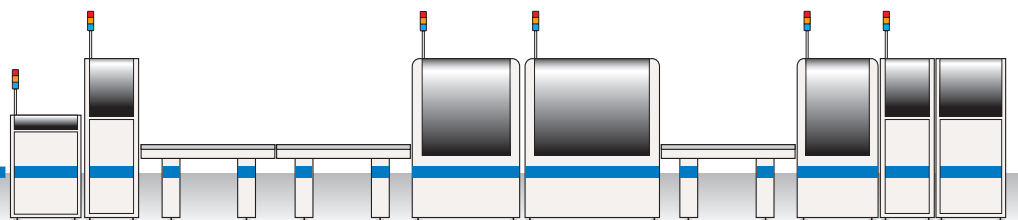




ANNUAL REPORT 1997



Completing the line



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PMJ'S AUTOMATION AND PCB  
HANDLING EQUIPMENT FOR  
THE END-OF-LINE AUTOMATION OF  
ELECTRONICS PRODUCTION:

Assembly cells for odd-form components

In-line depaneling cells

Soldering cells

Pin insertion cells

Conveyors

Turn units

Flip units

Magazine loaders/line unloaders

LIFO/FIFO buffers

Final assembly cells

Destackers

Soft-Beam™ soldering cells

Labelling cells

PMJ's 1998 interim reports will be  
published in weeks 24 and 41.

# PMJ

PMJ AUTOMEC CORPORATION'S HEAD OFFICE  
AND MANUFACTURING FACILITY ARE LOCATED  
IN VIRKKALA, IN THE MUNICIPALITY OF LOHJA,  
NEAR BEAUTIFUL LAKE LOHJANJÄRVI, THE  
LARGEST LAKE IN SOUTHERN FINLAND.  
THE DISTANCE TO HELSINKI IS 54 KM, AND THE  
DRIVE TO THE AIRPORT TAKES 50 MINUTES.



## BUSINESS IDEA

PMJ automec Corporation designs, manufactures and sells production automation equipment to the electronics industry. PMJ's modular production cells and PCB handling equipment offer flexible solutions to the needs of customers in different sectors of the electronics industry and boost the competitiveness of client companies by increasing productivity, improving the quality of products and shortening production throughput times.

## OVERVIEW OF PMJ IN 1997

### KEY FIGURES

		1997	1996 *)	Annual **)
				change %
Turnover	FIM million	71.2	61.8	35
International sales	FIM million	48.5	21.8	160
Operating profit	FIM million	4.5	5.2	0
Operating profit %		6.3	8.5	-2.2
Equity ratio %		35.5	40.3	-4.8
Capital expenditures	FIM million	8.7	6.1	67
R&D expenditures	FIM million	4.1	3.8	26
Personnel, average		97	80	21

\*) 14-month financial year

\*\*\*) the annual per cent change has been calculated from the 1996 figures / 14 x 12

## IMPORTANT EVENTS IN 1997

### February

- Nepcon West '97 exhibition, Anaheim, USA, February 25 - 27, 1997

### March

- Nepcon Electronics '97 exhibition, Birmingham, UK, March 18 - 20, 1997
- Main award at the Excellence in Electronics competition at the Nepcon Electronics '97 exhibition in England
- Record export orders of FIM 18 million to Germany, Denmark, Sweden and Great Britain

### April

- Elkom '97 exhibition in Helsinki April 7 - 10, 1997
- SMT '97 exhibition in Nuremberg, Germany, April 22 - 24, 1997
- Second part of public share issue; restricted shareholders' equity rises to FIM 13 million

### June

- PMJ automec USA, Inc. is established and a sales office is opened in Dallas

- A FIM 5 million order from Motorola, England
- PMJ buys its present manufacturing facility from Evox
- First order from the USA

### August

- PMJ acquires a minority holding in Global Integration, Inc.

### September

- Elektronik/EP exhibition in Gothenburg, Sweden, September 9 - 12, 1997

### October

- Nepcon Texas '97 exhibition in Dallas, October 8 - 9, 1997

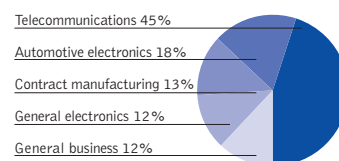
### November

- Productronica '97 exhibition in Munich, November 11 - 14, 1997
- A FIM 6.5 million order from Ericsson

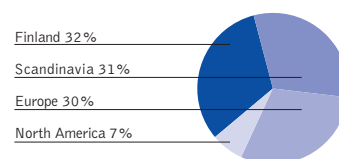
### December

- A record volume of orders from Finland, Sweden, the USA and Great Britain totalling FIM 21.5 million

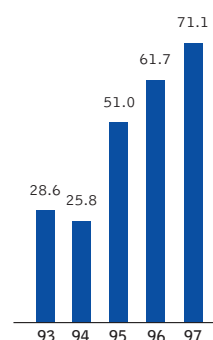
TURNOVER  
BY BUSINESS AREA



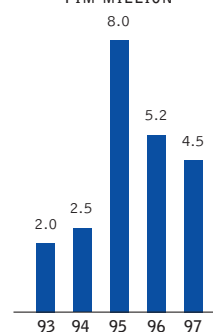
TURNOVER  
BY MARKET AREA



TURNOVER 1993 - 1997, FIM MILLION



OPERATING PROFIT 1993 - 1997,  
FIM MILLION



## PMJ'S OPERATIONS

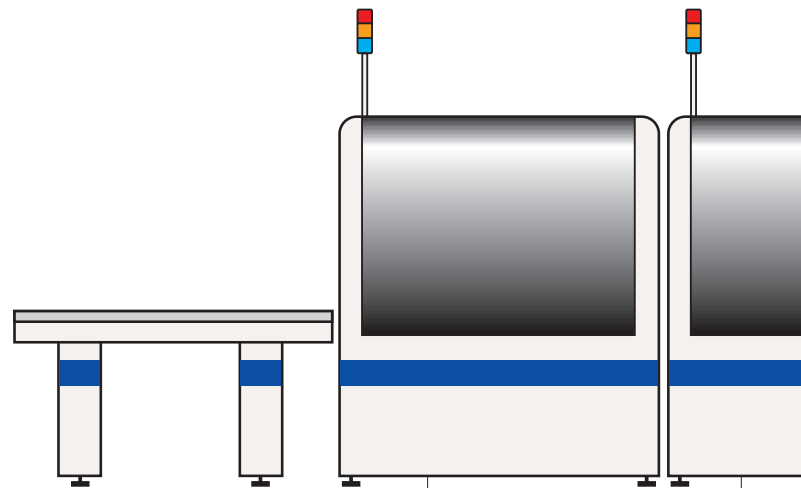
PMJ AUTOMEC CORPORATION IS THE LEADING MANUFACTURER OF PRODUCTION AUTOMATION EQUIPMENT FOR THE ELECTRONICS INDUSTRY IN ITS OWN MARKET SEGMENT. ITS PRODUCTS INCREASE THE EFFICIENCY OF CLIENT COMPANIES' PRODUCTION, HELPING THEM KEEP UP WITH THE FAST-PACED GROWTH IN THE MARKET. PMJ'S PRODUCTION EQUIPMENT IS DESIGNED FOR FLEXIBLE MODIFICATION ACCORDING TO THE CUSTOMER'S NEEDS AND CAN BE FITTED OUT WITH THE APPLICATIONS REQUIRED FOR ASSEMBLING THE CUSTOMER'S PRODUCTS.

PMJ specializes in end-of-line automation for the electronics industry - the phase of the production process that is still largely carried out manually in the electronics industry. Front-of-line assembly is highly automated, and at the same

time there are many competitors for this business. The market for end-of-the-line assembly is just now taking shape, and PMJ is a leader that is playing an important role in the development of end-of-line automation concepts.

End-of-line assembly has remained manual the longest because it is at this stage of the production process where the biggest, most variously shaped and hard-to-handle components are assembled. As a result of a long product development effort, PMJ has come out with a modular solution for assembling and handling these odd-form components: the HiSAC® High Speed Assembly Cell. HiSAC® cells can be divided into three main categories according to the tasks they perform: assembly, soldering and depaneling cells. These cells are all in-line production equipment, which can be integrated into an automatic production line with different types of PCB handling devices, which likewise belong to PMJ's product range. The assembly accuracy of PMJ's

## PMJ-Completing the line



THE DUAL-HEADED SUCTION PAD GRIPPER PICKS THE COVER OF A QUICK CHARGER FROM THE TRAY FEEDER AND THEN PLACES IT ON AN ASSEMBLY PALLET WHICH IS WAITING ON THE CONVEYOR BELT.



THE TOP ROUTER IN THE BACKGROUND DE-PANELS THE PCBs. IN THE FOREGROUND, THE GRIPPER PLACES THE DE-PANELLED PCB INSIDE THE COVER OF THE CHARGER THAT IS WAITING ON THE CONVEYOR BELT.



THE GRIPPER PICKS THE BASE OF THE CHARGER FROM THE TRAY FEEDER AND PLACES IT ON TOP OF THE COVER AND THE PCB.

modular assembly cell is better, the amount of defects smaller and the production throughput faster than that of a corresponding manual process.

