Salaries, wages, and social charges**

| Millions of guilders | 1984 | 1983 |
|---|---|---|
| Salaries and wages | 3,354.6 | 3,388.0 |
| Pension costs | 370.4 | 340.0 |
| Other social charges | 567.4 | 574.8 |
| | 4,292.4 | 4,302.8 |

**Employees**

| Average number of employees | 1984 | 1983 |
|---|---|---|
| Enka | 27,900 | 28,300 |
| Akzo Zout Chemie | 4,600 | 4,800 |
| Akzo Chemie | 4,900 | 5,100 |
| Akzo Coatings | 8,500 | 8,500 |
| Akzo Pharma | 9,300 | 9,200 |
| Akzo Consumenten Produkten | 3,100 | 3,200 |
| Other companies | 7,900 | 12,000 |
| | 66,200 | 71,100 |
| Number of employees at December 31 | 66,100 | 66,300 |

## Consolidated statement of changes in financial position

This statement provides data on sources and applications of funds and on the Company's financing activities.
It is based on a comparison of initial and final balance sheet amounts, in which currency translation differences, changes in investments in affiliated companies, etc. are eliminated.
For some items the elimination can be derived directly from the notes to the balance sheet. For certain other items the elimination is shown below.

| Millions of guilders | Working capital* | Provisions | Long-term debt | Short-term debt to credit institutions |
|---|---|---|---|---|
| Changes in 1984 balance sheet items | 242 | 194 | (981) | 81 |
| Eliminations: | | | | |
| Changes in exchange rates | (61) | (16) | (113) | 14 |
| Changes in investments in affiliated companies | (24) | (1) | (8) | (6) |
| Other changes | | 28 | (4) | |
| Changes in 1984 financial position | 157 | 205 | (1,106)** | 89 |

* Inventories and receivables less other current liabilities, exclusive of dividends.

** Balance of repayment of borrowings (Hfl 1,357 million) and drawdowns (Hfl 251 million).

**Acquisitions**

| Millions of guilders | 1984 | 1983 |
|---|---|---|
| Investments in nonconsolidated companies | 9 | 80 |
| Acquisition of consolidated companies | 88 | 45 |
| | 97 | 125 |

# Supplementary information on the basis of current value



In the valuation and determination of income on the basis of current value the following additional accounting policies are used:

*Property, plant and equipment*
- The current value of land is approximated on the basis of appraisals.
- The current value of the other property, plant and equipment is computed using indexes from external sources in the principal countries of establishment, with adjustments for the estimated decrease in value as a result of technological advances. In cases where the current value exceeds the value to the business, the latter value is used.
- Deferred taxes resulting from the revaluation of property, plant and equipment not yet realized are shown under provisions.
- To calculate depreciation on the basis of current value the same percentages are used as for depreciation on the basis of historical cost.
- The difference between depreciation on the basis of current value and depreciation on the basis of historical cost is treated as additional depreciation.

*Inventories*
- Inventories are shown at historical cost, unless there is a material difference with the current value at the balance sheet date.
- The difference between current value and historical cost of the inventories consumed is treated as inventory results.

*Gearing adjustment*
- To the extent that fixed assets and inventories are considered to be financed with debt, additional depreciation and inventory results are not charged against net income.

**Condensed consolidated balance sheet**

| Millions of guilders, December 31 | 1984 | 1983* |
|---|---|---|
| **Assets** | | |
| Fixed assets on the basis of historical cost | 4,818 | 4,451 |
| Revaluation of fixed assets | 1,564 | 1,501 |
| Fixed assets on the basis of current value | 6,382 | 5,952 |
| Current assets | 6,613 | 6,364 |
| Total | 12,995 | 12,316 |
| **Group equity and liabilities** | | |
| Stockholders' equity | 4,870 | 3,760 |
| Minority interest | 212 | 170 |
| Group equity | 5,082 | 3,930 |
| Provisions | 2,395 | 2,193 |
| Debt | 5,518 | 6,193 |
| Total | 12,995 | 12,316 |

**Summarized consolidated income data**

| Millions of guilders | 1984 | 1983* |
|---|---|---|
| Net sales | 16,520 | 15,085 |
| Operating income on the basis of historical cost | 1,340 | 843 |
| Adjustment of operating income to current value | | |
| Inventory results | (54) | (120) |
| Additional depreciation | (141) | (156) |
| Operating income on the basis of current value | 1,145 | 567 |
| As percentage of net sales | 6.9 | 3.8 |
| Net income on the basis of historical cost | 752 | 428 |
| Adjustment of operating income to current value | (195) | (276) |
| Gearing adjustment | 93 | 155 |
| Other adjustments (mainly relating to nonconsolidated companies) | (5) | - |
| Net income on the basis of current value | 645 | 307 |

* Restated to conform with the 1984 accounting policies; taxes on revaluation not yet realized have been recomputed on the basis of current tax rates.

# Akzo N.V. balance sheet

after allocation of profit

See notes on pages 57 through 59.



| Millions of guilders, December 31 | | 1984 | | 1983 |
|---|---|---|---|---|
| **Assets** | | | | |
| Fixed assets | | | | |
| Financial fixed assets | | 5,460.2 | | 4,879.1 |
| Current assets | | | | |
| Receivables | 171.3 | | 135.9 | |
| Marketable securities | 3.7 | | 1.4 | |
| Cash and short-term investments | 858.5 | | 853.9 | |
| | | 1,033.5 | | 991.2 |
| Total | | 6,493.7 | | 5,870.3 |
| **Stockholders' equity and liabilities** | | | | |
| Stockholders' equity | | | | |
| Subscribed stock | 789.2 | | 663.7 | |
| Additional paid-in capital | 1,087.1 | | 740.2 | |
| Statutory reserves | 346.7 | | - | |
| Other reserves | 1,791.5 | | 1,563.1 | |
| | | 4,014.5 | | 2,967.0 |
| Long-term debt | | 2,159.5 | | 2,648.7 |
| Current liabilities | | 319.7 | | 254.6 |
| Total | | 6,493.7 | | 5,870.3 |

# Akzo N.V. statement of income

See notes on page 59.

| Millions of guilders | 1984 | 1983 |
|---|---|---|
| Net income from affiliated companies | 814.6 | 505.6 |
| Other net income | (63.0) | (77.5) |
| Net income for the fiscal year | 751.6 | 428.1 |

# Notes to Akzo N.V. balance sheet and statement of income

## General



Foreign currency has been translated, assets and liabilities have been valued, and net income has been determined, in accordance with the principles of valuation and determination of income set forth on pages 45 and 46.

Thus stockholders' equity and net income are equal to stockholders' equity and net income as shown in the consolidated financial statements on pages 47 and 48.

