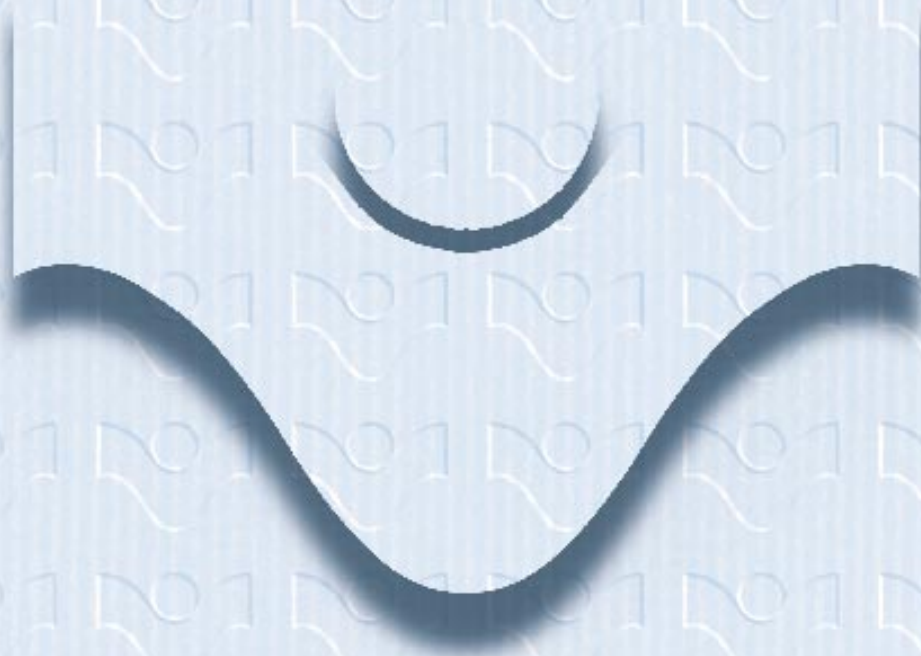


# ANNUAL REPORT 1998



## ANNUAL GENERAL MEETING

The Annual General Meeting will be held on Thursday, March 25, 1999 at 4.00 p.m. at Group headquarters in Tampere, Finland, Yrittäjänkatu 21.

## INTERIM REPORTS

Tamfelt will issue two Interim Reports in 1999, Thursday, June 3 and Wednesday, October 6.

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*The Annual Report is a translation from  
the original Finnish text.*



## COMPANY PROFILE

Tamfelt is one of the pioneers of Finnish industry. The company was founded over 200 years ago in 1797. It was first listed on the Helsinki Stock Exchange in 1942.

Tamfelt Group has four strategically located plants: one in the United States, one in Portugal and two in Finland. The plant in Tampere, Finland, is one of the largest and most modern in the world today.

The company's main products are forming fabrics, press felts and dryer fabrics for the pulp and paper industry. Filter fabrics cover a broad range, including the pulp, mining

and chemical industries.

Tamfelt's quality system is certified according to the most recent SFS-EN ISO 9001 quality standard and the environmental management system according to the SFS-EN ISO 14001 standard.

Tamfelt's customers require increasingly efficient products and advanced technical service to stay in the vanguard of the development. Tamfelt's state-of-the-art technology together with prompt and flexible service ensure the availability of products and technical expertise whenever the need arises in a customer's mill.

## KEY DATA

		1998	1997	Change %
Net sales	FIM mill.	615	607	1
	€ mill.	103	102	
Income before taxes and minority share	FIM mill.	124	137	-9
	€ mill.	21	23	
Gross investments	FIM mill.	104	60	73
	€ mill.	17	10	
Earnings/share	FIM	10,05	11,15	-10
	€	1,69	1,88	
Equity/share	FIM	64	59	8
	€	11	10	
Dividend/share common	FIM	4,95	4,65	
	€	0,83	0,78	
preferred	FIM	5,15	4,80	
	€	0,87	0,81	
Return on net assets, %		21	26	
Equity/Assets ratio, %		78	77	
Personnel, Dec. 31		1304	1229	6

## REVIEW BY THE PRESIDENT

Tamfelt's year was characterized by a favorable trend in the pulp and paper industry, especially during the first half of 1998. Volumes kept growing throughout the year helping our net sales reach an all-time high of 615 million markka. Our net income, 89.2 million markka, was the second best ever.

The total volume of orders in hand reached a record level at the end of 1998. Despite the continuing instability of the Far East economies, our shipments increased to these markets. Sharp slowdown in the European pulp and paper industry towards the end of the year may slightly affect our net sales in early 1999.

Our investments in production continued at a record rate. Gross investment expenditures of 104 million markka were the highest in the company's history. The third expansion of the Juankoski plant was completed and the new premises were occupied by the seaming department. The restructuring of filter fabrics production is now complete. Additional weaving capacity was added in all product groups. The investments enabled us to improve our delivery times, quality and productivity.

Investment programs scheduled for 1999 include a pre-needling line at Tampere, a needling department at Fanafel, and air conditioning of the Juankoski plant. All these



*Executive Board: Front (left) Jaakko Räsänen, Seppo Holkko, and Risto Hautamäki. Middle Kristian Lundström and Esko Pessi. Back Jyrki Nuutila, Kaarina Tasanen, Hannu Laine, and Jarmo Järviö. In the background the new pre-needling line to be started in spring at Tampere.*

accomplished, we will focus on improving productivity, efficiency and delivery strength as permitted by our increased capacity.

Preparations for the new millennium began early in our company. Problems that might arise in information systems or production processes have been carefully provided for. We anticipated the need for increasing customer service, sales and product development capabilities and recruited new personnel. We have advanced technical competence especially in the commissioning of new machinery. This Annual Report 1998 is the first to include a human resources account. Personnel-related costs are itemized in order to offer the information necessary for further development of our personnel. By investing in employees and their welfare we are investing in our future.

We have upgraded our product ranges at a brisk pace to meet the requirements of modern press sections. Our Ecostar felts have been a success. We have also been able to improve the performance of multi-

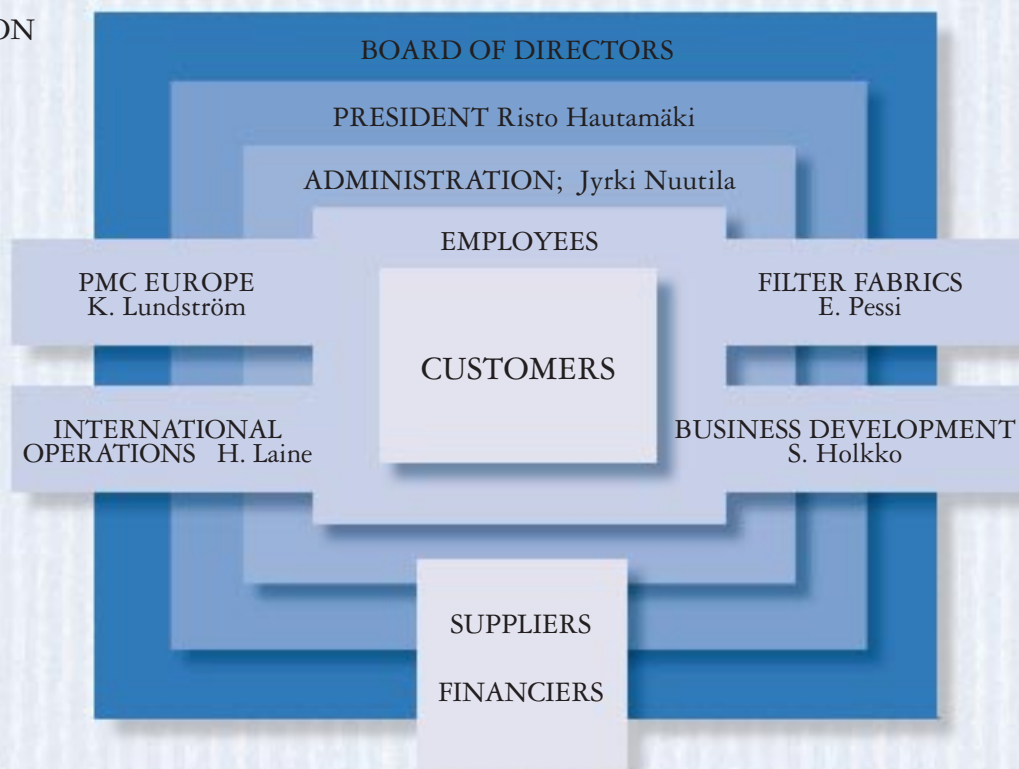
layer fabrics to the level required by high-speed twin-wire machinery. We have contributed to better runnability of dryer fabrics on paper machines by introducing new materials and weaving structures. Our long-term R&D on shoe press belts is beginning to bear fruit in the form of growing business. All this means we can face the new millennium with bright expectations.

I would like to thank all our customers, partners and stockholders for their cooperation and confidence in our company. My warmest thanks to all our personnel for the excellent year 1998 and for their commitment to build an increasingly strong Tamfelt.

*Risto Hautamäki*



## ORGANIZATION



### BOARD OF DIRECTORS

Mikael von Frenckell, Chairman, born 1947. Term expiring 1999. Holds 67,000 shares in Tamfelt Corp.

Axel Cedercreutz, Vice Chairman, born 1939. Term expiring 1999. Holds 166 343 shares in Tamfelt Corp.

Martin Lilius, born 1947. Term expiring 2000. Holds 3,104 shares in Tamfelt Corp.

Vesa Kainu, born 1947. Term expiring 1999. Holds no shares in Tamfelt Corp.

Jouko Oksanen, born 1951. Term expiring 2000. Holds no shares in Tamfelt Corp.

### AUDITORS

Jari Paloniemi  
Eero Suomela

Veikko Terho

Authorized Public Accountants  
KPMG Wideri Oy Ab

### EXECUTIVE BOARD

Risto Hautamäki, President and CEO  
Jyrki Nuutila, Senior Vice President, Deputy President  
Hannu Laine, Executive Vice President, Corporate Planning  
Seppo Holkko, Executive Vice President, Business Development  
Kristian Lundström, Executive Vice President, PMC Europe  
Esko Pessi, Executive Vice President, Filter Fabrics  
Kaarina Tasanen \*  
Jarmo Järviö \*  
Jaakko Räsänen \*

\* Personnel representatives

## ANNUAL REPORT BY THE BOARD OF DIRECTORS

### GENERAL

Tamfelt Group's main products include forming fabrics, press belts, dryer fabrics and filter fabrics for the paper, board and pulp industries. Filter fabrics are also delivered to the mining and chemical industries as well as wastewater treatment plants. Commercial laundries are another major customer segment; Tamfelt is the leading supplier of ironer felts for laundries.

The pulp and paper industry is Tamfelt's most important customer segment. Its production volumes grew in most principal markets, but the growth slowed down towards the end of 1998. Domestic production increased 5 %. In the latter half of the year, the utilization of paper machine capacity was lower, and short-term shutdowns occurred, notably in fine paper. The European paper industry grew at the rate of about 4 %, whereas output in the United States remained at the level of the previous year. In the Far East, paper production and the consumption of paper machine clothing are growing in the markets attractive to Tamfelt. These markets accounted for about 5 % of the company's consolidated net sales. Overall, the sales volume of the company's textiles clearly exceeded the growth of paper-making.



