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A PROFILE OF

ÅKERLUND & RAUSING

Written on behalf of the EGF

Mechtild Rosier/Sjef Stoop (SOMO).

Amsterdam, april 1992

## INTRODUCTION

This company profile is based on official information by the company and press clippings. On the basis of this material we have tried to make some analysis and made a few speculations, but could not answer all important questions, sometimes we had to leave some questions open. This is not to say that the company doesn't want to give this information. We simply did not ask them, because of lack of time. Still it seems that these questions can provide a good basis for discussion. After the European meeting in June, we will make an update of this profile, containing the information given on the meeting by the trade-unionists. If necessary we will also ask the company for additional information. In the meantime we hope that this profile gives the basic information, especially for those outside Sweden who have less opportunities to gain direct access to information.

Mechtild Rosier/Sjef Stoop (SOMO).

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## CONTENTS

INTRODUCTION .....	1
THE STORA CONCERN .....	3
ÅKERLUND & RAUSING WITHIN THE STORA CONCERN .....	8
ACTIVITIES AND INTERNAL STRUCTURE OF Å&R .....	13
STRATEGY .....	18
PERFORMANCE .....	21
THE PACKAGING SECTOR .....	24
LABOUR ISSUES .....	28
Annex .....	31

## THE STORA CONCERN

When the Stora concern took over Swedish Match in 1988, one of the biggest take-overs ever seen in Europe, Åkerlund & Rausing became part of the Stora concern too. This meant a new stage in the development of the packaging company, which was established in 1930. Before taking a closer look at A&R, we will first look at Stora, because this will be the background against which most of the recent developments within A&R are to be understood.

During the period 1983-1991, Stora grew from a (SEK 5.6 mrd company, employing 10,000 people, to a SEK 49 mrd company with 45,000 employees. This secured a firm hold of the no 1 place among the biggest European paper makers. From being basically a large Swedish company, Stora grew into a global concerns as can be seen from, partly the outdated 1989 map in annex 1.

On nine march 1988 the Swedish Stora AB made an offer of SEK 5.94 milliard to takeover Swedish Match. Stora as well as Swedish Match were owned by the investment trusts Investor and Providentia. In both these investment trusts the Swedish Wallenberg group has control.

By taking over Swedish Match, Stora made a big leap forwards in its strategy to become less dependent on the basic forestry products industry and to move into consumer products. In the early 1980s, Stora decided to take on a more aggressive strategy and to get closer to their European markets to maintain their competitiveness. In practical terms Stora became larger and acquired production facilities inside the EC. The most recent change began five years ago when Stora decided to reduce its dependence on pulp and timber. It expanded its operations in paper products from newsprint to packaging material and fine paper through a string of acquisitions that included Billerund and Papyrus. Its strategy of creating a vertically-integrated and rationalized forest products group climaxed in 1988 with the purchase of Swedish Match, which provided a range of building products, such as floorings, doors and kitchen furnishings. The deal also made Stora the largest forest

products group in Europe, while Stora hoped to maintain its position as one of the most profitable forestry companies in the world.

Stora chairman and chief executive Bo Berggren, who has masterminded the diversification strategy, described the company as going through a consolidation phase in 1990. Merging the different corporate cultures of Stora and Swedish Match as well as co-ordinating some 15 product areas has proved a challenge, although the process is almost complete. Soon after the purchase of Swedish Match, Stora started to sell off some of Swedish Match's best known consumer products - matches (Swedish Match), lighters (Cricket) and shaving products (Wilkinson Sword). Bo Berggren says Stora had integrated 80 percent of Swedish Match in his production, but these consumer products didn't fit in. These are product areas with which Stora admits it has little experience and it believes they will do better elsewhere. What is left is a forestry company that in the opinion of most analysts is well-prepared to withstand tougher times ahead as competition increases among producers of pulp, paper and board.

Stora's CEO Mr. Berggren wanted to create three product companies under the Stora Cell/Feldmühle, Billerud and Papyrus names in the printing, packaging and fine paper sectors respectively. The company is aiming to establish "an efficient marketing network behind an efficient industrial structure". However, the new group structure as from January 1st 1991, consists of four divisions - Stora Cell (Gävle); Feldmühle (Düsseldorf); Billerud (Skoghall) and Papyrus (Mölndal) - with an annual production capacity of 4.1 mn tons of pulp and 5.8 mn tons of paper and board. Besides those four divisions there are the other activities like: Stora Power; Stora Forest; Stora Timber; Swedoor; Stora Kitchen; Tarkett; Åkerlund & Rausing; Finess etcetera.

One of Stora's chief strengths is that some of its products, such as building materials, are less sensitive to cyclical downturns than pulp and paper. Stora betted that the building materials sector would be a prime beneficiary of synergy due to the integration of its timber operations with those of

Tarkett flooring, Stora Kitchen and Swedoor. However the construction related business areas were recently affected by lower demand and more intense competition than thought.

**Stora Cell** includes the pulp mills in Skutskär, Norrsundet, Sandarne and Skoghall (Sweden), Celbi (Portugal), and 50% of Forestal Valdivia (Chile). The combined production capacity for market pulp is about 1.1 mn tons per year.

**Feldmühle.** At the end of april 1990, Stora and AB Patricia jointly acquired 85% of the shares in the German industrial Group Feldmühle Nobel (FeNo) for about SEK 15.45 mrd. The acquisition created Europe's largest pulp and paper company and put Stora into the world's top five. It was a natural acquisition choice for Stora as both companies had jointly owned Hylte Bruks newsprint mill since 1970 and the Norrsundet Bruks pulp mill since 1980. The non-paper businesses of FeNo - heating products, explosives and technical products - were sold in june 1991 to the German industrial group Metallgesellschaft for SEK 5.12 mrd.

The Stora division Feldmühle includes three product divisions; Newsprint and SC magazine paper. This includes the mills at Kvarnsveden, Hylte Bruks (Sweden), Stora Forest Industries (Canada), Reizholz (Germany) and Langerbrugge (Belgium). The second is LWC (Light Weight Coated paper). This includes the mills at Hagen-Kabel (Germany) and Corbehem (France). The third division is Carbonless paper, and includes the mills at Hillegossen and Flensburg (Germany).

**Billerud's** main product area is board and packaging paper at mills and plants in Gruvön, Skoghall, Fors (Sweden), Newton Kyme (UK), Arnsberg and Baienfurt (Germany) and Corbehem (France).

**Papyrus's** main product is fine papers manufactured at Nymölla, Grycksbo and Mölndal (Sweden), Dalum, Maglemölle and Silkeborg (Denmark), Newton Falls (USA), Uetersen (Germany) and by

Iridium (France) which is owned for 40%.

Although the growth in demand for pulp and paper slowed down in 1991, Stora believes that it can remain competitive through increased production efficiency. The acquisition of Feldmühle removed a large part of Stora's exposure to fluctuations in pulp prices. It is now one of the biggest suppliers of pulp to Feldmühle's paper and board operations. But Stora continues to sell market pulp and Feldmühle continues to buy non-Stora pulp.

The next significant step that Stora will have to take is broadening its international operations, especially in the EC, which accounted for 43 percent of the company's sales in 1988, and 65 percent in 1990. Its production of paper and pulp largely remains concentrated in Sweden, which could prove a handicap as competition intensifies with the arrival of the EC internal market and leave Stora open to possible trade disputes, especially on pricing, with the EC.

In presenting Stora's annual report for 1990, president and chief executive Bo Berggren said however: "In choosing between integration and a broadening of the programme, it is now most important for Stora to focus on the former...certain priorities have also been modified. For example, the previously planned extension of a pulp line in the Celbi mill in Portugal has been postponed. The current excess capacity in pulp production means that we must now give precedence to evaluating an expansion of capacity for uncoated magazine paper, recycled fibre and liquid packaging board in the Stora Billerud unit at Skoghall". In 1991 Stora postponed most of its big investment schemes.