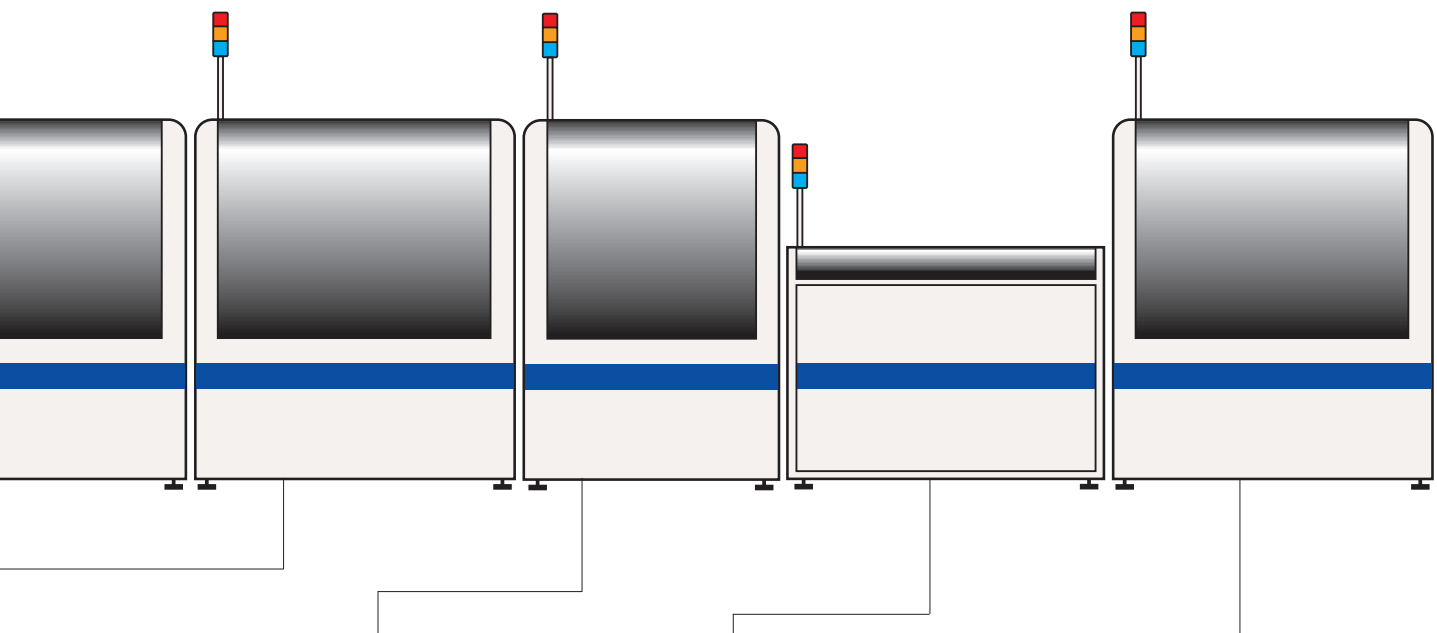
PMJ has sought to build up a wide customer base consisting of companies in different industries so that it is not too dependent on individual sectors or customers. At present, the customer base is made up mainly of companies in the telecommunications, electronics contract manufacturing, information technology, automotive electronics and residential electronics industries. No individual customer represents more than 10% of PMJ's turnover. The fast growing telecommunications industry naturally accounts for a major share of PMJ's sales. There is future growth potential in all the sectors of electronics production that use printed PCBs.

The company's production facilities are concentrated in Finland, but PMJ serves an international clientele. In 1996, Finland was still clearly the largest market area, but already

in 1997, Sweden and the rest of Europe grew to be market areas that equalled sales in Finland. Sales in North America got started during 1997 and are expected to grow fast. PMJ is also starting up manufacture in the USA. The next growth area is Asia, where sales are estimated to get under way within two years.

A strong product development capability that is geared to customers' needs is the foundation of PMJ's operations. The objective is to spend about 10% of turnover on product development. At present, 20% of the company's personnel work in product development in close cooperation with customers, universities and component suppliers.

As the installed base of delivered automation equipment grows, servicing and other after-sales support functions will gain in importance. PMJ is turning its after-sales customer service into an independent unit that is expected to grow in importance in the years ahead.



THE BASE AND COVER ARE SCREWED FAST.



TESTING.



THE PNEUMATIC GRIPPER PICKS THE COMPLETED PRODUCTS UP OFF THE BELT, AND THE EMPTY ASSEMBLY PALLET THEN RETURNS ALONG THE LOWER TRACK TO THE FRONT END OF THE PRODUCTION LINE.

## PRESIDENT'S REVIEW



PMJ's turnover continued upward in 1997. The main thrust of operations during the year was to gain a stronger foothold in the global market, and the company succeeded well in this effort. Exports rose to 68% of turnover, operations in the US market got under way and exports to the Nordic countries exceeded expectations.

PMJ's turnover rose to FIM 71 million. The new orders booked during the year amounted to about FIM 90 million, and the order backlog at the end of the year was FIM 24 million. The expenses incurred in beefing up export operations coupled with only moderate income in the first part of the year meant that the full-year earnings trend was weaker than had been planned. The new customer relationships formed during the financial year (Siemens, Philips, Panasonic, Motorola and others) represent clear-cut opportunities for growth and development. At the same time, PMJ further strengthened its cooperation with old customers.

Exports to the Nordic countries were especially strong, and the company achieved a stable market position there, with deliveries to Ericsson increasing substantially during the year.

Sales in the UK also developed according to expectations. Important new customers were landed during the year. For example, acting as a supplier to Motorola will bring important opportunities in the years ahead. Development in the continental European market was slower than elsewhere and the area will call for further outlays because the market outlook is nevertheless positive.

In the US market we moved ahead according to plan by

opening our own sales company in Dallas on June 1, 1997. The first orders were delivered to North America during the latter part of the year. To support our after-sales functions, we acquired a 35% holding in the Dallas-based automation systems integrator Global Integration, Inc.. The stake was raised to a majority holding in the first part of 1998. PMJ's objective over the next few years is to expand its market in the USA to at least the size of its European market. It will be easier to make the possibilities offered by PMJ's automation equipment well known in the USA now that the company has established a presence in the market via a local automation equipment manufacturer.

Domestic customers concentrated their capital expenditures on their operations abroad during the review period. This was expected because the investments which these companies have made in recent years have been geared to the domestic market. PMJ's sales in the first part of the year were fairly weak, but in the latter part of the year capital spending by customers increased significantly, and this favourable trend appears to be continuing in 1998.

### **PRODUCT DEVELOPMENT**

As the life cycles of customers' products get shorter, production automation equipment must meet more complex demands, and this means that equipment manufacturers must keep ploughing money into product development. PMJ must be able to forecast future trends and customers' needs, and this is why close and good relationships with customers are of prime importance. PMJ

shares a common goal with its customers: to find the best solution to their production problems, also over the long term. Thanks to their flexible, modular construction, PMJ's assembly cells can be easily and quickly modified to correspond to the changes that take place in customers' production. The most important innovations have been patented or patents are pending.

Expenditures on product development during the review period were on a par with previous years and amounted to FIM 4.1 million. Perhaps the best indication of successful product development and the competitiveness of the company's products - in addition to customer satisfaction - is that PMJ won the first prize in the Excellence in Electronics competition at the Nepcon Electronics exhibition that was held in Birmingham, England, in the spring 1997. Our bottom router cell received an Applications Award as the best new piece of production equipment of 1997 in the PCB Manufacturing & Assembly Equipment category.

The American robotics and control systems manufacturer Adept Technology, Inc. gave PMJ an award as the best systems integrator in Europe in 1996-1997.

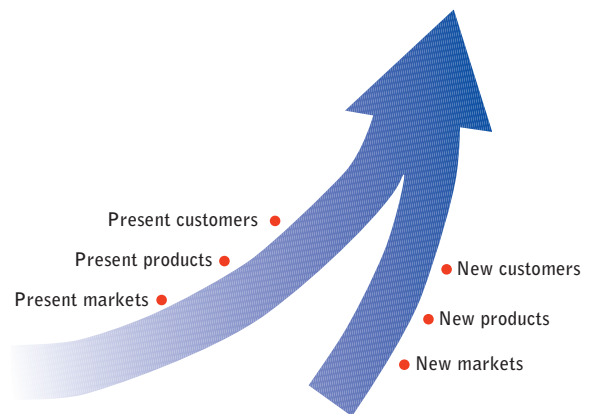
#### OUTLOOK FOR THE ELECTRONICS INDUSTRY

In 1996 the market volume of the automation equipment industry was about FIM 15 billion. The bulk of this is front-of-line assembly, and about FIM 1.5 billion consists of the end-of-line assembly of odd-form components, which is PMJ's business area. By the year 2000, the total market is estimated to grow to about FIM 25 billion, of which end-of-line assembly is expected to account for about FIM 3 billion. The market for end-of-line assembly equipment is thus estimated to double by the year 2000.

In addition to strong growth, the near-term outlook for the electronics industry is for continuous rapid technological development. The proportion of electronics in present-day applications will grow, new applications of electronics will spring up, integrated circuit technology will make further advances, the components to be assembled on PCBs will shrink in size and the components will be capable of performing a far greater number of processes. The upshot of this is that the number of components in end products will fall, leading to increased packaging efficiency and miniaturization. This in turn places greater demands on the accuracy of production equipment.

A trend that runs in parallel with technological development is that electronics products are becoming consumer commodities at a quickening rate. This, too, means that their assembly must meet tougher requirements. The small size of the components to be assembled, faster product lead times and growing quality requirements will mean that the electronics industry will boost the degree of automation of its assembly processes. PMJ's production automation concept meets these challenges.

#### PMJ'S GROWTH STRATEGY



#### PMJ'S OUTLOOK FOR THE FUTURE

PMJ has worked systematically to strengthen its position in its chosen product and market areas. Its present customer sectors - the telecommunications industry, electronics contract manufacturing, the automotive electronics industry and the general electronics industry - are all developing favourably.

Because PMJ's production automation can be utilized in the assembly of all electronics equipment, many different sectors represent growth potential for our company. For example, consumer and entertainment electronics are rapidly growing fields in which PMJ has so far not yet invested its marketing resources.

The strong growth in the end product markets of PMJ's customer sectors will offer opportunities for expanding the company's operations. Even more importantly, electronics will make up an increasing portion of our customers' products. PMJ's modular production solutions offer customer companies the possibility of stepping up their production capacity in a controlled way. In many market areas, the availability of skilled personnel has already become the biggest bottleneck which our customers must overcome. At the same time, labour costs are on the rise.

The objective which PMJ has set for 1998 is to further amplify its cooperation with customers, to strengthen its market position in the USA and Europe and to improve internal efficiency.

I wish to thank our personnel, our customers, our partners and our shareholders for their contribution to PMJ's performance in 1997. I firmly believe that PMJ is in a good position to continue its profitable growth in line with its chosen mode of operations and to achieve the objectives it has set both for 1998 and over the long term.

Markku Jokela



# TELECOMMUNICATIONS

## industry

THE TECHNOLOGICAL DEVELOPMENT AND DEREGULATION OF THE TELECOMMUNICATIONS MARKET WILL INCREASE THE DEMAND FOR TELECOMMUNICATIONS EQUIPMENT AND SYSTEMS IN THE YEARS AHEAD. FOR PMJ, THIS MEANS OPPORTUNITIES TO EXPAND BOTH THROUGH BIGGER ORDERS TO OUR PRESENT CUSTOMERS AND VIA NEW CUSTOMERS, MARKET AREAS AND PRODUCTION AUTOMATION APPLICATIONS.

In the telecommunications industry, PMJ's automation equipment is used in the assembly processes for mobile phones, digital telephone switches and base stations.

### OPERATIONS IN 1997

In previous years, the telecommunications industry has accounted for more than 60 per cent of PMJ's turnover. In 1997, sales to the telecommunications industry grew strongly, but its proportion of net sales fell to a half as other customer sectors increased their share. This will reduce the company's dependence on the telecommunications industry.