*Board of Directors: Front (left) Axel Cedercreutz and Mikael von Frenckell. Back Jouko Oksanen, Vesa Kainu, and Martin Lilius.*

Competition was increasingly heavy in the market for technical textiles. The average prices fell slightly and sales growth slowed. The customer base consists of consolidating company units, with corporate agreements driving competing suppliers to lower prices. Tamfelt, however, enjoys an established status as a supplier to sophisticated, high-speed paper and board machines. This status, together with new, innovative products are key strengths helping the company to increase volumes and shares in the principal markets and to secure full capacity utilization.

Tamfelt is a major supplier in the European market to paper machines over 5 meters wide and a market leader in forming fabrics engineered for SC paper machines and gap

formers. The company holds a large share of the clothing market for high-speed newsprint machines. Tamfelt contributed as full-line or major supplier for all domestic machine start-ups and on several start-ups of large and high-speed machinery in export markets.

The production of filter fabrics focuses on technically challenging heavy fabrics for wet filtration. Tamfelt is a globally significant supplier to the mining industry and pulp mills. Municipal waste water treatment is a growing market segment. Global problems in the mining industry were reflected in Tamfelt's production; both volumes and net sales fell. Towards the end of the year more orders began to flow in from mining customers. Order volumes for filter fabrics for the pulp and





*A new 13.5 m wide Jäger loom at Juankoski enables Tamfelt to supply clothing for the world's widest paper machines.*

paper industry remained good throughout 1998. Investments were made in the manufacture and marketing of new, heavy styles of filter fabrics, and the net sales are expected to regain growth as the product range expands.

The Group's order volumes and capacity utilization were good all through the year. Orders for paper machine clothing exceeded the average volume of the industry and reached an all-time high by the year-end. Orders for filter fabrics also took an upswing at the end of 1998.

## SALES AND EARNINGS

Consolidated net sales were FIM 615 million, up 1.3 % from FIM 607 million in 1997. The parent company's net sales remain-

ed unchanged. While the sales volumes of paper machine clothing grew as expected, net sales increased slowly due to lower price levels. Deliveries of filter fabrics decreased to the mining industry and the net sales were down. Subsidiary net sales continued to grow at a brisk rate.

While investment-boosted production capacity and high rates of utilization secured good earnings, the 1997 record level was not reached. Tamfelt Group's net income was FIM 113.2 million, down from 123.6 million in 1997, representing 18.4 % of 1998 net sales, compared to 20.4 % in 1997. Net income before taxes amounted to FIM 124.1 million vs. 137.1 million a year before. Return on net assets was 21.2 % compared to 26.3, and equity assets ratio 78.3 %

compared to 76.6 in 1997. Earnings per share adjusted for share issue were FIM 10.05, down from 11.15 in 1997. Investment expenditure was FIM 103.6 million. Higher exports and delivery term adjustments to stiffening competition increased the working capital significantly. Nevertheless, Group liquidity remained good throughout 1998. On the balance sheet date, interest-bearing loans amounted to FIM 7 million compared to 3 million in 1997, and the book value of liquid assets was FIM 134 million vs. 178 million in 1997. The company invests mainly in interest-bearing instruments. FIM 5.3 million, however, is contributed to other financial income by capital gain and dividends from shares quoted on the Helsinki Stock Exchange. The Group's net financial income totaled FIM 11.0 million compared to 13.5 million in the previous year.

The balance sheet total grew FIM 41 million to FIM 730 million at year-end. Fixed assets and working capital increased and liquid assets decreased.

The parent company's net sales were FIM 527 million compared to FIM 526 million in 1997. Net income was FIM 93.2 million compared to 105.9 million, and net income before extraordinary items, reserves and taxes was FIM 94.8 million compared to FIM 119.9 million in 1997. Extraordinary items comprise FIM 16.7 million group subsidy from Tamfelt Properties (15.6 million in 1997).



## STOCK EXCHANGE

The Annual General Meeting approved an increase of the capital stock from FIM 66.45 million to 88.60 million by a stock dividend. The Annual General Meeting also adopted the Board's proposal to grant certain Group executive members options to buy stock in the company. The options entitle them to subscribe for a total of 240,000 new preferred shares, including the stock dividend issue. The options exercised can increase the company's capital stock by a maximum amount of FIM 2.4 million. The options can be exercised for the first time on November 1, 2000 and they are valid up to March 31, 2004. On December 31, 1998 the subscription price was FIM 156.45.

The Board of Directors has decided to propose to the Annual General Meeting 1999 that the capital stock

be converted to euro and the nominal value of a share be abandoned.

Average all-share index prices on the Helsinki Stock Exchange rose 69 %. At the same time the HEX portfolio index rose 15 %. Tamfelt's common share adjusted for share issue was down 16 % from FIM 147.75 to 124.00, and preferred share 14 % from FIM 144.75 to 125.00. During the year, 87,697 shares were converted from common to preferred shares.

The Board of Directors' target is to distribute at least 40 % of earnings per share as dividends, providing it will not jeopardize the company's financial position or progress.

## INVESTMENTS

Growing demand for Tamfelt's technical textiles and the introduction of new products

called for major investments in production. The Group's gross investment outlay was the highest in the company's history - FIM 103.6 million, accounting for 17 % of the net sales. The expenditure in 1997 was FIM 60.1 million.

The third extension within two years of the Juankoski plant was completed at the end of 1998. The new, modern premises were occupied by the seaming department, whose machinery was upgraded at the same time.

The company's weaving capacity was increased in all parent company divisions with new and rebuilt looms. Growing capacity will shorten delivery times and improve quality, productivity and delivery strength. The production of filter fabrics was reorganized. Completed investments in warping facilities have produced a state-of-the-art unit in capacity as well as technology.

The construction of a new pre-needling line began in Tampere. It will be commissioned in spring to ensure consistent high quality even in the widest felts.

The production capacity of Fanafel Lda in Portugal was increased significantly. An extension of the facilities was completed in summer and a modern production line for laundry felts and dry filtration products was commissioned in fall. The investment program will continue by an increase in Fanafel's needling capacity.



*A weaving loom at Canton, rebuilt for the production of the newest styles of seamed press felts.*

## RESEARCH AND DEVELOPMENT

Cooperation with customers, suppliers and paper machine manufacturers has been increasingly intensified. A high number of programs are under way for the enhancement of paper quality, product runnability, and the development of paper machine clothing and raw materials.

The performance of multilayer forming fabrics has been improved by engineering product concepts for hybrid as well as gap former machines. This has enhanced runnability and the printability of paper. The easy clean project continued and it is backed by a new washing simulator installed in the laboratory. The idea is to employ both material and washing technology to improve the cleanness of forming fabrics on machines that use recycled fiber pulp.

The new-generation Ecostar laminated felts with smooth surface have ensured breakthrough on the most complex presses, such as the shoe presses of printing paper forming sections and the pick-up positions of high-speed machines. The Ecostar felts have helped to improve product runnability and paper quality and to prolong felt life.

The Group has invested heavily in the development of seamed press felts both at Tamfelt, Inc. and in the parent company. Already more than 30 % of Tamfelt, Inc.'s production consist of seamed felts, and the European share will grow in the next few years.

R&D continued on Tamfelt's newest product, the shoe press belt, and the sales advanced as intended. New belt styles were added to the range. The first grooved belts designed for high-speed paper machines were delivered and the

users' response has been encouraging. The experience will be used for the development of a Transfer belt to new types of closed press sections used in high-speed printing paper machinery. The first paper machines equipped with a Transfer belt will start up at the turn of the millennium.

Higher speeds and increasing running tension require stabler dryer fabrics. More exacting material requirements combined with new heat setting formulas have greatly improved the operation of forming fabrics. New dryer section designs have increased the need for dryer fabrics made of special materials. Goldstar is a special fabric for impingement drying and uniron positions of high-speed paper machines, where conventional materials have faced the problem of hydrolysis, which affects fabric life.

The seam styles of dryer fabrics have been upgraded to meet the latest requirements of strength and non-marking.

The cost of R&D was about 5 % of the Group's net sales.

## HUMAN RESOURCES

Tamfelt Group employment averaged 1291 people, of which an average of 1013 were in the parent company. In 1997, Tamfelt averaged 1202 employees and parent company 924. On the last day of the year, 1304 and 1229

*Expansions at Fanafel will double the plant's capacity.*





people were on the Group's payroll in 1998 and 1997, respectively. The parent company's employment was 1024 and 948, respectively.

The increase of 76 employees in the parent company was needed to enlarge production volumes at Juankoski and Tampere.

The total Group expenditure in personnel training was FIM 2.4 million, excluding payroll costs for the training periods and the training included in investment programs. Complying with the needs brought out in discussions with employees, the majority of

## ENVIRONMENT

Tamfelt's environmental management system under the SFS-EN ISO 14001 standard covering the Tampere and Juankoski



- FORMING FABRICS
- PRESS FELTS
- DRYER FABRICS

*In paper manufacturing, the function of forming fabrics, press felts and dryer fabrics (clothing) is to transport the web of paper through the process and to remove water as efficiently as possible. Clothing has a decisive effect on the quality of paper as well as the economy of the process. Each fabric and felt is tailored for a specific machine and application. Large, high-speed paper machines continue to set increasingly high demands on clothing. Customer-oriented product development is vital for the supplier of paper machine clothing.*

Technical customer service, sales and product development were also reinforced. In Tamfelt's subsidiaries, employment remained more or less unchanged.

The labor turnover at the group level was 6.4 % and in the parent company 5.2 %. The corresponding percentages for 1997 were 5.3 and 4.8. The average length of employment remained at 13 years. At the end of the year the average employee age was 41 for the Group as well as the parent company. The figures for the previous year were 41 and 40, respectively. Personnel welfare in the parent company was monitored by a working capacity index and absenteeism through sickness. The latter percentage was 5.2 compared to 5.0 in 1997.

the training programs focused on deepening and diversifying technical competence in Tamfelt's own and the customers' production processes, as well as quality and environmental knowhow, sales, and marketing. Instruction was also given in language and computer skills. Several work groups and departments participated in working community training and team training and the development of interactive skills.

During the year, the parent company offered training jobs to 140 students of vocational schools, polytechnics, and universities. It also provided 75 comprehensive school and high school students an opportunity for orientation to working life.

facilities was certified on March 2, 1998. The goals and targets to support sustainable development have been published in Tamfelt's environmental policy. The key actions aim at the recycling of materials and the reduction of slowly-decaying landfill waste. Compliance with the system was monitored by internal audits.

The environmental management program together with effective personnel training helped to cut back on the amount of landfill waste considerably. Recycling targets were exceeded by more effective reuse of materials. At the Tampere plant, special efforts were devoted to enhancing the attractiveness and cleanliness of the working environment and factory site.