Despite the SEK 16 mrd that Stora spent on acquisitions in the five years between 1984 and 1989, the company retained a strong financial position and good cashflow. This was partly due to the sharply rising pulp prices that have benefitted Stora and other pulp producers. Financial costs were further brought down by the sale of the Swedish Match consumer products division, which yielded SEK 4 mrd in 1989. Stora's finances are likely to remain secure based on guaranteed access to timber

and power. It owns 1.6 million hectares of forest in Sweden, which meets 30 percent of its needs. Stora has prepared itself for finding new sources of funding by recently being listed on the London and Frankfurt exchanges. The annual report of 1990 predicted that the trends for 1991 were difficult to evaluate. This would be particularly the case in newsprint, magazine papers and LWC grades where competition increased because of surplus capacity and falling prices. 1991 proved to be a very difficult year, forcing Stora to bring down its debts more than expected. A major advantage for the group is the full integration of pulp production and increased coordination of all forest industry operations. Other benefits for the group which now has an extensive cross-border network is that the group is decentralised, has local presence in every major European country and is integrated from forest ownership to trading.

Stora operates in 25 countries and a high proportion of its total of more than 60.000 employees work in countries other than Sweden. 70% of the Group's sales are to countries other than Sweden.

## ÅKERLUND & RAUSING WITHIN THE STORA CONCERN

Åkerlund & Rausing (Å&R) is just a small part of the Stora concern. Moreover, Stora is again only a part of the Wallenberg empire, which includes Electrolux, Asea Brown-Boveri, Ericsson, SKF, Saab-Scania, and other major Swedish companies. Wallenberg holds 27% of the shares and 35% of the votes in Stora.

It is difficult to establish exactly the pros and cons of this structure. On the one hand it means that Stora is always able to raise capital easily and thus is sheltered from too much pressures of the stock market. On the other hand it means that, for a company like Å&R, main decisions about the future might be taken without much consideration of the interest of individual companies.

This might be illustrated by recent developments. The Wallenbergs controlled both Stora and Swedish Match. This certainly facilitated the merger, which was seen by some analysts as a risky step. For Stora to become a more integrated paper and paper converting company however is quite a normal strategy, applied by most companies in the field. Since 1989 the Wallenbergs have started to consolidate their possessions, anticipating a liberalisation and internationalisation of the Swedish company law and stock market. This also implied selling of the automated milking machines manufacturer Alfa-Laval, another Wallenberg company, to Tetra Pak, a main competitor of Å&R. This again marked the end of Alfatar, the joint-venture between Alfa-Laval and Å&R.

Within the new Stora structure, Å&R forms an independent business unit. Again, it is hard to assess whether this means an advantage: Å&R being able to follow its own strategy, or a disadvantage: Å&R staying outside the main business areas of its parent company. In the coming years, Stora will be selling off companies which are no part of its core-business even more than in the past years.

Besides Å&R, Stora has three more groups which are active in the field of packaging. All of them



were acquired in the mid 1980s, except Feldmühle which was bought in 1990. The next table puts them together:

External sales 1990 (SEK million)

	Production of packaging P&B	Packaging	Total	% of Stora sales
Åkerlund & Rausing	-	1853	1853	3
Stora Feldmühle	560		13499	19
Stora Billerud <sup>1</sup>	7299		7841	11
Stora Papyrus	277		11948	16
Total	8,136	1853		
% of Stora sales	11	3		

Source: annual reports Stora.

Especially Billerud's activities seem very close to Å&R's activities. Stora Billerud concentrates on board production and produces amongst others liquid packaging board, but also plastic sacks. In 1990 it was decided to install a new liquid packaging board machine worth SEK 2.5 mrd in Skoghall (Sweden). At the end of 1991 this scheme was postponed.

Billerud was the most profitable paper manufacturing unit within Stora in 1991. Billerud enjoys a market share of 13% in this segment, which ranks it second after Finnish Enso Gutzeit. Tetra Pak is its largest individual customer. Billerud works together quite closely with Tetra Pak to develop new

<sup>1</sup> Including Kopparfors.

materials. Billerud also became the parent company of Feldmühles and Koparfors packaging board division. Although Å&R is active in some other part of the packaging industry, less based on board, it still could have made sense to make it part of Billerud's division too. Å&R's position within Stora seems not to be sorted out yet. The Lund factory is not included in Stora's 1990 overview of pulp, paper and board manufacturing, although the writers of this report haven't come across any announcement of closure of this activity. In 1991 a new packaging line for carton material was installed at Å&R. In Germany Å&R is part of a holding company 'Stora Beteiligung', which also contains Peguland and Feldmühle. This structure is designed to "equalize tax burden, since it is the combined income of these units that will be subject to tax" (Stora Report october 1991). In the Netherlands Å&R has its own sales office with only one employee. Stora Billerud B.V. sells products from Feldmühle, Fors, Hammarby, Mölndal and Newton Kyne.

Stora decided at the end of 1991 to intensify a cost cutting programme of 4 points:

- a trimming and reshuffling of investment budgets,
- cutting its wide range of products and reallocating production, so as to concentrate production,
- stopping production lines and closing plants,
- cutting employment with an extra 2.500, which brings total employment losses for 1990-1992 to 6.000.

For this programme, Stora has reserved a provision of SEK 300 million, instead of the 100 million it initially intended to reserve. Å&R is said to be far ahead with restructuring, because there it started already soon after the acquisition. In 1990 a provision of SEK 88 mn was booked at Å&R for writing down of fixed assets and restructuring. In 1991 this fell to 10 mn.

Only in respect to the 4th above mentioned point, Å&R is named specifically in Stora's general announcements, but this doesn't mean that Å&R will not be affected by the other measures. The background of this scheme is formed by Stora's high financial costs, caused by all its acquisitions, where at the same time the industry is facing a tough recession and the German and Swedish economies are showing signs of a recession too. The aim of this restructuring programme is to lower debts by SEK 5 mrd. Especially in Sweden, no big investments schemes are to be expected for the coming years.

Stora's purchase of Swedish Match and Feldmühle, has put great pressure on its finances. This will mean that there is very little room to tolerate operational losses at any part of the concern. Å&R has been making huge losses since 1988, so this may cast doubts on Å&R's future. Still Å&R is important as a part of Stora's long term strategy to become an highly integrated industrial firm, linking every stage of the chain from wood to paper-processing. Also Å&R's relatively high rate of sales outside Sweden, matches Stora's attempts to become more internationalised. Stora as a whole gets 70% of its sales from outside Sweden, Å&R 67%.

This has led Stora to start a tough restructuring drive at Å&R, but Å&R was not sold off. The question remains what will happen after Å&R has made a successful "turn-around". It doesn't seem likely that Å&R can exist for very long in the position it now has within Stora. In theory there are three possibilities:

1. Å&R may form the nucleus of Stora's expansions into packaging which is not solely based on paper and board.
2. Å&R will be merged into Billerud.
3. Å&R will still be sold off.

At this stage the writers of this report don't have enough information to make justified speculations.

However we can give some arguments to make any of the three possibilities plausible.

After the acquisition, Stora started a tough restructuring programme. From 1989 onwards Å&R's high development costs were directly charged to Å&R's earnings, whereas before this was not the case. Now, new technology is developed both by Å&R itself and jointly with the Stora technology division. Major changes in the companies operations and company structure were implemented in 1990-1991. Chairman of the Stora board, Lennart Hagelin appraises Å&R as follows:

" The basic product range is good. In the past substantial efforts have been devoted to development. As a result, the company has not sufficiently developed its basic product range and this is now the major focus of our attention. With these measures Å&R should rapidly recapture the positions lost by attempting to cover an excessively large area over a protracted period. The main loss in 1990 is mainly attributable to development projects.