The sustained effort to develop the European and Nordic market in recent years brought a significant number of new orders and deliveries in the latter part of the financial year. Scandinavia immediately became the largest new market area, and now nearly ranks with Finland in size. Europe, and Great Britain in particular, represented a significant share of turnover in the telecom-



The HiSAC® 1500 Odd-Form PCB Assembly Cell

munications industry, and the share represented by the USA was greater than expected. No single customer accounted for more than 20 per cent of turnover within the telecommunications sector. Intensive development work together with telecommunications customers will give PMJ a strong supporting leg so that it can further develop its operations in this fast-growing field. These development projects will begin generating income in the current year.

The most important product for the telecommunications industry in terms of sales volume was the HiSAC® Odd-Form PCB Assembly Cell, which accounted for more than half of the turnover in this sector. Sales of the depaenelling cell that was developed in 1996 also grew within this sector. In addition, the multifunction cell that was developed in 1997 and which



combines the assembly and soldering of odd-form components was well received as soon as it came out. The updating of products sold at the beginning of the decade has turned into a major service which has good growth potential. During the past year, PCB handling equipment has occupied a more prominent place in the company's product range and this will enable PMJ to offer customers increasingly comprehensive production lines. PMJ has now begun offering service agreements, and servicing is also expected to grow in the years ahead.

**INDUSTRY OUTLOOK**

The key growth factors over the next few years are technological development in the telecommunications market and the potential it creates. In Europe, deregulation of the telecommunications market is just getting started, and this will increase the offering of services and thereby boost demand for telecommunications systems and equipment. The growth in the telecommunications market in the USA will accelerate as PCS (Personal Communication Systems) networks spread, which in turn will also speed up the digitalization of the telecommunications market in the USA. In this growth environment, the greatest challenge facing equipment manufacturers and suppliers is to achieve rapid international growth in a controlled manner.

The mobile phone density in the Nordic countries has risen to over 30% and it is forecast to rise to as much as 80% by the year 2000. In many large countries, the mobile phone density is still low. From 1997 to 2000, the number of subscribers of mobile phone services is expected to increase from 196 million to 390 million, representing annual growth of about 25%. In 1997, the world's mobile phone density is estimated to have risen to 3.5%. The strong growth in mobile telephone density will increase the need to continually expand and develop mobile phone networks and the services they support.

**APPLICATION AREAS IN WHICH PMJ EQUIPMENT IS USED**



**PMJ'S OUTLOOK IN THE SECTOR**

It is believed that the US market will adopt the versatile possibilities offered by PMJ's flexible modular production cell faster than Europe. The acquisition of a majority holding in our partner company Global Integration, Inc. in February 1998 will strengthen PMJ's position in the US market and enable PMJ to develop its operations also among North American telecommunications customers faster than anticipated.

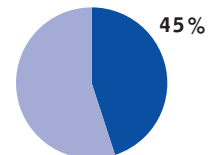
The telecommunications industry will continue to be a major customer segment for PMJ. It is still in a phase of rapid growth, especially in view of the energetically expanding mobile telephone market. The growth is global and particularly fast in Asia and Japan. Furthermore, this growth does not depend on business cycles to any significant extent. Instead, the opening up of the markets to competition coupled with intense technological development will keep up a fast rate of growth.

For PMJ, the fast growth of the telecommunications industry means possibilities for expansion, both in terms of increasing orders to present customers and via new customers, market areas and production automation applications.

PMJ'S CUSTOMERS IN THE TELECOMMUNICATIONS INDUSTRY

- ERICSSON**
- MOTOROLA**
- NOKIA**
- PANASONIC**
- PHILIPS**
- SIEMENS**
- TELLABS**

PROPORTION OF THE TELECOMMUNICATIONS INDUSTRY IN PMJ'S TURNOVER





## AUTOMOTIVE ELECTRONICS industry

THE AUTOMOTIVE ELECTRONICS INDUSTRY IS GROWING AT A CLEARLY FASTER RATE THAN THE AUTOMOBILE MANUFACTURING INDUSTRY, WHICH FOLLOWS GENERAL ECONOMIC GROWTH. THE REASON FOR THIS IS THAT ELECTRONICS NOW ACCOUNTS FOR AN INCREASING PROPORTION OF THE MANUFACTURING INPUT IN VEHICLES. AT THE SAME TIME, THE DEGREE OF AUTOMATION IN THE AUTOMOTIVE ELECTRONICS INDUSTRY IS RISING, AND THIS WILL MAKE THE INDUSTRY AN IMPORTANT GROWTH AREA FOR PMJ.

Electronics production in the automotive industry comprises a number of high-accuracy assembly processes in which PMJ is able to capitalize on the expertise it has built up in other areas of the electronics industry. These special areas include ABS brakes, airbag systems, anti-theft alarms, locators and active suspensions.

Electronics production in the automotive industry has thus become an important customer sector for PMJ. We have developed our own network of suppliers, who are able to offer quality service to customers in the automotive industry. The manual assembly of certain quality-critical products is even prohibited by the high quality requirements of a number of end customers. PMJ's modular production solutions offer a high-quality automated alternative for complying with these criteria.



The HiSAC® 1500 Dual Headed Soldering Cell

**OPERATIONS IN 1997**

The automotive electronics industry has accounted for a continually growing share of turnover, rising to about 20 per cent in 1997. PMJ's customers are in Europe and the Nordic countries. Germany represents a particularly big slice of the turnover in this customer sector - slightly less than 50 per cent. Marketing efforts have been started up in North America, and the American automotive electronics industry together with its counterpart in Europe will be a major factor in boosting turnover in the years ahead.

The increasing share of automation in the automotive electronics industry has also been reflected in the products which PMJ sells, and the flexible assembly cell for odd-form components is by far the largest-selling product in this customer sector. PCB handling equipment, too, reached a share of more than 20 per cent of sales to the automotive electronics industry. The multifunction cell which was developed in 1997 and combines the assembly and soldering of odd-form components will make possible a higher degree of automation in the automotive electronics industry, as elsewhere.

**INDUSTRY OUTLOOK**

The growth of the automotive industry tracks general economic growth fairly closely. In 1997, the European automotive industry grew at a rate of about 4%, but growth is expected to slow down to a level of 2.5-3% this year. The worldwide growth of the automobile manufacturing industry is estimated to be approximately two per cent.

The automotive electronics industry, for its part, will grow clearly faster than the automobile manufacturing industry because electronics components now account for an increasing proportion of each new vehicle. The semiconductors used in the automobile industry now make up a fast-growing proportion of all the components that go into a vehicle. Whereas in

**APPLICATION AREAS IN WHICH PMJ EQUIPMENT IS USED**



1993 semiconductors represented about 10% of all components, their share is expected to rise to 20% by 2003. In the years ahead, the degree of automation within the automotive electronics industry will be raised by the increase in the quality requirements which components must meet and by a greater emphasis on traceability.

The sales volume of the automotive electronics market was about FIM 204 billion in 1993, and by 2003 it is expected to hit FIM 440 billion, corresponding to an annual growth rate of 8% over this ten-year period. Compared with the forecast 2.5-3% growth in the automobile manufacturing industry, automotive electronics is growing 2-4 times faster.

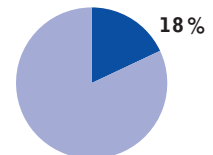
**PMJ'S OUTLOOK IN THE SECTOR**

The automotive electronics industry will remain a very important growth area for PMJ. In the future, vehicles will have more and more computer-controlled functions, which will become increasingly widespread. This will open up new applications for PMJ's assembly equipment.

PMJ'S CUSTOMERS IN THE AUTOMOTIVE ELECTRONICS INDUSTRY

- KIEKERT**
- KOSTAL**
- LUCAS**
- SEM**
- UK-NSI**

PROPORTION OF THE AUTOMOTIVE ELECTRONICS INDUSTRY IN PMJ'S TURNOVER





## CONTRACT MANUFACTURING industry

THE ANNUAL GROWTH RATE OF THE CONTRACT MANUFACTURING INDUSTRY IS ESTIMATED TO BE 25-30% OVER THE NEXT FEW YEARS. PMJ SUPPLIES AUTOMATION EQUIPMENT TO A NUMBER OF MAJOR CONTRACT MANUFACTURERS IN EUROPE AND NORTH AMERICA. THE INDUSTRY'S DEVELOPMENT OUTLOOK IS VERY FAVOURABLE FOR PMJ.

- PMJ supplies automation equipment to the contract manufacturing industry for a variety of manufacturing needs including mobile phones and their peripheral devices, digital telephone switches and computers as well as industrial and consumer electronics components and end products.

- PMJ's clientele includes not only manufacturers of end products in the electronics industry but also companies that offer equipment manufacturers the possibility of outsourcing their production. This option, known as contract manufacturing, enables end product manufacturers to concentrate on their core competence - product design, marketing and product distribution. Contract manufacturing is strongly dependent on its partners and at present is experiencing a second major upswing in step with the growth of the telecommunications industry and the trend towards outsourcing. The first strong growth phase coincided with the outsourcing of functions by the computer industry in the 1980s.



The HiSAC® 1500 Depanelling Cell  
Bottom Router

### OPERATIONS IN 1997

Sales to customers in the contract manufacturing industry grew to 13 per cent of PMJ's turnover. Finland and Scandinavia together represented more than half of the turnover in this customer sector and had roughly equal shares. The rest of Europe accounted for more than 10 per cent of turnover, and in North America, which is a new market area, the company was immediately able to reach a 20 per cent share of turnover. The development outlook for the North American market is very favourable, and at the beginning of 1998, PMJ landed its first order from the world's largest contract manufacturer, SCI.

The assembly cell for odd-form components, the depanelling cell that was developed in 1996, PCB handling equipment and the multifunction cell which was developed in 1997 and combines the assembly and soldering of odd-form components each accounted for nearly equal proportions of PMJ's turnover within the contract manufacturing industry. PMJ's deliveries to the contract manufacturing industry in Finland also included Camalot dispensing equipment, for which PMJ acts as a sales representative.

### INDUSTRY OUTLOOK

Apart from the manufacture of EDP equipment and the automotive industry, the outsourcing of production has also spread rapidly among manufacturers of telecommunications equipment, which is a fast-growing area. Many companies in the telecommunications industry are outsourcing - at an accelerating rate - functions which they feel do not belong to their core competence. In the years ahead, the contract manufacturing industry is estimated to grow about 20% faster than

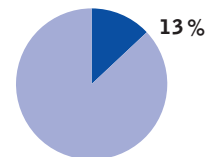
manufacturers of electronics end products and the annual rate of growth is forecast to be 25-30% from 1996 to 2001. The gross value of the world's contract manufacturing is about FIM 300 billion, of which North America accounts for about 50%, Asia for about 30% and Europe for less than 20%.

