MEASUREX ANNUAL REPORT 1990

The Results Company delivers computer-integrated control and information systems that ensure quality products and productivity for its customers worldwide.

Measurex is "The Results Company." It is a leading supplier of computer-integrated control and information systems that measure and control continuous and batch manufacturing processes ..... The Company's broad, integrated product line ensures economic results *for customers by increasing productivity, reducing raw material usage and energy consumption, and improving product quality and uniformity ..... The principal industries served by the Company are: pulp and paper, plastics, metals, rubber, chemicals, glass and pharmaceuticals ..... Corporate headquarters are located in Cupertino, California, in the heart of Santa Clara County's high technology "Silicon Valley." Measurex and its subsidiaries employ 2,580 persons who are located in 38 offices and plants in 23 countries around the world. More than half of the employees are in the Sales and Service organization, serving the Company's customers worldwide ..... Measurex operates a manufacturing plant in Waterford, Republic of Ireland, an engineering facility in Cork, Republic of Ireland, and a software facility in Tokyo, Japan, in addition to the headquarters and manufacturing facility in Cupertino ..... The Company's divisional operations include: the Management Systems Division in Cincinnati, Ohio; Measurex Safecontrol Oy in Jyvaskyla, Finland; and Measurex Automation Systems, headquartered in Cupertino.*

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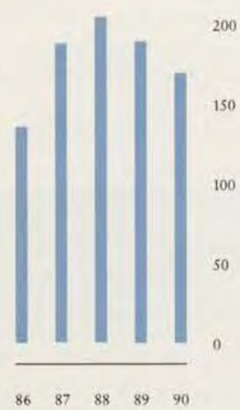
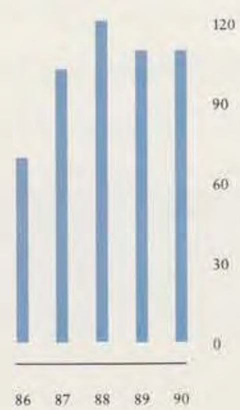
FINANCIAL HIGHLIGHTS

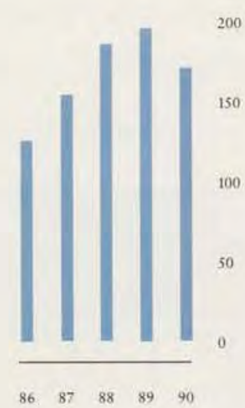
(Dollar amounts in thousands except per share data)	1990	1989	% Change
For the Year:			
Revenues	$266,198	$285,347	(7%)
Net income	$ 22,522	$ 40,682	(45%)
Net income per share	$ 1.26	$ 2.17	(42%)
Dividends per share	$ .43	$ .37	16%
System orders	$168,000	$189,000	(11%)
End of Year:			
System backlog	$109,000	$109,000	–
Working capital	$185,237	$186,798	(1%)
Total assets	$337,477	$333,010	1%
Total debt	$ 5,196	$ 5,257	(1%)
Stockholders' equity	$238,640	$230,074	4%
Number of employees	2,580	2,770	(7%)
Shares outstanding (thousands)	17,897	18,394	(3%)



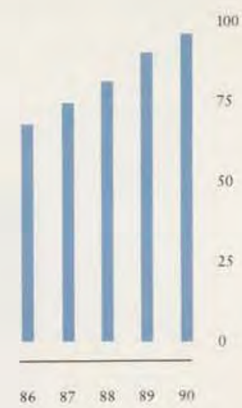
System Orders
($ millions)



System Backlog
($ millions)



System Revenue
($ millions)



Service and
Other Revenue
($ millions)

TO OUR STOCKHOLDERS

The year 1990 was a tough one for Measurex. Our paper industry customers in North America and Japan had a difficult year due to excess capacity and weak pricing. Fortunately, we recognized this situation early on and began to take corrective actions at the start of 1989's fourth quarter. We installed tight cost controls and reduced our head count worldwide by 190, principally by attrition. We continued our investments in new product development and maintained or improved our market share . . . . . Even though fiscal 1990 revenues of $266.2 million were down 7 percent from the prior year and net income, at $22.5 million, was down 45 percent compared with fiscal 1989, we believe that, considering the economic times, your Company performed well. As a percentage of revenue, Measurex earned 8 percent after taxes. And, after a very slow first six months, last-half orders took an encouraging upward swing. For the year, orders were $168 million, down 11 percent from $189 million in 1989 . . . . . In this annual report we will review our strategies for the 1990s and the actions we are taking to maintain our leading market share. Central to this is our pledge to continue our focus on *results* for our customers—results derived from improved quality, increased production and reduced costs.

KEY EVENTS

Measurex continued its emphasis on research and development in 1990. As a percentage of system sales, we invested 17 percent in product development during the year, compared with 15 percent in 1989. As a result, we introduced several significant products, including the IsoTherm™ scanner with its innovative Thermal Equalization System™ (patent pending). You will read more about this new product in the following pages . . . . . During the second quarter of 1990, Measurex and Beloit Corporation agreed to significantly expand and strengthen their successful strategic alliance. Added to our cooperative arrangement were provisions for the integrated marketing and sales of all Measurex controls with Beloit's full line of pulp and paper machinery. Simultaneously, a seven-year "standstill" agreement was executed between Measurex and Beloit's parent company, Harnischfeger Industries, Inc. As of

January 1991, Harnischfeger had purchased 20 percent of Measurex's stock on the open market, the maximum allowed under the agreement. We have already seen good results from this relationship and we expect these results to continue to improve with time . . . . . As a part of the agreement with Harnischfeger, its Chairman and Chief Executive Officer, William W. Goessel, was elected to serve on our Board of Directors. Bill is a long-time friend with many years of experience serving the paper industry. He will be a valuable contributor to our Board.

MAS DEVELOPMENTS

Our subsidiary company, Measurex Automation Systems (MAS) continues its strategic alliance with International Business Machines (IBM) Corporation. In 1990's first quarter Measurex received $0.6 million in royalty income from IBM, derived from IBM's licensing the use of the PlantWorks™: Application Automation Edition™ software package at a number of IBM plants . . . . . Early release software was provided for customer evaluation starting in April 1990. Based on market-driven requirements, two product updates were provided to complement the growing acceptance of the product. You'll read more about PlantWorks elsewhere in this report.

OUTLOOK

Though the economic outlook for 1991 is uncertain, we are well prepared to move through 1991 and into 1992 in an excellent competitive position. Measurex's balance sheet remains very strong, even though sales and profits are affected by the economic downturn in the North American pulp and paper industry . . . . . We are spending a great deal of effort to maintain our worldwide market leadership and to expand our presence in the emerging markets of Asia and Latin America . . . . . We continue to hold expenses down to support our present level of business, while investing in research and development of products vital to our future . . . . . Our new products and worldwide sales and service organizations offer excellent opportunities for growth . . . . . We hope you will support Measurex as we work to improve the Company's performance in the year ahead.

Sincerely,

David A. Bossen

David A. Bossen, *President and Chief Executive Officer*

January 31, 1991

PlantWorks and Application Automation Edition are trademarks of IBM.

PRODUCTION EFFICIENCY THROUGH INTEGRATED CONTROL SOLUTIONS

MEASUREX'S COMMITMENT

To provide its customers with systems and services that enable them to continually improve the production efficiency and quality of their products.

STRATEGIES FOR THE '90s

The decade of the '90s will see a revolution in the use of computers for information and control on the factory floor. Key to the success of this revolution will be *integrated* control solutions—the combining of all of the pieces of the factory-floor automation puzzle to achieve a cost-effective, total solution for optimum production . . . . . With the leading market position in supervisory controls and information management, Measurex puts those pieces together. The Company's systems and products provide complete integration in sensors, profile actuators, distributed controls, supervisory controls and plantwide information systems . . . . . Measurex's product offering today addresses virtually all aspects of the manufacturing process. The Company's systems are built upon an understanding of the customer's processes and quality objectives. A key strategy in the '90s will be to continue to complement Measurex's system-based applications to offer superior results in each industry the Company serves . . . . . Measurex will continue its commitment to research and development, placing a high priority on creating new sensor technologies, controls, profile actuators and management information tools . . . . . As a part of Measurex's total integrated systems solution, the Company will also continue its emphasis on service. With more than one-half of its employees located in field offices, serving customers around the world, Measurex has the strongest service organization in the industry . . . . . Integrated information and control systems will be a competitive requirement for manufacturers in the 1990s. Measurex's process knowledge, installed base of more than 3,000 systems and extensive service organization—combined with the breadth of its product line—position the Company to be a major supplier of systems which meet those requirements . . . . . Measurex's strategy over the past 23 years has been to achieve tangible economic *results* for its customers. This strategy has brought Measurex to where it is today and that "results" strategy will continue to drive the Company in the future.

With their open architecture, Measurex systems can control any level of the process within a plant or mill—from sensors, instrumentation and area supervisory controls to plantwide management—with one integrated system.

DynaView Operations Consoles allow operators to see the process—from pulp mill and paper machine operations to the condition of the paper machine itself.

MEASUREX'S COMMITMENT

To provide sensor and scanner technologies that enable customers to achieve the best measurement accuracy and control capability.

ISOTHERM SCANNER

A part of Measurex's strategy has been to continually focus research and development on sensor and scanner technology to maintain its competitive lead. The recent introduction of the Company's new IsoTherm scanner is an example of Measurex's continuing achievements in this technology . . . . . The IsoTherm's Thermal Equalization System, a sealed, closed-loop liquid flow system, maintains the top and bottom scanner support structures at a constant temperature, eliminating thermally induced scanner beam deflection to provide papermakers with the most precise measurements available . . . . . IsoTherm can support more sensors on a single platform than any other scanner on the market. On paper machines producing high-quality, value-added papers, the scanner's ruggedized frame can support the traditional basis weight, moisture and caliper sensors to reduce variability, as well as sensors that measure color and brightness, strength, formation, top and bottom smoothness, ash, opacity, gloss and coat weight . . . . . Mounted on the Quadrapac® Sensor Platform, Measurex sensors provide critical quality measurements—with precision, accuracy and speed—in real time, across the *entire* sheet . . . . . The IsoTherm scanner, combined with Measurex's UltraTech™ advanced measurement technology, enhanced profile resolution and control actuators technology, provide a unified solution with high-resolution profiles four times faster than conventional systems . . . . . Introduced in 1990, the UltraTech system encompasses a wide array of new measurement and control capabilities including the AutoLign™ dynamic alignment capability, which provides customers up to 50 percent tighter control . . . . . Measurex's "Ultra" technology, coupled with the new IsoTherm scanner, ensures that Measurex's customers satisfy their customers' demands for higher quality paper in today's global market . . . . . The ability to provide total on-line measurement, eliminate thermal warping and increase scanner reliability are important competitive advantages. Measurex's scanner and sensor technology are central to the Company's total integrated solution.

The Thermal Equalization System in the IsoTherm scanner eliminates beam deflection by circulating a liquid around HelicalFlow Guides™ in the upper and lower beams.

