

Review

1997



The Finnish ABB Companies



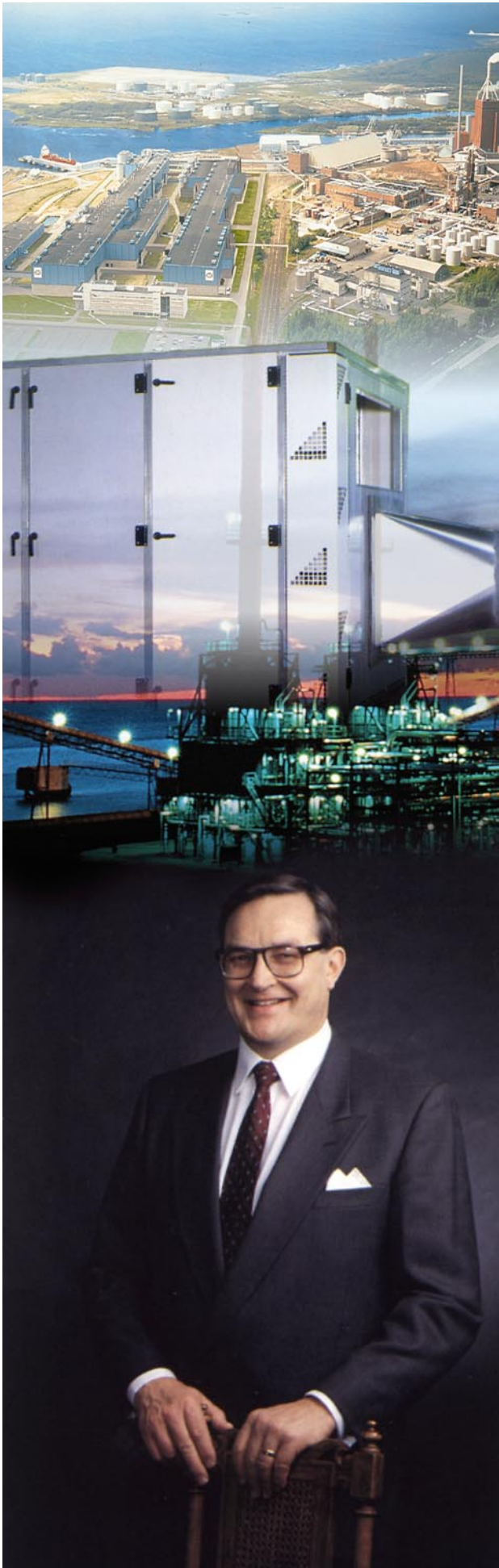
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ABB Oy Group, key figures (FIM million)

	1996	1995	1994	1993	1992	1991	Change 1995-96
Orders received	7,675	7,490	6,393	5,890	5,261	5,198	+2 %
of which exports	3,788	3,644	2,977	2,738	2,129	1,717	+4 %
Total revenues	7,813	7,139	6,291	5,580	5,304	5,321	+9 %
Result margin (%)	13	13	13	11	10	9	
Income before taxes	965	875	737	565	535	329	+10 %
Return on equity (%)	28	30	27	23	22	14	
Order backlog 31.	2,953	3,692	3,531	3,319	2,993	3,019	-20 %
Personnel 31.12.	9,175	8,975	7,971	7,788	8,025	9,318	+2 %
Capital expenditure, new decisions	237	234	291	182	138	134	+1 %
Research and development	502	438	401	397	315	267	+15 %
Competence develop- ment of the personnel	77	71	60	47	42	50	+8 %

1996 excluding Rail Transportation Business



Strong input in product development

The goal of the Finnish ABB companies' development work is technical proficiency. Our principle is always to serve customers with state-of-the-art technology and efficiency.

The Finnish ABB companies have increased their investment in research and development quite markedly. In financial terms, our investments have increased by a factor of 2.5 since 1988, i.e. the year ABB was founded, and last year exceeded 500 million Finnish marks.

We have devoted considerable resources to alternating ac-drives and their various applications. Our success has opened up an extensive international market for our electric drive technology. Our products are ensuring more effective energy use in large and small projects all over the world.

Another area in which we have in-depth expertise is the technology for medium-voltage electricity grids. Our development work in that field has also reached world-class heights and we export to all the continents.

Thermonet technology represents the latest innovation in building technology. It has found a number of successful applications in Finland and other Nordic countries and new uses are being actively developed.

The Finnish ABB companies need to be able to produce quality for the customer service on the global market. We are developing our overall quality systematically, assessing our operation in accordance with the criteria of the European Quality Award (EQA). We aim to develop our customer services to match those of the best companies in the sector, and this is a very challenging assignment.

Helsinki, 10th March 1997

Matti Ilmari



Slower growth in orders

In 1996, the Finnish ABB companies obtained new orders worth FIM 7.7 billion, i.e., 2 percent more than in the previous year. The growth in orders gained over the previous eight ABB years has averaged 11 percent a year.

Annual sales rose to FIM 7.8 billion, representing an increase of 9% of the previous year. The growth in sales was on a par with the average for the Finnish electronics and electrical industry as a whole.

Exports now account for nearly half of all sales

The value of the Finnish ABB companies' domestic sales last year totalled FIM 3.9 billion, an increase of 1 percent. The distinct decline in large new industrial investments was evident in trading.

Sales to the export market climbed to FIM 3.8 billion, 4 percent more than a year previously. Orders from the export market accounted for 49 percent of all orders.