Following the recent streamlining of the company, we are aware that certain complementary operations are required, which can be attained through acquisitions. But the latter are out of the question until the entire is functioning properly. Meanwhile operations must be rationalised. It should be possible to combine increased productivity with lower costs. It is particularly important to create a positive cash flow." (Stora Report march 1991). Also Bo Berggren, CEO of Stora blames too many wide-ranging development projects, in progress simultaneously, for the low levels of earnings (Annual report 1989).

All this may point to possibility 1.

Whether possibility 3, Å&R being sold, is plausible will depend on both the financial needs of Stora to bring down its debts, and the question, discussed in the part on Å&R's strategy, whether Å&R is able to play its role in the packaging industry, especially whether it is big enough.

## ACTIVITIES AND INTERNAL STRUCTURE OF Å&R

Å&R designs, manufactures and markets packaging and packaging systems (including machines), mainly for the food industry. The next table (see next page) puts Å&R most important trade marks and activities together.

Å&R is divided into 4 groups of operations:

- **Packaging Systems Europe:** manufacturing and marketing of packaging based on carton and flexible materials, as well as packaging systems for these sectors. Manufacturing takes place in Sweden, Norway and Germany. Formerly there were two divisions, Carton and Flexible.
- **Table pac and Tubes:** table packagings for spreads, tubes for pharmaceutical and hygienic applications. Manufacturing takes place in Sweden and Germany.
- **Overseas:** carton and flexible materials for food and chemical products.
- **Letpak:** plastic food cans, manufactured in the U.K.

Besides, the Å&R concern has a double structure. On the one hand, there is the Å&R parent company, which comprises all activities in Sweden, except the Norrköping plant, and part of the activities in England. On the other hand there is a Å&R group. The group consists of the parent company plus the Norrköping plant, the other activities in England, Denmark, Norway, USA, Philippines and Thailand. The Å&R group was formed in 1991 by raising the share of the parent company in its daughter companies. Å&R has been active in the Philippines and Thailand for quite some years, but only after Å&R raised its share in these daughter companies to more than 50%, are they included in the group and into the consolidated accounts.

The Åkerlund and Rausing range of packaging.

Packaging and packaging systems Product area	Flexible packaging, e. g. TRAYPAC®	Carton packaging, e. g. DURALOX® EXPRESSO®	Table packaging, e. g. TRITELLO®	Plastic tubes and laminated tubes	CEKACAN®	LETPAK®	StarAsept®	ALFASTAR®
Refrigerated fresh food	X		X					X
Cheese and edible fats	X		X	X				
Frozen food	X	X	X					
Heat-treated food	X					X	X	X
Dry and granulated foods	X	X	X		X			
Chocolate and candy	X	X	X		X			
Pet food	X	X			X	X		
Cosmetics and personal hygiene items	X	X		X				

The next table puts the different activities together:

Companies owned by Åkerlund & Rausing AB

		Bookvalue (SEK '000)	
Sweden	AB Dixie Cup	100%	2,400
	AB Förpackningsservice	100%	990
	Rinaldo and Johansson AB	100%	2,000
	Å&R Carton AB	100%*	50
	Alfastar AB	50%	30
USA	Åkerlund & Rausing N.A. Inc.	100%	78
Netherlands	Åkerlund & Rausing Benelux B.V.	100%	100
Philippines	Åkerlund & Rausing (Philippines) Inc.	100%**	83,831
	Phimco Industries inc.		
Denmark	A/S Åkerlund & Rausing	100%	610
Norway	Transparent Emballasje A/S	100%	7,337
U.K.	Åkerlund & Rausing Ltd.	100%	22,857
	(plants in Shrewsbury, Bury and Wickford)		
	East & Baker Ltd.		
Thailand	Strongpack Co Ltd.(indirectly owned)	39.3%***	20,363
India	Åkerlund & Rausing Packaging Systems Ltd.	40%	11,127
Pakistan	Packages Ltd.	6%	2,216
France	Cotuplas SA ****	5%	66
	Herestra Elverkförening	-	23
	Åkerlund & Rausing SARL		
Germany	Å&R Verpackung GmbH	1%	394
	Cekacan Europe GmbH		
Total			154,202

\* Å&R Carton AB (100% owned) is operating in its own name but on behalf of Å&R AB, assets and liabilities and income and expenses are accounted for in the parent company.

\*\* This was 49.9% in 1989. \*\*\* Å&R owned directly 39.3% of sharecapital of Strongpack, but this was raised to 64% in 1990 and is now included in the consolidated accounts. \*\*\*\* Cotuplas is owned for 64% by Pechiney. (Sources: Annual report Å&R 1990)

In 1985 Å&R reported 18 plants, in India, Philippines, Thailand, Dominican Republic, Great Britain, Germany, Norway and Sweden. In Sweden Å&R employed 2,840 persons. 3,200 out of 4,600 employees were active in the packaging sector. For the following years these figures were:

1986: 13 factories in 8 countries.

1988: 10 factories in 7 countries.

1989: 10 factories in 8 countries.

1990: 11 factories in 8 countries.

The structure of Å&R is quite complex and it's difficult to establish exactly the extent of Å&R's network. The authors of this report have difficulties to understand why a company in Germany is called Å&R Verpackung, when Å&R only have a 1% share in its capital.

Besides daughter companies, Å&R also has affiliated companies. Å&R Ceka International, AB Å&R Letpak Uk and AB Å&R (regional) are operating as affiliates of AB Å&R. Also Å&R has so-called companies on commission, but is not specified in Å&R's reports what is meant by that.

According to the Stora 1990 annual report, Stora owns the following participations, but it is not clear whether these include participations by Å&R:

		participation	value
India	Å&R Packaging India	40%	3 mn
Pakistan	Packages Ltd.	5,5%	2 mn

In the past few years, Å&R has started some new ventures:

Sprinter System (Sweden), part of the Bonnier Foretagen group and specialist in packaging systems and machinery, like carton erecting systems, cartons and flexible packaging, will be acquired by Å&R. A letter of intent has been signed december 1989 allowing integration of



Sprinter within Å&R.

In 1990 Vopa A/S was acquired in Norway and integrated in Transparent Emballasje. Vopa manufactures flexible materials for packaging.

In October 1990 news came that Å&R Bilt (India) would be a new packaging systems and materials joint venture held by Ballarpur Industries (India) (40%) and Å&R (Sweden). The new venture concentrated on packaging for frozen, granular and dried foods. The agreement sees Ballarpur taking a stake in Å&R Packaging Systems (ARPSL), a maker of laminated and flexible packaging which was set up in 1981 by Å&R Sweden and WIMCO.

In May 1991 Å&R (Sweden) and Europa Carton (Hamburg, Germany) have seen the EC Commission lift monopoly restrictions in certain EC countries for a period of 10 years for their new Cekaan packaging concept. The two companies will be cooperating in Germany under Ceka Europe, of which Åkerlund will hold 74% and Europa Carton 26%. The joint venture will be responsible for commercial production of the Cekaan process.

On the other hand is Å&R selling some activities, like in 1990 Starasept AB. Also the joint venture with Alfa laval was discontinued in 1990.

Annex 2 gives the official lists of Å&R's companies in 1990.

## STRATEGY

In 1986 Å&R decided to concentrate on packaging, especially food-packaging. Å&R targets the high sophistication segment of food-distribution. Important products are a plastic laminated can and a new system for packaging powdered food. In the segment Å&R targets, prices are not the only important feature of the product, and sometimes even not the most important.

Besides environment friendliness, convenience for consumers is a competitive item. For instance; Å&R is offering Cekacan, a paper-foil-plastic composite container. The packaging offers Euro-style design, better DPP scores for retailers and a metallic appearance. The packaging cost be double that of other containers, but Bahlsen, a European firm, doubled its sales of nuts after switching to Cekacan.