## Balance sheet

**Financial fixed assets**

| Millions of guilders | Total | Consolidated companies Share in capital | Consolidated companies Loans | Nonconsolidated companies Share in capital | Nonconsolidated companies Loans | Other financial fixed assets |
|---|---|---|---|---|---|---|
| Situation at December 31, 1983 | 4,879.1 | 3,580.3 | 1,185.4 | 92.0 | 0.9 | 20.5 |
| Investments | 121.6 | 121.6 | | | | |
| Equity in 1984 earnings | 814.6 | 773.8 | | 40.8 | | |
| Dividends received | (467.9) | (454.5) | | (13.4) | | |
| Loans granted | 258.1 | | 258.1 | | | |
| Repayment of loans | (204.0) | | (196.8) | | (0.1) | (7.1) |
| Changes in exchange rates | 129.6 | 96.8 | 33.3 | (0.5) | | |
| Goodwill resulting from acquisition of companies | (46.6) | (46.6) | | | | |
| Other changes | (24.3) | (10.4) | | (13.9) | | |
| Situation at December 31, 1984 | 5,460.2 | 4,061.0 | 1,280.0 | 105.0 | 0.8 | 13.4 |

Loans to consolidated companies have no fixed repayment schedule.

**Receivables**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Receivables from consolidated companies | 67.0 | 35.6 |
| Receivables from nonconsolidated companies | – | 0.1 |
| Other receivables | 104.3 | 100.2 |
| | 171.3 | 135.9 |

**Marketable securities**

Substantially all of these securities are listed on stock exchanges.

**Cash and short-term investments**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Short-term investments | 848.5 | 853.3 |
| Cash on hand and in banks | 10.0 | 0.6 |
| | 858.5 | 853.9 |

Short-term investments in the amount of Hfl 375.6 million (at December 31, 1983: Hfl 132.4 million) are not freely available to Akzo N.V.

## Stockholders' equity

| Millions of guilders | Subscribed stock | Additional paid-in capital | Statutory reserves | Other reserves | Stockholders' equity |
|---|---|---|---|---|---|
| Situation at December 31, 1983 | 663.7 | 740.2 | – | 1,563.1 | 2,967.0 |
| Issuance of common stock | 125.5 | 346.9 | | | 472.4 |
| Retained earnings | | | | 516.1 | 516.1 |
| Goodwill resulting from acquisition of companies | | | | (46.6) | (46.6) |
| Earnings retained by affiliated companies | | | 346.7 | (346.7) | |
| Changes in exchange rates in respect of affiliated companies | | | | 129.6 | 129.6 |
| Other changes | | | | (24.0) | (24.0) |
| Situation at December 31, 1984 | 789.2 | 1,087.1 | 346.7 | 1,791.5 | 4,014.5 |

*Subscribed stock*
Authorized capital stock of Akzo N.V. is Hfl 1,030,048,000 and consists of 48 shares of priority stock of Hfl 1,000 each, 30,000 shares of cumulative preferred stock of Hfl 1,000 each, and 50 million shares of common stock of Hfl 20 each. Subscribed stock consists of 48 shares of priority stock, 602 shares of cumulative preferred stock, and 39,427,165 shares of common stock.

*Additional paid-in capital*
At least Hfl 645 million of additional paid-in capital (at December 31, 1983: Hfl 300 million) can be considered free from income tax within the meaning of the Dutch 1964 Income Tax Law (Wet op de Inkomstenbelasting 1964).

*Statutory reserves*
This includes the statutory reserve relating to the earnings retained by affiliated companies after 1983.

*Other reserves*
"Other reserves" at December 31, 1984, includes a positive balance of Hfl 129.6 million in recognition of differences arising after 1983 from translation into guilders of stockholders' equities of affiliated companies outside the Netherlands.

**Long-term debt**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Convertible debentures | 125.5 | 147.6 |
| Other debentures | 625.7 | 693.3 |
| Debt to consolidated companies | 1,226.1 | 764.7 |
| Private borrowings | 172.0 | 338.4 |
| Debt to credit institutions | 10.2 | 704.7 |
| | 2,159.5 | 2,648.7 |

*Convertible debentures*
4¾% debentures Akzo N.V. 1969 convertible into Akzo N.V. common stock, payable 1985/1989. The amount outstanding at December 31, 1984, was U.S.$ 35 million. The conversion price is Hfl 121.60 per share of Hfl 20, based on an exchange rate of U.S.$ 1 = Hfl 3.60.

*Other debentures*

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| 11¼% 1974 due 1975/1984 | – | 7.3 |
| 9¼% 1976 due 1982/1986 | 50.0 | 75.0 |
| 9½% 1979 due 1983/1986 | 62.5 | 93.8 |
| 9¼% 1979/1987 (Flux 380 million) | 21.5 | 22.6 |
| 9% 1980/1990 (DM 125 million) | 141.1 | 140.5 |
| 9½% 1982/1989 (DM 100 million) | 112.9 | 112.4 |
| 10¾% 1982 due 1988/1992 | 100.0 | 100.0 |
| 5⅝% 1983-93 (Sfr 100 million) | 137.0 | 141.0 |
| Employee debentures | 0.7 | 0.7 |
| | 625.7 | 693.3 |

*Debt to consolidated companies*
Borrowings from these companies have no fixed repayment schedule. Part of these borrowings do not bear interest. To the extent that interest is charged, it averaged 6.5% in 1984 (1983: 8.7%).

*Private borrowings and debt to credit institutions*
Aggregate maturities are as follows:

| Millions of guilders | 1985 | 1986-1989 | after 1989 |
|---|---|---|---|
| Private borrowings | 30.0 | 132.9 | 9.1 |
| Debt to credit institutions | 4.5 | 5.2 | 0.5 |
| | 34.5 | 138.1 | 9.6 |

The average rate of interest was 8.4% (1983: 8.0%).

**Current liabilities**

| Millions of guilders, December 31 | 1984 | 1983 |
|---|---|---|
| Debt to credit institutions | 48.0 | 53.5 |
| Debt to consolidated companies | 26.5 | 1.8 |
| Taxes and social security contributions | 2.7 | 4.3 |
| Dividend | 177.4 | 99.5 |
| Other liabilities | 65.1 | 95.5 |
| | 319.7 | 254.6 |

**Liabilities not shown in the balance sheet**

*Long-term liabilities in respect of leasehold, rental, operating leases, etc.*
Long-term liabilities were contracted in the aggregate amount of Hfl 0.3 million. Of these liabilities an amount of Hfl 0.1 million will fall due in 1985.