A solid half of exports came from EU countries, 15% from the emerging South-East Asian market, 10% from the Americas, 8% from Eastern Europe, mainly Russia, and 11% from other countries.

Good profitability

The profitability of the Finnish ABB companies remained good. The group's result before taxes totalled FIM 965 million, compared to FIM 875 million a year earlier.

Investments in product development rose to FIM 502 million. R&D investment is among the highest for industrial companies in Finland. New investments in machinery and equipment worth FIM 237 million were also implemented.

More expatriates for the international operations

At the end of the year, the ABB companies employed a personnel of 9,175, compared to 8,975 a year earlier. The Finnish ABB companies are one of the largest employers in Finland.

FIM 77 million was devoted to developing personnel expertise. 112 expatriates worked in ABB's international organisation last year.

ABB Industry Oy



ABB Industry Oy granted environmental certificate

For Enso Fine Papers Oy's new art paper production line, slated to operations in Oulu in the spring, ABB will deliver e.g. sectional drive systems and production management system as well as electrification.

In 1996, ABB's so far smallest frequency converter series, ACS 300, was brought onto the market.

ABB Industry Oy is the first Finnish electrical company to receive an environmental certificate covering all its operations. This ISO 14001 standard certification is fast becoming the central international environmental norm.

At the beginning of 1995, the company embarked on a systematic development program for a more environmentally conscious business approach, e.g. by training its 2,000 staff-members. The company's most important suppliers have also been evaluated according to their environmental attitudes.

In the analysis of environmental issues, the frequency converters produced by ABB Industry Oy have become major factors as far as electricity saving is concerned.

Alternating periods of strong growth and streamlining

In 1996, there was a slump in sales after several years of brisk demand. ABB Industry Oy responded to this weakening market situation with a tight expenditure retrenchment program. At the same time, the company effected organizational changes to further adapt to the new conditions.

Product range expanded to include small frequency converters, previous Variable Speed Drives divisions combined into the Drives group
At the beginning of 1996, ABB introduced the

KEY FIGURES 1996

Revenues:	FIM 2,674 million
Export orders:	FIM 1,946 million
Personnel (31.12.):	2,011
Profitability:	good

ACS 300 line, its hitherto smallest frequency converter series.

Intensive product development was carried out to augment the utilization of DTC (Direct Torque Control) technology, both in a wider power range and in system applications. Direct Torque Control allows the torque and speed of induction motors to be adjusted without a tachometer on the basis of the motor's electro-magnetic state. Thus controlling the motor becomes more accurate and faster.

The shared technological base of the new electrical drives and the increased cost-efficiency pressures were the main factors contributing to the merger of the former Variable Speed Drives divisions into the Drives group last December.

Brisk demand for induction machines, slow down in diesel generator sales

The world-wide demand for diesel power plants fell off and the expanding sales volumes of the generator factory levelled out.

The manufacturing - concentrated since last year in Helsinki - and world-wide guarantee of AMA induction machines and AMK slip-ring machines proved very profitable. HX induction machines also managed to further consolidate their market position.

In order to improve efficiency and distribute resources more evenly, the organization of large electrical machines was altered by decreasing the number of profit units from four to two, i.e. synchronous machines and induction machines.

Major project selling orders and deliveries

The Pulp & Paper division received large domestic orders, such as the sectional drive systems and



The world's largest cruise liner m/s Carnival Destiny is equipped with ABB's power plant and propulsion machinery.

production management system for Enso Fine Papers Oy's new art paper production line in Oulu. In September, Metsä-Serla's new fine paper production line started operations in Kirkniemi in the city of Lohja and ABB delivered sectional drive systems and quality control and web inspection systems as well as electrification. The order was valued at over FIM 130 million.

The greatest successes in export activities were reaped in certain Asian countries, such as Indonesia and China. Operations will start at the Siam Paper company's new fine paper plant near Bangkok in early 1998. ABB delivered comprehensive electrification, sectional drive systems, automation etc. solutions to the customer.

The world's largest cruise liner, m/s Carnival Destiny owned by the American Carnival Corporation, was completed at the Fincantier shipyard in Italy in October. For this vessel, ABB delivered a power plant and the propulsion machinery. In October, our Marine division made a contract of similar deliveries to two new cruise liners owned by the Malaysian Star Cruises and due to be completed at the German Meyerwerft shipyard in 1998 and 1999.

ABB Motors Oy



Generators made by ABB Motors generate electricity in wind-powered turbines at the Yorkshire Royal Moor Wind Farm in England.

KEY FIGURES 1996

Revenues:	FIM 642 million
Export orders:	FIM 491 million
Personnel (31.12.):	642
Profitability:	good

Profitable growth by developing operations

Compared to the previous year, ABB Motors made significant advances in the Far East. The company also retained its position in Central European countries, despite a decline in total volume in this area's markets.

Among the largest orders received were those from UPM-Kymmene's Rauma paper machine and the Malaysian Genting Sanyen paper machine, which ordered high-efficiency electric motors for sectional drives as well as DOL motors. Roller table motors designed for demanding operating conditions were ordered for the hot-rolling plant of the Saudi-Arabian Hadeed project. ABB Motors is also a significant manufacturer of wind generators, with several orders received for them.

The most important deliveries were to Metsä-Serla's Kiri project and UPM-Kymmene's Valkea-

koski project, which were supplied with motors for sectional drives, and the Taiwanese Yieh Loong delivery comprising roller table motors for a hot-rolling plant.