## MAJOR START-UP DELIVERIES IN 1998

### FINLAND

UPM-Kymmene, Rauma	PM 4, new	LWC	Valmet (start-up 1/98)
UPM-Kymmene, Jämsänkoski	PM 3, rebuild	Label paper	Valmet (start-up 3/98)
UPM-Kymmene, Wisaforest	PM 1, rebuild	Sack paper	Voith Sulzer (start-up 10/98)
Enso Fine Papers, Veitsiluoto	PM 2, rebuild	Fine paper	Valmet (start-up 12/98)

### FRANCE

NSI Golbey	PM 2, new	News	Valmet (start-up 12/98)
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### CANADA

Stora Forest Ind. Port Hawkesbury	PM 2, new	SC	Valmet (start-up 3/98)
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### CHINA

Shanghai Hansol Potential	PM 1, new	News	Mitsubishi (start-up 1/98)
Shandong Chenming	PM 4, new	LWC	Valmet (start-up 12/98)
Jiangsu Gold East Paper, Dagang	PM 1, new	Fine paper	Voith Sulzer (start-up 2/99)

### INDONESIA

Sinar Mas, Tjiwi Kimia Mill	PM 11, new	Fine paper	Beloit (start-up 5/98)
Riau Paper	PM 1, new	Fine paper	Valmet (start-up 4/98)
Sinar Mas, Indah Kiat, Perawang Mill	PM 3, new	Fine paper	Beloit (start-up 10/98)

### KOREA

Hansol Paper	PM 32, new	Folding boxboard	Voith Sulzer (start-up 4/98)
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*Tamfelt supplied the full clothing for a start-up at the Myllykoski mill in September.*



## DIVISIONS

### PMC EUROPE

PMC Europe manufactures forming fabrics, press felts, dryer fabrics and shoe press belts for the paper, board and chemical pulp industries. High-quality technical and laboratory services support Tamfelt's paper machine clothing products.

PMC Europe's growth in the key markets was, again, higher than the average growth in the industry. The product groups registered an order volume higher than in the previous year.

The increase of sales volume exceeded the growth in paper production, which means that market shares were gained. The sales in markka were higher than in the previous year. An increasing number of customers are large, global corporations. In the vigorous competition, PMC Europe has succeeded in securing long-term delivery contracts by offering customers the added value of excellence.

The Far East, despite its financial problems, has become one of PMC's key export areas, and the sales growth is expected to continue. Resources in the area have been strengthened with new agency agreements and investments in technical customer service. A new market area is Japan, where an agency agreement was made and sales began.

PMC Europe has actively encouraged the advancement of excellence together with customers and paper machine suppliers. Contribution to



customers' development objectives and problem solutions has led to higher appreciation by customers, as evidenced by growing delivery volumes.

Robust growth has required investments in building and machinery. Investments have been successful and on schedule, and the conversion of production plants into product plants is coming along smoothly in accordance with the layout plans.

### PMC NORTH AMERICA

TF Group, Inc. manufactures and supplies fabrics for the North American paper and board industries. State-of-the-art knowhow, expertise in papermaking, and cooperation with Tamfelt's international papermaking experts are strengths upon which the division is being developed.

Tamfelt's market share grew for the second successive year. TF Group's sales to non-group customers grew 15 %, while the total sales of paper machine clothing declined in the United States. The projected positive net profit is yet to be reached.

Sales to large corporations were up. The start-up of a new paper machine at Stora Port Hawkesbury in Nova Scotia, Canada, was a success. Tamfelt continues as the main supplier to the forming section of this modern world-class paper machine.

The largest increase was in the deliveries of seamed press felts. A dryer fabric loom was rebuilt for the weaving of seamed press felts



*The expansion of the seaming department at Juankoski was completed in December.*

and has been operating since August 1998. Another loom will be rebuilt in spring. It will further improve Tamfelt's delivery strength by providing the additional capacity to meet the rapidly growing demand for seamed press felts.

### FANAFEL LDA

Fanafel in Portugal is the leading manufacturer and supplier of felts for commercial laundries worldwide. The company also makes paper machine clothing for press

and dryer sections for pulp and paper industries. The third major line produces filtration fabrics and other textiles used in environmental protection. In 1998, Fanafel won the award for being "the best textile industry company" in the category of small and medium-sized companies in Portugal.

Fanafel's net sales and operating income increased. Over 65 % of the net sales come from exports. The main export areas are Spain, France and Germany.



*The filter fabrics weaving department moved to new efficient premises at the Tampere plant.*

A new production line was installed in summer 1998 and commissioned in September. The second phase of the investment will be in operation during 1999. Fanafel's output will be doubled by the new line.

#### FILTER FABRICS

The division supplies wet filtration media used in special applications in the forest, mining and chemical industries. The proportion of filter fabrics for municipal and industrial waste water treatment is growing. Companies supplying filtration equipment for these purposes are an important customer segment.

The price level and profitability of the customers' products followed a downward trend in 1998. The biggest decline was in the manufacture of color metals. This has affected the willingness of companies to invest in new filter equipment and thus limits delivery opportunities. The overall consumption of filtration media has levelled or has declined in certain areas.

Owing to the difficulties of the mining industry, the net sales of filter fabrics were lower than in the previous year. The income targets were not reached. Exports accounted for 80 % of the sales. Human resources were added in sales and product development during the year. This will help the division to respond to increasing demand for the current products and to penetrate new areas in order to ensure long-term growth.

A company was founded in Brazil to concentrate on sales to the mining industry from the beginning of 1999.

Rearrangements were completed for a unified, high-capacity plant. The 1997 investments in warping and heat setting were completed in 1998 and have fulfilled expectations. The division has purchased two new, wide looms for the weaving of heavy styles of filter fabrics. The first loom started at the end of 1998 and the second in spring 1999. The new premises and machinery contribute to higher efficiency and further improve the division's already strong delivery capacity.

#### YEAR 2000

Reaching the new millennium is not expected to cause any major problems at Tamfelt. Potential troubles have been provided for and information systems have been upgraded during earlier accounting periods. The company's production processes do not contain any equipment or systems that might cause problems according to the present state of knowledge. No exceptional costs are expected to arise from year 2000.

#### OUTLOOK

The market outlook for the pulp and paper industries weakened during the last quarter of the year and production volumes are not expected to recover until the end of 1999. New papermaking capacity is under construction in Western Europe, and it will increase demand from Tamfelt's key market segment. While the financial situation in Southeast Asia remains unstable, Tamfelt believes it will be able to increase delivery volumes to the area.

The record-high order volumes for paper machine clothing anticipate a growing delivery volume. Stiff price competition continues. The prospects for filter fabrics are stable in the pulp and paper industry, and in the mining industry the rate of incoming orders picked up towards the end of the year.

Tamfelt's financial performance is expected to remain good in 1999. The net income, however, is expected to be slightly lower due to declining capacity utilization in the pulp and paper industries.



## CONSOLIDATED STATEMENT OF INCOME JAN. 1 - DEC 31.

(FIM 1 000)

	1998	%	1997	%
<b>NET SALES</b>	615 260	100	607 313	100
Increase (+) or decrease (-) in finished goods inventories	10 806		17 673	
Production for own use	1 382		2 077	
Other operating income	6 171		8 587	
<b>Costs and expenses</b>				
Materials, supplies and products				
Purchases during the year	121 100		124 362	
Increase (-) or decrease (+) in inventories	-9 065		-4 630	
External services	5 839		8 230	
Personnel expenses	248 579		238 691	
Rents	2 567		2 630	
Other costs and expenses	113 109		112 832	
	<u>-482 129</u>		<u>-482 115</u>	
<b>OPERATING INCOME BEFORE DEPRECIATION</b>	151 490	25	153 535	25
Depreciation on fixed assets and other long-term expenditure	-38 338		-29 887	
<b>OPERATING INCOME</b>	113 152	18	123 648	20
<b>Financial income and expenses</b>				
Interest income	5 724		6 550	
Other financial income	7 054		12 504	
Interest expenses	-541		-600	
Other financial expenses	-1 259		-4 961	
	<u>10 978</u>		<u>13 493</u>	
<b>INCOME BEFORE EXTRAORDINARY ITEMS, TAXES AND MINORITY INTEREST/ INCOME BEFORE TAXES AND MINORITY INTEREST</b>	124 130	20	137 141	23
Income taxes	-34 882		-38 379	
Minority interest	-51		-63	
<b>NET INCOME FOR THE YEAR</b>	<u>89 197</u>	14	<u>98 699</u>	16

## CONSOLIDATED BALANCE SHEET DEC. 31

(FIM 1 000)

ASSETS	1998	%	1997	%
<b>FIXED ASSETS AND OTHER LONG-TERM INVESTMENT</b>				
Intangible assets				
Intangible rights	3 554		3 360	
Consolidated goodwill			808	
Other long-term expenditure	2 516		2 733	
	<u>6 070</u>	1	<u>6 901</u>	1
Tangible assets				
Land and water	6 144		5 686	
Buildings	65 645		55 683	
Machinery, equipment and furniture	194 159		150 358	
Other tangible assets	822		458	
Advance payments and construction in progress	16 810		6 178	
	<u>283 580</u>	39	<u>218 363</u>	33
Financial assets				
Shares and holdings	1 404		1 519	
Loans receivable	3 760		4 049	
	<u>5 164</u>	1	<u>5 568</u>	1
<b>CURRENT ASSETS</b>				
Inventories				
Raw materials and consumables	33 930		28 431	
Work in progress	72 991		68 805	
Finished products	84 471		75 039	
	<u>191 392</u>	26	<u>172 275</u>	25
Receivables				
Sales receivable	89 060		85 790	
Loans receivable	831		788	
Prepaid expenses and accrued income	19 717		20 062	
Other receivables			1 063	
	<u>109 608</u>	14	<u>107 703</u>	15
Securities				
Shares and holdings	4 055		6 816	
Other securities	66 593		81 073	
	<u>70 648</u>	10	<u>87 889</u>	14
Cash in hand and at bank				
	63 670	9	90 107	13
	<u>730 132</u>	100	<u>688 806</u>	100



LIABILITIES	1998	%	1997	%
<b>STOCKHOLDERS' EQUITY</b>				
Restricted equity				
Capital stock	88 600		66 450	
General reserve			15 522	
Non-restricted equity				
Contingency reserve	13 178		19 806	
Other non-restricted equity	378 462		322 508	
Net income for the year	89 197		98 699	
	<u>569 437</u>	78	<u>522 985</u>	76
MINORITY INTEREST	428	0	377	0
<b>CREDITORS</b>				
Long-term liabilities				
Other long-term liabilities	1 502		1 948	
Deferred tax liability	40 559		39 924	
	<u>42 061</u>	6	<u>41 872</u>	6
Current liabilities				
Loans from financial institutions	5 066		504	
Advance received	2 291		5 905	
Accounts payable	26 353		26 525	
Accrued liabilities and deferred income	84 048		88 021	
Other current liabilities	448		2 617	
	<u>118 206</u>	16	<u>123 572</u>	18
	<u>730 132</u>	100	<u>688 806</u>	100

## CONSOLIDATED STATEMENT OF CASH FLOWS

(FIM 1 000)