IsoTherm's Thermal Equalization System and Rigid Sensor Platform™ ensure the exact alignment of the upper and lower sensor platform, providing unparalleled measurement accuracy.

A COMPLETE SOLUTION

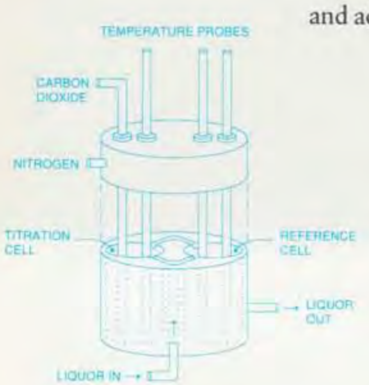
MEASUREX'S COMMITMENT

To provide a complete solution to customers' needs for improved pulp quality and lower manufacturing costs.

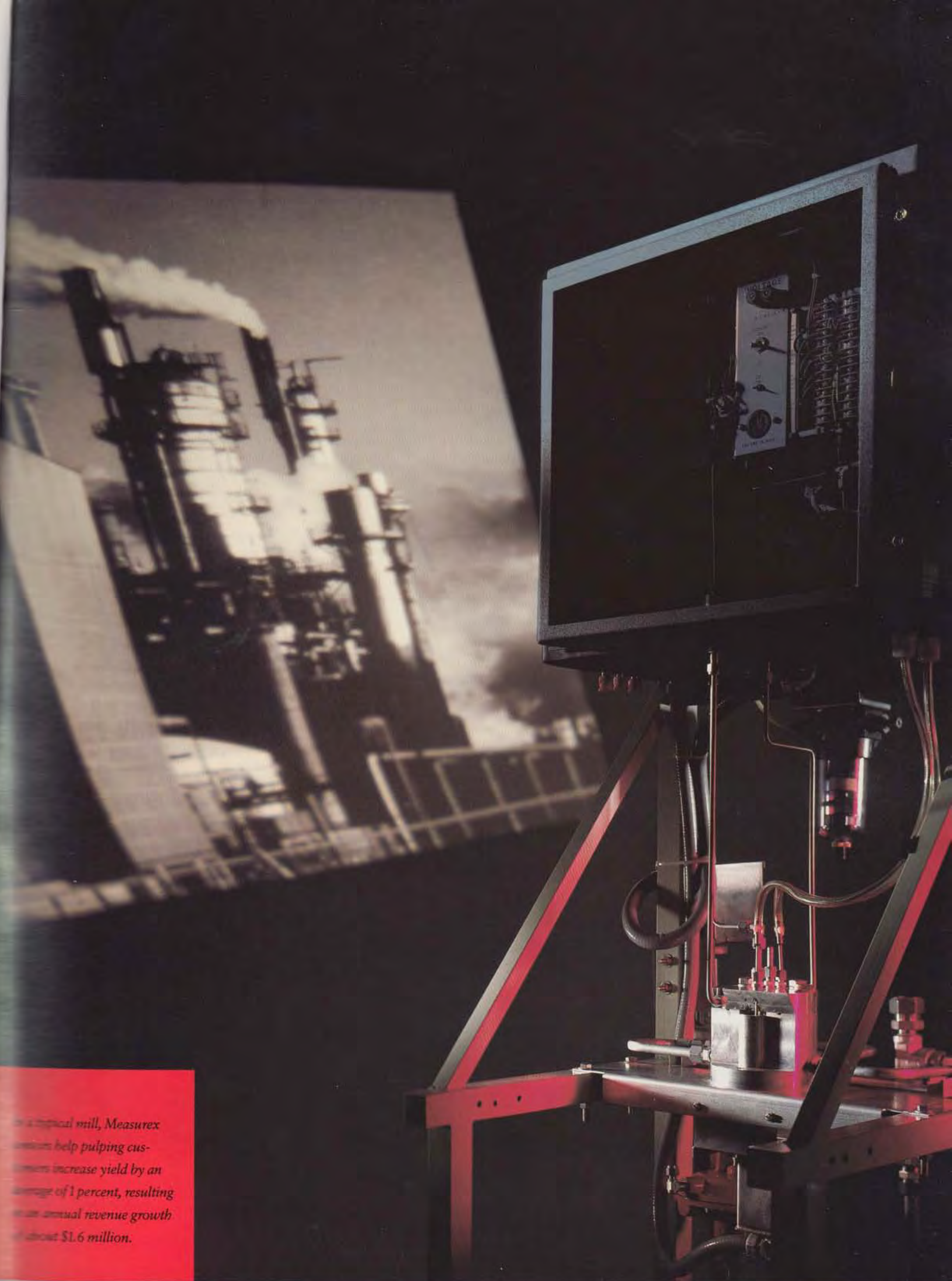
EFFECTIVE ALKALI SENSOR

As a part of Measurex's integrated system strategy for the paper industry, the Company offers the Effective Alkali Sensor,* one of three sensors designed to provide measurable results for integrated pulp mill control. The sensor ensures chemical charging ratios are optimized to improve digester control and produce better quality pulp. It also provides information to control the process while cooking, to increase yield . . . . . Measurex's Versabrite® and DynaCo™ Sensors also provide fundamental control and quality process measurements as part of a complete solution. The Versabrite is an in-line pulp brightness meter, providing direct feedback on pulp quality. The DynaCo is used to minimize energy loss to the environment through feedback to optimize combustion . . . . . Measurex provides the only integrated supervisory and application control modules with its VISION 2002® Network, the first integrated control system (ICS) that gives customers the capability to integrate sensors, control and information for their entire mill . . . . . The VISION system provides both regulatory and application-oriented supervisory control, and its DataFreeway™ local area network connects systems and unit operations throughout the mill. The network can link any distributed control system unit, either Measurex's or a competitor's, to VISION's supervisory controls to complement the mill's installed equipment base . . . . . With Measurex's control products and sensors, customers not only can maximize the quality of their products, but also can ensure faster response to process upsets, produce less off-specification pulp and improve yield . . . . . Measurex's pulping products also help customers operate their secondary fiber systems more efficiently. The Company and its strategic partner Beloit Corporation are both working in this advanced development area. Beloit has introduced a new system to improve its deinking system yields and Measurex offers complementary control systems for these processes. There is a good potential for the two partners to work together to further improve the efficiency and advance technologies in secondary fiber recovery systems.

*U.S. Patent No. 3,994,602



This sensor is used to monitor the alkali concentration in pulping processes to improve yield and quality. This unique technology measures the chemical strength during the pulping process.



In a typical mill, Measurex systems help pulping customers increase yield by an average of 1 percent, resulting in an annual revenue growth of about $1.6 million.

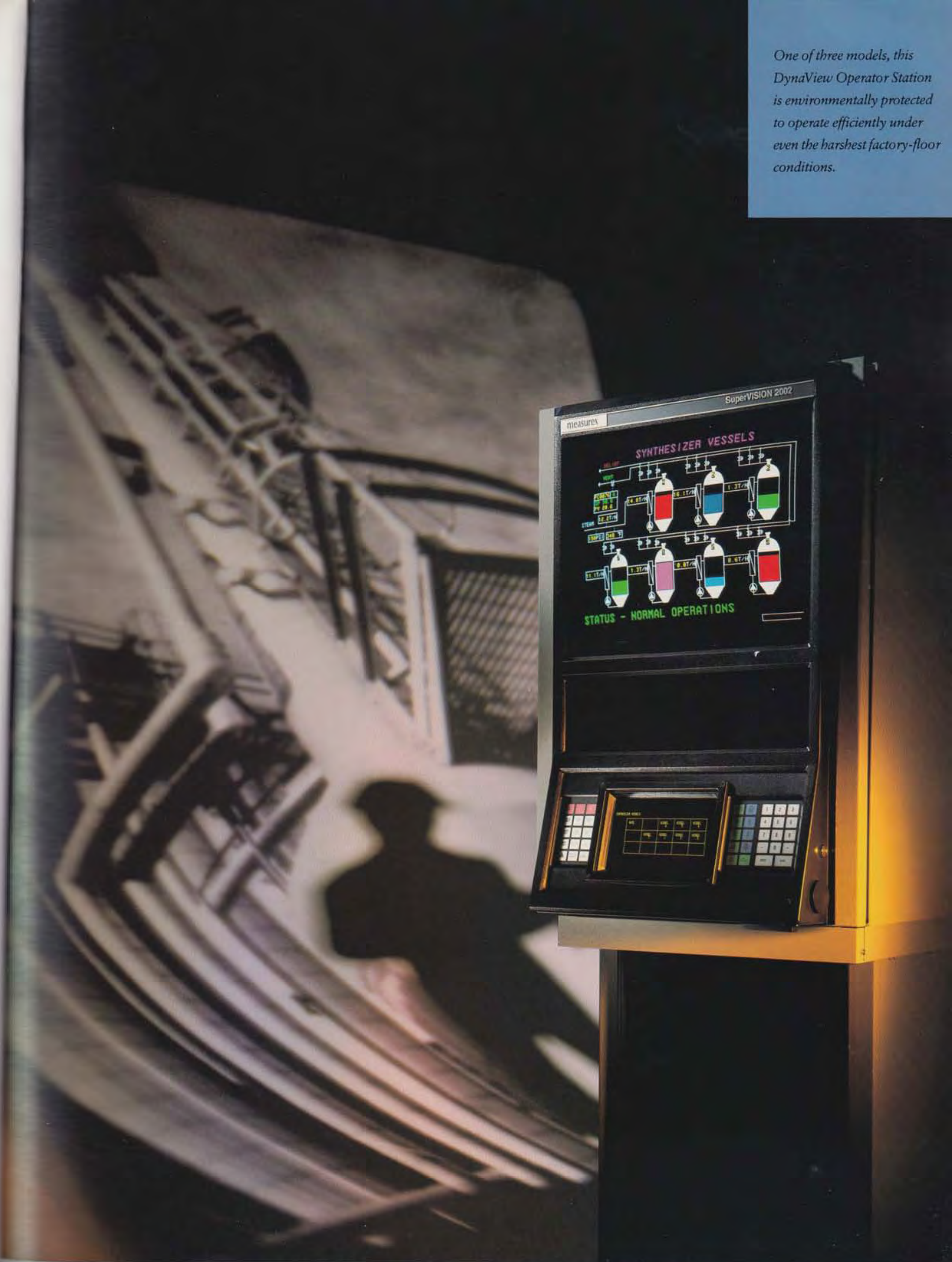
MEASUREX'S COMMITMENT

To provide operations consoles that improve productivity and quality through a common interface for operations and integrated control of the production line and complete plant.