*Joint and several liability; guarantees*
Akzo N.V. has declared in writing that it accepts joint and several liability for debts arising from legal transactions of Dutch consolidated companies.

These debts, at December 31, 1984 aggregating approximately Hfl 1.5 billion, are included in the consolidated balance sheet of the Akzo Group.
Additionally, guarantees were issued in behalf of consolidated companies (Hfl 608 million), and nonconsolidated companies and third parties (Hfl 124 million).

## Statement of income

**Net income from affiliated companies**

Net income from affiliated companies concerns Akzo's share in the earnings of its affiliates.

**Other net income**

Other net income comprises the costs, including financing charges, incurred by Akzo N.V., to the extent that these costs were not passed on to Akzo's affiliates.

**Remuneration of members of the Board of Management and of the Supervisory Council of Akzo N.V.**

In fiscal 1984, remuneration including pension expense amounted to Hfl 4,416,264 for members and former members of the Board of Management, and to Hfl 644,100 for members and former members of the Supervisory Council. These amounts were charged to Akzo Group income.

Arnhem, March 11, 1985

The Board of Management

A.A. Loudon
J. Veldman
H.J.J. van der Werf
H.G. Zempelin

The Supervisory Council

G. Kraijenhoff
J.R.M. van den Brink
S.C. Bakkenist
A.G. van den Bos
F.H. Fentener van Vlissingen
A. Herrhausen
C.S. Ramsey
H.J. Schlange-Schöningen
H.A. van Stiphout
E.G.G. Werner
O. Wolff von Amerongen

# Other information



**Provisions of the articles of association with regard to profit allocation**

Article 39

1

The Board of Management shall be authorized to determine, with the approval of the Supervisory Council, how great a share of the profit as shown by the approved statement of income shall be added to reserves; the general meeting of shareholders may dispose of such reserves only on the proposal of the Board of Management approved by the Supervisory Council. The remainder of the profits shall be put at the disposal of the general meeting of shareholders, with due observance of the provisions in paragraph 2.

2

The remainder of the profits shall, to the extent possible, be allocated as follows:

a

to the holders of priority shares:
six per cent per share or the statutory interest as stated in article 8, paragraph 1, whichever is lower, plus any accrued and unpaid dividends;

b

to the holders of cumulative preferred shares:
six per cent per share, plus any accrued and unpaid dividends;

c

to the holders of ordinary shares:
a dividend of such an amount per share as the remaining profit, less the aforesaid payments and less such amounts as the general meeting of shareholders may decide to carry to reserves, shall permit.

3

The holders of ordinary shares are, to the exclusion of everyone else, entitled to allocations made from reserves accrued by virtue of the provision of the second paragraph sub c.

4

The right to receive dividends and interim dividends shall lapse six years after such dividends and interim dividends have been made payable.

**Proposal for profit allocation**

| Amounts in guilders | | 1984 |
|---|---|---|
| Net income | | 751,600,000 |
| With due observance of art. 39, para 2, of the articles of association, it is proposed that this amount be allocated as follows: | | |
| To be distributed: | | |
| dividend on priority stock – Hfl 60 per share of Hfl 1,000 | 2,880 | |
| dividend on cum. pref. stock – Hfl 60 per share of Hfl 1,000 | 36,120 | |
| dividend on common stock – Hfl 6 per share of Hfl 20* | 235,460,647 | |
| | | 235,499,647 |
| To be retained | | 516,100,353 |
| for addition to statutory reserves | | 346,700,000 |
| for addition to other reserves | | 169,400,353 |

Following the acceptance of this proposal, the holders of common stock will receive a final dividend of Hfl 4.50 per share of Hfl 20, while Hfl 1.50 was paid earlier as an interim dividend.

The final dividend will be made available on dividend coupon No. 23 from May 14, 1985.

* Due to the exercise of their options after November 6, 1984, holders of 734,895 warrants obtained common stock not carrying entitlement to the 1984 interim dividend.

### Special rights to holders of priority stock

The priority stock is held by "Akzo-stichting" (Akzo Foundation), which is controlled by the members of the Supervisory Council and the Board of Management.

The meeting of holders of priority stock has the right to draw up binding lists of nominees for appointment to the Supervisory Council and the Board of Management.

### Balance sheets, with notes, of Dutch partnerships ("Vennootschappen onder firma")

The partnerships concerned are:

| | |
|---|---|
| Aramide Maatschappij v.o.f., Emmen | 50% |
| Glucona v.o.f., Ter Apelkanaal | 50% |
| Methanol Chemie Nederland v.o.f., Delfzijl (MCN) | 50% |
| Methanor v.o.f., Delfzijl | 28% |
| ROVIN Rotterdamse Vinylunie v.o.f., Amsterdam | 50% |

The percentages indicate Akzo Group interest in the above companies.

The balance sheets, with notes, at December 31, 1984, of these companies are given below.

| Millions of guilders | Ara-mide | Glu-cona | MCN | Metha-nor | ROVIN |
|---|---|---|---|---|---|
| Fixed assets | 298.8 | 5.7 | 23.0 | 129.1 | |
| Current assets | 52.7 | 25.4 | 19.2 | 63.2 | 75.7 |
| Total assets | 351.5 | 31.1 | 42.2 | 192.3 | 75.7 |
| Equity | 130.0 | 25.6 | 31.9 | 52.5 | 20.0 |
| Provisions | | | 2.4 | 2.2 | |
| Debt | 221.5 | 5.5 | 7.9 | 137.6 | 55.7 |
| Total equity and liabilities | 351.5 | 31.1 | 42.2 | 192.3 | 75.7 |

The principles of valuation used in drawing up these balance sheets are substantially the same as those stated on pages 45 and 46, but the fixed assets of Aramide Maatschappij v.o.f. include intangible assets which are not normally capitalized by the Akzo Group.
Akzo Group interest in the equity of these companies, computed on the basis of the principles of valuation of the Akzo Group, is included under financial fixed assets in the consolidated financial statements of the Akzo Group.

### Important event after the balance sheet date

In January 1985, Akzo N.V. and Shell Petroleum N.V. reached final agreement on the amalgamation of activities in the field of consumer products in Europe.
Within the context of this merger, the European Shell companies concerned are to bring consumer product interests into Akzo Consumenten Produkten, in which Shell acquired a 49% interest. Akzo holds the other 51%.

# Auditors' report

62 We have examined the foregoing 1984 financial statements of Akzo N.V., Arnhem. For the purpose of our examination we also have made use of the reports of other independent auditors with respect to a number of subsidiaries.
In our opinion, these financial statements present fairly the financial position of Akzo N.V. at December 31, 1984, and the results of its operations for the year then ended.