	1998	1997
<b>OPERATING ACTIVITIES</b>		
Internal financing		
Net operating income	113 152	123 648
Depreciation	38 338	29 887
Financial income and expenses	10 978	13 493
Taxes	<u>-34 882</u>	<u>-38 379</u>
	127 586	128 649
<b>CHANGE IN WORKING CAPITAL</b>		
Increase (-) or decrease (+) in inventories	-19 117	-25 716
Increase (-) or decrease (+) in short-term receivables	-1 906	-17 824
Increase (+) or decrease (-) in interest-free short-term debt	<u>-9 870</u>	<u>24 715</u>
	-30 893	-18 825
Cash flow from operations	96 693	109 824
<b>INVESTMENT</b>		
Capital expenditure in fixed assets	-103 621	-60 053
Sales of fixed assets	<u>232</u>	<u>8 922</u>
	-103 389	-51 131
Cash flow before financing	-6 696	58 693
<b>FINANCING</b>		
Increase (-) or decrease (+) in long-term receivables	404	778
Increase (+) or decrease (-) in long-term loans	-504	-511
Increase (+) or decrease (-) in deferred tax liability	635	-1 417
Increase (+) or decrease () in short-term loans	4 562	-14 847
Dividends	<u>-42 008</u>	<u>-38 021</u>
	-36 911	-54 018
Calculated increase in liquid assets increase (+) or decrease (-)	<u>-43 607</u>	<u>4 676</u>
Adjustments <sup>1)</sup>	-71	3 481
Balance-sheet increase (+) or decrease (-) in liquid assets	<u>-43 678</u>	<u>8 157</u>

The items of this Statement are not directly deducible from the Balance Sheet on account of changes in the Balance Sheet items.

<sup>1)</sup> including translation adjustments and exchange rate differences.



## STATEMENT OF INCOME JAN. 1 - DEC 31.

Parent company (FIM 1 000)

	1998	%	1997	%
<b>NET SALES</b>	527 000	100	526 216	100
Increase (+) or decrease (-) in finished goods inventories	10 309		17 411	
Production for own use	1 382		2 077	
Other operating income	5 004		7 257	
<b>Costs and expenses</b>				
Materials, supplies and products				
Purchases during the year	93 154		106 778	
Increase (-) or decrease (+) in inventories	-4 694		-4 405	
External services	5 986		7 891	
Personnel expenses	207 757		200 565	
Rents	19 988		19 790	
Other costs and expenses	98 077		92 177	
	-420 268		-422 796	
<b>OPERATING INCOME BEFORE DEPRECIATION</b>	123 426	23	130 165	25
Depreciation on fixed assets and other long-term expenditure	-30 192		-24 270	
<b>OPERATING INCOME</b>	93 234	18	105 895	20
<b>Financial income and expenses</b>				
Interest income	3 557		2 837	
Other financial income	2 852		16 550	
Interest expenses	-1 437		-1 691	
Other financial expenses	-3 407		-3 671	
	1 565		14 025	
<b>INCOME BEFORE EXTRAORDINARY ITEMS, RESERVES AND TAXES</b>	94 800	18	119 920	23
<b>Extraordinary income and expenses</b>				
Extraordinary income	16 650		15 600	
Extraordinary expenses	-16 650		-15 600	
	0		0	
<b>INCOME BEFORE RESERVES AND TAXES</b>	111 450	21	135 520	26
Increase (-) or decrease (+) in accelerated depreciation	-810		-45 199	
Increase (-) or decrease (+) in voluntary reserve			51 379	
Income taxes	-30 384		-39 726	
<b>NET INCOME FOR THE YEAR</b>	80 256	15	101 974	19

## BALANCE SHEET DEC. 31.

Parent company (FIM 1 000)

ASSETS	1998	%	1997	%
<b>FIXED ASSETS AND OTHER LONG-TERM INVESTMENT</b>				
Intangible assets				
Intangible rights	3 554		3 766	
Other long-term expenditure	<u>2 290</u>		<u>2 521</u>	
	5 845	1	6 287	1
Tangible assets				
Land and water	4 546		4 294	
Buildings	22 795		13 315	
Machinery, equipment and furniture	172 992		132 181	
Other tangible assets	822		458	
Advance payments and construction in progress	<u>16 035</u>		<u>5 500</u>	
	217 189	28	155 748	21
Financial assets				
Shares and holdings	205 422		205 104	
Loans receivable	<u>54 373</u>		<u>54 781</u>	
	259 795	32	259 885	35
<b>CURRENT ASSETS</b>				
Inventories				
Raw materials and consumables	28 967		24 273	
Work in progress	61 518		58 729	
Finished products	<u>66 864</u>		<u>59 345</u>	
	157 349	20	142 347	19
Receivables				
Sales receivable	73 276		66 775	
Loans receivable	761		695	
Prepaid expenses and accrued income	<u>13 510</u>		<u>28 847</u>	
	87 548	11	96 317	13
Securities				
Shares and holdings	65		2 053	
Other securities	<u>20 000</u>		<u>27 370</u>	
	20 065	3	29 423	4
Cash in hand and at bank	36 323	5	66 669	9
	<u>784 113</u>	100	<u>756 676</u>	100



LIABILITIES	1998	%	1997	%
<b>STOCKHOLDERS' EQUITY</b>				
Restricted equity				
Capital stock	88 600		66 450	
General reserve			15 522	
Non-restricted equity				
Contingency reserve	13 178		19 806	
Other non-restricted equity	328 504		268 538	
Net income for the year	<u>80 256</u>		<u>101 974</u>	
	510 538	66	472 290	62
<b>RESERVES</b>				
Total accelerated depreciation	138 254	18	137 444	18
<b>CREDITORS</b>				
Long-term liabilities				
Other long-term liabilities	1 500	0	1 862	0
Current liabilities				
Advance received	2 286		5 904	
Accounts payable	26 457		21 355	
Accrued liabilities and deferred income	71 716		77 459	
Other current liabilities	<u>33 362</u>		<u>40 362</u>	
	133 821	17	145 080	19
	<u>784 113</u>	100	<u>756 676</u>	100

## STATEMENT OF CASH FLOWS

Parent company (FIM 1 000)

	1998	1997
<b>OPERATING ACTIVITIES</b>		
Internal financing		
Net operating income	93 234	105 895
Depreciation	30 192	24 270
Financial income and expenses	4 358	7 072
Extraordinary items	16 650	15 600
Taxes	<u>-30 384</u>	<u>-39 726</u>
	114 050	113 111
<b>CHANGE IN WORKING CAPITAL</b>		
Increase (-) or decrease (+)		
in inventories	-15 002	-21 817
Increase (-) or decrease (+)		
in short-term receivables	8 769	-8 833
Increase (+) or decrease (-)		
in interest-free short-term debt	<u>-4 260</u>	<u>13 584</u>
	-10 493	-17 066
Cash flow from operations	103 557	96 045
<b>INVESTMENT</b>		
Capital expenditure in fixed assets	-91 193	-58 000
Sales of fixed assets	<u>5</u>	<u>126</u>
	-91 188	-57 874
Cash flow before financing	12 369	38 171
<b>FINANCING</b>		
Increase (-) or decrease (+)		
in long-term receivables	-2 703	3 372
Increase (+) or decrease (-)		
in long-term loans	-362	-361
Increase (+) or decrease (-)		
in short-term loans	-7 000	19 908
Dividends	<u>-42 008</u>	<u>-38 021</u>
	-52 073	-15 102
Calculated increase in liquid assets		
increase (+) or decrease (-)	<u>-39 704</u>	<u>23 069</u>
Balance-sheet increase (+) or decrease (-)		
in liquid assets	<u>-39 704</u>	<u>23 069</u>



## SIGNIFICANT ACCOUNTING POLICIES

### PRINCIPLES OF CONSOLIDATION

The consolidated accounts cover the parent company and those companies in which Tamfelt Corp., directly or indirectly, holds over 50 % of the voting stock. Associated undertakings have been consolidated according to their capital contribution.

The acquisition method has been adopted for consolidation.

A surplus of the purchase price of the shares in subsidiary company over their underlying net worth at the date of acquisition is shown in the consolidated accounts as goodwill, to be amortized over five years using the straight line method.

All inter-group transactions, pending margins, internal balances, and internal profits have been eliminated. Minority interests are deducted in the statement of income as an item of net income, and in the balance sheet as an item of stockholders' equity.

The income statements of the foreign group companies have been translated into markka at the average exchange rate for the year. Their balance sheets have been translated at the average rate quoted by the Bank of Finland on the balance sheet date. The resulting two-rate differences, together with the conversion adjustments resulting from the application of the acquisition method, and the exchange rate differences of equity-ranked inter-group loans are dealt with as translation adjustment in the non-restricted equity.

Change in accelerated depreciation and voluntary reserve has been split between change in deferred tax liability and income for the year.

Total accelerated depreciation and voluntary reserve have been divided between equity and the deferred tax liability included in creditors.

### NET SALES

For the computation of net sales, indirect taxes, discounts, and exchange rate differences have been deducted from the sales revenue.

### FOREIGN CURRENCIES

The parent company receivables and liabilities are booked at the average exchange rate quoted by the Bank of Finland on the balance sheet date. Current hedging instruments for foreign denominated items are entered at the value of the date, including the effect of interest.

### FIXED ASSETS AND DEPRECIATION

Fixed assets are stated in the balance sheet at acquisition cost less annual depreciation according to plan. Total accelerated depreciation is recorded in the parent company as a separate item in reserves.

Planned depreciation is computed using the straight line method over the useful economic life of the asset. The most common periods are:

Intangible rights	3 to 10 years
Consolidated goodwill	5 years
Other long-term expenditure	10 years
Buildings	25 to 50 years
Machinery and equipment	4 to 15 years
Other tangible assets	10 years

## INVENTORIES

Inventories are valued at lower of cost or market, at either the purchase price, or estimated net realizable value, whichever is lower. The purchase price is defined using the direct cost of acquisition or manufacture on the FiFo principle.

For foreign subsidiaries, inventories are valued in accordance with local practice and also include indirect costs of production.

## SECURITIES

Bonds are entered in assets at acquisition cost, allocating the difference between acquisition cost and nominal value as an increase or decrease of acquisition cost, according to maturity. In the final accounts, however, they are not valued higher than the market price. Shares and holdings are stated at the acquisition cost or market price, whichever is lower.

Nominal interest income from bonds is booked in interest income. The difference between acquisition cost and nominal value is allocated as an increase or decrease of interest income. If bonds are sold in advance of maturity date, a gain is entered in other financial income and a loss in other financial expenses.

## RESEARCH AND DEVELOPMENT

The R&D expenditure is booked as expenses of the financial period during which they arose, with the exception of research equipment, which is depreciated according to plan over five years by the straight line method.

## TAXES

Computed estimates of taxes are entered in the statement of income of the domestic group companies. Foreign subsidiary taxes are presented in the consolidated statements as booked in their respective original accounts.