Finland ranks as an important country in the manufacture of telecommunications equipment, and the gross value of its contract manufacturing production was about FIM 7 billion in 1997. The growth of Finland's contract manufacturing industry has followed that of the worldwide trend in the field and has been about 30% a year over the past five years. The contract manufacturing industry will continue its strong growth in the years ahead.

### PMJ'S CUSTOMERS IN THE CONTRACT MANUFACTURING INDUSTRY

**ELCOTEQ**  
**FLEXTRONICS**  
**KYREL**  
**MPI**  
**MSL**  
**SOLECTRON**

PROPORTION OF THE CONTRACT MANUFACTURING INDUSTRY IN PMJ'S TURNOVER



### APPLICATION AREAS IN WHICH PMJ EQUIPMENT IS USED

DIGITAL TELEPHONE SWITCHES ●

● MOBILE PHONES AND THEIR PERIPHERAL DEVICES

COMPUTERS ●

● INDUSTRIAL AND CONSUMER ELECTRONICS COMPONENTS AND END PRODUCTS





## GENERAL ELECTRONICS industry

• In 1997 the general electronics industry accounted for more than 10 per cent of PMJ's turnover, as it has in previous years.

• Finland again occupied a significant proportion of the sales to the general electronics industry. Thanks to intensive export efforts, PMJ landed new customers in Scandinavia and Europe. Scandinavia's share of the company's turnover nearly reached Finland's level. The trend in turnover in other parts of Europe was also positive. In the North American market, the inputs into developing sales to the general electronics industry will bring results in 1998. The largest single customer accounted for less than 40 per cent of turnover for this customer sector.

• Far and away the most important product for the general electronics industry was the flexible HiSAC® Odd-form PCB Assembly Cell, whereas PCB handling equipment represented about a fifth of the turnover in this customer sector. The multifunction cell which was developed in 1997 and combines



Magazine loader/line unloader

the assembly and soldering of odd-form components is likely to awaken interest among customers in this branch of industry, too.

### INFORMATION TECHNOLOGY INDUSTRY

The processes used in the information technology industry involve the assembly of computers and their peripherals.

Information technology equipment has huge world markets, which according to some estimates are as much as FIM 2,700 billion in total sales volume. In 1997, some 84 million personal computers (PCs) were sold worldwide, an aggregate sales volume of FIM 330 billion. Growth on the previous year was about 20% and it is expected to continue at an annual rate of 15-20%.

The primary reasons for this strong growth are the shift to more powerful processors and operating systems (notably, Intel Merced, Windows 98 and NT 5.0) together with ever shorter product life cycles: 20-35% of the installed base of computers is renewed each year. In addition, companies are investing in IT networks to improve productivity and they look on their purchases of computers as strategic investments, not as mere expense items. In the long term, this will increase companies' capital spending on computers even further.

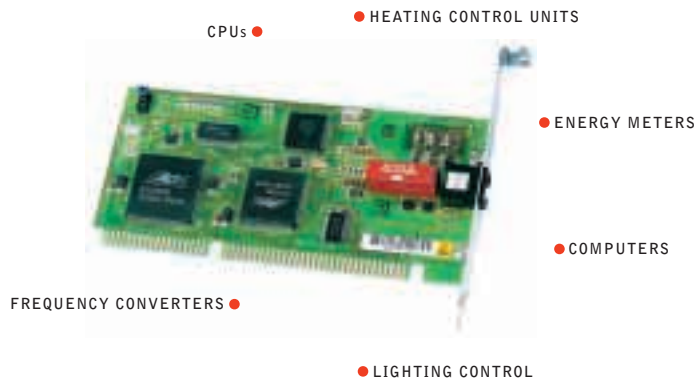
Measured in terms of PC penetration, too, the computer industry still has a lot of growth potential because the world's PC penetration is only about 3%, whereas in Finland, for example, it is 6%. Use of the Internet in particular is increasing rapidly. The worldwide penetration of the Internet is so far only about 1%. Its strong growth in the United States and in Europe in the years immediately ahead will offset the lower demand for computers in Southeast Asia, which is grappling with economic instability.

Since the world's computer manufacturing operations are mainly concentrated in North America and the Far East, PMJ has only had limited possibilities to deliver equipment to this sector as long as its operations have been confined to Europe. The acquisition of a majority holding in Global Integration Inc., our partner in cooperation, will strengthen PMJ's position in the US market and enable the company to develop its operations in this priority area. This offers great growth potential for PMJ.

**RESIDENTIAL ELECTRONICS**

Another significant area for PMJ within the general electronics industry is residential electronics. An increasing amount of electronics is used in all types of buildings. Typical products are fire detectors, access control equipment, identification systems, alarm systems, individual heating control systems, modernizations of lifts (elevators), apartment-specific energy measurement, electronic timers and lighting electronics.

**APPLICATION AREAS IN WHICH PMJ EQUIPMENT IS USED**



The many-year effort to develop customer relationships in this industrial sector brought good results in 1997 and will give PMJ an opportunity to grow along with successful customers.

**GENERAL BUSINESS**

Other business accounted for more than 10 per cent of turnover.

Established in 1996, Mecra tekniikka Oy is a tool and die maker that is specialized in fine mechanics. Customers outside the PMJ Group now account for more than 25% of Mecra's turnover, and it appears that this trend will continue in the years ahead. During the financial year, Mecra had a payroll of 20 employees. The company's development has been favourable and this good trend is expected to continue.

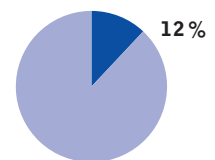
In addition to Mecra, other business includes PMJ's small-scale projects, which are based on additional orders in connection with previously installed project deliveries.

As the installed base of equipment continues to expand strongly, after-sales marketing will also account for an increasing share of the company's operations. PMJ has fine-tuned its organization in order to be able to react better to customers' increasingly complex demands, and it has already concluded its first servicing agreements, an area which is expected to grow in importance.

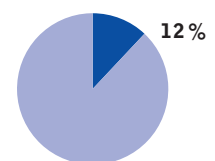
**PMJ'S CUSTOMERS IN THE GENERAL ELECTRONICS INDUSTRY**

- ABB**
- DANFOSS**
- ENERMET**
- EPEC**
- EUROTHERM**
- FUJITSU**
- KAMSTRUP**

**PROPORTION OF THE GENERAL ELECTRONICS INDUSTRY IN PMJ'S TURNOVER**



**PROPORTION OF OTHER BUSINESS WITHIN PMJ'S TURNOVER**



# REPORT OF THE BOARD OF DIRECTORS JANUARY 1-DECEMBER 31, 1997

## OVERVIEW

The PMJ automec Group's turnover was FIM 71.2 million in 1997, an increase of 34% on the previous year (1996: 61.8 million). The company's past financial year was 12 months, whereas in 1996 the financial year was 14 months. The share of exports within turnover rose from 36 per cent to 68 per cent. The strongest growth in exports took place in the markets of Scandinavia and continental Europe. The Group's equity ratio was 35.5%.

## THE US MARKET

During the financial year, we launched operations in the US market by establishing the subsidiary PMJ automec USA, Inc., and we furthermore acquired a 35 per cent holding in Global Integration Inc. PMJ automec USA, Inc. acts as a sales company, and the parent company owns 90% of the company, the other 10% being owned by the president of Global Integration Inc., Tim Criswell. Our holding in Global Integration will enable us to offer servicing and installation support to our customers in this market area. PMJ succeeded in gaining a good foothold in the market, and turnover for half a year reached nearly FIM 5 million.

## RESEARCH AND DEVELOPMENT

The Group continued to invest in research and development, which amounted to expenditures of FIM 4.1 million during the financial year.

## FINANCIAL RESULT

Operating profit was FIM 4.5 million, or 6.3% of turnover (1996: 5.2 million). Profit after financial income and expenses was FIM 2.4 million, or 3.4% of net sales (1996: 3.7 million). Earnings were weakened by heavy outlays on expanding the export market and by the lower than expected earnings in the first part of the year.

The last four months of the financial year were clearly the best and exceeded the targets that had been set, but did not compensate for the weaker earnings in the first part of the year.

## PUBLIC SHARE ISSUE

The second part of the share issue that was carried out during the financial year was subscribed in full and the number of Series A shares increased by 2,420 shares, resulting in an increase in share capital of FIM 363,000 and a share issue premium of FIM 3,319,000. The share capital at the end of the financial year was FIM 3,261,000, and the restricted shareholders' equity was FIM 13.1 million. The issue price was tied to the profit for the 1996 financial year. It increased the number of shares by 13 per cent, and it had a 3.5% effect on the number of votes. The proceeds from the issue were used to finance the growth of exports and for further heavy inputs into research and development. The company's principal owner is Markku Jokela, who holds 63.7 per cent of the company's shares and 81.2 per cent of the votes.

## CAPITAL EXPENDITURES

PMJ automec Corporation exercised a purchase option on its leased manufacturing facility in Virkkala. The sale price was FIM 3.2 million. Capital expenditures on intangible assets amounted to FIM 4.1 million, and FIM 4.6 million was spent on fixed assets. Capital expenditures totalled FIM 8.7 million.

## GROUP STRUCTURE AND OWNERSHIP

The Group comprises Mecra tekniikka Oy, in which PMJ automec Corporation has a 60% holding, PMJ automec USA, Inc., in which PMJ automec Corporation owns a 90% stake as well as the parent company's wholly owned subsidiary PMJ testline Oy, which did not have business operations during the financial year.

## PERSONNEL

The Group had an average payroll of 97 employees and the parent company employed an average of 75 people.

## IMPORTANT EVENTS AFTER THE CLOSING OF THE BOOKS

### 1. Extraordinary meeting of shareholders

At the extraordinary meeting of shareholders held in January, it was decided to carry out a bonus issue in a total amount of FIM 6.3 million, to lower the nominal value of the share to FIM 3, to merge the company's share series such that all shares carry one vote, and to change the company into a public limited company. Following these arrangements, the company's share capital is FIM 9.4 million and the number of shares outstanding is 3.1 million.

### 2. Majority holding in Global Integration

In February 1998, PMJ automec Corporation increased its holding in the associated company Global Integration Inc. from 35 per cent to 78 per cent. The deal will contribute to making the possibilities offered by PMJ's automation equipment better known in the US market.