Arnhem, March 11, 1985

Klynveld Kraayenhof & Co.

# Ten-year financial summary

Where necessary, figures for the years prior to 1984 have been restated to conform with the 1984 accounting policies.



| Consolidated balance sheet, December 31 | 1984 | 1983 | 1982 | 1981 | 1980 | 1979 | 1978 | 1977 | 1976 | 1975 |
|---|---|---|---|---|---|---|---|---|---|---|
| Millions of guilders | | | | | | | | | | |
| Property, plant and equipment | 4,208 | 3,840 | 3,911 | 3,673 | 3,441 | 3,273 | 3,360 | 3,577 | 3,904 | 4,396 |
| Financial fixed assets | 610 | 611 | 499 | 532 | 525 | 493 | 537 | 513 | 504 | 475 |
| Fixed assets | 4,818 | 4,451 | 4,410 | 4,205 | 3,966 | 3,766 | 3,897 | 4,090 | 4,408 | 4,871 |
| Inventories | 2,653 | 2,457 | 2,542 | 2,506 | 2,454 | 2,233 | 1,902 | 1,920 | 1,949 | 2,113 |
| Receivables | 2,893 | 2,701 | 2,339 | 2,587 | 2,308 | 2,225 | 1,993 | 1,898 | 1,792 | 1,914 |
| Marketable securities | 188 | 114 | 54 | 59 | 55 | 76 | 61 | 43 | 62 | 22 |
| Cash and short-term investments | 879 | 1,092 | 724 | 839 | 828 | 729 | 537 | 537 | 549 | 517 |
| Current assets | 6,613 | 6,364 | 5,659 | 5,991 | 5,645 | 5,263 | 4,493 | 4,398 | 4,352 | 4,566 |
| Total assets | 11,431 | 10,815 | 10,069 | 10,196 | 9,611 | 9,029 | 8,390 | 8,488 | 8,760 | 9,437 |
| Subscribed capital | 789 | 664 | 593 | 593 | 593 | 593 | 593 | 593 | 593 | 593 |
| Additional paid-in capital | 1,087 | 740 | 658 | 658 | 658 | 658 | 658 | 658 | 658 | 658 |
| Statutory reserves | 347 | – | – | – | – | – | – | – | – | – |
| Other reserves | 1,791 | 1,563 | 1,237 | 1,198 | 1,015 | 1,074 | 980 | 1,074 | 1,377 | 1,733 |
| Stockholders' equity | 4,014 | 2,967 | 2,488 | 2,449 | 2,266 | 2,325 | 2,231 | 2,325 | 2,628 | 2,984 |
| Minority interest | 170 | 120 | 122 | 407 | 393 | 408 | 397 | 414 | 486 | 541 |
| Group equity | 4,184 | 3,087 | 2,610 | 2,856 | 2,659 | 2,733 | 2,628 | 2,739 | 3,114 | 3,525 |
| Provisions | 1,729 | 1,535 | 1,427 | 1,335 | 1,329 | 1,147 | 1,054 | 1,039 | 942 | 1,052 |
| Subordinated loans | 203 | 221 | 175 | 75 | 25 | – | – | – | – | – |
| Other long-term debt | 2,169 | 3,132 | 3,227 | 3,114 | 3,072 | 2,842 | 2,645 | 2,790 | 2,947 | 2,974 |
| Long-term debt | 2,372 | 3,353 | 3,402 | 3,189 | 3,097 | 2,842 | 2,645 | 2,790 | 2,947 | 2,974 |
| Debt to credit institutions | 430 | 349 | 571 | 613 | 574 | 453 | 386 | 347 | 310 | 308 |
| Other current liabilities | 2,716 | 2,491 | 2,059 | 2,203 | 1,952 | 1,854 | 1,677 | 1,573 | 1,447 | 1,578 |
| Current liabilities | 3,146 | 2,840 | 2,630 | 2,816 | 2,526 | 2,307 | 2,063 | 1,920 | 1,757 | 1,886 |
| Total Group equity and liabilities | 11,431 | 10,815 | 10,069 | 10,196 | 9,611 | 9,029 | 8,390 | 8,488 | 8,760 | 9,437 |
| Invested capital*: | | | | | | | | | | |
| Of consolidated companies | 7,203 | 6,666 | 6,881 | 6,744 | 6,418 | 6,074 | 5,777 | 6,014 | 6,415 | 7,013 |
| In nonconsolidated companies | 445 | 452 | 351 | 351 | 357 | 297 | 338 | 321 | 288 | 307 |
| Total | 7,648 | 7,118 | 7,232 | 7,095 | 6,775 | 6,371 | 6,115 | 6,335 | 6,703 | 7,320 |
| Property, plant and equipment | | | | | | | | | | |
| Capital expenditures | 784 | 625 | 730 | 693 | 645 | 461 | 434 | 409 | 413 | 745 |
| Depreciation | 576 | 584 | 533 | 527 | 504 | 506 | 486 | 494 | 533 | 519 |
| Ratios | | | | | | | | | | |
| Net sales : invested capital | 2.29 | 2.26 | 2.06 | 2.15 | 1.94 | 1.98 | 1.85 | 1.73 | 1.68 | 1.39 |
| Group equity : debt | 0.58 | 0.40 | 0.35 | 0.39 | 0.38 | 0.43 | 0.46 | 0.48 | 0.55 | 0.60 |
| Group equity : fixed assets | 0.87 | 0.69 | 0.59 | 0.68 | 0.67 | 0.73 | 0.67 | 0.67 | 0.71 | 0.72 |
| Current assets : current liabilities | 2.10 | 2.24 | 2.15 | 2.13 | 2.23 | 2.28 | 2.18 | 2.29 | 2.48 | 2.42 |

Development of stockholders' equity since 1969**
Millions of guilders

| | |
|---|---|
| Stockholders' equity at January 1, 1969 | 2,519 |
| Issuance of stock, including additional paid-in capital | 1,030 |
| Stock dividends | 225 |
| Retained earnings | 1,517 |
| Goodwill resulting from acquisition of companies | (558) |
| Change in exchange rates | (576) |
| Other changes | (143) |
| Stockholders' equity at December 31, 1984 | 4,014 |

* Total assets less marketable securities, cash, and short-term investments, and less other current liabilities.