DYNAVIEW OPERATIONS CONSOLES

The success of all factory-floor operations depends upon the operator's ability to *see* the process. By providing complete, real-time visibility into the integrated production process and related operations, operators become a *part* of the production process, and can quickly react to any situation . . . . . Measurex's family of DynaView™ Operations Consoles are key ingredients to the integrated systems solution, providing the important function of operational involvement and ease of use in the real-time environment. The consoles—ranging from modular desktop and sit-down console models to environmentally protected factory-floor operator stations—provide a true "window on the entire process." . . . . . In the integrated systems environment, operations consoles enable users access to information and control data, and allow responses to process conditions. Commonality of console operations, regardless of environment, is key to minimizing user training and system maintenance . . . . . Fast, efficient access to process control, quality and production information requires significant innovation. For Measurex this requirement is filled by the console's unique DynaTouch II touch-sensitive video keypad. The electroluminescent flat-screen keypad replaces conventional keyboards, allowing direct and easy access to information, using configurable label names familiar to the operator. This eliminates the need for keyboard complexities to memorize command statements and function key codes . . . . . As a part of Measurex's integrated systems architecture, the DynaView Consoles provide advanced information and display capabilities. They give operators and plant managers complete visibility on all production activities in real time, resulting in total control of the product, not just the process . . . . . In all industries, the operations consoles make integrated control possible. They bring the operator together with multiple sets of technology—quality control, applications, supervisory and information systems—and all are available through one interface, in a way that can be understood by the operator.

Environmentally protected DynaView Operator Stations give operators and plant managers complete visibility on all production activities in real time for total control of the product, not just the process.



One of three models, this DynaView Operator Station is environmentally protected to operate efficiently under even the harshest factory-floor conditions.

OPTIMIZING QUALITY AND UPTIME

MEASUREX'S COMMITMENT

To provide process and monitoring systems that ensure paper quality and paper machine uptime at high speeds.

SAFECONTROL

As a part of the VISION 2002 Network, Measurex's SafeControl™ Process and Condition Monitoring System is integral to the Company's total product offering. Through integration, papermakers now have a real-time, single window not only to control the process, but also to monitor and control machine conditions that affect quality and predict equipment problems . . . . . SafeControl provides a unique systems advantage to monitor, detect and identify short-term product variations and relate these to their sources, enabling papermakers to fine-tune their machines and further increase the quality of their product . . . . . SafeControl's complete line of products provide process and machine-condition diagnosis and trending, giving papermakers powerful tools to address maintenance problems before failure and solve the continual challenge of product quality versus machine speed . . . . . SafeControl offers modular subsystems to match the growing requirements of the papermaker. The SafeNip™ application module monitors nip rolls and felts in the press. SafePulsation™ diagnoses conditions in the wet end of the paper machine. SafeCondition™ monitors bearing and gear vibrations, temperatures and other machine condition variables. SafeQuality,™ as an integrated module, analyzes the quality of the paper being produced . . . . . SafeControl identifies process and machine variations and vibrations and helps papermakers to eliminate problematic ones. As a result of SafeControl diagnostics, machines can be run at higher speeds, increasing productivity significantly . . . . . Primary benefits include: improved product uniformity, enhanced machine runability, reduced web breaks, prolonged felt life, increased maintenance predictability, heightened process efficiency and greater overall productivity, providing a key enhancement to Measurex's integrated control system results . . . . . Because SafeControl helps to improve the performance of paper machine equipment, it is a key product in Measurex's strategic alliance with Beloit Corporation. SafeControl data provide unique analytical capabilities for Beloit to strengthen its diagnostic services.

TRINIP™ PRESS

The SafeNip module of SafeControl is used to monitor the paper machine's press section and diagnose potential problems in rolls, felts and other equipment and presents the results on easy-to-understand operator displays.

The SafeControl Process and Condition Monitoring System monitors machine conditions to ensure papermakers can continually achieve the highest levels of productivity and paper quality.

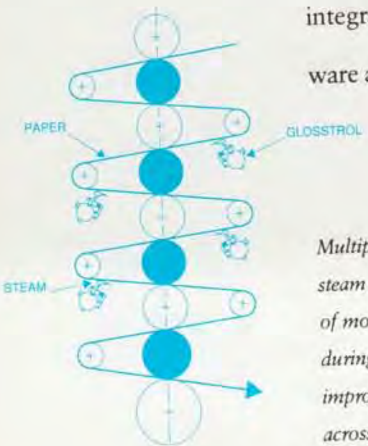
MEASUREX'S
COMMITMENT

GLOSSTROL
PROFILE
ACTUATOR

To provide an integrated systems offering of cross-direction control actuators, all designed to optimize profiling performance.

The GlossTrol™ Profile Actuator is one of seven Measurex actuators that help customers remain cost and quality competitive. The GlossTrol provides both cross-direction and machine-direction gloss control on high-quality supercalendered papers . . . . . A part of Measurex's integrated Supercalender System, the GlossTrol works with Digital Gloss Sensors and Gloss Optimizer Controls to enhance product quality and increase production efficiency . . . . . Today Measurex is the leading profile control supplier, with more installed systems than all other suppliers combined. This success derives from the Company's integrated approach, combining measurement systems, control software and actuators to best meet the needs of each application . . . . . Measurex's profile control actuators are designed for the operating environment. For example, controlling the basis weight profile in the harsh, wet-end environment requires a precise, extremely reliable actuator. The ThermaTrol™ system, which uses Equilex™ slice rods designed and licensed exclusively to Measurex by Chleq Frote et Cie, has no moving parts. On paper machines which have cross-directional weight control, ThermaTrol slice rods are used more frequently than all other actuators combined . . . . . For moisture profiling, a comprehensive set of moisture control technologies is offered. The SteamTrol™ Steam Shower increases water removal to reduce moist areas, the AquaTrol® Digital Spray Shower moisturizes narrow dry streaks, and the InfraTrol™ Electric Infrared Emitter evaporates narrow wet streaks . . . . . Because moisture profiles contain both dry and moist regions, Measurex developed its patented Multiple Frequency Actuator Control™ (MFAC) strategy* to provide an integrated moisture profiling solution using multiple actuators . . . . . Measurex's CalTrol™ actuator provides direct control of sheet caliper, with extremely fine zone spacings to improve control of the sheet's edges and overall quality . . . . . Measurex systems integrate the industry's fastest, most accurate profile measurement technology with profile control software and actuators that are delivering consistent results on more than 1,500 installations worldwide.

*Patent Pending



Multiple GlossTrols use digital steam valves to apply a thin film of moisture to the coated sheet during supercalendering. This improves the final gloss uniformity across the sheet.

The GlossTrol Profile Actuator epitomizes Measurex's commitment to meet its customers' emerging needs by providing elegant solutions that are derived from innovative designs.

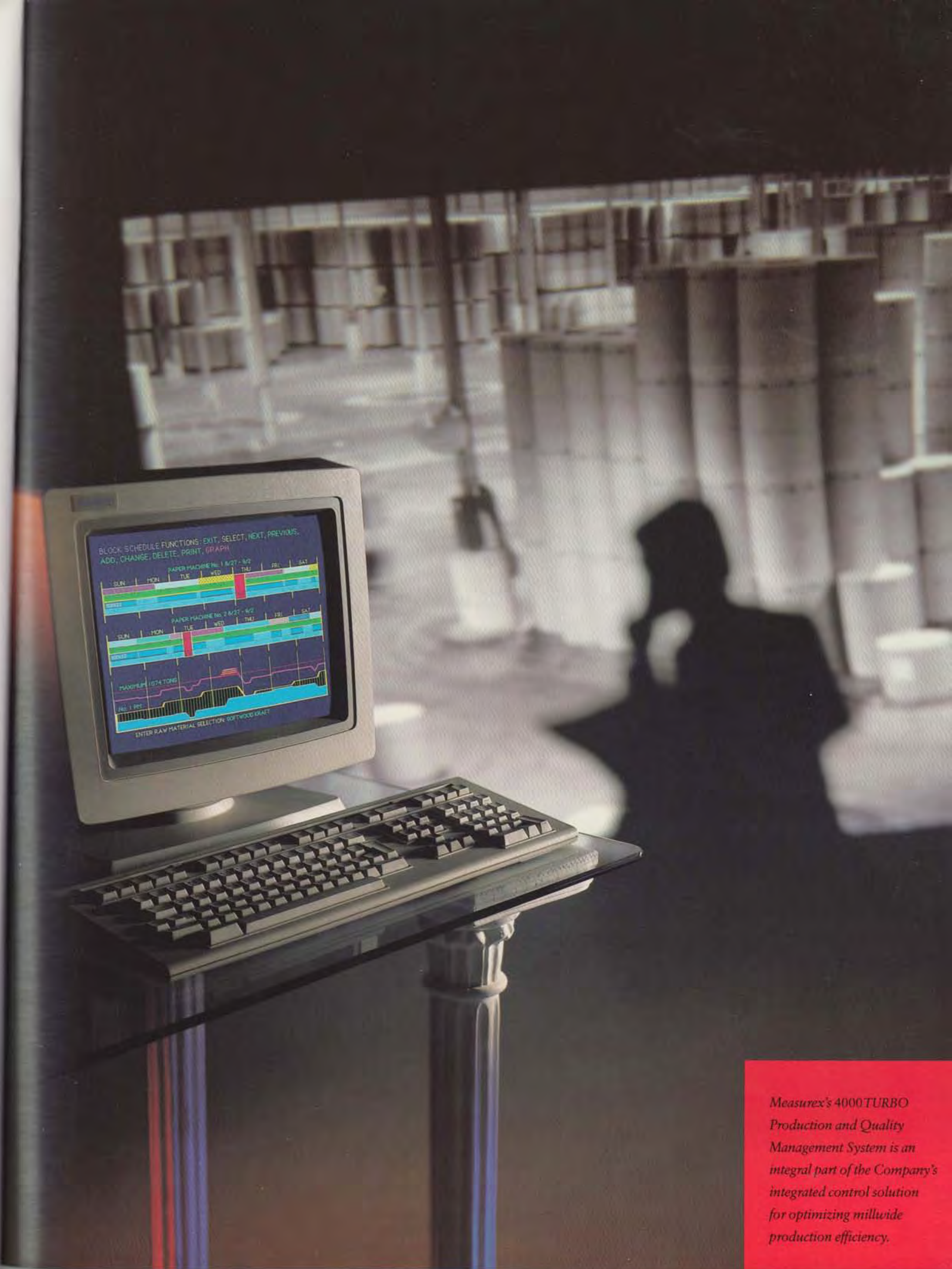
MEASUREX'S COMMITMENT

To provide integrated manufacturing and information systems that give customers the production management tools to meet marketplace demands for quality and service.