## OUTLOOK FOR THE FUTURE

In 1994, the company took a strategic decision to increase the share of export markets in its operations, and during the past financial year this decision has been implemented in accordance with the objective set, though at the expense of a dip in relative profitability. The positive outlook for both the export and domestic market together with the acquisition that has been made are expected to increase turnover dramatically, and profits are forecast to improve substantially on the previous financial year, thereby creating value added in the near future for both shareholders and other interest groups. Exports will account for an increasing share of turnover.

The backlog of orders on the balance sheet date is FIM 24 million, as against FIM 12 million a year earlier. At the beginning of March, the backlog of orders had risen further to more than FIM 35 million.



## CONSOLIDATED INCOME STATEMENT

	Jan. 1, 1997-Dec. 31, 1997		Jan. 1, 1995-Dec. 1996	
<b>Turnover</b>	<b>71 179 902.38</b>	<b>100.0 %</b>	<b>61 750 199.98</b>	<b>100.0 %</b>
Other operating income	268 743.01		1 593 582.65	
Expenses				
Materials, equipment and supplies				
Purchases during the financial year	37 040 342.32		30 091 994.44	
Increase in inventories (-) or decrease in inventories (+)	- 7 321 156.88		- 355 827.93	
External services	7 589 011.70		2 538 619.61	
Personnel expenses	16 685 976.37		15 132 745.53	
Rents	535 772.80		837 342.46	
Other expenses	9 183 353.52		7 315 249.41	
Share of result of associated companies	248 390.27			
Total expenses	63 961 690.10		55 560 123.52	
<b>Operating margin</b>	<b>7 486 955.29</b>	<b>10.5 %</b>	<b>7 783 659.11</b>	<b>12.6 %</b>
Depreciation on fixed assets and other long-term expenditure	2 994 368.43		2 553 322.91	
<b>Operating profit</b>	<b>4 492 586.86</b>	<b>6.3 %</b>	<b>5 230 336.20</b>	<b>8.5 %</b>
Financial income and expenses				
Interest income	26 209.52		42 093.25	
Other financial income	101 068.14		76 107.34	
Interest expenses	- 759 644.30		- 609 317.43	
Other financial expenses	- 1 469 845.15		- 1 024 904.14	
Financial income and expenses	- 2 102 211.79		- 1 516 020.98	
<b>Profit before extraordinary items, reserves and taxes</b>	<b>2 390 375.07</b>	<b>3.4 %</b>	<b>3 714 315.22</b>	<b>6.0 %</b>
Extraordinary income and expenses	-		-	
<b>Profit before reserves and taxes</b>	<b>2 390 375.07</b>	<b>3.4 %</b>	<b>3 714 315.22</b>	<b>6.0 %</b>
Accelerated depreciation	13 982.53		- 169 084.07	
Direct taxes	- 902 919.55		- 1 242 415.00	
<b>Profit before minority interest</b>	<b>1 501 438.05</b>	<b>2.1 %</b>	<b>2 302 816.15</b>	<b>3.7 %</b>
Minority interest	- 476 138.79		34 296.81	
<b>Net profit</b>	<b>1 025 299.26</b>	<b>1.4 %</b>	<b>2 337 112.96</b>	<b>3.8 %</b>

## CONSOLIDATED BALANCE SHEET

	Dec. 31, 1997		Dec. 31, 1996	
<b>ASSETS</b>				
<b>Fixed assets</b>				
Intangible assets				
Capitalized costs of share issue	381 176.14		233 833.01	
Research and development expenses	2 420 229.49		2 668 899.41	
Product development in progress	3 080 562.00		1 728 000.00	
Intangible rights	544 572.36		472 005.90	
Goodwill	143 818.42		213 970.66	
Other long-term expenses	919 607.21	7 489 965.62	447 012.95	5 763 721.93
Tangible assets				
Land and water	878 200.00		46 200.00	
Buildings	3 206 573.48		782 625.79	
Machinery and equipment	2 432 362.91	6 517 136.39	1 844 244.45	2 673 070.24
Financial assets				
Shares in associated companies	106 964.73			
Other shares	122 354.00	229 318.73	113 564.00	113 564.00
	<b>14 236 420.74</b>		<b>8 550 356.17</b>	
<b>Fixed assets</b>				
Inventories				
Materials and supplies	3 899 758.35		1 768 714.47	
Work in process	2 330 872.00		2 136 393.00	
Production in process	9 794 180.00		4 642 279.00	
Other inventories	350 168.00	16 374 978.35	506 435.00	9 053 821.47
Receivables				
Sales receivables	16 292 088.97		12 489 791.42	
Loan receivables	83 910.00		60 000.00	
Prepaid expenses and accrued income	3 283 299.57		1 751 693.39	
Other receivables	68 098.36	19 727 396.90	270 728.72	14 572 213.53
Cash and banks				
	3 218 986.72	3 218 986.72	349 607.00	349 607.00
		<b>39 321 361.97</b>		<b>23 975 642.00</b>
		<b>53 557 782.71</b>		<b>32 525 998.17</b>

# CONSOLIDATED BALANCE SHEET

	Dec. 31, 1997	Dec. 31, 1996
<b>LIABILITIES</b>		
<b>Shareholders' equity</b>		
Restricted equity		
Share capital	3 261 300.00	2 898 300.00
Reserve fund	9 850 852.60	13 112 152.60
	<u>13 112 152.60</u>	<u>16 092 643.22</u>
Non-restricted equity		
Currency differences in share capital	690.00	
Retained earnings	1 954 501.36	109 396.65
Book profit	1 025 299.26	2 337 112.96
	<u>2 980 490.62</u>	<u>2 446 509.61</u>
	<b>16 092 643.22</b>	<b>11 877 109.61</b>
<b>Minority interest</b>	<b>650 673.66</b>	<b>163 676.49</b>
<b>Reserves</b>		
Accumulated accelerated depreciation	308 311.20	322 293.73
	<u>308 311.20</u>	<u>322 293.73</u>
	<b>308 311.20</b>	<b>322 293.73</b>
<b>Liabilities</b>		
Long-term		
Loans from credit institutions	8 182 500.00	4 224 058.00
Pension loans	3 068 600.60	
Other long-term loans	2 550 000.00	4 224 058.00
	<u>13 801 100.60</u>	<u>4 224 058.00</u>
Short-term		
Loans from credit institutions	2 147 215.33	2 660 888.06
Pension loans	511 433.60	
Advance payments	5 544 140.92	1 835 251.60
Accounts payable	6 471 065.39	6 281 532.22
Accrued liabilities and prepaid income	5 740 156.23	5 161 188.46
Other short-term liabilities	2 291 042.56	15 938 860.34
	<u>22 705 054.03</u>	<u>15 938 860.34</u>
	<b>36 506 154.63</b>	<b>20 162 918.34</b>
	<u><b>53 557 782.71</b></u>	<u><b>32 525 998.17</b></u>

## CONSOLIDATED STATEMENT OF SOURCE AND APPLICATION OF FUNDS

	1.1.97-31.12.97	1.11.95-31.12.96
<b>FUNDING</b>		
Income financing		
Net profit	1 025 299.26	2 337 112.96
Depreciation	2 994 368.43	2 553 322.91
Change in reserves	-13 982.53	169 084.07
Income funding, total	4 005 685.16	5 059 519.94
Capital gains on fixed assets	47 500.00	10 400.16
Increase in long-term liabilities	13 325 751.00	2 400 000.00
Share issue	3 681 552.60	5 130 400.00
Currency differences in share capital	700.92	
Change in minority interest	486 997.16	165 803.19
	<b>21 548 186.84</b>	<b>12 766 123.29</b>
<b>APPLICATION OF FUNDS</b>		
Investment	8 727 933.00	5 785 694.75
Decrease in long-term liabilities	3 748 708.40	1 128 432.00
Dividends paid	492 019.17	480 060.00
Change in net working capital	8 579 526.27	5 371 936.54
	<b>21 548 186.84</b>	<b>12 766 123.29</b>
<b>CHANGE IN NET WORKING CAPITAL</b>		
Cash and banks	3 218 986.72	349 607.00
Short-term financial assets	19 727 396.90	14 572 213.53
Inventories	16 374 978.35	9 053 821.47
Short-term liabilities	- 22 705 054.04	- 15 938 860.34
	<b>16 616 307.93</b>	<b>8 036 781.66</b>
Net working capital on Nov. 1	8 036 781.66	2 664 845.12
Net working capital on Dec. 31	16 616 307.93	8 036 781.66
	<b>8 579 526.27</b>	<b>5 371 936.54</b>

## PARENT COMPANY INCOME STATEMENT

	Jan. 1, 1997 - Dec. 31, 1997		Nov. 1, 1995 - Dec. 31, 1996	
<b>Turnover</b>	<b>69 472 998.65</b>	<b>100.0 %</b>	<b>61 385 407.48</b>	<b>100.0 %</b>
Other operating income	498 603.01		2 412 467.65	
Expenses				
Materials, equipment and supplies				
Purchases during the financial year	41 119 659.33		32 062 196.95	
Increase in inventories (-) or decrease in inventories (+)	-7 465 054.25		- 368 036.21	
External services	8 184 670.25		2 522 146.76	
Personnel expenses	13 069 161.41		13 452 674.33	
Rents	410 197.78		682 434.26	
Other expenses	8 334 775.09		7 032 360.22	
Total expenses	63 653 409.61		55 383 776.31	
<b>Operating margin</b>	<b>6 318 192.05</b>	<b>9.1 %</b>	<b>8 414 098.82</b>	<b>13.7 %</b>
Depreciation on fixed assets and other long-term expenditure	3 009 507.19		2 545 385.16	
<b>Operating profit</b>	<b>3 308 684.86</b>	<b>4.8 %</b>	<b>5 868 713.66</b>	<b>9.6 %</b>
Financial income and expenses				
Interest income	26 209.52		42 093.25	
Other financial income	101 068.14		76 107.34	
Interest expenses	-723 710.68		- 593 199.70	
Other financial expenses	-1 464 610.16		-1 005 215.68	
Financial income and expenses	-2 061 043.18		-1 480 214.79	
<b>Profit before extraordinary items, reserves and taxes</b>	<b>1 247 641.68</b>	<b>1.8 %</b>	<b>4 388 498.87</b>	<b>7.1 %</b>
Extraordinary income and expenses	-		-	
<b>Profit before reserves and taxes</b>	<b>1 247 641.68</b>	<b>1.8 %</b>	<b>4 388 498.87</b>	<b>7.1 %</b>
Increase (-) or decrease (+) in accelerated depreciation	13 982.53		- 169 084.07	
Direct taxes	- 429 088.10		-1 242 415.00	
<b>Net profit</b>	<b>832 536.11</b>	<b>1.2 %</b>	<b>2 976 999.80</b>	<b>4.8 %</b>