## PENSION LIABILITY IN FINLAND

Liability for working employees is covered by pension insurance corporations. The parent company is responsible for voluntary, unregistered old age pensions. Corresponding figures are shown in the pledged assets included in Financial Data.



## FINANCIAL DATA

### STATEMENT OF INCOME (FIM 1 000)

#### NET SALES

Tamfelt's line of business is technical textiles.

#### Net sales in the various market areas

	Consolidated				Parent company			
	1998	%	1997	%	1998	%	1997	%
Nordic countries	320 210	52	314 616	52	319 434	61	314 000	60
Other Europe	176 286	29	190 256	31	133 130	25	151 982	29
North America	69 583	11	63 733	10	27 956	5	25 377	5
Far East	30 330	5	25 062	4	28 942	5	23 298	4
Other countries	18 851	3	13 646	2	17 538	3	11 559	2
Total	615 260	100	607 313	100	527 000	100	526 216	100

#### PERSONNEL EXPENSES AND FRINGE BENEFITS

	Consolidated		Parent company	
	1998	1997	1998	1997
Wages and salaries	201 999	192 572	167 821	161 730
Fringe benefits	493	432	493	432
Pension expenses	25 584	24 857	22 900	21 952
Other nonwage personnel expenses	20 996	21 262	17 036	16 883
Total	249 072	239 123	208 250	200 997

#### Remunerations

Presidents and directors	2 378	1 966	1 528	1 249
Other remunerations	201 416	185 498	167 334	149 721
Total	203 794	187 464	168 862	150 970

#### Employment

average	1 291	1 202	1 013	924
year-end	1 304	1 229	1 024	948

#### DEPRECIATION

#### Planned depreciation

	Consolidated		Parent company	
	1998	1997	1998	1997
Intangible rights	1 584	1 053	1 584	1 593
Consolidated goodwill	808	808	-	-
Other long-term expenditure	544	539	354	345
Buildings	3 538	123 <sup>*)</sup>	401	392
Machinery, equipment and furniture	31 722	27 349	27 835	21 925
Other tangible assets	142	15	18	15
Total	38 338	29 887	30 192	24 270

<sup>\*)</sup> Of a depreciation made in 1996 on loss of value, FIM 2.3 million was entered as income in 1997 following the sales of a building

INTER-GROUP FINANCIAL INCOME AND EXPENSES

	Parent company	
	1998	1997
Financial income from group companies		
Interest income from short-term receivables	73	78
Financial expenses paid to group companies		
Interest income from short-term debt	1 361	1 385

EXTRAORDINARY INCOME AND EXPENSES

Group subsidy from Tamfelt Properties	16 650	15 600
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CHANGE OF VOLUNTARY RESERVE

(increase + or decrease -)

	Parent company	
	1998	1997
Transition reserve	-	-51 379

TAXES

	Consolidated		Parent company	
	1998	1997	1998	1997
Taxes for the year	34 277	40 321	32 358	40 250
Taxes for earlier years	-30	-524	-1 974	-524
Change in deferred tax liability	635	-1 418		
Total	34 882	38 379	30 384	39 726



BALANCE SHEET (FIM 1 000)

INTANGIBLE AND TANGIBLE ASSETS 1998

	Acquisition cost Jan. 1	Increase Jan. 1 through Dec. 31	Decrease Jan. 1 through Dec. 31	Translation differences	Acquisition cost Dec. 31	Accumulated depreciation according to plan Dec. 31	Book value Dec. 31
<b>CONSOLIDATED</b>							
Intangible rights	16 622	1 374			17 996	-14 442	3 554
Consolidated goodwill	5 699				5 699	-5 699	0
Other long-term expenditure	4 117	327			4 444	-1 928	2 516
Land and water	5 686	458			6 144		6 144
Buildings	95 059	13 409			108 468	-42 823	65 645
Machinery, equipment and furniture	508 913	76 999	-5 031	-2 923	577 958	-383 799	194 159
Other tangible assets	765	382			1 147	-325	822
Advance payments and construction in progress	6 178	15 245	-4 573	-40	16 810		16 810
<b>Total</b>	<b>643 039</b>	<b>108 194</b>	<b>-9 604</b>	<b>-2 963</b>	<b>738 666</b>	<b>-449 016</b>	<b>289 650</b>
Machinery and equipment							166 198
<b>PARENT COMPANY</b>							
Intangible rights	20 689	1 374			22 063	-18 509	3 554
Other long-term expenditure	3 455	123			3 578	-1 288	2 290
Land and water	4 294	252			4 546		4 546
Buildings	13 883	9 791			23 674	-879	22 795
Machinery, equipment and furniture	399 510	68 736	-4 707		463 539	-290 547	172 992
Other tangible assets	765	382			1 147	-325	822
Advance payments and construction in progress	5 500	14 480	-3 945		16 035		16 035
<b>Total</b>	<b>448 096</b>	<b>95 138</b>	<b>-8 652</b>		<b>534 582</b>	<b>-311 548</b>	<b>223 034</b>
Machinery and equipment							150 023

INTANGIBLE AND TANGIBLE ASSETS 1997

	Acquisition cost Jan. 1	Increase Jan. 1 through Dec. 31	Decrease Jan. 1 through Dec. 31	Translation differences	Acquisition cost Dec. 31	Accumulated depreciation according to plan Dec. 31	Book value Dec. 31
<b>CONSOLIDATED</b>							
Intangible rights	15 161	1 461			16 622	-13 262	3 360
Consolidated goodwill	5 699				5 699	-4 891	808
Other long-term expenditure	3 854	271	-8		4 117	-1 384	2 733
Land and water	8 166		-2 896	416	5 686		5 686
Buildings	97 938	7 853	-12 527	1 795	95 059	-39 376	55 683
Machinery, equipment and furniture	448 229	56 210	-3 797	8 271	508 913	-358 555	150 358
Other tangible assets	765				765	-307	458
Advance payments and construction in progress	15 306	9 564	-15 306	-3 386	6 178		6 178
<b>Total</b>	<b>595 118</b>	<b>75 359</b>	<b>-34 534</b>	<b>7 096</b>	<b>643 039</b>	<b>-417 775</b>	<b>225 264</b>
Machinery and equipment							129 378
<b>PARENT COMPANY</b>							
Intangible rights	19 228	1 461			20 689	-16 924	3 765
Other long-term expenditure	3 455				3 455	-933	2 522
Land and water	4 294				4 294		4 294
Buildings	6 512	7 371			13 883	-569	13 314
Machinery, equipment and furniture	342 168	58 834	-1 492		399 510	-267 328	132 182
Other tangible assets	765				765	-307	458
Advance payments and construction in progress	15 236	5 500	-15 236		5 500		5 500
<b>Total</b>	<b>391 658</b>	<b>73 166</b>	<b>-16 728</b>		<b>448 096</b>	<b>-286 061</b>	<b>162 035</b>
Machinery and equipment							115 966

SHARES AND HOLDINGS OWNED BY THE GROUP AND THE PARENT COMPANY (1 000)

	Percentage of group ownership %	Percentage of group voting power %	Group ownership in equity FIM	in net income FIM	Percentage of parent company ownership	Shares owned by parent company Par value	Book value FIM
<b>GROUP COMPANIES</b>							
Fanafel Lda	98.2	98.2	23 347	2 778	72	PTE 304 136	15 870
TF Group, Inc. *	100	100	-4 992	-2 450	100	USD .	.
Tamfelt (UK) Ltd	100	100	170	-1	100	GBP .	181
Tamfelt Properties	100	100	194 603	218	100	FIM 83 109	187 535
Tamfelt Tecnologia em Filtração Ltda.	99.99	99.99	423	0	99.99	R\$ 100	423
Tampereen Verkatehdas Oy	100	100	23	0	100	FIM 10	10
Kiinteistö Oy Juvanmänty	100	100	52	0	0	-	-
Kiinteistö Oy Saarensahra	100	100	184	-1	0	-	-
							204 019

ASSOCIATED COMPANIES

Alakoski Oy	39	39	186	21	39	FIM 4	4
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OTHER PARENT COMPANY SHARES AND HOLDINGS

	Number of shares	Par value	Book value
HEX Ltd, Helsinki Securities and Derivatives Exchange, Clearing House	20 000	10 FIM	150
Condominiums and real estate companies			495
Other shares and holdings			125
Connection fees			629
			1 399

\* Including subsidiaries Formtec Forming Fabrics, Inc., Tamfelt, Inc., Tamfelt Canada, Inc. and Formtec Forming Fabrics of Canada, Inc.



FIXED ASSETS TAX VALUES

	Consolidated		Parent company	
	1998	1997	1998	1997
Land	4 654	4 489	4 046	3 881
Buildings	66 890	64 729	4 039	4 185
Shares and holdings	2 647	2 639	235 352	238 669

Tax values include the domestic fixed assets of parent company and group.  
In the absence of tax value, book value is shown.

LONG-TERM INVESTMENT AND LOANS RECEIVABLE/GROUP COMPANIES  
AND ASSOCIATED COMPANIES

Long-term investment in shares and loans receivable	Parent company	
	1998	1997
Group companies		
Shares	204 019	203 596
Loans receivable	50 612	50 732
Total	<u>254 631</u>	<u>254 328</u>
Associated companies		
Shares	4	4
Loans receivable	2 333	2 722
Total	<u>2 337</u>	<u>2 726</u>

CURRENT ASSETS

Receivables and liabilities/Group companies and associated companies	Parent company	
	1998	1997
Group companies		
Sales receivable	7 541	58
Loans receivable	-	-
Prepaid expenses and accrued income	-	15 600
Accounts payable	3 556	621
Accrued liabilities and deferred income	362	205
Other short-term debt	33 000	40 000
Current assets stock		
	Consolidated	Parent company
	Book value	Book value
	Market value	Market value
	4 055	5 510
		65
		399

STOCKHOLDERS' EQUITY

	Consolidated		Parent company	
	1998	1997	1998	1997
Capital stock Jan. 1	66 450	66 450	66 450	66 450
Stock dividend	22 150		22 150	
Capital stock Dec. 31	<u>88 600</u>	<u>66 450</u>	<u>88 600</u>	<u>66 450</u>
General reserve Jan. 1	15 522	15 522	15 522	15 522
Stock dividend	-15 522		-15 522	
General reserve Dec. 31	<u>0</u>	<u>15 522</u>	<u>0</u>	<u>15 522</u>
Restricted equity Dec. 31	<u>88 600</u>	<u>81 972</u>	<u>88 600</u>	<u>81 972</u>
Contingency reserve Jan. 1	19 806	19 806	19 806	19 806
Stock dividend	-6 628		-6 628	
Contingency reserve Dec. 31	<u>13 178</u>	<u>19 806</u>	<u>13 178</u>	<u>19 806</u>
Other non-restricted equity Jan. 1	421 207	355 621	370 512	306 559
Dividend	-42 008	-38 021	-42 008	-38 021
Change in translation adjustment	-737	4 908		
Net income for the year	89 197	98 699	80 256	101 974
Other non-restricted equity Dec. 31	<u>467 659</u>	<u>421 207</u>	<u>408 760</u>	<u>370 512</u>
Non-restricted equity Dec. 31	<u>480 837</u>	<u>441 013</u>	<u>421 938</u>	<u>390 318</u>
Total stockholders' equity	<u>569 437</u>	<u>522 985</u>	<u>510 538</u>	<u>472 290</u>
Distributable earnings	376 544	338 351	421 938	390 318