4000*TURBO* PRODUCTION AND QUALITY MANAGEMENT SYSTEM

The final element of an integrated solution is provided through Measurex's 4000*TURBO*™ Production and Quality Management System. Three key mill requirements are filled with the 4000*TURBO*'s modular application software: Logistics Management, Quality Management and Information Management. The first application, Logistics Management, controls every aspect of production from initial forecasting through scheduling, manufacturing, shipping and invoicing . . . . . The Quality Management module reduces production losses and helps papermakers satisfy their customers' requirements. Lab tests and sensor-based data are compared with product standards to create a historical quality record of each shipment. Armed with a start-to-finish record, papermakers can cut losses, improve quality and expedite customer service . . . . . Information Management takes production data from operator entry and process interfaces, and stores the data in a configurable 4000*TURBO* historical data base for easy retrieval. The system provides standard production reports and supports user-generated, ad hoc queries equipping customers with flexible decision support for improving plant efficiency . . . . . Since the 4000*TURBO* offers *modular* applications software, the system can be modified to address papermakers' evolving needs and business practices. Beginning with standard core software modules, the integrated application solution can be configured to meet specific needs through specialized user displays and reports. And, to ensure the system is fully and correctly used, Measurex provides installation planning and supervision, and extensive classroom and mill-floor training . . . . . Management tools—such as the 4000*TURBO*—when integrated with control systems, eliminate paper handling and chances for miscommunications while directing total paper production operations through added decision support capability. Through an integrated system, the 4000*TURBO* adds results to a process, just like control, to produce better quality products and increase productivity.

The 4000TURBO's "building-block" design facilitates development of solutions ranging in scope from basic product tracking through comprehensive, fully integrated production information systems.



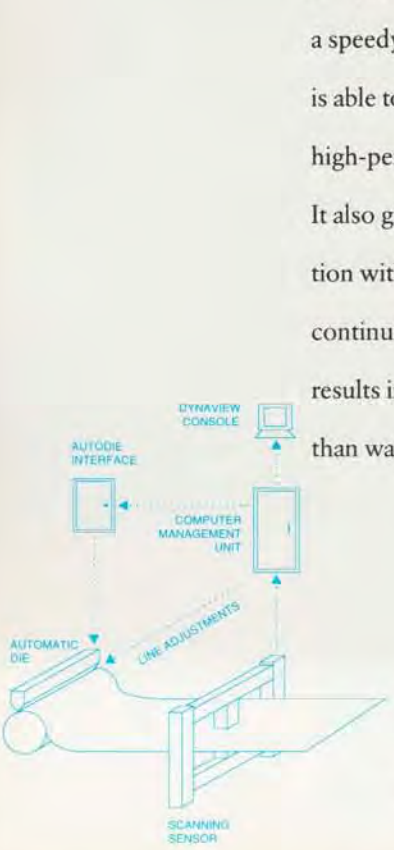
Measurex's 4000 TURBO Production and Quality Management System is an integral part of the Company's integrated control solution for optimizing millwide production efficiency.

MEASUREX'S COMMITMENT

To provide application matched systems that cost effectively meet plastic extruder manufacturers' needs for finished products that are uniform, "on spec" and precisely what their customers want.

FASTRAK EXTRUSION MEASUREMENT AND CONTROL SYSTEM

In September 1990, Measurex introduced the FasTrak™ Extrusion Measurement and Control System to meet the diverse needs of today's plastics industry. It is a packaged product that integrates all of the key elements needed for extrusion control into one functional system . . . . . FasTrak provides the high-quality measurement and control technology desired by many plastics processors who were unable to implement this technology because of the cost and complexity of traditional systems . . . . . The system has all of the features that have always distinguished the sensors provided by Measurex. This includes high-speed signal processing, greater measurement precision, higher streak resolution capabilities and a broad measurement range . . . . For cast film and sheet manufacturers, this results in higher profitability on new lines through improved uniformity, reduced resin usage and greater throughput . . . . . FasTrak's fast scanning helps users achieve high levels of quality. Fast scanning also allows for quicker separation of cross-direction and machine-direction variations for faster, more responsive control . . . . . The system's low-maintenance design is a key feature. End users can perform much of FasTrak's service themselves. If additional support is needed, Measurex ensures a speedy response from a worldwide pool of expert service technicians . . . . . With FasTrak, Measurex is able to serve the needs of a larger segment of the plastics industry. The system provides a cost-effective, high-performance extrusion measurement and control option for the Company's existing customer base. It also gives extrusion line suppliers (OEMs) an opportunity to offer the system as a total integrated solution with *their* product lines . . . . . The FasTrak system represents another example of Measurex's continuing efforts to meet its customers' demands for higher levels of quality. And, its simplified design results in lower manufacturing costs, allowing Measurex to deliver this performance at a lower price than was previously possible.



The FasTrak system simplifies installation, increases reliability and maximizes results for plastic sheet and film extrusion lines.

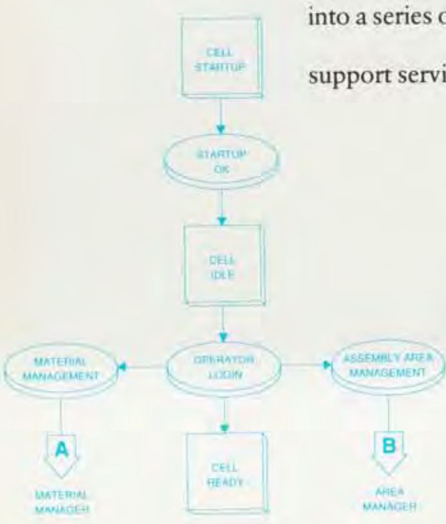
The recently introduced FasTrak Extrusion Measurement and Control System provides a cost-effective, high-performance extrusion control system for cast film and sheet manufacturers.

MEASUREX'S COMMITMENT

To maximize stockholder value by leveraging Measurex technology into new industries through its subsidiary company, Measurex Automation Systems (MAS).

PLANTWORKS: APPLICATION AUTOMATION EDITION

In 1985, MAS was established to provide an entry for Measurex into discrete computer-integrated manufacturing through the development of software products that would exploit new distribution channels and trends toward personal computer platforms . . . . . Since its inception, MAS has had strategic alliances with two industrial giants—Ford Motor Company and International Business Machines Corporation. Through these alliances, MAS developed PlantWorks: Application Automation Edition, a software tool kit, or enabler . . . . . Marketed by IBM, PlantWorks is a cornerstone product of IBM's computer-integrated manufacturing (CIM) strategy. It is an applications enabler that provides non-programmers the ability to create displays, connect plant-floor devices and to graphically build factory-floor applications to operate and control manufacturing plants . . . . . That means, the person who best understands a plant's operations problems and processes—the manufacturing or process engineer—can now design, build and maintain the application programs that best address each plant's operations needs . . . . . PlantWorks is helping IBM and IBM's customers to reduce their application costs, eliminate production bottlenecks and streamline work flow. It offers immediate, as well as long-range, benefits through a network of distributed personal computers . . . . . By the end of 1990, more than 35 major IBM customer accounts were implementing applications with PlantWorks in a variety of industries including automotive, electronics, aerospace, metals, food and beverage, and consumer products. In addition, more than half of IBM's internal manufacturing sites were using PlantWorks as a tool to build their own manufacturing applications . . . . . In December of 1990, MAS and IBM entered into a series of new agreements to provide additional releases of the product and technical and integration support services.

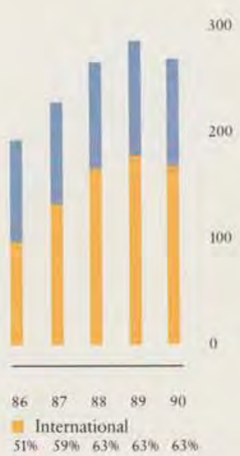


This flow cart depicts a typical PlantWorks user-created application logic. An end user will use one of many PlantWorks' services to implement a plant-floor automation application.

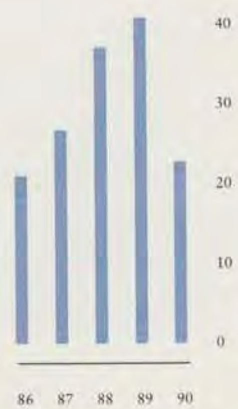
The PlantWorks: Application Automation Edition provides an integrated solution to plant-floor application requirements and is a corner-stone product of IBM's computer-integrated manu-facturing strategy.

One of the guiding principles at Measurex is to provide attractive, tangible, economic results for our customers. We feel that if we are successful in providing results for our customers, we will be able to ensure results for our stockholders through long-term growth in earnings per share and dividends . . . . . To achieve these results, we believe it is necessary to take risks in developing new products and addressing new markets in order to aggressively pursue long-term business strategies. This requires a strong balance sheet and cash reserves so that we are financially able to absorb the costs and corresponding negative cash flow associated with new product and marketing programs . . . . . Maintaining a strong balance sheet and cash position also allows us to use the cash flow from our interest income to gain competitive advantages during economic downturns by investing a greater percentage of revenue in new product development than our competitors, pursuing aggressive marketing programs to increase market share and broadening our technology bases and markets through acquisitions . . . . . Another key to our business strategy is the successful management of assets. Over the years we have substantially improved our inventory turnover and our ability to obtain cash deposits with system orders. Our objective is to manage cash and receivables so that we can achieve safety, liquidity and yield—in that order. Capital expenditures are also carefully managed and controlled . . . . . One of our financial objectives is a 20 percent after-tax return on our beginning equity. We have achieved this in the past and we believe our investments in new product development and sales and marketing programs should help us to continue to grow profitably and achieve that objective again.

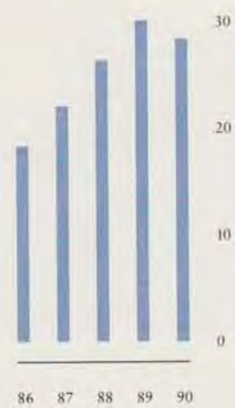
Robert McAdams Jr.
Senior Vice President, Finance and Administration
Chief Financial Officer



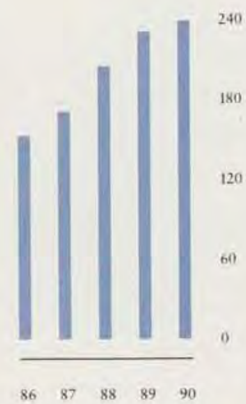
Revenues
($ millions)



Net Income
($ millions)



Product Development Spending
($ millions)



Stockholders' Equity
($ millions)

Management's Discussion and Analysis of Financial Condition and Results of Operations

Liquidity and Capital Resources

Measurex's financial condition remained strong as of fiscal year-end 1990, and the Company expects cash flow from operating activities to continue to be sufficient to cover the Company's operating needs, capital expenditures and cash dividends.

Net cash generated by operations during 1990 totaled $29.5 million. This was substantially below the $52.2 million in fiscal 1989 primarily due to the 45% ($18.2 million) decline in net income. Continuing efforts to reduce inventory levels to match order and shipment trends resulted in inventory declining by $4.5 million or 12% between year-end 1989 and 1990. Accounts receivable increased $1.9 million between year-end 1989 and 1990 due to a higher proportion of sales in Europe where collections have been historically slower than in other geographic areas. Contracts receivable increased $3.8 million from fiscal year-end 1989 due to the use of sales-type leasing in Europe and Canada. Accrued expenses decreased $2.9 million from 1989 due to lower profit sharing, commissions, bonuses and customer deposits.