** Year in which Akzo was established.

| **Consolidated statement of income** | 1984 | 1983 | 1982 | 1981 | 1980 | 1979 | 1978 | 1977 | 1976 | 1975 |
|---|---|---|---|---|---|---|---|---|---|---|
| Millions of guilders | | | | | | | | | | |
| Net sales | 16,520 | 15,085 | 14,154 | 14,476 | 12,453 | 12,015 | 10,666 | 10,433 | 10,750 | 9,717 |
| Operating income | 1,340 | 843 | 493 | 564 | 416 | 689 | 421 | 240 | 305 | (17) |
| Financing charges | (285) | (341) | (297) | (329) | (261) | (259) | (248) | (245) | (249) | (234) |
| Taxes on operating income less financing charges | (369) | (73) | (28) | (79) | (48) | (136) | (113) | (65) | (59) | 58 |
| Equity in earnings of nonconsolidated companies | 123 | 110 | 59 | 83 | 72 | 32 | 28 | 34 | 24 | 13 |
| Group income from normal operations, after taxes | 809 | 539 | 227 | 239 | 179 | 326 | 88 | (36) | 21 | (180) |
| Extraordinary items after taxes | (35) | (102) | (49) | 7 | (246) | (60) | (25) | (122) | (167) | (253) |
| Group income | 774 | 437 | 178 | 246 | (67) | 266 | 63 | (158) | (146) | (433) |
| Minority interest | (22) | (9) | (13) | (7) | (3) | (36) | (39) | (8) | (7) | (7) |
| Net income | 752 | 428 | 165 | 239 | (70) | 230 | 24 | (166) | (153) | (440) |
| Common stock, in thousands of shares of Hfl 20 | 39,427 | 33,151 | 29,594 | 29,594 | 29,594 | 29,594 | 29,594 | 29,594 | 29,594 | 29,594 |
| Dividend | 236 | 133 | 47* | 59 | – | 71 | – | – | – | – |
| Per common share of Hfl 20, in guilders | | | | | | | | | | |
| Net income | 19.06 | 12.91 | 5.56 | 8.07 | (2.35) | 7.74 | 0.82 | (5.63) | (5.16) | (14.86) |
| Dividend | 6.00 | 4.00 | 1.60 | 2.00 | – | 2.40 | – | – | – | – |
| Stockholders' equity | 101.80 | 89.48 | 84.06 | 82.72 | 76.56 | 78.55 | 75.35 | 78.52 | 88.78 | 100.80 |
| Adjusted for common stock issues | | | | | | | | | | |
| Net income | 19.06 | 12.85 | 5.29 | 7.67 | (2.23) | 7.36 | 0.78 | (5.35) | (4.91) | (14.13) |
| Dividend | 6.00 | 3.98 | 1.52 | 1.90 | – | 2.28 | – | – | – | – |
| Stockholders' equity | 101.80 | 89.03 | 79.94 | 78.67 | 72.81 | 74.70 | 71.66 | 74.67 | 84.43 | 95.86 |
| Number of employees at December 31 | 66,100 | 66,300 | 73,700 | 77,800 | 83,100 | 83,000 | 83,200 | 84,400 | 91,100 | 98,200 |
| Salaries, wages, and social charges | 4,292 | 4,303 | 4,229 | 4,182 | 3,789 | 3,572 | 3,395 | 3,277 | 3,277 | 3,109 |
| Salaries, wages, and social charges, as percentage of net sales | 26.0 | 28.5 | 29.9 | 28.9 | 30.4 | 29.7 | 31.8 | 31.4 | 30.5 | 32.0 |
| Ratios | | | | | | | | | | |
| Operating income, as percentage of net sales | 8.1 | 5.6 | 3.5 | 3.9 | 3.3 | 5.7 | 3.9 | 2.3 | 2.8 | (0.2) |
| Operating income, as percentage of invested capital | 18.6 | 12.6 | 7.2 | 8.4 | 6.5 | 11.3 | 7.3 | 4.0 | 4.8 | (0.2) |
| Net income, as percentage of stockholders' equity | 18.7 | 14.4 | 6.6 | 9.7 | (3.1) | 9.9 | 1.1 | (7.2) | (5.8) | (14.7) |

* Of which Hfl 30 million in cash.

| Product group statistics | 1984 | 1983 | 1982 | 1981 | 1980 | 1979 | 1978 | 1977 | 1976 | 1975 |
|---|---|---|---|---|---|---|---|---|---|---|
| Millions of guilders | | | | | | | | | | |
| Net sales | | | | | | | | | | |
| Man-made fibers | | | | | | | | | | |
| Textile uses | 3,528 | 3,223 | 3,105 | 3,427 | 2,663 | 2,817 | 2,633 | 2,590 | 2,834 | 2,880 |
| Industrial uses | 1,507 | 1,303 | 1,254 | 1,251 | 1,119 | 1,035 | 934 | 1,008 | 970 | 827 |
| | 5,035 | 4,526 | 4,359 | 4,678 | 3,782 | 3,852 | 3,567 | 3,598 | 3,804 | 3,707 |
| Chemical products | | | | | | | | | | |
| Salt and heavy chemicals | 2,302 | 2,001 | 1,872 | 1,924 | 1,729 | 1,797 | 1,388 | 1,370 | 1,312 | 1,005 |
| Specialty chemicals | 2,498 | 2,096 | 1,945 | 2,087 | 1,820 | 1,684 | 1,528 | 1,628 | 1,471 | 1,247 |
| | 4,800 | 4,097 | 3,817 | 4,011 | 3,549 | 3,481 | 2,916 | 2,998 | 2,783 | 2,252 |
| Coatings | 1,973 | 1,796 | 1,572 | 1,513 | 1,432 | 1,221 | 1,049 | 975 | 941 | 836 |
| Pharmaceuticals | 1,849 | 1,647 | 1,563 | 1,484 | 1,320 | 1,274 | 1,211 | 1,099 | 1,071 | 971 |
| Consumer products | 1,302 | 1,080 | 1,055 | 1,013 | 869 | 725 | 696 | 611 | 789 | 779 |
| Miscellaneous products | 1,826 | 2,142 | 1,976 | 1,959 | 1,670 | 1,595 | 1,349 | 1,274 | 1,362 | 1,172 |
| | 6,950 | 6,665 | 6,166 | 5,969 | 5,291 | 4,815 | 4,305 | 3,959 | 4,163 | 3,758 |
| Total | 16,785 | 15,288 | 14,342 | 14,658 | 12,622 | 12,148 | 10,788 | 10,555 | | |
| Intra-Group deliveries | (265) | (203) | (188) | (182) | (169) | (133) | (122) | (122) | | |
| Net sales to third parties | 16,520 | 15,085 | 14,154 | 14,476 | 12,453 | 12,015 | 10,666 | 10,433 | 10,750 | 9,717 |
| Operating income (loss) | | | | | | | | | | |
| Man-made fibers | 302 | 151 | (19) | 33 | (170) | 74 | 10 | (88) | (142) | (326) |
| Chemical products | 403 | 193 | 89 | 125 | 183 | 253 | 122 | 110 | 134 | 54 |
| Coatings | 144 | 143 | 97 | 110 | 110 | 98 | 64 | 45 | | |
| Pharmaceuticals | 306 | 260 | 233 | 190 | 145 | 134 | 140 | 133 | | |
| Consumer products | 69 | 59 | 47 | 50 | 40 | 31 | 31 | 16 | | |
| Miscellaneous products | 168 | 65 | 51 | 88 | 116 | 132 | 107 | 80 | | |
| | 687 | 527 | 428 | 438 | 411 | 395 | 342 | 274 | 313 | 255 |
| Total | 1,392 | 871 | 498 | 596 | 424 | 722 | 474 | 296 | | |
| Nonallocated costs | (52) | (28) | (5) | (32) | (8) | (33) | (53) | (56) | | |
| Operating income (loss) | 1,340 | 843 | 493 | 564 | 416 | 689 | 421 | 240 | 305 | (17) |
| Invested capital | | | | | | | | | | |
| Man-made fibers | 2,446 | 2,364 | 2,477 | 2,328 | 2,123 | | | | | |
| Chemical products | 2,362 | 2,025 | 1,895 | 1,851 | 1,749 | | | | | |
| Coatings | 738 | 653 | 598 | 569 | 585 | | | | | |
| Pharmaceuticals | 809 | 772 | 701 | 714 | 733 | | | | | |
| Consumer products | 366 | 315 | 295 | 289 | 261 | | | | | |
| Miscellaneous products | 605 | 604 | 1,007 | 1,058 | 973 | | | | | |
| | 2,518 | 2,344 | 2,601 | 2,630 | 2,552 | | | | | |
| Total | 7,326 | 6,733 | 6,973 | 6,809 | 6,424 | | | | | |
| Nonallocated invested capital | (123) | (67) | (92) | (65) | (6) | | | | | |
| Invested capital | 7,203 | 6,666 | 6,881 | 6,744 | 6,418 | 6,074 | 5,777 | 6,014 | 6,415 | 7,013 |