Delivery processes shortened

Production investments made last year were intended to bring operations closer to customers. Production processes have been divided into two parts, to ensure profitable growth and to shorten lead times in the order/delivery process, improve customer-orientation and develop teamwork. New notching centers, and flexible automatic manufacturing systems (FMS) for manufacturing frames, shields and shafts increased production capacity.

The new motor lines are flexible and fast. For example, the standard motor line started in 1996 can dispatch a motor within 24 hours of receiving an order. A long chain of people, from employees to occupational health experts, helped design the line and its tools and procedures, which represent the latest technology. Operators are multi-skilled, so that sudden absences do not upset production. The line has easily achieved its target capacity of 100 motors a week.

A more comprehensive range of products

Various customer applications ordered for wind power stations constitute the most important input in product development. At present, most customers for wind generators are located in Denmark and the Netherlands, while the European markets for wind turbines are



Roller table motors, delivered to National American Steel in the USA, are also among the most commonly ordered products.

principally in Germany and Great Britain. The Chinese and South American markets are expected to grow in coming years.

The company has prepared to supply the wind energy markets by introducing a new production line manufacturing generators for wind power stations. Almost one thousand generators were made in 1996, with ABB Motors supplying most of the requirements of the world's largest manufacturer of wind power stations.

A number of production series were supplemented during the year. The steel motor series was complemented with motors size IEC 400. The NEMA cast iron motor series now comprises sizes 440-587, and the series of motors for hazardous environments is now complete and approved.

ABB Control Group



ABB Control's handle range was awarded in the Pro Finnish Design competition.

KEY FIGURES 1996

Revenues:	FIM 557 million
Export orders:	FIM 197 million
Personnel (31.12.):	834
Profitability:	good

Design award for ABB new handle range

ABB Control Oy's investments in industrial design have been awarded. The new handle range was awarded in Pro Finnish Design competition. Electro-technical products must not only be well designed and ergonomic, but also easy to manufacture and able to meet operating requirements.

Demands for better quality of electricity have opened excellent market prospects for the harmonic filtering and power factor correction equipment developed and manufactured by ABB Control. These devices have already been supplied for many applications, ranging from process industry to greenhouses.

Increased exports

A large increase in exports has compensated for weakening domestic demand. Switchgear exports doubled last year, while switch exports also grew briskly.

The largest single export order came from Thailand, when Advance Agro ordered low-voltage switchgear and busduct system for their pulp line, paper machine and power plant. Low-voltage switchgear and busducts were delivered to the Thai company, Siam Paper, last year.

The most significant Finnish orders were low-voltage switchgears and busducts for Enso's Lumi 7 project in Oulu, which also were delivered during 1996 and an order from UPM-Kymmene's Rauma Paper Mill. Outokumpu Oy in Tornio ordered motor control centers and busducts for the annealing and pickling line of their refined steel mill. Low-voltage switchgear and busducts were also delivered last year to the Kaukas paper mill. Metsä-Botnia's Kaskinen mill was supplied with power factor correction equipment and harmonic filters.

Efforts to maintain the personnel's work fitness and to improve the working environment were continued. The emphasis was on teamwork training and personnel skills development.

To improve service, a new information system was introduced in the Systems Division.

Environmental protection has always been one of ABB Control Oy's top priorities. In the turn of the year, the company became the first Vaasa-based company who received a certificate of environmental management systems covering the company's all operations. The certificate is based on the international ISO 14001 standard.



The development of the new environmental management system has improved the operation, safety and cleanliness of the oil store.

ABB Installaatiot Group



Metsä-Serla ordered instrumentation and process electrification from ABB Installaatiot for its Kirkniemi paper mill and auxiliary departments.

Large industrial projects and complete building services packages

ABB Installaatiot maintained its good market share, while the company's positive profit development continued. The largest orders received for industrial projects are an instrumentation and process electrification contract for the Metsä-Serla Kirkniemi paper mill and the process electrification and air-conditioning of the UPM-Kymmene Kaukas Lappeenranta pulp mill. The largest building services orders received are for building services for the Lesnaya office building in Moscow and for the Hartwall Arena in Helsinki.

The year's most significant deliveries included air-conditioning and automation for the president's palace in the Kremlin, the electrification of the head office of Sperbank Russia and a complete building services delivery for ICL's office building.

Europe's largest and most modern prefabricated concrete building module factory at Sertolovo near St. Petersburg was completed as the last project in the military housing program. ABB Installaatiot Oy was responsible for the electrification and power supply system of the factory and its related dried powder products factory and auxiliary premises.

KEY FIGURES 1996

Revenues:	FIM 1,152 million
Export orders:	FIM 172 million
Personnel (31.12.):	1,549
Profitability:	good

ThermoNet gains ground and is developed

The majority of product development investments went to the further development of ThermoNet technology, used to improve the energy efficiency of buildings and communities and to cut service-life costs.

Building services system products and service operations promoting industrialized construction are being developed. Markets for building services system products are being opened in the EU area and in Russia and the Baltic countries.

District heating and cooling distribution systems are being developed in a community energy systems program. The results will be applied in district cooling demonstration projects, based on district heating, to be implemented in Helsinki, Finland and in Herring, Denmark. The use of ground water will be investigated in a pilot plant to be built in Vaasa.

In the spring, the Finnish District Heating Association awarded the ThermoNet system its Energy Golden Nugget prize.

ABB Installaatiot has participated in the development of the LON (Local Operating Network) system, an open building services control and information system that is not dependent on any particular manufacturer.

Focusing on development of skills and quality

A great deal of attention is being paid to quality and environmental matters and their development, as well as to personnel development. Last year was a work safety theme year in the company. At the end of the year, quality manager Kai Alopaeus received the national work safety award.