Cash used for investing activities totaled $23.4 million in 1990 as compared to $34.0 million in 1989. Investments in property, plant and equipment totaled $15.5 million during 1990, $9.5 million lower than in 1989. During 1989, a new product development building at the Company's corporate headquarters was constructed at a cost of approximately $10 million. In addition, during 1989, the Company purchased a new United States sales and service facility in Atlanta, Georgia, and acquired a 90% interest in the Safecontrol division of Safematic Oy of Finland. In 1990, the Company purchased a new facility for the Management Systems Division (MSD) in Ohio, for approximately $3.0 million. The MSD facility is for production, product development and marketing, as well as administrative activities. No major facilities acquisitions or expansions are planned for 1991.

Cash used for financing activities during 1990 totaled $20.9 million, including $15.2 million for the repurchase of 651,800 shares of common stock of the Company and $7.7 million to pay cash dividends. In 1989, the Company paid $16.7 million for 615,550 shares of its common stock and paid cash dividends of $6.9 million. Issuance of common stock under the Company's employee stock purchase and stock option plans generated $2.3 million in cash in 1990 as compared to $5.3 million in 1989.

As a result of the above operating, investing and financing activities, the Company's cash and temporary cash investments decreased $11.1 million to $128.9 million, while marketable securities increased $3.3 million to $14.3 million. Total cash, temporary cash investments and marketable securities were $143.1 million at the end of 1990.

The Company's current ratio (current assets divided by current liabilities) was 3.7 at the end of year 1990 compared to 3.5 at the end of 1989. Total debt remained at only 2% of stockholders' equity at the end of fiscal 1990, the same as 1989.

The Company continues to have readily available financing resources, including unused domestic lines of credit of $9.5 million at December 2, 1990.

The Company believes that its financial position, future earnings and borrowing capabilities provide adequate flexibility to fund financial requirements for operations for the foreseeable future.

Results of Operations

The Company's orders, revenues and net income declined during 1990 primarily as a result of lower capital spending in the pulp and paper industry, which accounts for approximately 76% of the Company's systems revenue. During this past year, the Company has closely controlled expenses and reduced the total number of employees by approximately 7%, generally through attrition. At the same time, investments in new product development have been maintained and, in certain projects, have increased to ensure we continue to have a strong product offering when our customers' capital spending increases.

New system orders were $168 million for fiscal year 1990, a $21 million (11%) decrease from $189 million in fiscal 1989 and a $35 million (17%) decrease from $203 million in fiscal 1988. The Company's worldwide sales and market presence helped to offset the significant order declines in North America. 1990 orders were at record levels in Europe, increasing 2% from 1989, and accounting for 51% of total worldwide orders received. North American orders, however, declined 27%, and other international orders decreased 4%, due primarily to lower orders in Japan. Similarly, the lower orders in 1989 as compared to 1988 were due to a drop in North American orders (primarily Canada) as well as slightly lower orders from the Pacific region. Worldwide Pulp and Paper Group orders were $130 million in 1990, a decline of $17 million (12%) from orders in 1989 and a decline of $32 million (20%) from 1988. The Company believes this decline was due to overall reductions in capital spending in the pulp and paper industry, and not due to a decline in the Company's market share. Industrial Systems Group orders were $38 million, a decrease of $4 million (9%) from 1989 and approximately equal to 1988 orders.

System backlog at the end of fiscal 1990 was $109 million, a 6% increase from the $103 million backlog at the end of the third quarter of 1990, and equal to the backlog at the end of fiscal 1989. Although the Company had a strong backlog at year-end 1990, due to customer delivery requirements, the portion of system backlog that will be shipped in the first quarter of 1991 is expected to be lower than the comparable quarter a year ago. However, over 90% of the $109 million 1990 backlog is scheduled to be shipped during fiscal 1991. The strong backlog position helps the Company manage its manufacturing facilities efficiently, as well as control inventory levels.

Systems revenue was $170.6 million in 1990, a $24.9 million (13%) decrease from $195.5 million in 1989 and a $13.6 million (7%) decrease from $184.2 million in 1988. Systems revenue decreased in both the Pulp and Paper and the Industrial Systems product groups. Sales of the SuperVISION 2002 UT™ increased during this period as did Management Systems Division's 4000*TURBO*™ and the Safecontrol Division's products. These increases were offset by lower sales of cross-direction control systems and the 2002 ET™ product.

Service and other revenues, excluding royalties, increased to $95.0 million in 1990 from $87.8 million in 1989 and $81.0 million in 1988. The increase in service revenue in 1990 is due to the larger base of installed systems resulting from record shipment levels during 1989, as well as the weaker U.S. dollar which impacts reported revenue when translated. The weaker U.S. dollar results in higher translated revenues and costs with little impact on service margin percentages.

During 1990, the Company recorded a $0.6 million royalty from International Business Machines Corp. (IBM) for PlantWorks™: Application Automation Edition™ software package for use at IBM plants. During 1989, a $2.0 million initial royalty from IBM was recorded upon announcement of PlantWorks software.

Margins on systems revenue were 42% in fiscal 1990 compared to 49% in 1989 and 51% in 1988. The system margin decrease over the past two years is due to: 1) a fixed base of Cupertino, California, factory costs being allocated to a lower shipment level; 2) a higher proportion of larger SuperVISION 2002 UT systems, which typically have greater total revenue and margin but a lower margin percentage due to more complex custom application software and system integration requirements; 3) a higher proportion of European systems which have higher costs due to freight, duty and overseas factory overhead costs; and 4) cost overruns on several large projects at MSD in the later part of 1989 and the first part of 1990. In addition, the weakening of the United States dollar in the latter half of 1990 adversely affected product costs in the manufacturing facility in Ireland.

Service and other margins, excluding the IBM royalties, were 35% in 1990 compared to 36% in 1989, and 34% in 1988. The decrease in margins in 1990 compared to 1989 was due to an increase in the proportion of European service revenue. Europe has slightly lower service margins than other geographic locations.

Product development costs decreased \$1.8 million (6%) from \$30.0 million in 1989 to \$28.2 million in 1990. However, the Company continues to invest a high percentage of its systems revenue in product development. Product development costs were 17% of systems revenue in 1990, compared to 15% in 1989 and 14% in 1988. Measurex Automation Systems' (MAS) product development spending was down from the prior year as a result of the IBM PlantWorks product introduction in late 1989. However, this lower spending at MAS was partly offset by higher spending on Measurex Corporation projects. During 1990 and 1989, \$3.5 and \$5.1 million, respectively, of product development expenditures were reimbursed under the co-development agreement with IBM. In accordance with Statement of Financial Accounting Standards No. 86, the Company capitalized a total of \$4.5 million and \$3.2 million of software development costs in 1990 and 1989, respectively. After deducting the reimbursed and the capitalized expenditures, the net product development expense was \$20.2 million in 1990 and \$21.7 million in 1989. The Company believes the continued investment in new product development, even during difficult economic times, is key to its long-term success.

In 1989, product development costs increased \$3.8 million to \$30.0 million, a 14% increase over 1988. This reflected increased spending by MAS prior to the 1989 IBM introduction of PlantWorks. The higher expenditures also reflect the Company's increased investment in its basic product line, as well as in the new SafeControl™ and InfraTrol™ products.

Selling and administrative expense was \$65.4 million in 1990, a \$3.4 million (5%) decrease from \$68.8 million in 1989 and a \$3.0 million (5%) increase from \$62.4 million in 1988. Although reported expense, particularly in the fourth quarter of 1990, was adversely affected by changes in foreign currency exchange rates, the Company was able to reduce expenses by improving efficiency and tightly controlling spending in administrative and selling areas. In addition to the reduction in spending, profit sharing and commission expenses were lower due to lower revenue and profits in 1990 compared to 1989. If the U.S. dollar remains weak, reported expense will be adversely affected in the first part of 1991 as compared to 1990.

Selling and administrative expense was \$68.8 million in 1989, an increase of \$6.4 million from \$62.4 million in 1988. This increase, in addition to normal inflationary increases, was primarily related to the new SafeControl Division and reorganization expenses related to a realignment of the sales and service organization.

Interest income was \$12.1 million, a \$1.4 million decrease (11%) from \$13.5 million in 1989, but a \$2.4 million (24%) increase from \$9.7 million in 1988. The decrease from 1989 was due primarily to lower average cash balances as a result of the repurchase of Company stock at the beginning of fiscal 1990, and also due to lower interest rates. Although the Company expects continued positive cash flows, interest income in 1991 is dependent upon interest rates, which have been declining recently.

The Company's effective tax rate in 1990 was 26%, compared with 20% in 1989 and 24% in 1988. The low 1989 rate was principally due to the utilization of certain foreign and repatriation tax benefits.

In 1987, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 96, "Accounting for Income Taxes." The Statement will be effective for the Company's fiscal year 1993. The Company is currently studying the implications of the statement, but the timing and impact of its implementation have not yet been determined.

Net income for 1990 was \$22.5 million, a decrease of \$18.2 million (45%) from \$40.7 million in 1989 and a decrease of \$14.6 million (39%) from \$37.1 million in 1988. Net income was \$1.26 per share in 1990, compared to \$2.17 and \$1.95 per share in 1989 and 1988, respectively.

The Company plans to continue to invest in new product development, but to tightly control expenditures in the factory, selling and administrative areas to ensure that expenses are in line with projected shipment levels.

CONSOLIDATED STATEMENTS OF INCOME

Three years ended December 2, 1990 (Dollar amounts in thousands except per share data)	1990	1989	1988
Revenues:			
Systems	$170,619	$195,508	$184,220
Service and other	95,579	89,839	81,020
Total revenues	266,198	285,347	265,240
Operating costs and expenses:			
Systems	98,907	100,307	90,145
Service and other	62,179	56,633	53,682
Product development	20,240	21,685	19,185
Selling and administrative	65,412	68,807	62,373
Total operating costs and expenses	246,738	247,432	225,385
Earnings from operations	19,460	37,915	39,855
Other income (expense):			
Interest expense	(712)	(399)	(1,141)
Interest income and other	11,626	13,407	10,033
Total other income, net	10,914	13,008	8,892
Income before income taxes	30,374	50,923	48,747
Provision for income taxes	7,852	10,241	11,681
Net income	$ 22,522	$ 40,682	$ 37,066
Net income per share	$ 1.26	$ 2.17	$ 1.95
Dividends per share	$ .43	$ .37	$ .27
Average number of common and common equivalent shares (thousands)	17,931	18,730	18,960