For the years 1975 and 1976, intra-Group deliveries and nonallocated costs have been deducted from sales and operating income, respectively, of the several product groups. This does not materially affect the comparability with subsequent years.

| Regional statistics | 1984 | 1983 | 1982 | 1981 | 1980 | 1979 | 1978 | 1977 | 1976 | 1975 |
|---|---|---|---|---|---|---|---|---|---|---|
| Millions of guilders | | | | | | | | | | |
| *The Netherlands* | | | | | | | | | | |
| Net sales by area of destination | 1,836 | 1,675 | 1,561 | 1,460 | 1,454 | 1,419 | 1,289 | 1,284 | 1,295 | 1,218 |
| Net sales by area of origin | 5,772 | 5,106 | 4,528 | 4,699 | 4,255 | 4,212 | 3,623 | 3,585 | 3,706 | 3,237 |
| Operating income | 453 | 229 | 75 | 133 | 117 | | | | | |
| Expenditures for property, plant and equipment | 286 | 283 | 338 | 303 | 246 | 170 | 180 | | | |
| Invested capital | 2,414 | 2,293 | 2,288 | 2,143 | 2,095 | 2,069 | 1,983 | 1,962 | 2,286 | 2,255 |
| Number of employees | 22,400 | 22,000 | 22,600 | 23,000 | 23,600 | 23,700 | 24,300 | 25,400 | 27,600 | 29,700 |
| *Federal Republic of Germany* | | | | | | | | | | |
| Net sales by area of destination | 2,493 | 2,340 | 2,168 | 2,266 | 2,198 | 2,243 | 1,966 | 1,932 | 2,056 | 1,939 |
| Net sales by area of origin | 4,130 | 3,580 | 3,395 | 3,385 | 3,106 | 3,087 | 2,825 | 2,658 | 2,727 | 2,547 |
| Operating income | 370 | 178 | 128 | 105 | 66 | | | | | |
| Expenditures for property, plant and equipment | 157 | 110 | 136 | 138 | 130 | 100 | 96 | | | |
| Invested capital | 1,562 | 1,694 | 1,688 | 1,660 | 1,578 | 1,613 | 1,576 | 1,690 | 1,622 | 1,835 |
| Number of employees | 18,400 | 18,700 | 19,400 | 20,200 | 21,000 | 21,200 | 21,300 | 21,800 | 23,800 | 26,000 |
| *Other EEC countries* | | | | | | | | | | |
| Net sales by area of destination | 3,991 | 3,449 | 3,398 | 3,431 | 2,966 | 2,791 | 2,348 | 2,143 | 2,198 | 2,020 |
| Net sales by area of origin | 1,662 | 1,491 | 1,561 | 1,633 | 1,498 | 1,287 | 1,161 | 1,055 | 1,003 | 994 |
| Operating income | 135 | 112 | 100 | 78 | 46 | | | | | |
| Expenditures for property, plant and equipment | 67 | 53 | 37 | 43 | 63 | 44 | 36 | | | |
| Invested capital | 744 | 650 | 645 | 601 | 632 | 583 | 541 | 521 | 393 | 633 |
| Number of employees | 6,700 | 6,800 | 7,200 | 8,200 | 9,600 | 9,600 | 10,200 | 10,000 | 11,000 | 13,400 |
| *Rest of Europe* | | | | | | | | | | |
| Net sales by area of destination | 1,911 | 1,682 | 1,739 | 1,845 | 1,750 | 1,732 | 1,384 | 1,473 | 1,646 | 1,432 |
| Net sales by area of origin | 808 | 735 | 831 | 825 | 718 | 711 | 573 | 561 | 712 | 685 |
| Operating income (loss) | 80 | 62 | 64 | 31 | 37 | 56 | 40 | (2) | 16 | 10 |
| Expenditures for property, plant and equipment | 33 | 24 | 31 | 52 | 36 | 16 | 11 | 11 | 36 | 76 |
| Invested capital | 308 | 242 | 264 | 332 | 309 | 329 | 254 | 303 | 433 | 507 |
| Number of employees | 4,400 | 4,200 | 5,500 | 5,800 | 6,400 | 6,300 | 6,000 | 6,300 | 7,600 | 7,800 |
| *North America* | | | | | | | | | | |
| Net sales by area of destination | 3,781 | 3,744 | 3,241 | 3,375 | 2,362 | 2,413 | 2,315 | 2,334 | 2,292 | 2,018 |
| Net sales by area of origin | 3,353 | 3,462 | 3,048 | 3,210 | 2,253 | 2,224 | 2,027 | 2,133 | 2,147 | 1,909 |
| Operating income (loss) | 166 | 123 | (24) | 99 | 45 | 113 | 99 | 87 | 53 | 103 |
| Expenditures for property, plant and equipment | 217 | 136 | 148 | 139 | 150 | 117 | 93 | 87 | 103 | 134 |
| Invested capital | 1,853 | 1,510 | 1,695 | 1,721 | 1,542 | 1,291 | 1,188 | 1,339 | 1,459 | 1,556 |
| Number of employees | 8,800 | 9,100 | 13,400 | 14,900 | 16,000 | 16,200 | 15,600 | 15,300 | 15,500 | 16,100 |
| *Other regions* | | | | | | | | | | |
| Net sales by area of destination | 2,508 | 2,195 | 2,047 | 2,099 | 1,723 | 1,417 | 1,364 | 1,267 | 1,263 | 1,090 |
| Net sales by area of origin | 795 | 711 | 791 | 724 | 623 | 494 | 457 | 441 | 455 | 345 |
| Operating income | 136 | 139 | 150 | 118 | 105 | 79 | 86 | 72 | 90 | 57 |
| Expenditures for property, plant and equipment | 24 | 19 | 40 | 18 | 20 | 14 | 18 | 20 | 15 | 54 |
| Invested capital | 322 | 277 | 301 | 287 | 262 | 189 | 235 | 199 | 222 | 227 |
| Number of employees | 5,400 | 5,500 | 5,600 | 5,700 | 6,500 | 6,000 | 5,800 | 5,600 | 5,600 | 5,200 |