Another important aspect of Å&R strategy is its wish to increase the degree of specialization in the Swedish manufacturing units. This wish was already expressed before the take over by Stora, but it seems that the restructuring by Stora of Å&R has quickened the pace of this project. A third important aspect is the regional dimension of the marketing policy. Å&R wants to concentrate outside Europe in the U.S. and in Asia on Thailand, India, Pakistan and the Philippines. In 1986 Å&R closed its cardboard plant in the Dominican Republic. In 1987 Å&R tried to get into the US market by founding a US establishment. Until now it doesn't look like Å&R is gaining a hold on the American market. Sales outside Sweden amounts to 67% of total sales, but the biggest part of this goes to the EC. The largest part of the remaining outside sales will be in Asia, were Å&R has quite a few establishments.

Å&R strategy decisions of 1986 also meant that it got rid of a large part of its board activities. Cardboard production stopped in England in 1986. In 1987 this was followed by the closing of

Rinaldo & Johansson carton production in Kumla, and in 1989 by the restructuring and specialization of carton manufacturing in Lund and Norrköping.

At the same time Å&R expanded in other types of packaging: In 1987 Å&R made a large investment in a table pac production line in Hochheim (Germany). Also, in coordination with Alfa-Laval, a new aseptic filling system for pumpable products was developed: StarAsept. Alfa-laval and Å&R jointly owned Alfatar Ab on a 50-50 basis.

In 1990 a new plant was built in the U.K. for Letpak products. In that same year Alfatar was discontinued.

The background to these strategic decisions can be found in some of the general qualities of the packaging industry.

Vertical integration has existed in the packaging industry for many years, although its extend has fluctuated. Packaging is a significant cost to the manufacturer, who will always be searching for more cost effective alternatives. It is therefore essential for the industry to work hard at reducing the real cost.

Board producers are increasingly seeking to face the future by merging into broader conglomerates, and the two main takeovers have both had a Swedish parent: that of Thames case and Dolan being taken over by ASSI, and Thames Board being acquired by Iggesund. The Tames-Iggesund undertaking was subsequently, in the summer of last year, taken over by the MoDo Group.

It can be doubted though, whether Å&R is big enough to play its role in the packaging market for two reasons. First, there is a continuous integration happening between food processing, food packaging and food distribution. This was the reason for Tetra Pak to buy Alfa Laval. Å&R seems to be too small to integrate these three aspects of the process. Therefore Å&R tries its strength in comprehensive development projects, often together with customers.

Secondly, the European food multinationals, which are the main customers, are planning to concentrate their production, to develop European brands, and to standardize packaging and distribution. They find themselves confronted by retail chains which are becoming bigger and more powerful, and who are able to press their interests. In between them, the packaging industry is too small to influence developments and has to adapt to the wishes of the food processing industry. It may be expected that, in the context of "Just-in-time" production, the food processing industry wants the packagers to work "wall-to-wall". In the longer run it may even be the case that the food industry decides that filling and packaging is no core activity, and go looking for partners to do contract-packaging. They then will prefer firms which are big enough to do the necessary investments in large quantity systems, to satisfy high international standards, and to be able to operate in all countries where the food-processing industry is operating. Therefore, companies like Carnaud, Courtaulds, VAW, PLM and Lawson Mardon are expanding all over Europe and taking over other companies (Missets Pakblad 1990/8). For other companies only local niche markets will remain. But this all depends on the ability of the food-industry to promote European brands.

## PERFORMANCE

From 1988 onwards Å&R has witnessed a severe fall in profits. The performance of Å&R was the only to clearly disappoint Stora management (Stora report 1989/1). It seems like Å&R management in the past was not critical enough of its own operations. During the time it was still a part of Swedish match, disappointing results were mainly attributed to increased competition and technical problems. The first year after the acquisition Å&R showed a record loss. Substantial losses attributable to that year and preceding years had incurred.

Until 1991 it still occupied bottom place in Stora's profit ranking:

### Profitability within Stora:

	1990	1989	1988
Stora Power	36	30	25
Stora Forest	25	19	16
Stora Cell	17	45	41
Stora News	12	17	20
Billerud	18	19	14
Papyrus	9	12	13
Stora Timber	17	12	7
Tarkett	1	11	15
Stora Kitchen	12	24	21
Swedoor	14	25	32
Åkerlund & Rausing	neg	neg	neg
Finess	-	11	14
Swedish Match	-	16	13
Total	10	14	13

Source: annual reports.

In 1990, Å&R's parent company received a shareholders addition of SEK 540 million. Together with a net contribution from dispositions, this raised the negative operating income and the net result to a positive SEK 515.8 million, compared with a negative -6.9 for 1989. The Å&R group received a total 555.1 of shareholders contribution, raising negative incomes on operations to a positive SEK 505.2 million, compared to 6.4 in 1989.

The next table shows Å&R coming out of the red again in 1991.

Key figures since 1985

	1985	1986	1987	1988	1989	1990	1991
Employees	3100	2900	2890	2830	2915	2986	
Sales*	1669	1813	1750	1821	1764	1853	2066
Sales outside Sweden			62%	60%	60%	67%	
Plants		13	11	10	10	11	
Profits**	58	90	110	-6	-112	-147	
Operating income						-223	6
Return on cap.	8%	11%	14%	neg.	neg.	neg.	
Investments	84	122	102	188	170	147	

Notes: 1985 Figures after the split off of the consumers division of which 3100 belonged to the packaging division, on which Å&R concentrated since 1986.

\* Sales from 1988 onwards: external sales.

\*\* Profits: Operating income after depreciation

Profits in 1990 were charged with SEK 35 million for the Alfaster divestment.

Source: annual reports Swedish Match and Stora, Stora report march 1992.

In 1989 Å&R recorded a loss of SEK 112mn versus a profit of SEK 6mn in 1988. It was said that this was due mainly to Cekan, a new packaging system (Financial Times 14-3-90). In may 1991 Stora indicated that the losses at Å&R had been stopped.

Å&R improved income by SEK 150mn in 1991, excluding restructuring costs. The improvement is

attributable to the forceful rationalisation program implemented in 1990 and 1991. This was also partly due to the fact that demand continued to improve in a number of areas. This in combination with the favourable income trends resulting from the concentration of Å&R's operations carried out in the preceding year, resulted in a significant improvement in income.

Å&R's losses cannot be attributed only to external causes. As we saw Stora management also criticised its technology developments being too ambitious and we'll see in the chapter on labour issues that Å&R's top layers might have been too heavy and overpaid. But still it is necessary to look at the packaging sector at large, to evaluate Å&R's stronger and weaker points.

## THE PACKAGING SECTOR

A slowdown of growth, increased demands by the food-industry and tougher environmental laws; these are the main characteristics of the packaging market in the 1990s.

The Swedish packaging industry is after many years of growing demands reaching a point of saturation. Since the maximum performance in the eighties, the consumption of packaging materials is declining. An exception is formed by packaging made of glass, which according to insiders is probably due to a new recognition of glass as a basic and clean way of packaging. Artificial packaging covers about 40 percent of the export, glass only 10 percent. Artificial and paper packagings have become thinner and cheaper, which also reduces the costs of transport and the environmental burden.

The Swedish packaging production, worth about 12 milliard SEK.(1990), approaches the packaging consumption per year. However 25 percent of the production is exported. But this amount is compensated by an equal amount of import.

The packaging industry is dominated by three big enterprises: Tetra Pak, Å&R, and PLM. Besides these three there are a few hundred little producers.

The branch is being restructured following the tendency of the market. Moreover the producers are preparing themselves for tougher competition from the EC.

According to Packforsk, a research institute for packaging industry, the stress for future activities is on security and environmental friendliness of packaging.