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED BALANCE SHEETS

December 2, 1990 and December 3, 1989 *(Dollar amounts in thousands except per share data)*		1990	1989
ASSETS	Current assets:		
	Cash and temporary cash investments	$128,856	$139,944
	Marketable securities	14,280	10,939
	Accounts receivable	65,712	63,793
	Inventories	34,216	38,722
	Prepaid and other	11,770	9,634
	Total current assets	254,834	263,032
	Contracts receivable	9,187	5,340
	Service parts, net	4,507	4,161
	Property, plant and equipment, net	55,798	48,736
	Other assets	13,151	11,741
	Total assets	$337,477	$333,010
LIABILITIES AND STOCKHOLDERS' EQUITY	Current liabilities:		
	Current portion of long-term debt	$ 351	$ 302
	Accounts payable	5,706	6,091
	Accrued expenses	59,303	62,185
	Income taxes payable	4,237	7,656
	Total current liabilities	69,597	76,234
	Long-term debt	4,845	4,955
	Deferred income taxes	24,395	21,747
	Stockholders' equity:		
	Preferred stock, $.01 par value; authorized: 10,000,000 shares; issued and outstanding: none		
	Common stock, $.01 par value; authorized: 50,000,000 shares; outstanding: 1990—19,062,584 shares, 1989—19,074,235 shares	191	191
	Additional capital	74,762	74,582
	Retained earnings	186,363	173,358
	Cumulative translation adjustments	6,654	23
	Less: Treasury stock at cost: 1990—1,165,167 shares, 1989—680,203 shares	(29,330)	(18,080)
	Total stockholders' equity	238,640	230,074
	Total liabilities and stockholders' equity	$337,477	$333,010

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Three years ended December 2, 1990 (Dollar amounts in thousands)	Common Stock	Additional Capital	Retained Earnings	Cumulative Translation Adjustments	Treasury Stock	Total
Balance November 29, 1987	$ 190	$ 68,862	$113,790	$ 892	$(13,544)	$170,190
Stock issued under employee stock purchase and stock option plans (351,057 shares including 309,322 from treasury shares)	1	989	–	–	7,153	8,143
Tax benefit from exercise of employee stock options	–	2,466	–	–	–	2,466
Excess of cost of treasury shares issued over proceeds received	–	–	(4,083)	–	–	(4,083)
Foreign currency translation	–	–	–	949	–	949
Net income	–	–	37,066	–	–	37,066
Dividends	–	–	(5,059)	–	–	(5,059)
Treasury stock acquired (205,600 shares)	–	–	–	–	(5,185)	(5,185)
Balance November 27, 1988	191	72,317	141,714	1,841	(11,576)	204,487
Stock issued under employee stock purchase and stock option plans (266,488 shares including 250,675 from treasury shares)	–	464	–	–	5,223	5,687
Tax benefit from exercise of employee stock options	–	1,801	–	–	–	1,801
Excess of cost of treasury shares issued over proceeds received	–	–	(2,169)	–	–	(2,169)
Foreign currency translation	–	–	–	(1,818)	–	(1,818)
Net income	–	–	40,682	–	–	40,682
Dividends	–	–	(6,869)	–	–	(6,869)
Treasury stock acquired (420,700 shares)	–	–	–	–	(11,727)	(11,727)
Balance December 3, 1989	191	74,582	173,358	23	(18,080)	230,074
Treasury stock issued under employee stock purchase and stock option plans (166,836 shares)	–	–	–	–	3,976	3,976
Tax benefit from exercise of employee stock options	–	180	–	–	–	180
Excess of cost of treasury shares issued over proceeds received	–	–	(1,813)	–	–	(1,813)
Foreign currency translation	–	–	–	6,631	–	6,631
Net income	–	–	22,522	–	–	22,522
Dividends	–	–	(7,704)	–	–	(7,704)
Treasury stock acquired (651,800 shares)	–	–	–	–	(15,226)	(15,226)
Balance December 2, 1990	$ 191	$ 74,762	$186,363	$ 6,654	$(29,330)	$238,640

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Three years ended December 2, 1990 *(Dollar amounts in thousands)*	1990	1989	1988
Cash flows from operating activities:			
Net income	$ 22,522	$ 40,682	$ 37,066
Non-cash items included in net income:			
Depreciation and amortization:			
Service parts	1,404	1,499	3,098
Property, plant and equipment	8,750	7,355	6,719
Capitalized software and goodwill	3,057	2,732	1,956
Deferred income taxes	508	(1,760)	(562)
Translation (gain) loss	(3,869)	1,160	917
Net (increase) decrease in:			
Accounts and contracts receivable	1,590	(4,456)	2,388
Inventories and service parts	5,893	(6,671)	1,024
Prepaid and other	1,023	(871)	(213)
Net increase (decrease) in:			
Accounts payable and accrued expenses	(7,906)	4,844	4,829
Income taxes payable	(4,303)	6,867	(1,495)
Other, net	826	796	247
Net cash provided by operating activities	29,495	52,177	55,974
Cash flows from investing activities:			
Purchase of marketable securities	(47,525)	(44,176)	(8,816)
Sale of marketable securities	44,184	38,354	3,699
Acquisition of property, plant and equipment and other	(15,484)	(25,010)	(10,265)
Capitalized software	(4,535)	(3,180)	(3,027)
Net cash used in investing activities	(23,360)	(34,012)	(18,409)
Cash flow from financing activities:			
Reductions of long-term debt	(319)	(1,911)	(1,843)
Dividends	(7,704)	(6,869)	(5,059)
Stock issued under employee stock purchase and stock option plans including related tax benefits	2,343	5,319	6,526
Payments for treasury stock	(15,226)	(16,656)	(268)
Net cash used in financing activities	(20,906)	(20,117)	(644)
Effect of exchange rate fluctuations on cash and temporary cash investments	3,683	(1,320)	(884)
Net increase (decrease) in cash and temporary cash investments	(11,088)	(3,272)	36,037
Cash and temporary cash investments at beginning of year	139,944	143,216	107,179
Cash and temporary cash investments at end of year	$128,856	$139,944	$143,216

The accompanying notes are an integral part of the financial statements.

(Dollar amounts in thousands unless otherwise noted)

Summary of Significant Accounting Policies

Fiscal Year – The Company uses a 52-53-week fiscal year. References to 1990, 1989 and 1988 are for fiscal years ended December 2, 1990, December 3, 1989 and November 27, 1988, respectively. Fiscal years 1990 and 1988 were 52-week years and fiscal year 1989 was a 53-week year.

Consolidation – The consolidated financial statements include the accounts of all subsidiaries after elimination of intercompany balances and transactions. In 1989, the Company adopted the provisions of Statement of Financial Accounting Standards No. 94, "Consolidation of All Majority-owned Subsidiaries." Accordingly, the Company has consolidated Measurex Credit Corporation and Measurex Credit (U.K.) Ltd. These companies were previously presented as unconsolidated subsidiaries accounted for under the equity method of accounting. Prior period financial statements have been restated. Income from these finance subsidiaries was not material in 1990, 1989 or 1988.

Foreign Currency Translation – The Company has translated its foreign operations (except certain manufacturing operations) as follows: all assets and liabilities at current exchange rates at the balance sheet date, and income and expense accounts at average exchange rates for the year. Resulting translation adjustments were recorded directly to a separate component of stockholders' equity. For certain foreign manufacturing operations, the functional currency is deemed to be U.S. dollars as defined by Statement of Financial Accounting Standards No. 52, "Foreign Currency Translation." For these manufacturing operations, non-monetary assets and liabilities (primarily inventory and fixed assets) are translated at historical exchange rates and resultant gains or losses are reflected in interest income and other.

Foreign Exchange Contracts – The Company receives orders for systems in its worldwide sales offices from foreign companies denominated in currencies other than the U.S. dollar. In order to reduce the risk of loss on these orders due to fluctuations in the value of foreign currencies between the time the order is received and when revenue is recognized, the Company hedges using foreign exchange contracts. In addition, the Company hedges the U.S. dollar value of net asset or liability positions denominated in currencies other than the functional currency of its foreign subsidiaries and records any resulting gains or losses in interest income and other. At December 2, 1990, the Company had fixed rate foreign exchange contracts valued at $69.6 million maturing from December 1990 through January 1992, of which 80% were denominated in European currencies.

Revenue Recognition – Revenue is recognized in accordance with the following:

- At the time of shipment for products sold to customers or third-party financing institutions;
- At the time of shipment for products financed under lease transactions which qualify as sales-type leases; and
- At the time of performance for services.

Product Development Expenses – The Company is actively engaged in basic technology and applied research and development programs which are designed to develop new or improved products and process applications. The cost of these programs is charged to expense as incurred except for certain software development costs which are capitalized as described below (see Capitalized Software).

The Company, through its subsidiary Measurex Automation Systems, has entered into co-development programs. Reimbursement under these programs, which was $3.5 million in 1990, $5.1 million in 1989 and $4.0 million in 1988, is netted against product development expense.

Capitalized Software – Costs related to the conceptual formulation and design of software products are expensed as product development. Costs incurred subsequent to establishing the technological feasibility of software products are capitalized.

Amortization of capitalized software costs, which begins when products are available for general release to customers, is computed on a straight-line basis over the expected product lives, generally estimated to be three years.

Income Taxes – Taxes are provided for items included in the consolidated statements of income regardless of the period when such items may be reported for tax purposes.

It is the policy of the Company to provide appropriate U.S. and foreign income taxes on the portion of the accumulated earnings of the Company's foreign subsidiaries which are intended to be remitted to the parent Company within the foreseeable future.

Cash and Temporary Cash Investments – Temporary cash investments generally consist of certificates of deposit, time deposits, treasury bills and municipal bonds. The Company considers all highly liquid debt instruments with an original maturity or put feature of 90 days or less to be a temporary cash investment.

A substantial portion of the Company's cash and temporary cash investments are held by foreign subsidiaries and are generally in U.S. dollar denominated accounts. Amounts held by foreign subsidiaries would be subject to U.S. income taxation upon repatriation to the U.S.

Marketable Securities – Marketable Securities are stated at cost, which approximates market.

Inventory Valuation – Inventories are stated at the lower of standard cost (which approximates actual cost determined on a first-in, first-out basis) or market.

Inventories comprise the following:

	1990	1989
Purchased parts and components	$18,327	$18,519
Work in process	9,120	10,857
Finished subassemblies and systems	6,769	9,346
	$34,216	$38,722

Depreciation – Property, plant, equipment and service parts are depreciated on a straight-line basis over estimated useful lives which range as follows: buildings and improvements–3 to 40 years; machinery and equipment–2 to 20 years; and service parts–3 to 10 years. When assets are sold or retired, the cost and related accumulated depreciation is removed from the accounts and the resulting gains or losses are included in income.

Net Income Per Share – Net income per share is computed based on the weighted average number of common shares outstanding during the year adjusted to reflect the assumed exercise of outstanding employee stock options to the extent these items had a dilutive effect on the computation.