# Principal companies of the Akzo Group

December 31, 1984

Percentages of participation are only stated for companies in which Akzo N.V. or any of its majority-owned subsidiaries separately or jointly holds less than 95% of the subscribed stock.



| **Enka, Wuppertal** | **Federal Republic of Germany (D)** | |
|---|---|---|

*Man-made fibers, machinery, engineering plastics, membranes, nonwovens, various industrial products*

| | | |
|---|---|---|
| Enka B.V., Arnhem | Netherlands | |
| Enka International B.V., Arnhem | Netherlands | |
| Akzo Plastics B.V., Arnhem | Netherlands | |
| Colbond B.V., Arnhem | Netherlands | |
| Aramide Maatschappij v.o.f., Emmen | Netherlands | (50) |
| Enka AG, Wuppertal | D | |
| Barmag Barmer Maschinenfabrik AG, Remscheid-Lennep | D | |
| with establishments in Switzerland*, U.S.A., Brazil*, and Hong Kong | | |
| Kuaggarn Textil GmbH, Wuppertal | D | |
| Membrana GmbH, Wuppertal | D | |
| Italenka Film S.p.A., Milan | Italy | (91) |
| La Seda de Barcelona S.A., Barcelona | Spain | (58) |
| Fibras Químicas S.A., Monterrey | Mexico | (40) |
| Polyenka S.A., São Paulo | Brazil | (51) |
| COBAFI Companhia Bahiana de Fibras S.A., Camaçari | Brazil | (36) |
| Enka de Colombia S.A., Medellín | Colombia | (49) |
| Enkador S.A., Quito | Ecuador | (49) |
| Century Enka Ltd, Calcutta | India | (40) |

| **Akzo Zout Chemie, Hengelo (O)** | **Netherlands** | |
|---|---|---|

*Salt, chlorine, alkali products, vinyl chloride, methanol, petrochemicals*

| | | |
|---|---|---|
| Akzo Zout Chemie Nederland B.V., Hengelo | Netherlands | |
| Methanol Chemie Nederland v.o.f., Delfzijl | Netherlands | (50) |
| Methanor v.o.f., Delfzijl | Netherlands | (28) |
| Delamine B.V., Delfzijl | Netherlands | (35) |
| Delesto B.V., Delfzijl | Netherlands | (50) |
| ROVIN Rotterdamse Vinylunie v.o.f., Amsterdam | Netherlands | (50) |
| Norddeutsche Salinen GmbH, Stade | D | |
| Elektro-Chemie Ibbenb. GmbH, Ibbenbüren | D | (50) |
| Konezo, division of Akzo België N.V., Brussels | Belgium | |
| Dansk Salt I/S, PR Mariager | Denmark | (50) |
| Akzo Zout Chemie Svenska A.B., Göteborg | Sweden | |
| CIRNE – Companhia Industrial do Rio Grande do Norte, Macau | Brazil | |
| Denak Co. Ltd, Tokyo | Japan | (50) |

| **Akzo Chemie, Amersfoort** | **Netherlands** | |
|---|---|---|

*Specialty chemicals, functional chemicals, catalysts, industrial chemicals*

| | | |
|---|---|---|
| Akzo Chemie Nederland B.V., Amersfoort | Netherlands | |
| Cyanamid-Ketjen Katalysator B.V., Amsterdam | Netherlands | (50) |
| Glucona v.o.f., Ter Apelkanaal | Netherlands | (50) |
| Silenka B.V., Hoogezand | Netherlands | (33) |
| Akzo Chemie GmbH, Düren | D | |
| Carbosulf Chemische Werke GmbH, Cologne | D | (67) |
| Rhodanid Chemie GmbH, Cologne | D | (67) |
| Akzo Chemie, division of Akzo België N.V., Mons | Belgium | |
| Soc. des Dérivés Azotés S.A., Mons | Belgium | |
| Akzo Chemie France S.à.r.l., Venette | France | |
| Akzo Chemie Italia S.p.A., Arese | Italy | |
| Akzo Chemie U.K. Ltd, Gillingham | U.K. | |
| Akzo Chemie America Co.**, Chicago, Illinois | U.S.A. | |
| with establishments in Canada | | |
| Poliquíma Indústria e Comércio, division of Akzo Indústria e Comércio Ltda, São Paulo | Brazil | |
| FCC, S.A.-Fabrica Carioca de Catalisadores, Rio de Janeiro | Brazil | (40) |
| Nippon Ketjen Co. Ltd, Tokyo | Japan | (50) |
| Kayaku Noury Corp., Tokyo | Japan | (50) |
| Lion Akzo Co. Ltd, Tokyo | Japan | (50) |

| **Akzo Coatings, Hoofddorp** | **Netherlands** | |
|---|---|---|

*Paints, stains, synthetic resins*

| | | |
|---|---|---|
| Sikkens B.V., Sassenheim | Netherlands | |
| Koninklijke Talens B.V., Apeldoorn | Netherlands | |
| Synthese B.V., Bergen op Zoom | Netherlands | |
| Akzo Farben Beteiligungs-GmbH, Stuttgart | D | |
| Deutsche Akzo Coatings GmbH, Stuttgart | D | |
| Austro-Lesonal GmbH, Salzburg | Austria | |
| Akzo Coatings, division of Akzo België N.V., Ternat | Belgium | |
| Astral S.A., Paris | France | |
| with establishments in Morocco*, Senegal*, Ivory Coast*, and Cameroun* | | |
| Dacral S.A., Paris | France | (50) |
| Sikkens U.K. Ltd, London | U.K. | |
| Akzo Coatings Italia S.r.l., Milan | Italy | |
| Ivanow S.A.***, Barcelona | Spain | |
| Akzo Coatings America Inc.**, Troy, Michigan | U.S.A. | |
| with establishment in Canada | | |
| Miluz S.A.I.C.I. y F., Buenos Aires | Argentina | |
| R. Montesano S.A. – Tintas Wanda, São Paulo | Brazil | |
| Metropolitan Paint Factory Ltd, Bangkok | Thailand | |

* Participation less than 95%.