## PARENT COMPANY BALANCE SHEET

	Dec. 31, 1997		Dec. 31, 1996	
<b>ASSETS</b>				
<b>Fixed assets</b>				
Intangible goods				
Capitalized costs of share issue	342 154.85		233 833.01	
Research and development expenses	2 459 229.49		2 668 899.41	
Product development in progress	3 080 562.00		1 728 000.00	
Intangible rights	544 572.36		472 005.90	
Goodwill	143 818.42		213 970.66	
Other long-term expenses	919 607.21	7 489 944.33	579 612.95	5 896 321.93
Tangible assets				
Land and water	878 200.00		46 200.00	
Buildings	3 206 573.48		782 625.79	
Machinery and equipment	1 896 734.95	5 981 508.43	1 430 964.82	2 259 790.61
Financial assets				
Shares in subsidiaries	411 854.70		315 000.00	
Shares in associated companies	355 355.00			
Other shares	116 354.00	883 563.70	107 564.00	422 564.00
		<b>14 355 016.46</b>		<b>8 578 676.54</b>
<b>Inventories and financial assets</b>				
Inventories				
Materials and supplies	3 817 905.00		1 679 507.75	
Work in process	2 330 872.00		2 136 393.00	
Production in process	10 032 139.00		4 743 694.00	
Other inventories	350 168.00	16 531 084.00	506 435.00	9 066 029.75
Receivables				
Sales receivables	16 137 331.97		12 314 944.07	
Loan receivables	103 006.65		277 610.09	
Prepaid expenses and accrued income	3 263 892.95		1 719 953.39	
Other receivables	68 098.36	19 572 329.93	268 428.72	14 580 936.27
Cash and banks	3 040 686.35	3 040 686.35	342 965.37	342 965.37
		<b>39 144 100.28</b>		<b>23 989 931.39</b>
		<b>53 499 116.74</b>		<b>32 568 607.93</b>

# PARENT COMPANY BALANCE SHEET

	Dec. 31, 1997	Dec. 31, 1996
<b>LIABILITIES</b>		
<b>Shareholders' equity</b>		
Restricted equity		
Share capital	3 261 300.00	2 898 300.00
Reserve fund	9 850 852.60	13 112 152.60
	<u>13 112 152.60</u>	<u>16 010 452.60</u>
Non-restricted equity		
Retained earnings	2 749 421.53	264 440.90
Book profit	832 536.11	3 581 957.64
	<u>3 581 957.64</u>	<u>3 846 398.54</u>
	<b>16 694 110.24</b>	<b>12 672 040.70</b>
<b>Reserves</b>		
Accumulated accelerated depreciation	308 311.20	322 293.73
	<u>308 311.20</u>	<u>322 293.73</u>
<b>Liabilities</b>		
Long-term		
Loans from credit institutions	7 870 000.00	3 786 558.00
Pension loans	3 068 600.60	
Other long-term loans	2 550 000.00	3 786 558.00
	<u>13 488 600.60</u>	<u>7 573 116.00</u>
Short-term		
Loans from credit institutions	2 022 215.33	2 477 192.00
Pension loans	511 433.60	
Advance payments	5 544 140.92	1 835 251.60
Accounts payable	8 212 406.17	7 019 416.81
Accrued liabilities and prepaid income	4 426 856.12	4 455 855.09
Other short-term liabilities	2 291 042.56	23 008 094.70
	<u>23 008 094.70</u>	<u>15 787 715.50</u>
	<b>36 496 695.30</b>	<b>19 574 273.50</b>
	<u><b>53 499 116.74</b></u>	<u><b>32 568 607.93</b></u>

# PARENT COMPANY STATEMENT OF SOURCE AND APPLICATION OF FUNDS

Jan. 1, 1997 - Dec. 31, 1997    Nov. 1, 1995 - Dec. 31, 1996

## FUNDING

Income financing		
Net profit	832 536.11	2 976 999.80
Depreciation	3 009 507.19	2 545 385.16
Change in reserves	-13 982.53	169 084.07
Income funding, total	3 828 060.77	5 691 469.03
Capital gains on fixed assets	47 500.00	10 400.16
Increase in long-term liabilities	13 325 751.00	1 900 000.00
Share issue	3 681 552.60	5 130 400.00
	<b>20 882 864.37</b>	<b>12 732 269.19</b>

## APPLICATION OF FUNDS

Investment	8 833 347.11	5 622 027.37
Decrease in long-term liabilities	3 623 708.40	1 065 932.00
Dividends paid	492 019.17	480 060.00
Change in net working capital	7 933 789.69	5 564 249.82
	<b>20 882 864.37</b>	<b>12 732 269.19</b>

## CHANGE IN NET WORKING CAPITAL

Cash and banks	3 040 686.35	342 965.37
Short-term financial assets	19 572 329.93	14 580 936.27
Inventories	16 531 084.00	9 066 029.75
Short-term liabilities	- 23 008 094.70	- 15 787 715.50
	<b>16 136 005.58</b>	<b>8 202 215.89</b>
Net working capital on Nov. 1	8 202 215.89	2 637 966.07
Net working capital on Dec. 31	16 136 005.58	8 202 215.89
	<b>7 933 789.69</b>	<b>5 564 249.82</b>



## ACCOUNTING POLICY

### PRINCIPLES OF CONSOLIDATION

The consolidated financial statements have been prepared according to the acquisition cost method, in which the acquisition cost of subsidiaries established by the parent company itself, intercompany transactions, receivables and liabilities as well as the internal gain on the sale of items included in fixed assets have been eliminated and the minority interest share of the net profit and shareholders' equity has been stated as a separate item.

### TURNOVER

Items subtracted from sales income in calculating turnover are indirect taxes, discounts granted, the expenses of customer claims and foreign exchange differences on sales. Sales freight charges and other sales and delivery expenses, commissions on sales as well as credit losses have been treated as operating expenses in the income statement. During the past financial year, the principle of recognizing income from projects sold to customers has been changed such that the customer projects are credited to income on a degree of completion basis. The provisions for costs connected with these projects are entered in deferred liabilities and prepaid income. The effect of this change on turnover was FIM 8.0 million and its impact on operating profit was in the same proportion.

### OTHER OPERATING INCOME

Items entered in Other operating income include gains on the sale of fixed assets depreciated according to plan, grants received and other income that is not connected with the actual sale of goods and services. Losses on the sale of fixed assets are entered in Other expenses.

### TRANSACTIONS IN FOREIGN CURRENCY

Balance sheet receivables and liabilities denominated in foreign currency have been valued at the average rate quoted by the Bank of Finland on the balance sheet date. Transactions denominated in foreign currency are booked at the exchange rate on the date of transaction. The exchange rate differences arising from derivative contracts taken out to hedge the currency position are booked to financial income and expenses.

### PENSIONS AND

#### PENSION LIABILITY COVERAGE

The personnel's pension security is handled through separate pension insurance companies. The pension insurance contributions are periodized to correspond to the accrual-based wages and salaries on the balance sheet date. There is no unfunded pension liability.

### LEASING

Leasing payments are treated as rental expenses. Unpaid leasing instalments are stated as a leasing liability in the Notes to the financial statements.

### RESEARCH AND DEVELOPMENT

#### EXPENDITURE AND OTHER

#### CAPITALIZED EXPENSES

Research and development expenditures are booked either as expenses for the financial period or else capitalized under fixed assets in the balance sheet in the manner described in the Notes to the financial statements. Capitalized product development expenses as well as marketing and other related expenses are as a rule written off over a three-year period.

### FIXED ASSETS AND DEPRECIATION

The balance sheet values of fixed assets are based on the original acquisition values less the annual depreciation according to plan. The depreciation according to plan consists of straight-line depreciation that is calculated on the basis of the estimated economic life of the assets. The depreciation periods used are itemized in the Notes to the financial statements. The depreciation period of fixed asset investments acquired during the financial year begins from the first of the month following the month when the acquisition or purchase was made.

### INVENTORIES

Inventories are stated in the balance sheet according to the fifo principle in accordance with the expenses of purchasing or manufacturing them or their probable market value, whichever is lower.

### COMPULSORY RESERVES

Recognized expenses which are no longer estimated to generate corresponding income are stated as expenses in the income statement and entered in accrued liabilities and prepaid expenses in the balance sheet. Compulsory reserves comprise the warranty and refitting reserves for goods and services sold as well as reserves for expenses in connection with projects that have been credited to income.

## NOTES TO THE FINANCIAL STATEMENTS

December 31, 1997	CONSOLIDATED		PARENT COMPANY		
	1997	1996	1997	1996	
<b>TURNOVER BY MARKET AREA (FIM 1,000)</b>					
Finland	32 %	22 664.0	39 941.9	20 957.1	39 577.1
Scandinavia	31 %	22 265.1	7 065.7	22 265.1	7 065.7
Europe	30 %	21 547.5	14 742.6	21 547.5	14 742.6
North America	7 %	4 703.3		4 703.3	
Total		71 179.9	61 750.2	69 473.0	61 385.4
<b>PERSONNEL EXPENSES (FIM 1,000)</b>					
Wages and salaries		12 449.2	12 013.7	10 053.0	10 849.2
Fringe benefits		85.3	61.4	69.9	61.4
Pension expenses		2 464.0	2 403.7	2 038.4	2 135.0
Other salary-related expenses		4 026.1	3 265.1	3 246.5	3 018.1
		19 024.6	17 743.9	15 407.8	16 063.7
of which, capitalized as long-term expenditure		2 338.7	2 611.1	2 338.7	2 611.1
Personnel expenses in the income statement		16 685.9	15 132.8	13 069.1	13 452.6
Remuneration paid to the Board of Directors and management		1 250.7	582.2	750.8	376.3
Number of employees, average		97	80	75	65

### DEPRECIATION

A depreciation plan has been used in determining the depreciation of fixed assets subject to wear and tear. Depreciation according to plan has been calculated from the acquisition cost of fixed assets on a straight-line basis according to the estimated economic life of the assets.

The depreciation periods applied and the percentages corresponding to them are:

Goodwill I *)	5 years	20.0 %
Goodwill II **)	10 years	10.0 %
Intangible rights	5 years	20.0 %
Other long-term expenditures	3 - 10 years	10.0 - 33.3 %
Buildings	25 years	4.0 %
Machinery and equipment	4 - 7 years	25.0 - 14.3 %
Boats	15 years	6.7 %

\*) Goodwill booked on the acquisition of Global Integration Inc.

\*\*\*) Goodwill booked on the business operations that were purchased when the company was established.