Accounts Receivable

Accounts receivable are summarized below:

	1990	1989
Accounts receivable	$66,665	$66,021
Contracts receivable	4,049	3,306
Less:		
Allowances for noncollection and system returns	(5,002)	(5,534)
	$65,712	$63,793

Contracts Receivable

Contracts receivable are summarized below:

	1990	1989
Contracts receivable	$16,851	$10,242
Less:		
Unearned financing income	(3,615)	(1,596)
	13,236	8,646
Current portion	(4,049)	(3,306)
	$ 9,187	$ 5,340

The aggregate amount of payments receivable by the Company in fiscal years subsequent to 1990 is set forth below:

1991 – $5,209	1994 – $2,103
1992 – $4,566	1995 – $1,658
1993 – $2,845	Thereafter – $ 470

Service Parts

Service parts comprise the following:

	1990	1989
Service parts, at cost	$12,327	$12,790
Less:		
Accumulated depreciation	(7,820)	(8,629)
	$ 4,507	$ 4,161

Property, Plant and Equipment

Property, plant and equipment are recorded at cost and comprise the following:

	1990	1989
Land	$ 3,273	$ 2,136
Buildings and improvements	36,570	30,465
Machinery and equipment	55,994	50,119
	95,837	82,720
Less:		
Accumulated depreciation	(40,039)	(33,984)
	$ 55,798	$ 48,736

Other Assets

Other assets comprise the following:

	1990	1989
Capitalized software, net	$ 6,949	$ 5,293
Goodwill, net and other	6,202	6,448
	$ 13,151	$ 11,741

Capitalized software is amortized over the expected product life, generally estimated to be 3 years, and goodwill is amortized on a straight-line basis over 5 to 40 years.

Notes Payable and Lines of Credit

As of December 2, 1990, the Company had multi-currency working capital agreements totaling $9.5 million. The working capital agreements are unsecured bank lines of credit which provide for domestic dollar borrowings, eurocurrency advances or prime bankers' acceptances. There were no borrowings outstanding in connection with these agreements at December 2, 1990.

The agreements, which are renewed annually, provide for interest rates ranging from below the prime rate of the particular lending bank to the prime rate, depending upon the type of borrowing; maintenance of average non-interest-bearing demand deposits (not legally restricted) with lending banks in amounts equal to approximately 5% of each bank's domestic dollar borrowing commitment or payment of fees; and, adherence to certain covenants regarding working capital, indebtedness, and minimum stockholders' equity.

Accrued Expenses

Accrued expenses are comprised of the following:

	1990	1989
Accrued payroll and related items	$24,597	$23,680
Accrued initial service	6,589	7,870
Customer deposits	13,611	17,388
Other	14,506	13,247
	$59,303	$62,185

Long-Term Debt

Long-term debt consists of the following:

	1990	1989
Mortgage payable in monthly installments through 2009	$ 3,576	$ 3,633
Other borrowings	1,620	1,624
	5,196	5,257
Less amount due within one year	(351)	(302)
	$ 4,845	$ 4,955

The interest rate on the mortgage payable is 9¼%.

Commitments and Contingencies

At December 2, 1990, the Company was contingently liable for approximately $14.9 million relating principally to letters of credit issued to support European receivable collections.

Interest Income and Other

Components of interest income and other are as follows:

	1990	1989	1988
Interest income	$12,055	$13,503	$ 9,687
Translation gain (loss)	3,869	(1,160)	(917)
Gain (loss) on foreign exchange contracts	(4,298)	1,064	1,263
	$11,626	$13,407	$10,033

As discussed under "Significant Accounting Policies," the Company hedges the net asset or liability positions denominated in currencies other than the functional currency of its foreign subsidiaries. Gains and losses on such contracts offset translation gains and losses recorded by the foreign subsidiary and are reported as Interest Income and Other.

Stock Option Plans

Under the Company's stock option plan, 5,830,000 shares of common stock have been reserved for issuance to officers and key employees.

Options may be granted at prices not lower than the fair market value of the Company's common stock at the date of grant. Options generally become exercisable in four equal annual installments commencing one year from the date of grant. Options expire, if not exercised, within five years from the date of grant. During 1990, the Company amended the stock option plan to include an automatic option grant program for the Company's non-employee directors. Such options expire ten years from the date of grant.

The stock option plan was also amended in 1990 to allow selected employees to elect to have a portion of their base salary reduced in return for options to purchase common stock. The option price represents the difference between the fair market value of the Company's common stock at the date of grant and the salary reduction. In 1990, options were granted for 6,600 shares at an option price of $7.02 per share under this program. These options are fully vested one year from date of grant and expire if not exercised within 10 years.

A summary of transactions relating to options during fiscal years 1988, 1989 and 1990 is set forth below:

(amounts in thousands except per share data)

Options Outstanding	Shares	Price Per Share	Amount
November 29, 1987	1,136.4	$ 1.06-$33.75	$ 14,621
Granted	400.5	26.25- 32.44	10,994
Terminated	(52.5)	4.00- 33.75	(913)
Exercised	(317.6)	1.06- 26.94	(3,103)
November 27, 1988	1,166.8	$ 4.00-$33.75	$ 21,599
Granted	584.8	26.81- 31.13	16,895
Terminated	(72.7)	6.72- 33.75	(1,833)
Exercised	(210.0)	4.00- 27.88	(2,592)
December 3, 1989	1,468.9	$ 8.15-$33.75	$ 34,069
Granted	1,418.8	7.02- 23.44	35,034
Terminated	(949.4)	10.28- 33.75	(26,144)
Exercised	(88.3)	8.15- 22.19	(1,039)
December 2, 1990	1,850.0	$ 7.02-$33.75	$ 41,920

Included in the 1990 activity is the cancellation and regrant of 839,322 options at $23.19 per share. Employees who canceled higher priced options lost all vested rights to exercise such options. In addition, in December 1990, the Company authorized the cancellation of then outstanding options and the regrant of an equal number of new options at a price of $16.87 per share. Employees who elect to cancel higher priced options will lose all vested rights to exercise these options.

At year-end 1990 and 1989, options to purchase 377,919 shares and 377,750 shares, respectively, were exercisable at prices ranging from $14.00 to $33.75 and from $8.15 to $33.75, respectively.

Shares available for option grants at year-end 1990 and 1989 were 1,414,024 and 1,879,832, respectively.

Employee Benefit Plans

The Company has a Savings and Deferred Profit Sharing Plan qualified under section 401(k) and 401(a) of the Internal Revenue Code. This plan is designed to enable eligible U.S. employees to share in the profits of the Company and supplement their retirement income. The Company contributes to the Plan up to 10% of consolidated pretax income before contributions under the Plan. Eligible employees may elect to receive up to 50% of the profit sharing in cash. In addition, the Plan allows eligible employees to defer up to 10% of their salary on a pretax basis through contributions to the Plan. Profit sharing expenses under this plan were $2.7 million, $4.1 million and $3.7 million in fiscal years 1990, 1989 and 1988, respectively.

Certain foreign employees are eligible to participate in similar profit sharing programs or local pension plans. Effective December 4, 1989, as required, the Company adopted Statement of Financial Accounting Standards No. 87, "Employer's Accounting for Pensions" for its foreign plans. With respect to these plans, the pension benefit obligations and plan assets, as well as the effect of the change on pension expense, were not material. Total pension expense under these foreign pension plans for 1990 was $1.3 million.

The Company has a remaining reserve of 444,160 shares of its authorized but unissued common stock for issuance under an employee stock purchase plan. The plan covers substantially all employees of the parent company and its domestic subsidiaries. Common stock purchases are paid through periodic payroll deductions of up to 10% of eligible compensation. The participant's purchase price is 85% of the lower of the closing market price on the first trading day or the last trading day of the quarter in which the stock is purchased by the employee. The Company has issued 763,329 shares of its stock (including 207,489 treasury shares) under this plan as of December 2, 1990.

Income Taxes

The provision for income taxes consists of the following:

	1990	1989	1988
Current income taxes:			
United States	$ (342)	$ 3,448	$ 2,828
Foreign	5,307	7,153	7,957
State	500	1,400	1,458
	5,465	12,001	12,243
Deferred income taxes:			
United States	2,677	(133)	(303)
Foreign	(290)	(1,627)	(259)
	2,387	(1,760)	(562)
Provision for income taxes	$ 7,852	$10,241	$11,681

The foreign provision for income taxes is based on foreign pretax earnings of approximately $19.0 million, $30.8 million and $35.7 million in 1990, 1989 and 1988, respectively.

In December 1987, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 96, "Accounting for Income Taxes." This Statement is effective for the Company's fiscal year 1993; earlier adoption is permitted. The Company is currently studying the implication of this Statement, but the timing and impact of its implementation has not yet been determined.

The major components of the provision not currently payable result from:

	1990	1989	1988
Taxes provided on undistributed earnings of foreign subsidiaries	$ 1,022	$ 1,145	$ 1,724
Tax accounting for:			
Finance leases	(774)	(176)	(1,111)
Inventory reserves	681	(1,122)	(580)
Noncollection and system return reserves	157	(138)	(110)
Deferred compensation	(677)	(38)	(637)
Capitalized software	641	248	353
Installment sales	(656)	294	(799)
Other accrued expenses	1,196	(468)	209
Unrealized foreign exchange (loss) gain	(179)	(460)	693
Other	976	(1,045)	(304)
	$ 2,387	$ (1,760)	$ (562)

The Company has not provided for United States income taxes on the earnings of certain foreign subsidiaries that are considered invested indefinitely outside the United States. The accumulated net income of the foreign subsidiaries that are considered permanently invested outside the United States amounted to $76.0 million at December 2, 1990.

The Company's subsidiary in the Republic of Ireland had a tax holiday which ended on August 1, 1988. The manufacturing profits from this subsidiary are now subject to a 10% tax.

At December 2, 1990, the Company has net operating loss carryforwards in various foreign subsidiaries of approximately $2.2 million at current exchange rates expiring in varying amounts between 1995 and 1997. These carryforwards will reduce future net tax expense for financial reporting purposes, if utilized.

The principal items accounting for the difference between income taxes computed at the United States statutory rate and the provision for income taxes are as follows:

	1990	1989	1988
United States statutory rate	34.0%	34.0%	34.0%
Effect of:			
Undistributed earnings of foreign subsidiaries deemed permanently reinvested	(10.3)	(6.3)	(9.6)
Tax credits	–	(1.7)	(0.7)
Foreign sales corporation	–	(1.7)	(1.6)
Income of foreign subsidiaries taxed at differing statutory rates	1.6	(1.3)	2.1
Losses of foreign subsidiaries not providing tax benefit	2.5	–	–
Tax exempt investment income	(2.0)	(2.5)	(0.9)
State income taxes	1.1	1.8	2.0
Other items	(1.0)	(2.2)	(1.3)
Provision for income taxes	25.9%	20.1%	24.0%

Income tax payments of $12.1 million, $6.6 million and $10.1 million were made during fiscal years 1990, 1989 and 1988, respectively.

Transactions with Affiliated Company

In the second quarter of 1990, the Company entered into a cooperative arrangement with Beloit Corporation for integrated marketing and sales of all Measurex controls with Beloit's full line of pulp and paper machinery. Simultaneously executed was a seven-year "standstill" agreement between Measurex and Harnischfeger Industries Inc., Beloit's parent company, whereby Harnischfeger could buy up to a maximum of 20 percent of Measurex's common stock on the open market. As of December 2, 1990, Harnischfeger owned 19.0 percent of the Company's common stock. Harnischfeger's Chairman and Chief Executive Officer was elected to the Company's Board of Directors as part of the agreement. Revenues and ending accounts receivable with Beloit for the year ending December 2, 1990 were immaterial. Sales transactions with Beloit were at competitive arms-length original equipment manufacturing (OEM) prices.