Sweden witnessed a fall in the value of paper and board packagings, plastics remained stable, after a high growth rate till 1985, metals continued its slight rise. The much smaller segment of glass witnessed a rise,



whereas output of wooden packaging fell .

The Swedish market for liquids packaging board grew 14.9% in 1989.

Markets in other parts of Europe show similar tendencies. For instance in 1988, the carton market was expected to grow just 1% a year. In the Netherlands a fall in the market value of plastic packagings is expected to be 31%. The foils segment will fall with the same percentage.

Main markets will be France, Germany, Great Britain, and Italy. Analysts now point to Switzerland as an market which will witness interesting growth. The same has been said about Spain. Germany is the biggest market. It is to be expected that Å&R will concentrate on these markets. Until now, Southern Europe has no important Å&R presence.

Part of Å&R's activities in packaging machinery is aimed at the most expanding segment of the packaging machine market. The market for filling and closing packaging machines is expected by an international market research institute to rise from SEK 3.9 mrd in 1989 to SEK 6.2 mrd in 1995. Combined filling and closing systems will grow from SEK 1.45 mrd to SEK 2.34 mrd (Frost&Sullivan 1991).

There is a tendency in reducing the weight of packaging and development of returnable and recyclable packaging. Besides that there is a tendency to more sophisticated packagings which are at the same time a display aid to selling, since goods have to sell themselves. Today's shopper expects a much wider selection of goods, including exotic fruits and vegetables out of the season. Transporting these has required more protection and better display. For example Felix is packaging 3 new fruit products in a new sterilizable white plastic can. The Letpak can, produced by Å&R, needs no utensils to open and weighs only 50% of the weight of a tinplate can. The can body, lid and base are made of polypropylene with an aluminum foil barrier lamination.

Also Spillers has launched a new product on the dogfood market which is packaged in the new can. The 360g plastic can weights around 50% less than a metal pack of the equivalent size. The pack under the LETPAK brand was developed by Å&R in Sweden, and is being produced in its new Brandon Factory in Suffolk designed to be produced on existing conventional can processing lines. Marketing Director Sharrock: "We are also investigating methods of totally recycling Letpaks to produce other forms of plastic goods with waste materials." Sonoco Products (US) has introduced thermoformed hybrid food packaging with excellent graphics. The process, licensed by Å&R (Sweden), uses an in-mold labeling technique to bond the printed paperboard to the container. The paperboard blanks have adhesive on the backside, which melts with the process heat and bonds the paper to the container. Applications are in salads, spreadable and spoonable foods, and eventually microwaveable foods. Kraft and Lever Bros have test-marketed foods with the packaging, and commercial production began in autumn 1988, with a 50 million units per machine per year capacity.

Also Laughing Cow Cheese spreads are now available in a new Tritello package which facilitates microwavability. The package is again being supplied by Sonoco Products Co., the US licensee of Å&R. The package relies on polypropylene (PP), and according to Sonoco, the tray is environment friendly.

General Foods now offers its Maxwell House coffee in filter pouches packed in square canisters offering an oxygen barrier comparable to metal cans or glass jars. The Pouches offer users the convenience of prepackaged and premeasured coffee.

The same packaging is used by Ralston Purina for its Happy Cat semi-moist cat food.

The environmental issue is becoming ever more important. Companies in countries with tough environmental laws, may have an competitive advantage because they will be the first to introduce more environmental friendly products. Å&R replaced PVC material in butter and margarine

packaging for the Swedish market by alternative materials during 1990.

Å&R has promoted its aluminum laminates as a more environmental friendly packaging system. The use of aluminum for 'green' packaging, for instance for crisps bags has however been widely criticized. Winning and melting of aluminum has large disadvantages for the environment. Recently metallized materials have been promoted as an alternative to aluminum laminates and foils. Metallization of paper only uses a very small amount of aluminum (according to Van Leer Metallized Film and Paper company, in VerpakkingsManagement 1991/2). Laminated packagings have a severe environmental disadvantage because its is difficult to recycle. Its composite materials can not be separated.

Bringing back the weight of packaging is an important task of the packaging industry. This both means lower costs for the manufacturer which uses the packaging, as less waste.

We may conclude that competition in the packaging industry will increase even more, but that Å&R has the products to stay competitive in the packaging industry.

## LABOUR ISSUES

The restructuring programme within Å&R has meant serious losses of jobs in the company.

Å&R Papierwaren (Hoheim, W Germany) moved in march 1990 the conversion of gift wrapping paper from its subsidiary operation in Eislingen/Fils to its main unit in Hoheim, affecting around 70 of the 170 employees in Eislingen. The Å&R packaging group is one of the leading West German manufacturers of paper serviettes and gift wrapping paper. In november 1991 Å&R decided to cut its workforce in Sweden by 172. The cuts affected the company's plants in Lund, Norrköping and Jarfalla.

In Lund Å&R began negotiations with staff on the shedding of 64 jobs. In Norrköping the workforce had to be cut by 98 people. At the Jarfalla plant ten people received redundancy notices.

The cuts affected 32 administrative staff and 140 workers.

The results of these measures cannot be found in the overall group figures. They suggest that employment within Å&R is rising.

### EMPLOYMENT (excl. non-100% owned companies)

Average number	Parent*		Group	
	1990	1989	1990	1989
Employees	1,166	1,222	2,627	1,640
of which women	237	277	620	379

\* incl. affiliate, excl. companies operating on commission basis

The large rise in employees in the group stems from a new basis for consolidating foreign affiliates, as can be seen from this table (annual report 1990):

EMPLOYMENT	Parent company		Group	
	1990	1989	1990	1989
<u>Sweden</u>				
Lund	1,020	1,074	1,020	1,074
Stockholm	2	6	2	6
Norrköping	-	-	410	406
Järfälla	131	142	131	142
Kumla	-	-	-	12
Total	1,153	1,222	1,563	1,640
<u>Elsewhere</u>				
Denmark	-	-	11	-
Norway	-	-	117	-
England	12	-	57	-
USA	-	-	24	-
Philippines	1	-	425	-
Thailand	-	-	430	-
Total	1,166	1,222	2,627	1,640

Source: Annual reports Å&R, 1990, Who owns whom 1991.

It seems like the top of Å&R have been too heavy or overpaid, or both. This observation is based on the fact that in 1990 the total remuneration for the board and managing director was cut from SEK 700,000 to SEK 502,000.

The average labour costs per person for Å&R in Sweden only rose 0.7%, whereas inflation amounted to much higher levels.

It will come as no surprise that workers in Europe are better off than those in Asia. In fact the average wage for Swedish Å&R employees was ten times that of the Thai colleagues:

# An International Company With

Following the corporate acquisitions of recent years, Stora has developed to become one of the leading forest products industries worldwide, with an extensive international network of operations.

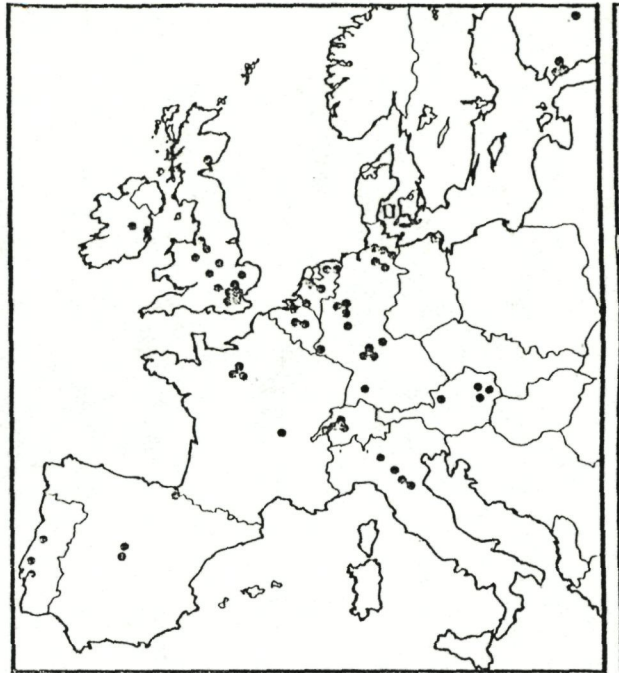
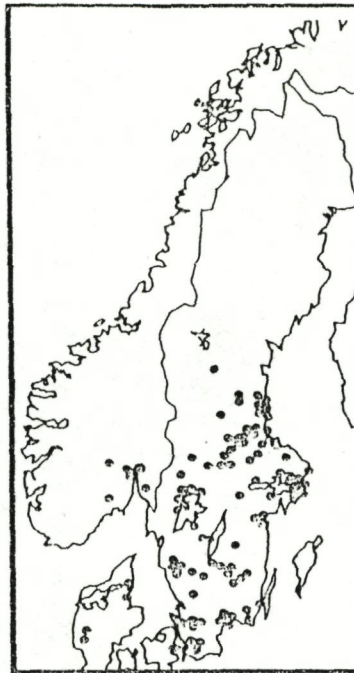
The accompanying illustration shows Stora's international spread.