** Also listed under Akzo U.S. Inc.

*** Renamed Akzo Coatings S.A. with effect from January 1, 1985.

| **Akzo Pharma, Oss** | **Netherlands** |
|---|---|

*Ethical drugs*
(Organon International B.V., Oss, the Netherlands)
*Hospital supplies*
(Organon Teknika N.V., Turnhout, Belgium)
*Nonprescription products*
(Chefaro International B.V., Rotterdam, the Netherlands)
*Raw materials for the pharmaceutical industry*
(Diosynth B.V., Oss, the Netherlands)
*Veterinary products*
(Intervet International B.V., Boxmeer, the Netherlands)

Sales offices or production plants of one or more of the above companies are established in:

- the Netherlands, Federal Republic of Germany, Belgium, France, Italy, United Kingdom, Republic of Ireland, Denmark, Norway, Sweden, Finland, Switzerland, Spain, Portugal, Greece, Turkey
- United States**, Canada**
- Mexico, Argentina, Brazil, Chile, Ecuador, Venezuela
- Cyprus, Bangladesh*, India*, Malaysia, Pakistan*, Thailand, South Korea*, Indonesia*, Hong Kong, Japan*
- Australia
- Morocco, Nigeria*, South Africa

| **Akzo Consumenten Produkten, The Hague** | **Netherlands** | |
|---|---|---|

*Detergents and cleaning products, health and bodycare products, foodstuffs*

| | | |
|---|---|---|
| Kortman Redipro B.V., Veenendaal | Netherlands | |
| Duyvis Recter B.V., Veenendaal | Netherlands | |
| Grada Productiebedrijven B.V., Apeldoorn | Netherlands | |
| Rotterdamse Margarine Industrie ROMI B.V., Vlaardingen | Netherlands | |
| California Verkoopmaatschappij B.V., Harderwijk | Netherlands | |
| Otarès B.V., Enschede | Netherlands | |
| N.V. Akzo Consumer Products (Belgium) S.A., Brussels | Belgium | |
| Ashe Laboratories Ltd, Leatherhead | U.K. | |
| Mayolande S.A., Seclin | France | (89) |
| A/S Blumøller, Odense | Denmark | |
| Tomten A/S, Sandvika | Norway | |
| Legrain S.A., Barcelona | Spain | |

| **Akzo U.S. Inc.***, Enka, North Carolina** | **U.S.A.** |
|---|---|

*Man-made fibers, salt, specialty chemicals, coatings, pharmaceuticals, various industrial products*

| | |
|---|---|
| American Enka Co., Enka, North Carolina | U.S.A. |
| International Salt Co., Clarks Summit, Pennsylvania | U.S.A. |
| with establishments in Canada and the Netherlands Antilles | |
| Akzo Chemie America Co., Chicago, Illinois | U.S.A. |
| with establishments in Canada | |
| Akzo Coatings America Inc., Troy, Michigan | U.S.A. |
| with establishment in Canada | |
| Pharmaceutical companies in the United States and Canada active in the fields of ethical drugs and diagnostics (Organon Inc.), artificial kidneys (Organon Teknika Corp.), raw materials for the pharmaceutical industry (Diosynth Inc.), and veterinary products (Inter-Continental Biologics Inc.) | |
| Armira Corp., Bolivar, Tennessee | U.S.A. |

**Other companies**

| | | |
|---|---|---|
| N.V. Verenigde Instrumentenfabrieken Enraf-Nonius, Delft (medical equipment, etc.) | Netherlands | (15) |
| Akzo Engineering B.V., Arnhem | Netherlands | |
| Akzo Systems B.V., Velp | Netherlands | |
| Rijnconsult B.V., Arnhem | Netherlands | |

* Participation less than 95%.
** Also listed under Akzo U.S. Inc.
*** Renamed Akzo America Inc. with effect from January 1, 1985.

*Dividends are paid through the following banks:*

**The Netherlands**

Amsterdam-Rotterdam Bank
Algemene Bank Nederland
Bank Mees & Hope
Nederlandsche Middenstandsbank
Pierson, Heldring & Pierson
Rabobank Nederland
at their offices in Amsterdam, Rotterdam, The Hague, Utrecht (Rabobank Nederland), and Arnhem, if established there

**Federal Republic of Germany**

Deutsche Bank
Deutsche Bank Berlin
Bank für Handel und Industrie
Berliner Handels- und Frankfurter Bank
Dresdner Bank
Sal. Oppenheim jr. & Cie.
at their offices in Düsseldorf, Frankfurt/Main, Hamburg, Cologne, Berlin (West), and Wuppertal, if established there

**Belgium**

Generale Bankmaatschappij
Paribas Bank België
Kredietbank
at their offices in Brussels and Antwerp

**Luxembourg**

Banque Générale du Luxembourg, Luxembourg

**United Kingdom**

Barclays Bank
Midland Bank
at their offices in London

**France**

Lazard Frères & Cie
Banque Nationale de Paris
at their offices in Paris

**Austria**

Creditanstalt-Bankverein, Vienna

**Switzerland**

Schweizerische Kreditanstalt, Zurich
Schweizerische Bankgesellschaft, Zurich
Schweizerischer Bankverein, Basel
and the Swiss branch offices of these banks
Pictet & Cie, Geneva

**U.S.A.**

The Chase Manhattan Bank, New York

*Akzo N.V. common stock is listed on the following stock exchanges:*

| | |
|---|---|
| the Netherlands: | Amsterdam |
| Federal Republic of Germany: | Frankfurt/Main, Düsseldorf, and Berlin (West) |
| Switzerland: | Zurich, Basel, and Geneva |
| France: | Paris |
| Belgium: | Brussels and Antwerp |
| United Kingdom: | London |
| Austria: | Vienna |

Printed by: Tesink, Zutphen, the Netherlands