December 31, 1997	CONSOLIDATED		PARENT COMPANY	
	1997	1996	1997	1996

### CHANGES IN FIXED ASSETS (FIM 1,000)

#### Intangible assets

Acquisition cost at start of financial year				
Establishment and arrangement expenses	271.5	0.0	271.5	0.0
Intangible rights	769.2	453.9	769.2	453.9
Goodwill	701.5	701.5	701.5	701.5
Product development and other long-term expenditures	7 990.0	3 007.1	8 107.0	3 124.1
Increases				
Establishment and arrangement expenses	261.6	271.5	219.8	271.5
Intangible rights	222.2	315.2	222.2	315.2
Product development and other long-term expenditures	3 617.4	4 983.0	3 617.4	4 983.0
Accumulated depreciation at start of financial year				
Establishment and arrangement expenses	37.7		37.7	
Intangible rights	297.1	158.5	297.1	158.5
Goodwill	487.6	405.7	487.6	405.7
Product development and other long-term expenditures	3 146.2	1 693.3	3 130.6	1 656.7
Depreciation for the period				
Establishment and arrangement expenses	114.3	37.7	111.5	37.7
Intangible rights	149.7	138.6	149.7	138.6
Goodwill	70.1	81.8	70.1	81.9
Product development and other long-term expenditures	2 040.8	1 452.9	2 134.4	1 473.9
Carrying value at end of financial year				
Establishment and arrangement expenses	381.1	233.8	342.1	233.8
Intangible rights	544.6	472.0	544.6	472.0
Goodwill	143.8	214.0	143.8	213.9
Product development and other long-term expenditures *)	6 420.4	4 843.9	6 459.4	4 976.5
*) includes product development expenses in process	3 080.6	1 728.0	3 080.6	1 728.0

#### Tangible assets

Acquisition cost at start of financial year				
Land and water areas	46.2	46.2	46.2	46.2
Buildings	801.3	373.8	801.3	373.8
Machinery and equipment	5 231.0	4 392.1	4 788.3	4 392.1
Increases				
Land and water areas	832.0	0.0	832.0	0.0
Buildings	2 496.0	427.5	2 496.0	427.5
Machinery and equipment	1 197.0	849.3	999.0	406.6
Decreases				
Machinery and equipment	61.6	10.4	61.6	10.4
Accumulated depreciation at start of financial year				
Buildings	18.7		18.7	
Machinery and equipment	3 386.7	2 562.9	3 357.3	2 562.9
Depreciation for the period				
Buildings	72.0	18.7	72.0	18.7
Machinery and equipment	547.4	823.8	471.7	794.4
Carrying value at end of financial year				
Land and water areas	878.2	46.2	878.2	46.2
Buildings	3 206.6	782.6	3 206.6	782.6
Machinery and equipment	2 432.3	1 844.3	1 896.7	1 431.0
Accelerated depreciation at end of financial year				
Buildings	61.7	61.7	61.7	61.7
Machinery and equipment	246.6	260.5	246.6	260.5

### TAXATION VALUES OF FIXED ASSETS

Land areas	980.7	148.7	980.7	148.7
Buildings	3 297.5	918.0	3 297.5	918.0
Shares	477.7	113.6	817.2	422.6
Total	4 755.9	1 180.3	5 095.4	1 489.3

If a taxation value has not been available, the book value is given.

## NOTES TO THE FINANCIAL STATEMENTS

December 31, 1997	CONSOLIDATED		PARENT COMPANY	
	1997	1996	1997	1996
<b>SHAREHOLDERS' EQUITY (FIM 1,000)</b>				
<b>Changes in shareholders' equity</b>				
Share capital at start of financial year	2 898.3	535.0	2 898.3	535.0
Bonus issue		2 000.3		2 000.3
Public issues	363.0	363.0	363.0	363.0
Share capital at end of financial year	3 261.3	2 898.3	3 261.3	2 898.3
Reserve fund at start of financial year	6 532.3	1 764.9	6 532.3	1 764.9
Premium on share issue	3 318.6	4 767.4	3 318.6	4 767.4
Reserve fund at end of financial year	9 850.9	6 532.3	9 850.9	6 532.3
Non-restricted equity at start of financial year	2 446.5	2 587.6	3 241.4	2 744.7
Transfer to share capital		-2 000.2		-2 000.2
Dividend paid	-492.0	-480.1	-492.0	-480.1
Transfer to minority interest account		2.1		
Net profit	1 025.3	2 337.1	832.5	2 977.0
Non-restricted equity at end of financial year	2 979.8	2 446.5	3 581.9	3 241.4

### LONG-TERM LIABILITIES (FIM 1,000)

Long-term liabilities include items falling due in five years or more:

Loans from financial institutions	1 715.0	300.0	1 715.0	300.0
Pension loans	1 022.9		1 022.9	
Other long-term liabilities	1 550.0		1 550.0	
Total	4 287.9	300.0	4 287.9	300.0

### CONTINGENT LIABILITIES (FIM 1,000)

Leasing commitments				
falling due in 1998	154.5	142.5	54.6	43.0
falling due at a later date	323.1	294.2	48.4	19.5
total	477.6	436.7	103.0	62.5

Pledge:

Mortgages on company assets for own liabilities	10 700.0	5 200.0	10 000.0	4 500.0
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Real-estate mortgages for own liabilities	6 400.0	1 200.0	6 400.0	1 200.0
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Unconditional guarantees on behalf of Group companies	1 074.6	1 174.5	1 074.6	1 174.5
-------------------------------------------------------	---------	---------	---------	---------

Pledges given, total	18 652.2	8 011.2	17 577.6	6 937.0
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### GROUP RECEIVABLES AND LIABILITIES (FIM 1,000)

	1997	1996
Loan receivables	19.1	217.6
Accounts payable	2007.0	846.7
Accrued liabilities and prepaid income		33.4

### GROUP OWNERSHIP STRUCTURE

Company/holding	Book value	Net profit	Shareholders' equity	
<b>Shares in subsidiaries:</b>				
PMJ testline Oy / 100 %	15 000,00	- 209.45	8 509.72	Dec. 31, 1997
PMJ automec USA, Inc. / 90 %	96 854,70	- 118 677.28	- 10 263.28	Dec. 31, 1997
MECRA tekniikka Oy / 60 %	300 000,00	1 213 254.74	1 622 295.97	Dec. 31, 1997
<b>Shares in associated companies:</b>				
Global Integration Inc. / 35 %	355 355,00	-361 375.63	110 220.39	Dec. 31, 1997

## PROPOSAL FOR THE DISTRIBUTION OF PROFITS

The Group's non-restricted and distributable shareholders' equity according to the Consolidated Balance

Sheet as at December 31, 1997 FIM 2,980,490.62

The parent company's retained earnings

according to the balance sheet as at December 31, 1997, are

from previous financial periods FIM 2,749,421.53

and from the 1997 financial period FIM 832,536.11

A dividend of FIM 9 per share shall be paid, or FIM 187,578,

which after the bonus issue carried out in January 1998 and

the lowering of the nominal value of the shares yields

a dividend of FIM 0.06 per share

Transfer to the retained earnings account

FIM 3,394,379.64

Virkkala, Finland, March 13, 1998

Heikki Kiesi

Jarmo Kanervo

Turo Levänen

Markku Jokela

## AUDITORS' REPORT

To the shareholders of PMJ automec Corporation

I have examined the accounting records, consolidated financial statements and administration of PMJ automec Corporation for the financial year January 1 - December 31, 1997. The financial statements prepared by the Board of Directors and the President include the report of the Board of Directors as well as the consolidated and parent company income statement, balance sheet and notes to the financial statements. Based on my audit, I express an opinion on these financial statements and the company's administration.

The audit has been conducted in accordance with generally accepted auditing standards. The accounting records as well as the accounting policy, content and format of the financial statements have accordingly been examined to a sufficient extent to ascertain that the financial statements do not contain material errors or deficiencies. The purpose of my audit of the company's administration has been to determine whether the Board of Directors and the President have complied with the rules and regulations of the Finnish Companies Act.

In my opinion, the financial statements have been prepared in accordance with the Finnish Accounting Act and the other rules and regulations concerning the preparation of financial statements in Finland. The financial statements give a true and fair view, as defined in the Accounting Act, of both the consolidated and parent company result of operations as well as of the financial position. The financial statements including the consolidated financial statements can be adopted and the Board of Directors and the President of the parent company can be discharged from liability for the financial year audited by me. The proposal of the Board of Directors for the disposal of the non-restricted equity shown in the balance sheet is in compliance with the Finnish Companies Act.

Helsinki, March 16, 1998

Esko Saarinen

Authorized Public Accountant

## KEY RATIOS

	Jan. 1, 1997- Dec. 31, 1997	Nov. 1, 1995 - Dec. 31, 1996	Nov. 1, 1994 Oct. 31, 1995	Nov. 1, 1993- Oct. 31, 1994	Sep. 1, 1992 Oct. 31, 1993
Turnover	71 179.9	61 750.2	51 043.2	25 804.1	28 567.9
Operating profit/loss % of turnover	4 492.6 6.3	5 230.3 8.5	8 053.9 15.8	2 481.2 9.6	2 048.5 7.2
Profit before extraordinary items, reserves and taxes % of turnover	2 390.4 3.4	3 714.3 6.0	7 448.2 14.6	1 994.0 7.7	70.7 0.2
Profit before reserves and taxes % of turnover	2 390.4 3.4	3 714.3 6.0	7 488.8 14.7	2 568.2 10.0	- 2.5 neg.
ROE %	10.1	28.3	161.6	neg.	neg.
ROI %	16.8	36.1	87.6	35.6	39.2
Equity ratio %	35.5	40.3	26.6	13.0	neg.
Gross investments in fixed assets % of turnover	8 741.9 12.3	6 065.0 9.8	2 703.1 5.3	1 681.3 6.5	2 318.2 8.1
Research and development expenses % of turnover	4 087.7 5.7	3 795.0 6.1	2 017.1 4.0	1 122.0 4.3	2 245.0 7.8
Order backlog, FIM thousands	24.4	12.0	19.0	17.0	8.0
Personnel, average	97	80	50	40	36
Earnings/share, FIM/share	50.09	192.98*)	1 715.51	707.86	24.48*)
Shareholders' equity/share, FIM	755.70	653.33	1 890.04	531.49	neg.
Dividend/share, FIM	9.00 **)	26.70	180.00	-	-
Dividend/earnings, %	18.0	13.28	10.50	-	-
Adjusted average number of shares during the financial year	20 192	11 094	3 267	2 817	2 667
Adjusted number of shares at the end of the financial year	20 842	18 422	2 667	3 567	2 667