Jyrki Heinonen and Markku Laaja from ABB Installaatiot are installing a high voltage cable terminal.

ABB Service Group



*Call us when you need maintenance.
We're at your service, all round the
clock, all round the year.*

KEY FIGURES 1996

Revenues:	FIM 676 million
Export orders:	FIM 130 million
Personnel (31.12.):	1,284
Profitability:	good

Development of comprehensive maintenance services continued

ABB Service Oy continued to develop maintenance services to improve its customers' production processes and cost-effectiveness. The company's goal as a comprehensive maintenance company in Finland is to meet its customers' present and future requirements.

Maintenance outsourcing for several customers

For the second year running, several production plants in various fields handed over responsibility for their maintenance to ABB Service and concentrated on their core business, thus increasing their competitiveness. These full-service contracts increased the personnel of ABB Service by about two hundred persons.

Spare parts service became ABB Logistics Center, Finland

ABB Service's spare parts service covers not only conventional spare parts sales and technical support, but also a large number of other activities relating to maintenance. In the spring of 1996, the name of the service was correspondingly changed to ABB Logistics Center, Finland.

Spare parts logistics efficiency increased by Statim

The Statim spare parts ordering and information system for ABB's customers was launched in February 1996. This has a partial real-time connection to ABB Service Oy's operational sales, warehousing and purchasing system. By February 1997, Statim was in use in 14 countries and included 14 000 items. By the end of the year, the system will cover 100 000 items.

ABB now sells and services Jungheinrich fork-lift trucks

Since spring 1996, ABB Service has been responsible for the sales and service of German Jungheinrich fork-lift trucks in Finland. The agreement covers indoor and warehouse trucks. Jungheinrich trucks have been sold in Finland since the 1950s.

ABB Fläkt Oy



ABB Fläkt develops and manufactures high-quality products and services - rapidly and effectively. They meet customer requirements for the treatment of both indoor air and industrial process air.

KEY FIGURES 1996

Revenues:	FIM 465 million
Export orders:	FIM 169 million
Personnel (31.12.):	533
Profitability:	good

The expert in air handling increased its exports

The revenues of ABB Fläkt Oy increased by about 25 % over the previous year, mainly due to exports. All the profit units of the company are certified under the ISO 9001 quality system. The company's internal innovativeness is reflected by a considerable increase in its patent applications.

Rapid growth accelerates internal change

Lapinleimu Oy, a subsidiary manufacturing air terminal devices, was merged with ABB Fläkt Oy in January 1997. This will improve customer service and further increase operational efficiency.

Since February, all of ABB Fläkt's operations in the Helsinki region have been concentrated in Espoo. A new duct factory is under construction in Turku, and will start operation in the spring.

New products launched

In 1996, the new generation EU 2000 air handling unit was brought onto the market, its greatest advantage being economy in all sub-areas and over its entire life.

The first applications of the ThermoNet building services center were also launched in 1996. The ThermoNet runs a building's heating, cooling and ventilation. The company also unveiled the quietest powered roof-fan on the market.

New software package for air handling designers

An entirely new tool was developed for air handling designers, the most up-to-date software package in the field. The package comprises six programs, the most versatile of which is the EU 2000 air handling unit dimensioning and selection program.

ABB Transmit Oy



The 100,000 MVA milestone in power transformer production was reached in March 1996. The 'Hero of the Day' was a 47 MVA transformer to an extensive electrification project in Colombia. The photograph shows representatives of the customer, Central Hidroeléctrica de Caldas, and of ABB Transmit.

KEY FIGURES 1996

Revenues: FIM 1,164 million
Export orders: FIM 630 million
Personnel (31.12.): 1,307
Profitability: good

A firm foothold in power transmission and distribution

ABB Transmit Oy offers a comprehensive range of products for power transmission and distribution. The company's revenues increased by 7 % over the previous year. Exports account for more than half of ABB Transmit's business.

Large transformer orders in Finland

Teollisuuden Voima Oy ordered a 1000 MVA power transformer for the renovation project at Olkiluoto nuclear power station. The largest 3-phase transformer ever made in the Nordic Countries, will replace the existing 800 MVA main transformer and permit the output increase of the plant units.

IVO Voimansiirto Oy placed an order for two

400 kV power transformers for substations. In addition, ABB Transmit will supply circuit breakers and surge arresters for a substation project increasing power capacity in the transmission lines between Sweden and Finland.

A GIS-switchgear extension and a power transformer were supplied to Metsä-Botnia in Kemi and a medium voltage switchgear to Enso Fine Papers Oy in Oulu.

Relays and electrification projects abroad
Relays and Network Control Division further increased exports. The growth was particularly strong in eastern Europe, Asia and Sweden.

Transmission and Distribution Projects Division was responsible for a significant electrification project in Colombia. Most of the 28 transformers and other equipment delivered were taken over in 1996. The division also won a large order for diesel power plant electrification in the Tapal project in Pakistan.

New products and development responsibilities

An important production centre for air-insulated switchgear is being created in Vaasa following the transfer of Uniswitch switchgear manufacture from Norway to Finland.

Systematic quality development led to extension of ISO 9001 quality certificate to include network control and substation project operations.

Power Transformers Division pioneered development of operations; model process based procedure developed in Vaasa is expanded in ABB.



A cellular terminal is the cornerstone of power distribution automation. The REF cellular terminal is a new generation protective relay developed by Relays and Network Control. The REF was awarded the prize for the best product at the Poznan Fair in Poland.