PARENT COMPANY CAPITAL STOCK AND CLASSES OF SHARES DEC. 31

	1998		1997	
	Number of shares	FIM	Number of shares	FIM
Common stock (20 votes/share)	3 377 999	33 779 990	2 599 272	25 992 720
Preferred stock (1 vote/share)	5 482 001	54 820 010	4 045 728	40 457 280
Total	<u>8 860 000</u>	<u>88 600 000</u>	<u>6 645 000</u>	<u>66 450 000</u>

VOLUNTARY RESERVE AND DEFERRED TAX LIABILITY

	Consolidated		Parent company	
	1998	1997	1998	1997
Accumulated depreciation Jan. 1	141 967	95 692	137 444	92 245
Changes during the year	1 735	46 275	810	45 199
Accumulated depreciation Dec. 31	<u>143 702</u>	<u>141 967</u>	<u>138 254</u>	<u>137 444</u>
Other voluntary reserve Jan. 1	619	51 956		51 379
Changes during the year	531	-51 337		-51 379
Other voluntary reserve Dec. 31	<u>1 150</u>	<u>619</u>		<u>0</u>
Accumulated depreciation and other voluntary reserve Dec. 31	<u>144 852</u>	<u>142 586</u>	<u>138 254</u>	<u>137 444</u>
Tax liability from reserves	-40 559	-39 924		
Reserves from equity	<u>104 293</u>	<u>102 662</u>		



## CREDITORS

	Consolidated		Parent company	
	1998	1997	1998	1997
Liabilities due within five years or later				
Other long-term liabilities	-	375	-	375

## PLEGDED ASSETS AND CONTINGENT LIABILITIES

	Consolidated		Parent company	
	1998	1997	1998	1997
a) Own debt				
Mortgages in land and buildings	1 297	1 802	500	500
b) Consolidated debt				
Guarantees			3 165	504
c) For others				
Guarantees	200	200	200	200
d) Other own liabilities				
Bill liabilities	105	199		
Leasing liabilities	5 050	7 886	1 733	1 598
Pension liabilities	1 101	1 101	1 101	1 101
Total	7 753	11 188	6 699	3 903

## OTHER DATA

### RISK MANAGEMENT

The means of hedging against currency risks include cash flow matching, forward contracts, and options.

The parent company has no loans denominated in foreign currency. Subsidiary loans are in the currency of the particular country. Current risk positions result only from foreign exchange purchases and sales in operating activities and from inter-group financial arrangements.

The current exchange rate risk involved in sales and purchases is mainly covered by forward contracts. In certain cases, even current foreign exchange positions arising from unfilled orders or pending offers are hedged against.

The group does not cover subsidiary equity or currency risks involved in equity-ranked loans.

In liquid fund investments, Tamfelt avoids risks. The company invests mainly in monetary instruments. Limited amounts of liquid funds can be placed in shares. The Board of Directors has confirmed principles for the taking of investment risks and risks with partners.

## CONSOLIDATED FINANCIAL SUMMARY

(FIM 1 000)

	1994	1995	1996	1997	1998
Net sales	451 837	501 939	531 765	607 313	615 260
Change %	-2.1	11.1	5.9	14.2	1.3
Exports and foreign subsidiaries	244 507	276 435	303 108	365 983	365 276
% of sales	54.1	55.1	57.0	60.3	59.4
Operating income	46 563	71 154	83 576	123 648	113 152
% of sales	10.3	14.2	15.7	20.4	18.4
Net income before taxes and minority interest <sup>*)</sup>	40 510	76 328	98 511	137 141	124 130
% of sales	9.0	15.2	18.5	22.6	20.2
Return on equity %	9.5	13.4	17.2	20.1	16.3
Return on net assets %	11.2	16.8	20.3	26.3	21.2
Equity/assets ratio %	59.1	65.2	75.4	76.6	78.3
Gross investment	21 905	38 941	53 039	60 053	103 621
% of sales	4.8	7.8	10.0	9.9	16.9
Average employment during the period	1 153	1 133	1 162	1 202	1 291

### RETURN ON EQUITY %

Net income before extraordinary items, taxes and minority interest - taxes	
Equity + minority interest (average)	x 100

### RETURN ON NET ASSETS %

Net income before extraordinary items, taxes and minority interest + interest and other financial expenses	
Balance sheet total - interest-free liabilities (average)	x 100

### EQUITY/ASSETS RATIO %

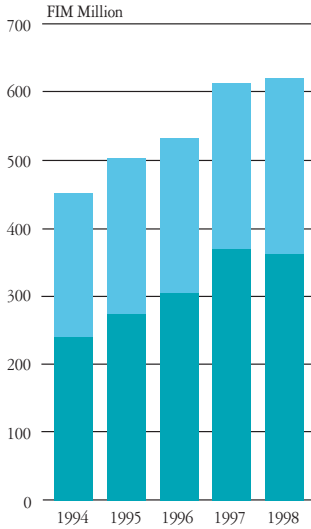
Equity + minority interest	
Balance sheet total - advance received	x 100

<sup>\*)</sup> Extraordinary items do not exist.

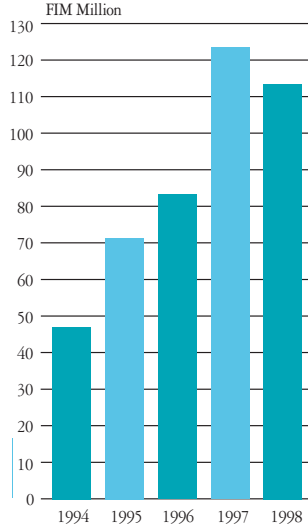


NET SALES, CONSOLIDATED

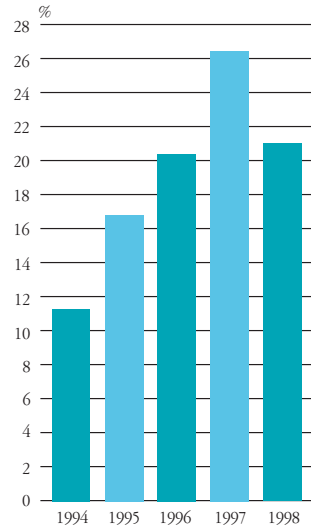
- Total net sales
- Exports and foreign subsidiaries



OPERATING INCOME, CONSOLIDATED

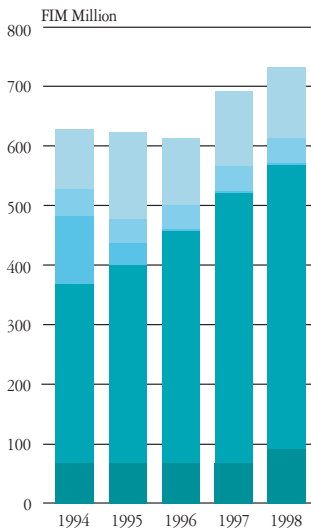


RETURN ON NET ASSETS, CONSOLIDATED

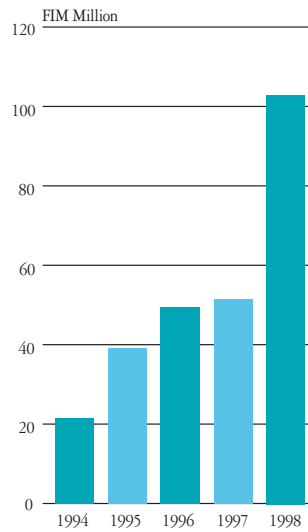


FINANCING, CONSOLIDATED

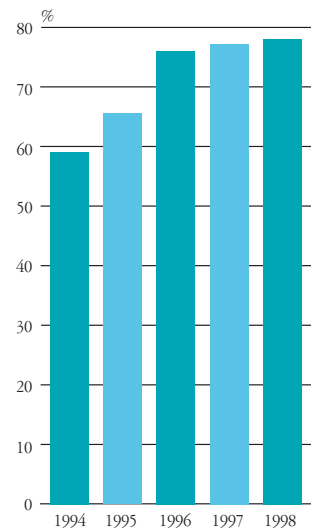
- Capital stock
- Other equity
- Long-term debt
- Deferred tax liability
- Short-term debt



NET INVESTMENTS, CONSOLIDATED

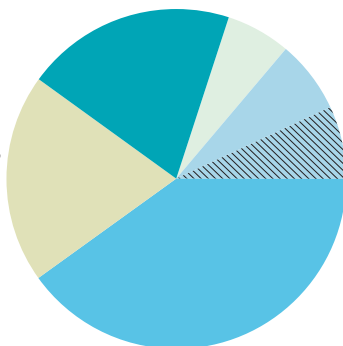


EQUITY/ASSETS RATIO, CONSOLIDATED



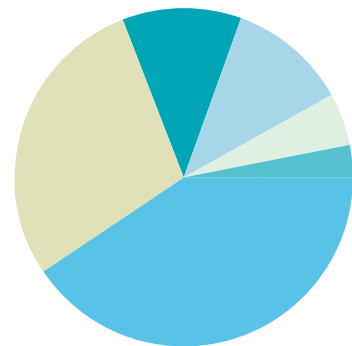
DISTRIBUTION OF INCOME 1998, CONSOLIDATED

- Personnel costs 40 %
- Raw materials and supplies 20%
- Other expenses 20 %
- Depreciation according to plan 6 %
- Net income 14 %, dividend 7 %



NET SALES IN VARIOUS MARKET AREAS 1998, CONSOLIDATED

- Finland 40.6 %
- Other Europe 28.7 %
- North America 11.3 %
- Scandinavia 11.4 %
- Far East 4.9 %
- Other countries 3.1 %



## STOCK ANALYSIS

### CAPITAL STOCK AND CLASSES OF SHARES

The capital stock of Tamfelt Corp. consists of common stock and preferred stock. The par value is 10 markka for each class of share. Preferred shares receive a two percentage points higher dividend than common shares whenever the Annual General Meeting decides that a dividend be issued. Common shares carry twenty votes and preferred shares one vote. If requested by the holder, a common share can be converted into a preferred share on conditions specified in the Articles of Association.

The Annual General Meeting held on April 1, 1998 adopted an increase of the capital stock from FIM 66.45 million to 88.60 million by a stock dividend of FIM 22.15 million. One new common share was issued against three old common shares and one new preferred share against three old preferred shares free of charge. The increase was entered in the Trade Register on April 28, 1998 and the new shares are being publicly traded on the Helsinki Stock Exchange Main List since April 29, 1998 together with and in the same class as the previously listed common and preferred shares.