Through the acquisition of the forest-products company Billerud in 1984 and Papyrus in 1986 and through its own investments, Stora has become Europe's largest forest-products industry, and one of the world's leading companies in the fields of pulp, newsprint, fine papers, packaging papers and packaging board.

As a result of the acquisition of Swedish Match, Stora has expanded into more consumer-oriented product areas, such as building and interior products, consumer products and packaging, as well as the chemicals market.

Stora is now a strong internationally oriented Group, operating in 50 countries with approximately 54,000 employees. Of its total sales, which amount to approximately SEK 40 billion, SEK 29 billion is attributable to markets outside Sweden, of which EC countries account for SEK 17 billion, SEK 4 billion comes from other European countries, 4 billion from North America and SEK 4 billion from the rest of the world.

Stora has its own forest holding, amounting to about 1.6 million hectares of productive woodland, as well as hydropower facilities with a total annual production capacity of Gwh 3,800. As well as being a substantial capital reserve, these tangible assets provide the basis for forest products operations.



## EUROPE

### SWEDEN

#### STORA POWER

Falun  
Borlänge  
Bjersås

#### STORA FOREST

Falun  
Sveji  
Söderhamn  
Mora  
Torshög  
Ludvika  
Hagfors  
Tierp  
Färsnäs  
Årjika  
Enköping  
Säljö  
Oxelbo

#### STORA KEMI

Stora Kemi AB  
Alby Kemi AB  
Skoghäll Kemi AB  
Alby Systems  
Stora Koppbergst  
Dacell

#### STORA CELL

Stora Cell AB  
Skutskar  
Sawdust  
Skoghäll  
Norrundet Bruks AB

#### STORA NEWS

Stora News AB  
Stora Kvartsveden AB  
Hyllie Bruks AB

#### BILLERUD

Billerud AB  
Gruvön  
Skoghäll  
Billeruds Bruk  
Skott-Billerud AB  
Koppberg AB  
Fors  
Hammarby  
Oppboja AB  
Paccac AB  
Skoghäll  
Vålberg  
Fågesta

#### PAPYRUS

AB Papyrus  
Papyrus, Marudal AB  
Papyrus, Grycksbo AB  
Papyrus, Björnå AB  
Pappersgruppen AB  
Marudal  
Johanneshov  
Malmö  
Norrköping  
Hölsjöström

#### STORA TIMBER

Stora Timber AB  
Åla  
Gruvön  
Hällefors  
Koppberg  
Långby  
Västern, Tröber, AB  
Sveby AB  
Fredriksson & Co AB

#### TARKETT

Tarkett AB  
Hornby  
Stockholm  
Härnsjö  
Nässun  
Bröby  
Ljusne  
Tarkett Svenska  
Forsalping AB

#### STORA KITCHEN

Marudal AB  
Bostrom Guss AB  
Geus Guss AB  
N A Eriksson AB  
HTH Kokkener AB  
E Lekson AB  
Star Guss AB  
Näs, Tronesson AB  
Nyström & Lundell  
Forsalping AB  
Svenska Guldslö  
Jönköping AB

#### SWEDOOR

Swedoor AB  
Åstorp  
Forsström  
Veitlanda  
SP Snickener AB  
AB Gunnarsson & Co  
Loverne Dörfabrik AB  
Bosholm Dörf AB  
Bar Dörren AB  
SP Snickener Malmö AB  
SP Snickener, Storhålan AB

#### STORA TEKNIK

Falun  
Säljö

#### SWEDISH MATCH

Arenco Match Machinery AB  
Finex International AB  
Klippan  
Lund  
AB Jönköpings Vårcan  
Jönköping  
Tidåholm  
Veitlanda  
JD Stora AB  
Kuddeby  
Nissafors  
Lundberg  
Svevick, Tessa AB  
Långsgrus  
Klippan  
AB Finex  
Svenska Tandstuckbolaget  
Forsalpingaktiebolag

#### FASTIGHETSBOLAGET

#### MATCH

#### STORALENE AB

#### STORA DATA

Falun  
Söderhamn

#### STORA FINANSTANSICER

Stora Finansförvaltning AB

#### STORA INKOP OCH

#### TRANSPORT

#### ÅKERLUND & RAUSING

Åkerlund & Rausing  
Lund  
Stockholm  
Järfälla  
ÅR Carton AB

#### DENMARK

#### PAPYRUS

Haverholm Papir A/S  
Ballerup  
Ålbjerg  
Papyrus Koppberg A/S  
L Simon A/S

#### STORA TIMBER

Skandinavisk Trælast  
agentur A/S

#### TARKETT

Tarkett Aps  
Pegulan A/S

#### STORA KITCHEN

Stora Kitchen A/S  
HTH Kokkener A/S  
Implast A/S  
SM Production Aps  
Danica Kokkener A/S (51%)  
Marudal

#### SWEDOOR

Swedoor A/S

#### SWEDISH MATCH

Star Mark A/S

#### ÅKERLUND & RAUSING

A S Åkerlund & Rausing

#### FINLAND

#### SWEDOOR

SO Outohallisuus OY

#### TARKETT

Tarkett OY

#### STORA KITCHEN

HTH Keittot OY  
Marudal OY

#### NORWAY

#### STORA KEMI

Rana Kemi A S

#### PAPYRUS

Pappersgruppen A/S

#### TARKETT

Tarkett A S

#### STORA KITCHEN

Sjgda Industri A/S  
HTH Kjøkken A/S  
Marudal A/S

#### SWEDOOR

Swedoor A S

#### SWEDISH MATCH

A S Pava Finex  
Nordski Tandstikker A/S

#### ÅKERLUND & RAUSING

Transparent Emballage A/S

### WEST GERMANY

#### STORA CELL

Stora Cell GmbH & Co KG

#### BILLERUD

Walter Durbeck Papiersack  
fabriken GmbH & Co KG  
Billerud GmbH  
Koppberg GmbH

#### PAPYRUS

Papyrus Deutschland GmbH

#### STORA TIMBER

Stora Timber GmbH & Co KG

#### TARKETT

Klingenberg Dekoramik GmbH  
Pegulan Werke AG  
Frankenthal  
Osterberg  
Ramsstein  
Konz  
Tarkett GmbH  
Pegulan Vertriebs GmbH  
Fehlt & Fagerlin

#### STORA KITCHEN

Star Möbelwerk GmbH  
HTH Küchen GmbH

#### SWEDOOR

Swedoor Bauelementvertrieb  
GmbH

#### SWEDISH MATCH

Åkerlund & Rausing  
Papierwaren GmbH  
Hochheim/Mann  
Esslingen  
Wilkinson Sword GmbH  
Deutsche Zundholzfabriken  
GmbH  
Swedish Match Advertising  
Products GmbH