ABB Power Oy



In the fall, the After Sales unit rebuilt the number 3 electrostatic precipitator of the soda recovery unit at Metsä-Sellu's Äänekoski pulp mill.

KEY FIGURES 1996

Revenues:	FIM 343 million
Export orders:	FIM 18 million
Personnel (31.12.):	156
Profitability:	good

Increasingly comprehensive services for power producers

ABB Power is responsible for business operations involving power production and environmental technology in Finland.

In the spring of 1996, a new profit unit, After Sales, was established, comprising power plant and environmental service operations, with the aim of providing even more comprehensive customer service.

ABB Power was granted a quality certificate meeting the requirements of ISO 9001. Quality management is now being developed further on the basis of the European Quality Award criteria.

Large contracts in environmental technology and power production machinery

Deliveries of the Environmental Systems division included a pulp dryer for UPM-Kymmene's Kaukas mill and four electrostatic precipitators for

the Mosenergo coal-fired power plant in Moscow. Kvaerner Pulping Oy ordered electrostatic precipitators for a soda recovery unit at the Riau Andalan mill in Indonesia, and Rautaruukki Oy ordered a fabric filter for process dust removal.

The Power Generation unit supplied a turbo-generator for Oy Metsä-Rauma Ab. A contract was signed with Kotkan Energia Oy for the supply of a gas turbine and a steam turbine for a gas combi power plant. The turbine plant will start up in August 1997. ABB Power is responsible for future maintenance of the plant's gas turbine.

The Control Systems unit received an order from UPM-Kymmene for an EHJ2000 energy control system. The delivery will include a total of nine computer systems for seven factory locations in Finland. The system will help manage the group's energy purchasing operational planning, purchasing monitoring and optimization, and post-invoicing and reporting.

Neste Oy ordered a gas turbine power plant electrification project, with delivery due in the spring of 1997. Iijoen Voima Oy ordered a generator for the Raasakka hydro power plant, together with electrification and automation.



A turbine plant was delivered to Oy Metsä-Rauma's new pulp mill.

New technology tested in a pilot power plant

The Wasa Pilot Power Plant ordered a 38 MW diesel combi power plant from Wärtsilä Diesel. The principal shareholder in the project is Wärtsilä Diesel Oy, which is developing and testing new power plant technologies. ABB is supplying the plant with a new type of desulphurization technology, a steam turbine and electro-technical deliveries. In addition, ABB Power Oy is a shareholder in the newly established power plant company.

ABB Ecopipe Oy



During the summer, more than 30,000 households in Sarajevo were connected to district heating using ABB Ecopipe's elements.

Quality certification invigorates operations

ABB Ecopipe Oy specializes in the manufacture of insulated district heating pipes. For several years, the company has emphasized the comprehensive development of quality. In the summer of 1996, Ecopipe was granted an ISO 9002 certificate for its quality system, which is particularly important in the export business.

The company significantly increased its exports over the past year. Trade with Russia tripled and sales to Estonia nearly doubled. Ecopipe participated in the Finnish government's reconstruction project in Sarajevo by supplying about 7 kilometers of district heating piping.

In Finland, the Helsinki City Energy company's extensive Vuosaari-Pasila tunnel project, which has lasted for several years, was completed.

KEY FIGURES 1996

Revenues:	FIM 68 million
Export orders:	FIM 15 million
Personnel (31.12.):	35
Profitability:	satisfactory

The 19-kilometre-long Vuosaari-Pasila tunnel, for which ABB Ecopipe delivered district heating pipes, will be brought into use in autumn, 1997.

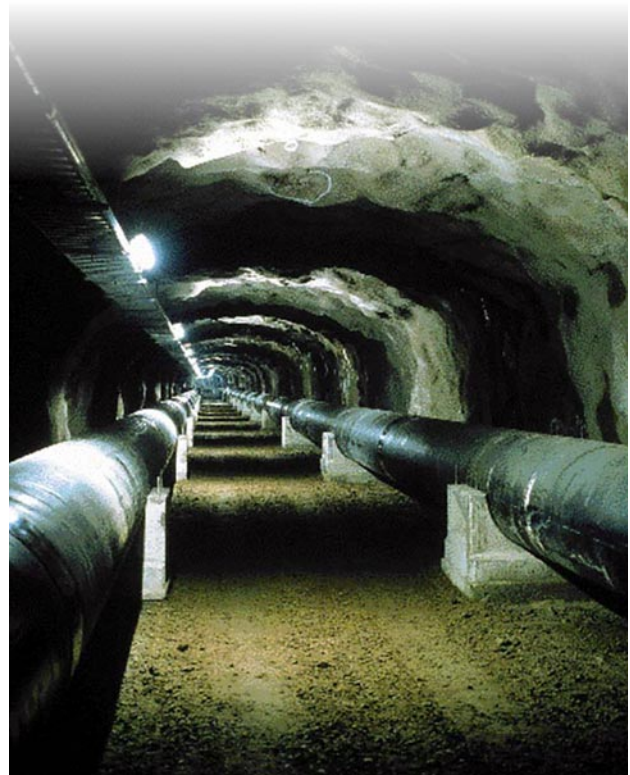


ABB Asea Skandia Group



"18.00 hours is a system that ensures the Thorsman cable ducts you order today will be supporting the cables tomorrow. At your installation."
ABB Asea Skandia expanded its services and became the first electrical wholesaler to accept daily orders up to 6.00 p.m.