\*) The profit for the financial year has been calculated on a 12-month basis

\*\*) Board proposal, total dividends FIM 187 578.00

## CALCULATION OF KEY RATIOS

**ROE (%) =**

$$\frac{\text{Profit after financial items - direct taxes}}{\text{Shareholders' equity + minority interest + difference in accelerated depreciation (average)}} \times 100$$

**ROI (%) =**

$$\frac{\text{Profit after financial items + interest expense and other financial expenses}}{\text{Total assets - non-interest bearing liabilities (average)}} \times 100$$

**EQUITY RATIO (%) =**

$$\frac{\text{Shareholders' equity + minority interest + difference in accelerated depreciation}}{\text{Total assets - advance payments received}} \times 100$$

**EARNINGS/SHARE, FIM/SHARE =**

$$\frac{\text{Profit after financial items + minority interest of the profit for the financial year - direct taxes}}{\text{Adjusted number of shares at the end of the financial year (average)}}$$

**SHAREHOLDERS' EQUITY/SHARE, FIM =**

$$\frac{\text{Shareholders' equity + difference in accelerated depreciation - minority interest}}{\text{Adjusted number of shares at the end of the financial year}}$$

**DIVIDEND/SHARE =**

$$\frac{\text{Dividends}}{\text{Adjusted number of shares at the end of the financial year}}$$

**DIVIDEND/EARNINGS (%) =**

$$\frac{\text{Dividend/share}}{\text{Earnings/share}} \times 100$$

## PMJ OVER THE YEARS

**1998** Acquisition of Global Integration Inc. in the USA.



**1997** PMJ automec Corporation is winner of the Excellence in Electronics award at Nepcon '97  
PMJ automec Corporation ranks as one of Europe's 500 fastest growing companies (Europe's 500 Board of Directors 1997).

**NEW STRATEGY:  
A FOCUS ON END-  
OF-LINE AUTO-  
MATION IN THE  
ELECTRONICS  
INDUSTRY**



**1996** PMJ automec Corporation is one of three finalists for the Excellence in Electronics award at Nepcon '96.



**1995** The second HiSAC® generation comes out on the market.

**1994** The first modular production cell (HiSAC® High Speed Assembly Cell) is launched.



**1989** Markku Jokela purchases Evox's automation business and establishes PMJ automec Corporation.



**1986** The first assembly cell for odd-form components is manufactured.

**1964** The first automatic capacitor-manufacturing machine is produced.

**1948** Evox Oy is established



## LANDMARKS IN THE HISTORY OF THE ELECTRONICS INDUSTRY



**1995** AST's Pentium version has 5x86 CPUs and 16 MB of RAM.



**1991** The Internet comprises about 5000 networks in nearly 40 countries and it has more than four million users



**1987** Nokia brings out on the market the world's first NMT mobile phone, the Mobira Cityman, which is manufactured in 1987-1990.



**1968** Technical colour TV test broadcasts are started in Finland.



**1946** The world's first general use digital computer, ENIAC, weighs 30 000 kg and takes up 150 square metres of space. Eniac has one central processing unit and 20 memory registers.

## SHAREHOLDERS AND BOARD OF DIRECTORS

### THE 10 LARGEST SHAREHOLDERS

Markku Jokela	63.69%
TR European Growth	9.60%
Raimo Korhonen	3.83%
The Zabłudowicz Trust	2.40%
Joni Jokela	2.11%
Pirjo Jokela	2.11%
SITRA (The Finnish National Fund for Research and Development)	2.11%
Tommi Rakshit	1.92%
Jarmo Kanervo	1.55%
St. Petersburg Trading	1.44%
Total	90.76%



From the left: Jarmo Kanervo, Markku Jokela, Heikki Kiesi, Turo Levänen)

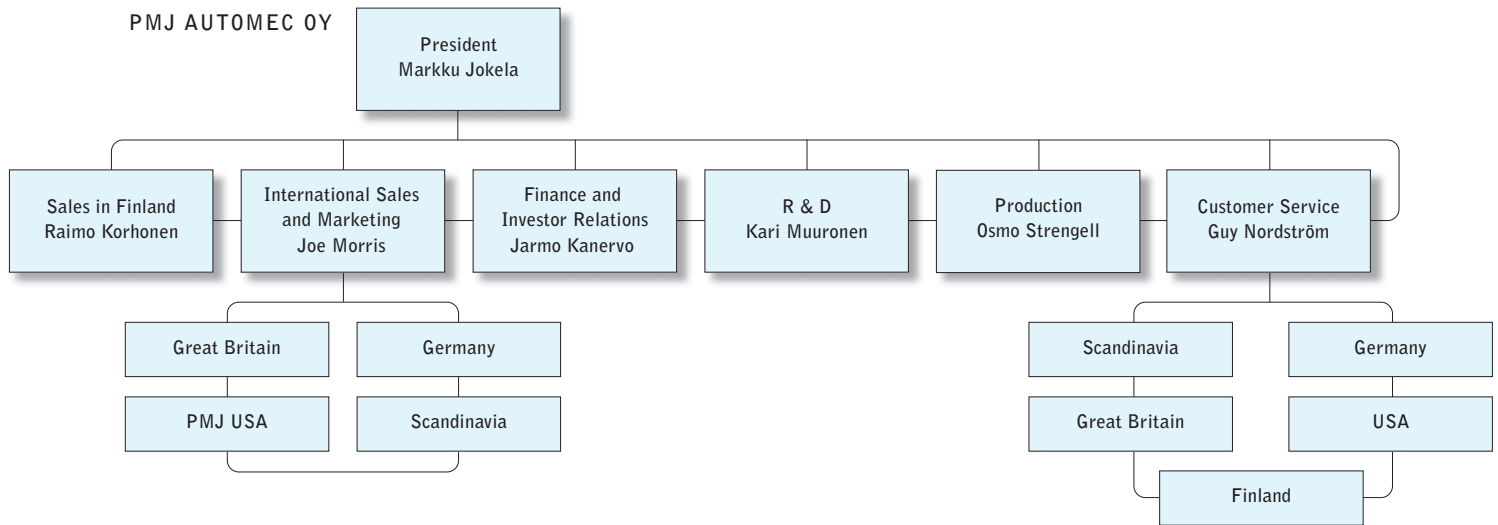
### PMJ'S SHARES

December 31, 1997  
% of shares

#### BOARD OF DIRECTORS

Jokela, Markku (40)	President	63.69
Kanervo, Jarmo (43)	Executive Vice President, Finance and Investor Relations	1.55
Kiesi, Heikki (Chairman) (44)	Senior Lawyer, Founding partner of Kiesi Juridia Oy	0.78
Levänen, Turo (37)	Director, Suomen Teollisuussijoitus Oy	0.78
	Total	66.80

# ORGANIZATION



## MANAGEMENT GROUP

Jokela, Markku (40)

Kanervo, Jarmo (43)

Kauppila, Sisko (44)

Korhonen, Raimo (36)

Morris, Joe (38)

Muuronen, Kari (42)

Nordström, Guy (45)

Strengell, Osmo (31)

President, B.Sc.(Eng.)

Executive Vice President, M.Sc.(Econ.)

Finance and Investor Relations

Accounting Manager, M.Sc.(Econ.)

Vice President, technician

Sales in Finland

Vice President, B.Sc.(hons.), MBA

International Sales and Marketing

Vice President, M.Sc.(Eng.)

Product Development

Director, technical student

Customer Service

Production Director, B.Sc.(Eng.)

## CONTACT INFORMATION

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Hartford, Cheshire CW8 1PF, UK  
Tel. +44-1606-781 465  
Fax: +44-1606-742 03

## GLOSSARY

**AUTOMATION SYSTEMS INTEGRATOR =**

An equipment manufacturer whose products incorporate an operations control system and robotics

**ASSEMBLY CELL FOR ODD-FORM COMPONENTS****AUTOMATIC CAPACITOR-MANUFACTURING MACHINE****EMS (ELECTRONIC MANUFACTURING SERVICES) =**

Electronics manufacture in which the end product manufacturer has outsourced portions of the manufacture to subcontractors

**HiSAC® (HIGH SPEED ASSEMBLY CELL) =**

PMJ's own product name

**IN-LINE PRODUCTION CELL =**

Production equipment that can be connected to form an integral part of the production line

**SOLDERING CELL=**

A piece of equipment that is used in electronics manufacture to solder components to a PCB

**DEPANELLING CELL =**

A piece of equipment that is used in electronics manufacture whereby PCBs are cut free from their panels. The types of depanelling cells are

- Bottom router = the depanelling is done from underneath the PCB
- Top router = the depanelling is done from above the PCB

**ASSEMBLY CELL =**

A piece of equipment used in electronics manufacture whereby components are assembled on a PCB

**MODULAR PRODUCTION CELL =**

A production cell consisting of independent modules, e.g. PMJ's HiSAC®

**MODULE =**

An independent part of a production cell

**OEM (ORIGINAL EQUIPMENT MANUFACTURER) =**

An end product manufacturer who manufactures and sells its product to end users, i.e. consumers

**PCB HANDLING EQUIPMENT =**

Equipment that has been developed for transporting and handling PCBs between cells, for example, a conveyor, a magazine loader/line unloader, a destacker and a flip unit.

**INTEGRATED CIRCUIT =**

The raw material that is used in active semiconductor components, e.g. in diodes, transistors, etc.

## PMJ PRODUCTS

### HiSAC<sup>®</sup> products

**HiSAC<sup>®</sup> ODD-FORM PCB ASSEMBLY CELL =**

used for assembly of odd-form PCB components

**HiSAC<sup>®</sup> IN-LINE DEPANELLING CELLS =**

used for automatic break out and unloading of PCBs from panels

**HiSAC<sup>®</sup> SELECTIVE SOLDERING CELL =**

used for the selective soldering of certain components to a PCB, unlike the wave soldering method in which all the components are soldered.

**HiSAC<sup>®</sup> SOFT BEAM SOLDERING CELL =**

makes use of Panasonic's fiber optic light system for soldering components.

**HiSAC<sup>®</sup> PIN INSERTION CELL =**

used for installing of e.g. connector pins on a PCB.

**HiSAC<sup>®</sup> MULTIFUNCTION CELL =**

combines several of the above mentioned tasks according to the customer needs

**HiSAC<sup>®</sup>** Final assembly cells

### PCB handling equipment for end-of-line automation of electronics manufacture

Conveyors

Turn units

Flip units

Magazine loaders/line unloaders

LIFO/FIFO Buffers

Destackers

Soft-Beam<sup>™</sup> soldering cells

Labelling cells