Business Segments

The Company operates in one principal industry segment: the design, development, manufacture, sale and service of computer-integrated control and information systems. The Company sells these products to the pulp and paper, plastics, metals, rubber, chemical, glass and pharmaceutical industries. In 1990, approximately 76% of the Company's systems revenue was from the pulp and paper industry.

No single customer accounted for 10% or more of revenues during 1990, 1989 or 1988.

The Company's products are principally distributed and serviced through its own marketing and service organizations. Operations are conducted worldwide and are grouped into three geographic areas: United States, Europe, and Other International (primarily Canada, the pacific region, and the southern hemisphere countries).

The following table summarizes the geographic operations of the Company.

(Dollar amounts in millions)	1990	1989	1988
Revenues from unaffiliated customers:			
United States	$ 95.6	$104.9	$ 97.2
Europe	112.0	107.7	96.4
Other International	58.6	72.7	71.6
Consolidated	$266.2	$285.3	$265.2
Earnings from operations:			
United States	$ 9.5	$ 17.3	$ 16.3
Europe	17.3	24.5	22.2
Other International	–	2.4	7.8
Eliminations and Corporate	(7.3)	(6.3)	(6.4)
Consolidated	$ 19.5	$ 37.9	$ 39.9
Identifiable assets:			
United States	$ 93.9	$ 92.5	$ 73.5
Europe	83.4	67.9	71.2
Other International	27.6	33.0	30.6
Corporate	132.6	139.6	128.6
Consolidated	$337.5	$333.0	$303.9

The Company's manufacturing operations sell systems to its sales and service operations. Sales to non-U.S. subsidiaries from U.S. manufacturing operations were $47.2 million in 1990, $63.3 million in 1989 and $59.0 million in 1988. Sales to affiliates from other geographic areas were not significant. Internal selling prices are designed to allocate manufacturing profits to manufacturing entities and sales and service profits to sales and service entities.

The United States revenues from unaffiliated non-U.S. customers in 1990, 1989 and 1988 were not significant.

Corporate identifiable assets include short-term cash investments and marketable securities.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Stockholders, Measurex Corporation

We have audited the accompanying consolidated balance sheets of Measurex Corporation as of December 2, 1990 and December 3, 1989 and the related consolidated statements of income, stockholders' equity and cash flows for each of the three fiscal years in the period ended December 2, 1990. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the aforementioned financial statements present fairly, in all material respects, the consolidated financial position of Measurex Corporation as of December 2, 1990 and December 3, 1989, and the consolidated results of its operations and its cash flows for each of the three fiscal years in the period ended December 2, 1990, in conformity with generally accepted accounting principles.

Coopers & Lybrand

San Jose, California
December 19, 1990

SUPPLEMENTAL FINANCIAL DATA

Interim Financial Information (Unaudited)

(Dollar amounts in thousands except per share data)

1990 Quarter Ended	Mar. 4	June 3	Sept. 2	Dec. 2
Revenues	$67,765	$63,418	$65,851	$69,164
Gross margin	28,990	24,646	24,993	26,483
Income before income taxes	9,785	5,287	7,394	7,908
Net income	7,241	3,965	5,472	5,844
Net income per share	.40	.22	.31	.33
Dividends per share	.10	.11	.11	.11

(Dollar amounts in thousands except per share data)

1989 Quarter Ended	Mar. 5	June 4	Sept. 3	Dec. 3
Revenues	$68,482	$71,973	$71,968	$72,924
Gross margin	31,203	32,507	31,830	32,867
Income before income taxes	12,232	12,636	12,617	13,438
Net income	9,663	10,172	10,094	10,753
Net income per share	.51	.54	.54	.58
Dividends per share	.07	.10	.10	.10

Market For the Registrant's Common Stock and Related Security Holder Matters

The Company's common shares are listed on the New York and Pacific Stock Exchanges.

As of December 2, 1990, there were 1,822 stockholders of record. Dividends of $.43 and $.37 per share were paid in 1990 and 1989, respectively.

Price	1990 High	1990 Low	1989 High	1989 Low
1st Quarter	$26	$20⅝	$32	$25½
2nd Quarter	23¾	17¾	31⅜	26
3rd Quarter	22⅜	16⅞	30⅝	26
4th Quarter	18½	15⅛	30¾	24

SELECTED FINANCIAL DATA

Six years ended December 2, 1990 *(Dollar amounts in thousands except per share data)*	1990	1989	1988	1987	1986	1985
Revenues:						
Systems	$170,619	$195,508	$184,220	$153,293	$125,287	$114,593
Service and other	95,579	89,839	81,020	74,060	67,420	62,021
Total revenues	266,198	285,347	265,240	227,353	192,707	176,614
Gross Margin:						
Systems	$ 71,712	$ 95,201	$ 94,075	$ 75,302	$ 65,647	$ 58,576
Service and other	33,400	33,206	27,338	23,174	20,790	19,338
Total gross margin	105,112	128,407	121,413	98,476	86,437	77,914
Earnings from operations	$ 19,460	$ 37,915	$ 39,855	$ 29,038	$ 24,521	$ 23,224
Net income	22,522	40,682	37,066	26,815	21,068	17,720
Net income per share	1.26	2.17	1.95	1.39	1.12	.97
Dividends per share	.43	.37	.27	.225	.165	.12
System orders	168,000	189,000	203,000	187,000	135,000	112,000
System backlog	109,000	109,000	120,000	102,000	69,000	60,000
Return on Revenues:						
Gross margin:						
Systems	42.0%	48.7%	51.1%	49.1%	52.4%	51.1%
Service and other	34.9%	37.0%	33.7%	31.3%	30.8%	31.2%
Total gross margin	39.5%	45.0%	45.8%	43.3%	44.9%	44.1%
Earnings from operations	7.3%	13.3%	15.0%	12.8%	12.7%	13.1%
Net income	8.5%	14.3%	14.0%	11.8%	10.9%	10.0%
Income tax rate	25.9%	20.1%	24.0%	28.6%	31.7%	41.0%
Working capital	$185,237	$186,798	$176,429	$142,129	$122,080	$ 99,267
Total assets	337,477	333,010	303,875	261,024	229,058	198,941
Total debt	5,196	5,257	6,721	8,584	10,761	12,613
Stockholders' equity	238,640	230,074	204,487	170,190	151,866	128,670
Current ratio	3.7:1	3.5:1	3.4:1	3.2:1	3.5:1	3.4:1
Return on beginning equity	9.8%	19.9%	21.8%	17.7%	16.4%	16.0%
Return on beginning assets	6.8%	13.4%	14.2%	11.7%	10.6%	9.9%
Book value per share	$ 13.33	$ 12.51	$ 11.02	$ 9.24	$ 8.20	$ 7.15
Product Development:						
Total product development costs	$ 28,226	$ 29,970	$ 26,177	$ 21,875	$ 18,346	$ 14,502
Less:						
Capitalized software costs (a)	(4,535)	(3,180)	(3,027)	(2,432)	(2,282)	NA
Reimbursement from co-development programs	(3,451)	(5,105)	(3,965)	(2,734)	(1,941)	–
Product development expense	$ 20,240	$ 21,685	$ 19,185	$ 16,709	$ 14,123	$ 14,502
Capital expenditures	$ 15,484	$ 25,010	$ 10,265	$ 6,912	$ 7,323	$ 7,820
Number of employees	2,580	2,770	2,620	2,540	2,490	2,360
Shares outstanding (thousands)	17,897	18,394	18,561	18,416	18,516	18,002

(a) Computer software costs capitalized in accordance with Statement of Financial Accounting Standards No. 86. In years prior to 1986, such costs were included in product development expense.

All share and per share data have been adjusted to reflect the two-for-one stock split declared in January of 1987.

NA=Not applicable

DIRECTORS AND OFFICERS

Directors of Measurex Corporation

Paul Bancroft, III*
Independent Venture Capitalist and Consultant to Bessemer Securities Corporation (Private investment company)

Dwight C. Baum**
Senior Vice President PaineWebber Incorporated (Investment banking firm)

David A. Bossen
President, Chief Executive Officer Measurex Corporation

William W. Goessel**
Chairman, Chief Executive Officer Harnischfeger Industries, Inc. (A multi-industry company)

Dr. Orion L. Hoch*
Chairman, Chief Executive Officer Litton Industries (A multi-industry company)

John W. Larson*
Managing Partner Brobeck, Phleger and Harrison (Law firm)

John W. McKittrick**
Director VMX, Inc. (Manufacturer of voice store and forward equipment)

Graham Tyson**
Retired Chairman and Chief Executive Officer Dataproducts Corporation (Manufacturer of computer printers)

*Member of Compensation Committee
**Member of Audit Committee

Principal Officers of Measurex Corporation

David A. Bossen
President, Chief Executive Officer

John C. Gingerich
Executive Vice President

Erik J. Hällman
Senior Vice President, President, Europe

Robert McAdams Jr.
Senior Vice President, Finance and Administration

Jerome Raffel
Senior Vice President, Manufacturing Operations

Lance M. Lissner
Vice President, Engineering and Marketing, Industry Groups

Phillip E. Peterson
Vice President, Human Resources

Dr. Harish S. Rao
Vice President, Corporate Engineering and Marketing

Carl A. Thomsen
Vice President and Corporate Controller

Robert W. Hirt
Treasurer

Charles Van Orden
General Counsel and Secretary

Officers of Subsidiaries

Harry D. Biehl
Vice President General Manager, Management Systems Division

Robert Hein
Vice President, U.S. Industrial Systems Group

Richard Hill
Vice President, Finance Europe

Neil Laird
Vice President, Finance Americas and Pacific

William H. Moore
Senior Vice President, Asia

Masaaki Ohno
President, Japan

John Preston
President, Canada

Hans Westerberg
Vice President, Operations Europe

William J. Weyand
Senior Vice President, U.S. Pulp and Paper Group

Glenn R. Wienkoop
President, Measurex Automation Systems

Norman D. Winton
Vice President Mexico, Central/South America, Australia, New Zealand

CORPORATE AND INVESTOR INFORMATION

Form 10-K

Measurex's Form 10-K, the Company's annual report filed with the Securities and Exchange Commission, will be sent without charge upon written request.

Please write:
Corporate Communications
Measurex Corporation
One Results Way
Mailstop 208
Cupertino, CA 95014-5991

Stock Listing

Measurex's common stock is listed on the New York and Pacific Stock Exchanges and trades under the symbol MX.

Transfer Agent and Registrar

Bank of America
N.T. & S.A.
San Francisco, California

Independent Accountants

Coopers & Lybrand
San Jose, California

Legal Counsel

Brobeck, Phleger and Harrison
San Francisco, California

Notice of Annual Meeting

The annual meeting of stockholders will be held at 10:00 a.m. Monday, April 22, 1991, at corporate headquarters, Cupertino, California.

measurex
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