#### ÅKERLUND & RAUSING

Åkerlund & Rausing  
Verpackung GmbH  
Cekacan Europe GmbH

#### STORA

Stora GmbH  
Swedish Match Risk Management  
& Insurance Broker GmbH

### AUSTRIA

#### TARKETT

Durmont Teppichbodenfabrik  
GmbH  
Hertberg  
Ebergsässing  
Tarkett GmbH  
Pegulan GmbH

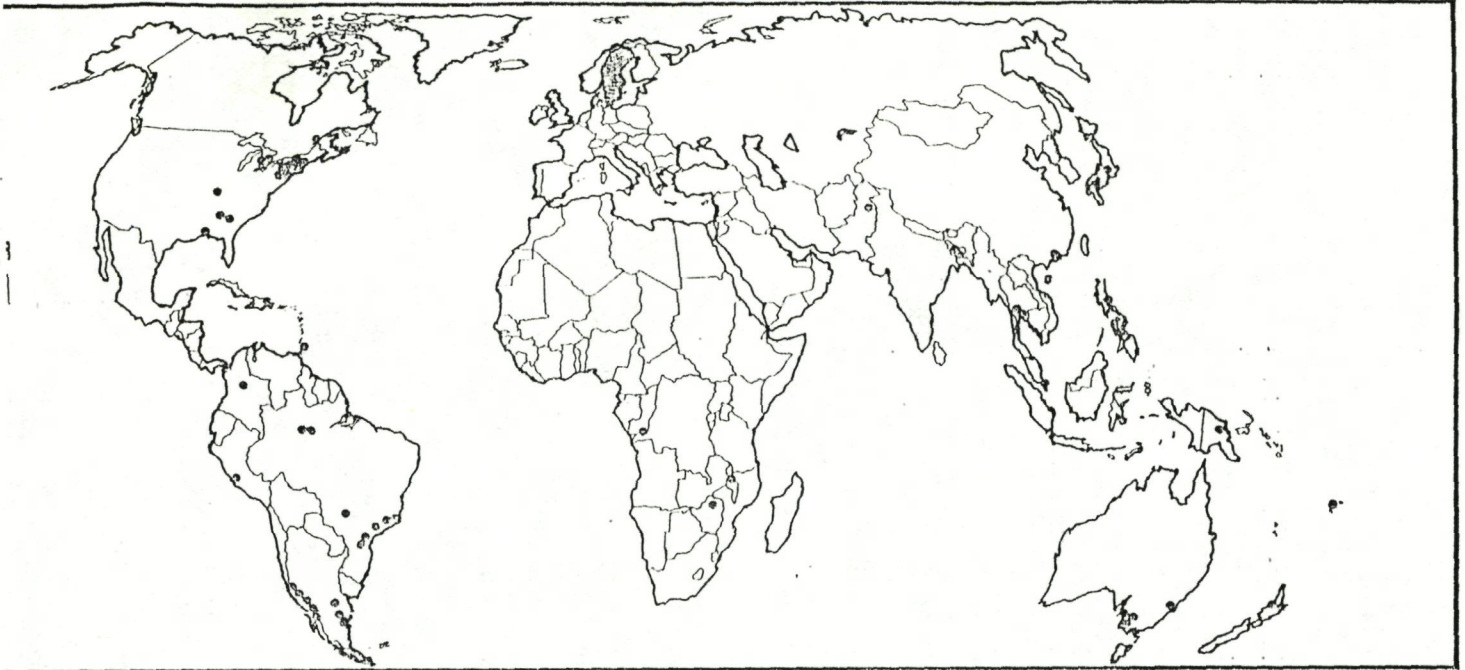
#### SWEDISH MATCH

Sinus Solo Zundholz GmbH  
Wilkinson Sword GmbH

#### STORA

Stora Koppberg GmbH

# Operations In 50 Countries



SWITZERLAND	ITALY	BELGIUM	AFRICA	NORTH AMERICA	LATIN AMERICA
<b>TARKETT</b> Pigolan SARL	<b>TARKETT</b> Gruppo Ceramiche Ricchetti S.r.l. Nuove Ceramiche Ricchetti S.r.l. Sassuolo Mordano Pegagus S.p.A. Pegulan Italiana S.p.A.	<b>PAPYRUS</b> Forest Products S.A.	<b>MALAWI</b> <b>SWEDISH MATCH</b> The Match Company (Malawi) Ltd	<b>USA</b> <b>STORA KEMI</b> Alby Olin Chlorates Company <b>PAPYRUS</b> Newton Falls Paper Mill Inc <b>TARKETT</b> Hans Tarkett Inc Tarkett Inc - Parsippany, NJ - Whitehall, PA - Vails Gate, NY	<b>ARGENTINA</b> <b>SWEDISH MATCH</b> Cia General de Fosforos - Sud America SA - Buenos Aires - Parana - La Plata
<b>GREAT BRITAIN</b> <b>STORA CELL</b> Stora Cell Ltd <b>STORA NEWS</b> Stora News Ltd <b>BILLERUD</b> Robert L Fleming Ltd Newton Kyme Board Mill Ltd Billerud Sales Ltd Koppaberg Ltd <b>PAPYRUS</b> Barnett & May Ltd Papyrus Ltd <b>STORA TIMBER</b> Stora Shipway Ltd R A Taylor Ltd Stora Vaneer Timber Ltd <b>STORA KITCHEN</b> Star Interiors Ltd <b>TARKETT</b> Tarkett Ltd Pegulan Ltd <b>SWEDOOD</b> Scandinor Ltd <b>SWEDISH MATCH</b> Bryant & May Ltd Leverpool High Wycombe Wilkinson Sword Ltd Cranington High Wycombe Wilkinson Sword Group Ltd <b>ÅKERLUND &amp; RAUSING</b> East & Baker Ltd Åkerlund & Rausing Ltd Bury Shrewsbury Wickford <b>STORALENE</b> Storalene Ltd	<b>IRELAND</b> <b>TARKETT</b> Tarkett Ltd <b>SWEDISH MATCH</b> Maguire & Paterson Ltd <b>STORA</b> Stora Ireland Ltd <b>THE NETHERLANDS</b> <b>BILLERUD</b> Stora Billerud BV <b>STORA TIMBER</b> J Schoonmakers Belier BV - Amsterdam - Moerdijk - Oss - Terneuzen <b>SWEDISH MATCH</b> Poppell BV BV Nederlandse Lucifers Handelmaatschappij v/h J.W. Attena & Co <b>STORA</b> Stora Koppaberg Bergskov BV <b>LUXEMBURG</b> <b>STORA</b> Stora Reinsurance S.A.	<b>FRANCE</b> <b>STORA CELL</b> Stora Cell S.A. <b>BILLERUD</b> Billerud S.A. <b>STORA TIMBER</b> Scandinavia S.A. <b>TARKETT</b> Tarkett S.A. <b>SWEDISH MATCH</b> Fosfor S.A. Adco S.A. Crocket S.A. Wilkinson Sword SARL <b>ÅKERLUND &amp; RAUSING</b> Åkerlund & Rausing SARL <b>STORA</b> Stora Koppaberg Bergskov S.A. <b>PORTUGAL</b> <b>STORA CELL</b> Celia SARL <b>SWEDISH MATCH</b> Sociedade Nacional de Fosforos SARL - Livisban - Porto <b>SPAIN</b> <b>STORA NEWS</b> Stora Espana S.A. <b>SWEDISH MATCH</b> Wilkinson Sword SARL Madrid Irun	<b>ZAIRE</b> <b>SWEDISH MATCH</b> Manufacture Zairoise des Allumettes S.P.R.L. <b>ZIMBABWE</b> <b>SWEDISH MATCH</b> Lion Match Ltd <b>ASIA</b> <b>BANGLADESH</b> <b>SWEDISH MATCH</b> Dhaka Match Industries Co Ltd - Dhaka - Khulna <b>THE PHILIPPINES</b> <b>SWEDISH MATCH</b> Phanco Industries Inc Ottolinea Philippines Inc <b>ÅKERLUND &amp; RAUSING</b> Phanco Industries Inc <b>HONGKONG</b> <b>PAPYRUS</b> Hagner Dahl (HK) Ltd <b>TARKETT</b> Tarkett (Far East) Ltd <b>JAPAN</b> <b>SWEDISH MATCH</b> Wilkinson Sword Group Japan Branch <b>PAKISTAN</b> <b>SWEDISH MATCH</b> Orient Match Company Ltd <b>SINGAPORE</b> <b>PAPYRUS</b> Stora (Singapore) Pte Ltd <b>THAILAND</b> <b>SWEDISH MATCH</b> The Thai Match Company Ltd <b>ÅKERLUND &amp; RAUSING</b> Strongpack Co. Ltd	<b>CANADA</b> <b>STORA KEMI</b> Alby Chlorates Canada Inc Alby Systems Engineering <b>STORA NEWS</b> Stora Forest Industries Ltd <b>SWEDISH MATCH</b> Wilkinson Sword Canada Inc. - Toronto - Pembroke <b>OCEANIA</b> <b>AUSTRALIA</b> <b>TARKETT</b> Tarkett Australia Pty Ltd <b>STORA KITCHEN</b> HSH Kitchens <b>SWEDISH MATCH</b> Bryant & May Pty Ltd Wilkinson Sword Pty Ltd - Fairfield - Victoria Bryant & May Pty Ltd - Fairfield - Victoria <b>FIDJI</b> <b>SWEDISH MATCH</b> Pacific Manufacturers Ltd <b>NEW ZEALAND</b> <b>SWEDISH MATCH</b> Wilkinson Sword (NZ) Ltd <b>PAPUA NEW GUINEA</b> <b>SWEDISH MATCH</b> Melanesian Matches Pty Ltd - Lae - Papua	<b>BRAZIL</b> <b>STORA KEMI</b> Alby Eletronica <b>SWEDISH MATCH</b> Cia Brasileira de Fosforos Crocket de Amazona Ltda - Manaus - Rio de Janeiro Cia Fiat Lux de Fosforos de Seguranca - Rio de Janeiro - Curitiba - São Lourenço - Paoli - São Gonçalo Fiat Lux Empresa Agrícola de Florestamento e Bellestamento Ltda Fosforos de Norte SA Wilkinson Sword da Amazona Industria de Cuiabana Ltda <b>PERU</b> <b>SWEDISH MATCH</b> Cia Nacional de Fosforos "La Llama" SA <b>CHILE</b> <b>STORA KEMI</b> Alby Quimica Chilena Ltda <b>SWEDISH MATCH</b> Cia Agrícola y Foresta "El Alamo" Ltda - Parícut - Berengo Cia Chilena de Fosforos SA - Sawwago - Tarea TEMISA - Berengo - Los Lagos <b>COLOMBIA</b> <b>SWEDISH MATCH</b> Compania Fostorera Colom biana SA <b>DOMINICAN REPUBLIC</b> <b>SWEDISH MATCH</b> Fábrica Nacional de Fosforos CA <b>TRINIDAD</b> <b>SWEDISH MATCH</b> Trinidad Match Factory Ltd