KEY FIGURES 1996

Revenues: FIM 691 million
Export orders: FIM 6 million
Personnel (31.12.): 275
Profitability: good



ABB Asea Skandia awarded Finnish logistics prize in 1996

Last year, the Finnish division of the ICHCA (International Cargo Handling Coordination Association) awarded ABB Asea Skandia its Finnish commercial logistics prize for work on the subject 'The development and implementation of a wireless table and fork-lift mounted computer terminal system'. In November 1996, the company's materials operations quality system was approved as conforming to the ISO 9002 standard. It is now intended to bring operations up to European quality award standards.

ABB Asea Skandia has succeeded against stiff competition in saturated markets. The good result came not only from cost savings, but also from good service achieved by improved materials control. The largest single order was for electrical installation materials for the Sarajevo waterworks reconstruction project.

The central warehouse introduced a system, in which orders placed before 4.00 p.m. are dispatched from the Hyvinkää Logistics Center the same evening and are delivered to the customer the following morning. This system has significantly improved customer service and has been in operation for all of last year. The excellent experiences gained from this led to an experiment during the autumn, in which orders can be placed up to 6.00 p.m., the products being dispatched the same evening. Positive customer reaction means that these services will be continued and developed this year.

Two commercials were run on the Finnish commercial TV channel for the Cylinda tumbler drier. One of these was awarded in the VOITTO competition as the best Finnish advertising film of 1996.

ABB Financial Services Group

Financing companies support ABB's sales

The ABB Financial Services Group's result for 1996 was good. In particular, sales grew in both leasing financing (ABB Credit Oy) and investment management (ABB Investment Management Finland Oy), and the targets were exceeded. In the future, the AFS Group will increasingly concentrate on supporting sales by the ABB companies in an integrating Europe and in the emerging markets of the South East Asia, where competition is stiffening.

ABB Project & Trade Finance exploits a range of financing sources

The growth of exports by the industrial ABB companies is targetted to high risk countries where lack of financing is often an obstacle to investments. In the near future, the greatest challenge will be to structure financing solutions in these emerging markets. In 1996 ABB Project & Trade Finance unit worked especially in the Russian market for which the risk taking appetite of commercial financiers has gradually increased.

ABB Credit arranges leasing financing

Leasing financing arranged by ABB Credit Oy has become an established form of financing for the energy sector. Metal and engineering, forest and chemical industry enterprises have also begun to utilize the new opportunities offered by leasing financing. During its six years of operation, the company has developed into Finland's market leader in large industrial leasing transactions.

ABB Treasury Center manages risks

In the future, financing risks and the needs of risk management must be known more precisely. The views of the professionals at ABB Treasury Center (Finland) Oy, and their efforts to improve risk management through system support, produced a good result in 1996 - a year in which Finland joined the ERM and which was characterised by fluctuating interest rates. The company also acted as the internal bank of the Baltic ABB companies.

ABB Investment Management manages assets

Contract-based investment management has



The management group of the AFS companies:
From left: Olli Lempiäinen, Gunnar A. Larsen, Kenneth Stenberg, Gunnar Hindsberg, Heli Kämäräinen and Gerd Gripenberg.

KEY FIGURES 1996

Share capital:	FIM 175 million
Income after financial items:	FIM 72 million
Balance sheet total:	FIM 2,608 million
Personnel (31.12.):	44
Profitability:	good

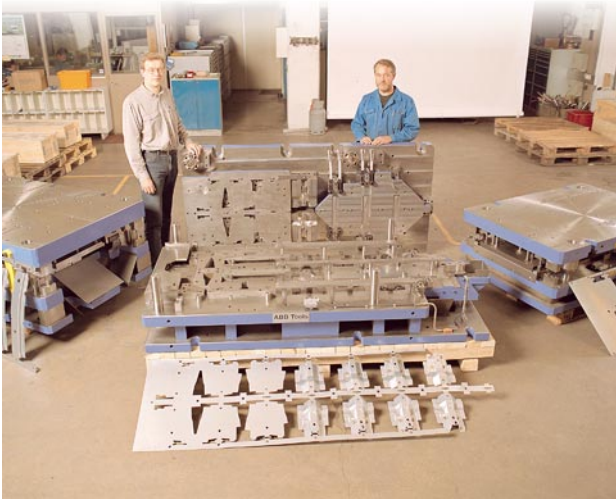
become established in the Finnish capital markets. As a pioneer in the field, ABB Investment Management (Finland) Oy has focused on long-term customer relations and successfully made new relationships among pension funds.

ABB Rahastoyhtiö (ABB Fund) terminated; securities trading changed owners

From the start, the development of the funds market has been weak and from time to time the growth in volume has ceased. The attraction of the Finnish markets was insufficient for the profitable growth of ABB Rahastoyhtiö Oy and for its continued operation.

In May, ABB sold all of its worldwide brokerage operations to Unibank, the second largest bank in Denmark. In Finland, ABB Aros Securities Ltd. was part of the deal.

ABB Tools Oy



The largest tool in the company's fifty-year history was supplied to Volvo Truck Corporation to make components for truck cabs.

KEY FIGURES 1996

Revenues:	FIM 106 million
Export orders:	FIM 5 million
Personnel (31.12.):	224
Profitability:	good

Tools gains certificate

At the end of 1996, ABB Strömberg Tools, which at the same time shortened its name to ABB Tools, gained the ISO 9001 quality certificate granted by Det Norske Veritas. Work on quality will not stop with certification, as the development of operations is a continuous process. An environmental system is being created parallel to the quality system.