The Annual General Meeting also adopted the Board of Directors proposal to grant certain Group executive members options to buy stock in the company. A decision was made to issue 180,000 options entitling the management to subscribe for a total of 180,000 preferred shares; combined with the stock dividend issue it will be an aggregate stock of 240,000. All the options were subscribed for and approved. Subscription for shares will begin on November 1, 2000 and on November 1, 2002 and end on March 31, 2004. According to the option terms the subscription price on December 31, 1998 was FIM 156.45. Options exercised can increase the company's capital stock by a maximum amount of FIM 2,400,000. On December 31, 1998

the option holders owned 0.11377 % of the company's shares representing 0.13733 % of the voting rights. If they exercise all their rights to subscribe for preferred shares, the percentages can rise up to 2.74813 and 0.46439, respectively. The options are covered by a stock-holding plan, whereby the holder agrees to invest 10 % of the derived gross benefit in the company's stock.

Further, the Annual General Meeting adopted the Board of Directors proposal to upgrade the Articles of Association to comply with the amended provisions of the Companies Act.

87,697 common shares were converted into preferred shares. The corresponding entries were made in the Trade Register on September 1, 1998.

The company's capital stock is FIM 88,600,000 compared to 66,450,000 in 1997. After the conversions made in 1998, the capital stock consists of 3,377,999 common shares and 5,482,001 preferred shares. The respective numbers in 1997 were 2,599,272 and 4,045,728. The total number of shares is 8,860,000 and the total number of votes after stock dividend and the conversions is 73,041,981. The corresponding numbers for 1997 were 6,645,000 and 56,031,168.

### TRENDS AND TRADE VOLUMES

The HEX all-share index rose 68.5 % and the HEX portfolio index rose 15 % in 1998. Tamfelt common share fell 16.1 % and preferred share 13.6 %.

Trading in Tamfelt common shares on the Helsinki Stock Exchange amounted to FIM 76.5 million (13.3) and preferred shares to FIM 156.3 million (144.1). The numbers traded were 454,212 (78,552) common shares and 906,418 (789,600) preferred shares. Turnover in common shares was

13.4 % (3.0) of the company's total common stock. Turnover in preferred shares was 16.5 % (19.5). The percentages have been calculated on the stock numbers at the end of 1998. The common stock turnover was increased by trading on June 30, 1998 with Pension-Varma, Mutual Insurance Company (now Mutual Insurance Company Pension-Fennia) at the start-up of Varma-Sampo Mutual Pension Insurance Company.

The highest quotation for a common share was 200 markka and the lowest 121 markka. The highest quotation for a preferred share was also 200 markka and the lowest 123 markka. The quotations are adjusted for share issue.

### CAPITAL STOCK OWNERSHIP

At the end of 1998 (1997) the company had 1,769 (1,653) stockholders and three (two) ownership registrations in the name of a nominee. The number of shares registered in the name of a nominee was 41,432 (116,560). The number of shares yet to be transferred to the book-entry securities system is 7,088 (8,496), or 0.08 % (0.10). The company's Directors, President and Senior Vice President held a total of 165,605 (118,974) common and 76,717 (65,539) preferred shares corresponding to 2.7 % (2.8) of the capital stock and a 4.6 % (4.4) voting power. The number of options held by the President and the Senior Vice President was 56,800 (0). The persons subject to the disclosure requirement held a total of 346,003 (185,992) shares corresponding to 3.9 % (2.8) of the capital stock and a 6.3 % (4.4) voting power, and 123,600 (0) options. The total number of options issued and subscribed for is 240,000. Options exercised can increase the company's capital stock by a maximum amount of FIM 2,400,000. The stock dividend issue in 1998 is included in the above option numbers.



STOCK OWNERSHIP ON THE BASIS OF CLASSIFICATION OF INSTITUTIONAL SECTORS DEC. 31, 1998

Category	Ownerships	%	Shares	%	Votes	%
100 Corporations	150	8.5	747 511	8.4	6 956 654	9.5
200 <sup>*)</sup> Financial and insurance institutions	29	1.6	1 916 540	21.6	12 029 974	16.5
300 <sup>**)</sup> General government	14	0.8	1 416 965	16.0	9 602 583	13.1
400 Non-profit institutions	87	4.9	1 352 757	15.3	12 346 385	16.9
500 Households	1 472	83.2	3 330 133	37.6	31 240 316	42.8
600 Rest of the world	17	1.0	89 006	1.0	819 727	1.1
Total	1 769	100.0	8 852 912	99.9	72 995 639	99.9
Shares not transferred to book-entry system			7 088	0.1	46 342	0.1
Issued number			8 860 000	100.0	73 041 981	100.0
Ownerships registered in the name of a nominee			41 432	0.5	77 532	0.1

STOCK OWNERSHIP BY SIZE DEC. 31, 1998

Number of shares	Ownerships	%	Shares	%	Votes	%
1 - 500	969	54.7	190 263	2.1	1 031 697	1.4
501 - 5 000	605	34.2	942 819	10.6	6 711 447	9.2
5 001 - 10 000	68	3.8	502 023	5.7	3 865 631	5.3
10 001 - 50 000	94	5.3	2 184 681	24.7	17 931 710	24.5
50 001 - 100 000	18	1.0	1 250 383	14.1	10 245 458	14.0
100 001 - 999 000	18	1.0	3 782 743	42.7	33 209 696	45.5
Total	1 772	100.0	8 852 912	99.9	72 995 639	99.9
Shares not transferred to book-entry system			7 088	0.1	46 342	0.1
Issued number			8 860 000	100.0	73 041 981	100.0

<sup>\*)</sup> Including ownerships registered in the name of a nominee

<sup>\*\*)</sup> Employment pension schemes (Pension insurance companies) fall under category 300 General government

LARGEST OWNERSHIP REGISTRATIONS BY VOTING POWER DEC. 31, 1998 (DEC. 31, 1997)

1		Varma-Sampo Mutual Pension Insurance Company ..	9.1	%	
	(1)	Pension-Varma, Mutual Insurance Company			(8.9)
2	(2)	Industrial Insurance Company Ltd .....	5.1	%	(5.0)
3	(4)	Sampo Life Insurance Company Limited .....	4.7	%	
		Nova Life Insurance Company Ltd			(4.3)
4	(3)	Valmet Corporation .....	4.5	%	(4.4)
5	(6)	Waldemar von Freneckell Foundation .....	4.0	%	(3.5)
6	(7)	Cedercreutz, Axel .....	3.3	%	(3.0)
7	(8)	Samfundet Folkhälsan i Svenska Finland .....	2.5	%	(2.5)
8	(11)	Snäll, Clara .....	1.9	%	(1.6)
9	(9)	House of Nobility .....	1.8	%	(1.8)
10	(10)	Insurance Company of Finland Limited .....	1.8	%	(1.8)
		TOTAL	38.7	%	(36.8)

LARGEST OWNERSHIP REGISTRATIONS BY NUMBER OF SHARES DEC. 31, 1998 (DEC. 31, 1997)

1		Varma-Sampo Mutual Pension Insurance Company ..	6.1	%	
	(1)	Pension-Varma, Mutual Insurance Company			(6.0)
2	(2)	Industrial Insurance Company Ltd .....	5.0	%	(5.0)
3	(3)	The Local Government Pensions Institution .....	3.3	%	(3.3)
4	(4)	Sampo Life Insurance Company Limited .....	3.2	%	
		Nova Life Insurance Company Ltd			(2.8)
5	(5)	Valmet Corporation .....	2.7	%	(2.7)
6	(6)	Waldemar von Freneckell Foundation .....	2.7	%	(2.7)
7	(8)	Suomi Mutual Life Assurance Company .....	2.6	%	(2.6)
8	(9)	Samfundet Folkhälsan i Svenska Finland .....	2.3	%	(2.3)
9	(11)	Tapiola General Mutual Insurance Company .....	2.2	%	(1.8)
10	(13)	Tapiola Mutual Pension Insurance Company .....	2.1	%	(1.7)
		TOTAL	32.2	%	(30.9)

Sampo Insurance Company plc informed on February 27, 1998 of a merger between Sampo Life Insurance Company Limited and Nova Life Insurance Company Ltd effective on December 31, 1998. After the merger Sampo exceeds the threshold of one-tenth of the voting rights and the capital stock of Tamfelt Corp.

Mutual Insurance Company Pension-Fennia informed on July 1, 1998 that Pension-Varma, Mutual Insurance Company had traded shares to Sampo Pension Insurance Company Limited, whose company form and name were changed to Varma-Sampo Mutual Pension Insurance Company on July 1, 1998. The name of Pension-Varma, Mutual Insurance Company is now Mutual Insurance Company Pension-Fennia. As a result, the portion of voting rights held by Mutual Insurance Company Pension-Fennia in Tamfelt fell below the threshold of one-tenth.



STOCK SUMMARY	1994	1995	1996	1997	1998
Earnings/share (FIM) <sup>2)</sup>	3.85	5.85	8.40	11.15	10.05
Equity/share Dec. 31 (FIM) <sup>2)</sup>	42	46	52	59	64
DIVIDEND					
Dividend (FIM million) <sup>1)</sup>	17.30	21.90	38.02	42.01	44.95
Dividend/share (FIM)					
common	2.50	3.20	5.60	6.20	4.95
preferred	2.70	3.40	5.80	6.40	5.15
Adjusted dividend/share (FIM) <sup>2)</sup>					
common	1.88	2.40	4.20	4.65	4.95
preferred	2.03	2.55	4.35	4.80	5.15
Dividend/earnings (%)	51.3	42.5	51.3	42.6	50.4
Effective dividend yield Dec. 31 (%)					
common	3.3	4.3	4.5	3.1	4.0
preferred	3.7	5.1	4.8	3.3	4.1
P/E ratio Dec. 31					
common	14.7	9.5	11.1	13.3	12.3
preferred	14.3	8.5	10.8	13.0	12.4
TRENDS AND TRADING					
Unadjusted trading price at year-end					
common	75.00	74.00	125.00	197.00	124.00
preferred	73.00	66.50	121.00	193.00	125.00
Adjusted trading price at year-end <sup>2)</sup>					
common	56.25	55.50	93.75	147.75	124.00
preferred	54.75	49.90	90.75	144.75	125.00
Change of adjusted trading price (%)					
common	-22.7	-1.3	68.9	57.6	-16.1
preferred	-20.4	-8.9	82.0	59.5	-13.6
Highest trading price (FIM) <sup>2)</sup>					
common	77.50	60.00	94.50	157.50	200.00
preferred	76.30	57.80	93.80	161.30	200.00
Lowest trading price (FIM) <sup>2)</sup>					
common	53.30	43.50	56.30	94.50	121.00
preferred	52.50	41.30	51.80	92.30	123.00
Trading volume (FIM million)					
common	17.8	14.8	17.4	13.3	76.5
preferred	49.6	44.4	78.9	144.1	156.3
Trading volume (number of shares) <sup>3)</sup>					
common	201 803	218 612	164 383	78 552	454 212
preferred	571 210	710 462	819 084	789 600	906 418
Trading volume/total stock %					
common	7.8	8.4	6.3	3.0	13.4
preferred	14.3	17.8	20.4	19.5	16.5
CAPITAL STOCK AND NUMBER OF SHARES					
Capital stock Dec. 31 (FIM million)	66.0	66.0	66.45	66.45	88.60
common	26.0	26.0	26.00	25.99	33.78
preferred	40.0	40.0	40.45	40.46	54.82
Market capitalization Dec. 31 (FIM million)	487.0	458.4	814.4	1 292.9	1 104.1
Number of shares Dec. 31 (1 000)	6 600	6 600	6 645	6 645	8 860
common	2 600	2 600	2 600	2 599	3 378
preferred	4 000	4 000	4 045	4 046	5 482
Average number of shares (1 000) <sup>2)</sup>	8 800	8 800	8 811	8 860	8 860
Adjusted number of shares Dec. 31 (1 000) <sup>2)</sup>	8 800	8 800	8 860	8 860	8 860
Number of shareholders Dec. 31	1765	1 773	1 629	1 653	1 769
Nominee-registered ownerships Dec. 31	3	3	2	2	3
EARNINGS/SHARE					
Net income before extraordinary items, taxes and minority interest - taxes - minority interest	<hr/>				
Year-end number of shares adjusted for issue	<hr/>				
EQUITY/SHARE					
Equity	<hr/>				
Year-end number of shares adjusted for issue	<hr/>				
PRICE/EARNINGS (P/E)					
Year-end trading price adjusted for issue	<hr/>				
Earnings/share (EPS)	<hr/>				

<sup>1)</sup> 1998 Board of Directors' proposal

<sup>2)</sup> Adjusted for share issue

<sup>3)</sup> Trading volume made commensurable with current par value.