Average Wages, salaries and other remuneration per employee (excl. board of directors and managing director) (SEK 1000 per person)

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	Parent	
	1990	1989
Sweden	195.07	193.63
	Group	
Denmark	208.36	
Norway	184.44	
England	200.00	
USA	259.17	
Philippines	23.08	
Thailand	19.89	

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Source: annual report Å&R



## Åkerlund &amp; Rausing Production Units.

## Åkerlund &amp; Rausing Sales Offices.

## SWEDEN

Head office  
 AB Åkerlund & Rausing  
 Box 22  
 S-221 00 LUND  
 Street address:  
 Södra Industriområdet  
 Tel: Int + 46-46 18 30 00  
 Telex 32350 package s  
 Telefax: Int + 46-46 11 36 00

Å&R Ceka International  
 Box 547  
 S-175 26 JÄRFÄLLA  
 Street address:  
 Veddestavägen 7  
 Tel: Int + 46-8 36 26 25  
 Telex 17261 ceka s  
 Telefax: Int + 46-8 761 31 00

Å&R Carton AB  
 Box 921  
 S-601 19 NORRKÖPING  
 Street address:  
 Malmgatan 25  
 Tel: Int + 46-11 10 64 00  
 Telex 64039 carton s  
 Telefax: Int + 46-11 12 61 38

Alfatar AB  
 (50% Åkerlund & Rausing,  
 50% Alfa-Laval)  
 Box 198  
 S-221 00 LUND  
 Street address:  
 Maskinvägen 5  
 Tel: Int + 46-46 16 07 00  
 Telex 33072 alstar s  
 Telefax: Int + 46-46 13 69 19

## NORWAY

Transparent Emballasje A/S  
 Postboks 238  
 N-3001 DRAMMEN  
 Street address:  
 Nedre Eiker vei 12  
 Tel: Int + 47-3 83 69 90  
 Telex 76392 trans n  
 Telefax: Int + 47-3 89 51 27

## WEST GERMANY

Åkerlund & Rausing  
 Verpackung GmbH  
 Postfach 1180  
 D-6203 HOCHHEIM/ MAIN  
 Street address:  
 Feldbergstrasse 9  
 Tel: Int + 49-6146 510  
 Telex 4182367 arhm d  
 Telefax: Int + 49-6146 511 71

## INDIA

A.R Packaging Systems Ltd.  
 'Suryodaya'  
 1-10-60/3 Begumpet  
 HYDERABAD 500 016  
 Tel: Int + 91-842 84 84 92  
 91-842 82 55 30  
 Telex 425-6847 ares in

## THAILAND

Strongpack Co. Ltd.  
 P.O. Box 101059  
 BANGKOK 10311  
 Street address:  
 91 Moo Watkingkaew Road  
 Bangplee  
 S-AMUTPRAKARN 10540  
 Tel: Int + 66-2 316 90 46-47  
 Telex 21440 spackth th  
 Telefax: Int + 66-2 316 81-89

## THE PHILIPPINES

Phimco Industries, Inc.  
 P.O. Box 7215  
 Air Mail Distribution Center  
 MIA  
 Street address:  
 Phimco Compound  
 Punta Sta. Ana  
 MANILA  
 Tel: Int + 63-2 70 10 31 to 39  
 Telex 14731 phimco ps (CWI)  
 Telefax: Int + 63-2 818 04 61

## SWEDEN

AB Åkerlund & Rausing  
 Box 20070  
 S-161 02 BROMMA  
 Street address:  
 Karisbodavägen 39  
 Tel: Int + 46-8 29 04 50  
 Telefax: Int + 46-8 98 44 16

## DENMARK

A/S Åkerlund & Rausing  
 Hvidovrevej 59 B  
 DK-2650 HVIDOVRE  
 Tel: Int + 45-1 75 86 00  
 Telefax: Int + 45-1 75 09 00

## FINLAND

AB Åkerlund & Rausing  
 Haantie 4  
 SF-28600 BJÖRNEBORG  
 Tel: Int + 358-939 20555  
 Telefax: Int + 358-939 27162

## FRANCE

Åkerlund & Rausing SARL  
 33, Rue d'Amsterdam  
 F-75008 PARIS  
 Tel: Int + 33-1-45 26 02 61  
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1 US\$ (USD) = SEK 6.175

1 HFL (NLG) = SEK 3.19

1 DM (DEM) = SEK 3.61

1 FF (FRF) = SEK 1.06

1 £ (GBP) = SEK 10.72