Cost-effective data systems for offices, financial planning and production are important tools in the development of operations. A computer-aided design (CAD) system and a CAM manufacturing system have already served Tools for ten years.

Biggest deal in the company's history goes to Sweden

Most of the customers are Finnish, but exports are expanding. Last year's largest single deal was made with the Swedish Volvo Truck Corporation, which ordered press tools for making parts for truck cabs. The order included the largest tool ever made in the company. It weighed about seven tonnes.

Tools' products are mostly tailor-made for customers and require a great amount of individual development, so that the customer always receives a tool fitting his own requirements as closely as possible. More than 4 million FIM are used annually for this development work.

ABB Current Oy



Renovation work began last year on the Turku Prisma project, in which an industrial building is being converted to a hypermarket.

KEY FIGURES 1996

Revenues:	FIM 203 million
Balance sheet total:	FIM 1,034 million
Personnel (31.12.):	165
Profitability:	adequate

A ten-storey parking and office building at Pitäjänmäki in Helsinki will be completed in the summer of 1998.



Many important building projects

1996 saw the completion of many important projects in the field of real estate. Official approval was obtained for the 14 000 m² Prisma project in Turku, which will convert industrial premises into a hypermarket. Work began at the end of the year. Work also began on a 4000 m² extension to an industrial building in Turku, which will replace the industrial premises lost because of the Prisma project. The company owning a new building at Peronkatu was sold to Merita Rahoitus Oy, and was then leased back on a 15-year leasing agreement.

Details of the area plan for Pitäjänmäki in Helsinki, which came into force in 1994, were reconsidered, and the parking garage was altered to a parking and office complex. Design work for the parking and office building began in early 1996 and building commenced at the end of the year. The ten-storey building will have 12 620 m² of office space on four floors, the six lower floors having 28 850 m² of parking space for 845 cars. The project is being financed by Eläke-Sampo, with Skanska Oy acting as project manager. ABB Current Oy has signed a 15-year leasing agreement for the building.

During the year, the remaining possible housing sites at Pitäjänmäki were sold, and the plans for Strömbergintie 6 and Kornetintie were developed further.

Group cost-cutting creates a challenge for company services

The main challenge of company services was to create conditions for the Group's cost-cutting programme. Competitive tendering and reorganization (re-numbering, virtual network) gave good results in telecommunications services. The purchasing of electrical power organized at Group level achieved savings in both the price of energy and in the power requirement covering the whole country.

Operation of the company became more efficient when key appointments were confirmed and the organization of the company was clarified. Quality work and teamwork were reinforced. IT Center and ABB Development Services were added to the company as new operations.

ABB Corporate Research

Research operations continued to grow and internationalize

ABB Corporate Research works with other ABB companies to develop new products and to improve quality and operations.

The revenue of the unit grew by 11 % in 1996. The size of the projects also increased. The research centre was also strongly represented in new extensive international HIP-projects (High Risk High Impact Projects), which contain both great risks and great opportunities.

The role of the production technology laboratory in ABB's international research organization was reinforced. Enterprise simulation and business process simulation projects were carried out in several ABB countries. In Asia, an extensive feasibility study was carried out into the possibilities of expanding the operations of the ABB Group's PTO organization (Process Technology Organization) into the area.

New operating procedures and methods for Finnish ABB companies

An EQA (European Quality Award) assessment process was started in most Finnish ABB companies. A new Lean Office concept, which makes office work more efficient, was introduced in many Finnish ABB companies. The PDM (Product Data Management) pilot project for managing product data proved successful in Finland, leading to its wider introduction in ABB.

Improved teamwork received particular emphasis in the development of the expertise of the electronic systems laboratory. The replacement of old measurement systems started with the design of an effective and easy-to-use floating three-phase measurement system for ABB Industry Oy and ABB Service Oy. Paper quality improvement was pursued through the continuation of the paper and pulp fibre light scattering project.

The modelling and simulation of motors continued by field-testing the applicability of the algorithms developed earlier. There was an increase in



The Production Technology Laboratory has combined DFMA (Design for Manufacturing and Assembly) and teamwork with excellent results. The number of product parts and work stages, as well as production costs, have been reduced to improve competitiveness.

KEY FIGURES 1996

Revenues:	FIM 36 million
Export orders:	FIM 10 million
Personnel (31.12.):	91

activities intended to find suitable simulation tools for the ABB companies.

The materials laboratory continued plastics molding research and consultation. Environmental protection operations were expanded to include Life cycle Analyses of products.

Testing accredited

In December, the Center of Metrology and Accreditation (FINAS) approved accreditation for testing according to IEC standards. The operations of the testing laboratory are now accredited for both testing and calibration.

Consolidated income statement 1996 (FIM 1,000)

	Total Group 1996	Total Group 1995
REVENUES	7,813,086	7,139,036
Material expenses	-3,857,425	-3,489,629
Personnel expenses	-1,956,328	-1,832,563
Other expenses	-973,067	-913,730
Change in inventories	182,418	138,199
Depreciation of fixed assets	-182,607	-157,641
Unusual Items	23,365	75,115
OPERATING EARNINGS AFTER DEPR.	1,049,442	958,787
Dividend income	362	643
Interest income	116,358	172,158
Interest on advances	-91,495	-103,100
Interest expenses	-109,880	-154,002
Exchange and translation differences	-83	478
INCOME BEFORE TAXES	964,704	874,964
Current taxes	-213,600	-184,388
Deferred taxes	-42,786	-13,415
Minority interest	-510	-1,821
NET INCOME	707,808	675,340