## BOARD OF DIRECTORS' PROPOSAL TO ANNUAL GENERAL MEETING

Consolidated distributable earnings total  
FIM 376,544,000.00

Parent company's retained earnings from previous years are and net income for the year is	328,503,961.98 mk 80,255,969.97 mk <u>408,759,931.95 mk</u>
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The Board proposes that this sum be appropriated as follows:	
- a dividend of FIM 4.95 a share paid on 3,377,999 common shares	16,721,095.05 mk
- a dividend of FIM 5.15 a share paid on 5,482,001 preferred shares	28,232,305.15 mk
- to be retained	<u>363,806,531.75 mk</u> <u>408,759,931.95 mk</u>

Helsinki, February 17, 1999

Mikael von Frenckell	Axel Cedercreutz
Martin Lilius	Vesa Kainu
Jouko Oksanen	
	Risto Hautamäki
	President and CEO

## AUDITOR'S REPORT

to the shareholders of Tamfelt Corp.

We have audited the book-keeping, the financial statements and the administration of Tamfelt Corp. for the financial year 1998. The financial statements, which include the report of the Board of Directors, consolidated and parent company income statements, balance sheets and notes to the financial statements, have been prepared by the Board of Directors and President. Based on our audit we express an opinion on these financial statements and on administration. We have conducted the audit in accordance with Finnish Standards on Auditing. Those standards require that we perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements.

An audit includes examining on a test basis evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statement presentation. The purpose of our audit of administration is to examine that the members of the Board of Directors and President have legally complied with the rules of the Companies Act.

In our opinion the financial statements have been prepared in accordance with the Accounting Act and other rules and regulations governing the preparation of financial statements. The financial

statements give a true and fair view, as defined in the Accounting Act, of both the consolidated and parent company's result of operations as well as of the financial position. The financial statements with the consolidated financial statement can be adopted and the members of the Board of Directors and President can be discharged from liability for the period audited by us. The proposal by the Board of Directors regarding the distribution of retained earnings is in compliance with the Companies Act.

We have reviewed the interim reports published during the financial year. The interim reports have been prepared in accordance with applicable regulations.

Tampere, March 3, 1999

Jari Paloniemi

Eero Suomela

Authorized Public Accountant

Authorized Public Accountant





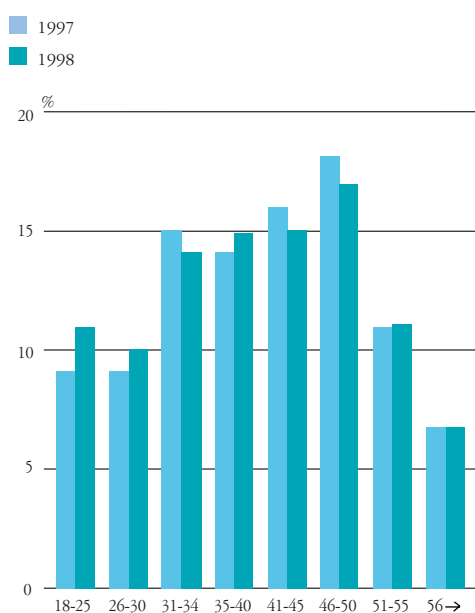
*The otter (*Lutra lutra*) is Tamfelt's mascot.*

## HUMAN RESOURCES ACCOUNT

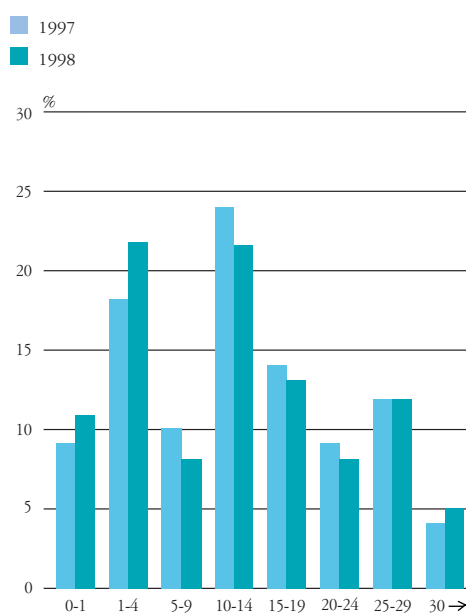
Parent company (1 000 FIM)

	1998		1997	
	1.1 - 31.12.	%	1.1.-31.12.	%
NET SALES	527 000		526 216	
Personnel expenses	213 330	40	206 078	39
Payroll for regular worktime	150 686	29	139 137	26
Payments by results	4 509		10 825	
Payments for overtime	5 544	1	4 961	1
Personnel renewal				
Recruiting and job orientation	3 798	1	3 219	1
Vacation payments	26 969	5	26 492	5
Other holiday payments	8 834	2	8 191	2
Personnel development				
Training	3 209	1	3 315	1
Other measures to maintain and improve working ability	1 666	.	1 325	.
Sick payments	3 205	1	3 210	1
Disability pension expenses	1 630	.	2 387	.
Other personnel expenses	3 279	1	3 015	1
Outsourced services	7 102	1	9 128	2
Other costs and expenses	226 312	43	209 036	40
NET INCOME FOR THE YEAR	<u>80 256</u>	15	<u>101 974</u>	19

AGE COMPOSITION, PARENT COMPANY



YEARS IN THE PARENT COMPANY





## ENVIRONMENTAL REPORT



### TAMFELT'S ENVIRONMENTAL POLICY AND ENVIRONMENTAL MANAGEMENT SYSTEM

Tamfelt's environmental policy has been designed to promote sustainable development. It considers the major environmental impacts of the Juankoski and Tampere plants and the requirements of environmental legislation. The Group's Executive Board and the representatives of personnel groups endorsed the policy in August 1997.

The goal is to avoid unnecessary use of energy, electricity and water and to save natural resources by efficient use of raw materials. Efforts are made to reduce waste amounts and to increase the reuse of materials. Waste hazardous to the environment or human health is transported to plants specializing in the disposal of hazardous waste.

Tamfelt's environmental management system is based on the SFS-EN ISO 14001 standard and was certified on March 2, 1998.

### ENVIRONMENTAL ORGANIZATION

Tamfelt's management is responsible for the development and implementation of the environmental program. An environmental officer is in charge of the continuity, enforcement and development of the program.

### COMPLIANCE WITH LICENCE CONDITIONS AND AUTHORITY ORDERS IN 1998

The Tampere plant took service water from the nearby Kaukajärvi lake in accordance with the licence conditions of a decision by the Water Rights Court. The contents and amounts of waste water discharged into the municipal sewerage system through an equalizing basin were below the licenced rates. The boiler plant was fuelled by natural gas. An air protection report was submitted to the Environment Agency detailing the amounts of

gas consumed and the nitrogen and carbon dioxide emissions produced by the combustion, as required by the State Provincial Office. Tamfelt was a party in an air quality monitoring agreement applied in the city of Tampere. Chemicals were used and stored "to a slight degree", as reported by the Environmental Protection Inspector.

According to the waste management orders of the City of Tampere, hazardous waste, waste paper, board, biodegradable waste and recyclable construction waste were sorted for recovery. The Juankoski plant observed local waste management orders. The numbers of packings supplied by Tamfelt were reported to the Environment Agency.

### MANAGEMENT OF ENVIRONMENTAL RISKS

Environmental risks from Tamfelt's activities are low. Potential risks at the Tampere plant are provided by the hot oil system and the location of the plant in a watershed area. At the Juankoski mill, environmental risks are very low. There were no accidents leading to environmental damage at either plant in 1998.

### TREND OF ENVIRONMENTAL IMPACTS

Nitrogen oxide and carbon dioxide emissions from the burning of natural gas remained at the level of the previous year per output ton. The amounts of service water and waste water per output ton were reduced at both plants.

At the Juankoski plant, waste amounts were reduced according to the environmental goals. The Tampere plant failed to reach the target; the amount of waste grew 11 % per output ton compared to 1997. At both plants more than half of the waste consists of raw material residue. In waste recycling, the 1998 target of the environmental program was exceeded, and the amount of landfill waste was thus

reduced from the previous year. All hazardous waste was sent to appropriate disposal plants.

All of the product groups failed to reach the targets of raw material reuse. The recycling of cloth waste in the parent company grew from 25 to 37 %.

90 % of the packings supplied by Tamfelt are reused. The amount of packing is 280 kg per product ton.

### PRODUCT LIFE CYCLE

Tamfelt's products are mainly made of PA, PES and PP filaments. Suppliers have been informed on the requirements of Tamfelt's environmental management system. Emissions from passenger and goods transports and energy consumption at the Tampere plant were under survey in 1998. Used forming fabrics and felts can be put into service in soil improvement or another secondary application, or be burnt or disposed of in a landfill site.

### STAKEHOLDER RELATIONS

Tamfelt's customers have asked questions about the management of environmental issues in the company. None of the neighbors were in contact with Tamfelt in environmental affairs in 1998. The Environmental Office of the City of Tampere inspected the Tampere plant in summer 1998 because of its location in a watershed area; it had no objections to Tamfelt's performance. The company's employees have actively contributed to developing the environmental program. They are committed to the program and they can express their opinions within the initiative scheme as well.



## JUANKOSKI PLANT 30 YEARS



*The 30th anniversary of the Juankoski plant was celebrated by organizing an international seminar on paper machine clothing in Kuopio in May. The seminar was attended by 143 visitors. In the photo the German group on a tour of the Juankoski plant.*



*Prime Minister Paavo Lipponen visited the Juankoski mill in March.*



*The 30 years of activities were also commemorated by unveiling a plaque in the plant yard.*



*The main celebration was held on June 5. Over 600 guests had a great dinner in a tent with music and dancing afterwards.*



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