Consolidated Balance Sheet, Dec. 31, 1996 (FIM 1,000)

	Total Group 31.12.1996	Total Group 31.12.1995
ASSETS:		
CURRENT ASSETS		
Cash and marketable securities	536,848	687,710
Trade receivables	926,972	973,171
Other current receivables	833,108	1,037,712
Inventories	1,230,265	1,156,137
TOTAL CURRENT ASSETS	3,527,193	3,854,730
FIXED ASSETS		
Loans granted and financing receivables	1,265,106	1,044,328
Shares and participations	31,066	28,387
Goodwill	79,683	0
Intangible assets	517	959
Construction in progress	16,498	28,343
Machinery and equipment	576,130	506,032
Land and buildings	863,202	917,750
TOTAL FIXED ASSETS	2,832,202	2,525,799
TOTAL ASSETS	6,359,395	6,380,529
LIABILITIES AND EQUITY:		
CURRENT LIABILITIES		
Trade payables	529,509	496,668
Short-term loans	1,240,985	1,499,180
Other current liabilities	461,644	635,019
TOTAL CURRENT LIABILITIES	2,232,138	2,630,867
Advances from customers	756,632	854,165
Medium- and long-term loans	35,032	45,279
Pension liabilities	100,160	10,626
Deferred taxes	426,730	369,859
Minority interest	2,949	3,653
STOCKHOLDERS' EQUITY		
Share capital	1,000,000	1,000,000
Restricted reserves	1,002,933	687,641
Retained earnings	95,013	103,099
Net income	707,808	675,340
TOTAL STOCKHOLDERS' EQUITY	2,805,754	2,466,080
TOTAL LIABILITIES AND EQUITY	6,359,395	6,380,529

Change in Financial Position 1996 (FIM 1,000)

INTERNAL FINANCING	
Total revenues	7,813,086
Material expenses	-3,823,164
Personnel expenses	-1,956,328
Other expenses	-973,067
Change in inventories	148,157
Unusual Items	68,388
Financial income and expense	-84,738
Change in current receivables	234,516
Change in current non-interestbearing liabilities	-178,211
Change in inventories	-148,157
Change in advances from customers	15,988
Current taxes	-213,600
Minority interest	-510
Dividend paid	-425,000
INTERNAL NET FINANCING	477,360
INVESTMENTS IN FIXED ASSETS	
Change in financial receivables	-212,639
Sales of fixed assets	31,502
Capital Expenditure	-246,553
EXTERNAL FINANCING	
Change in short term loans	-205,677
Change in medium and long term loans	-11,248
Other	21,924
CHANGE IN CASH AND MARKETABLE SECURITIES	-145,331

The Finnish ABB Companies, January 1, 1997

Industrial and Building Systems

<p>ABB Industry Oy</p> <p>President Martti T. Määttäen*</p>	<p>ABB Installaatiot Group</p> <p>President Sakari Vornanen*</p>	<p>ABB Motors Oy</p> <p>President Jorma Koivusipilä</p>
<p>ABB Service Group</p> <p>President Kalevi Hasi</p>	<p>ABB Control Group</p> <p>President Rainer Smått</p>	<p>ABB Fläkt Oy</p> <p>Managing Director Hannu Paitula</p>

Power Transmission and Distribution

<p>ABB Transmit Oy</p> <p>President Lauri Ruotsalainen*</p>	<p>*Member of the Executive Committee (FIEC)</p>
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Power Generation

<p>ABB Power Oy</p> <p>President Kalle Mattila*</p>	<p>ABB Ecopipe Oy</p> <p>Managing Director Harry Majonen</p>
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Financial and Real Estate Services

<p>ABB Financial Services Group</p> <p>President Gunnar Hindsberg*</p>	<p>ABB Current Oy</p> <p>Managing Director Aulis Kohvakka</p>
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Special Services

<p>ABB Asea Skandia Group</p> <p>Managing Director Markku Nihti</p>	<p>ABB Tools Oy</p> <p>Managing Director Ari Niemi</p>
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Working Committee of FIEC

President and CEO, Country Manager Matti Ilmari*	Human Resources Senior Vice President Harri Mattila*
Finance and Business Control Senior Vice President Erkki Luhta*	Communications Vice President Pentti Nuutinen*

ABB Corporate Research, Finland	Marketing, Domestic	Marketing, Europe
Senior Vice President Juhani Pylkkänen*	Vice President Olli Pakkala	Vice President Harri Launonen

The ABB Group

ABB is a global \$35 billion engineering Group serving customers in electric power generation, transmission and distribution, industrial and building systems, and rail transportation. Income before taxes in 1996 was \$2,007 million and net income was \$1,233 million. The total number of employees worldwide at the end of 1996 was 214,894. Of the Group's total sales, 57 percent were in Europe, 18 percent in the Americas, and 25 percent in Asia, Australasia and Africa.

ABB Group Reports

The ABB Group publishes an annual report as well as a six-month report in English, German, and Swedish. The English version is binding. The Group also publishes an annual Environmental Review. These reports can be obtained from:

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Ownership structure:

ABB Oy is a fully owned subsidiary of ABB Asea Brown Boveri Ltd, Zurich (Switzerland), the holding company of the ABB Asea Brown Boveri Group of approximately 1,000 companies around the world.

ABB Asea Brown Boveri Ltd is owned in equal parts by ABB AB, Stockholm (Sweden) and ABB AG, Baden (Switzerland).

The shares of the two parent companies are listed on various stock exchanges in Europe and the United States.

