

1980 ANNUAL REPORT

AMETEK, Inc.

OPERATING AND FINANCIAL HIGHLIGHTS

(Dollar amounts in thousands, except per share figures)

For the year	1980	1979	1978
Net Sales	\$ 400,180	\$ 392,873	\$ 320,701
Net Income	21,665	22,442	19,402
Per Share	2.02	2.11	1.85
Capital Expenditures	21,923	20,320	11,736
Dividends Paid	10,759	9,839	8,667
Per Share	1.00	.92½	.82½
At year end			
Working Capital	\$ 94,981	\$ 96,482	\$ 79,621
Long-term Debt	156,119	53,140	34,861
Stockholders' Equity	326,670	114,171	100,427
Shares Outstanding	10,787,939	10,658,892	10,530,428
Number of Employees	6,700	7,300	6,600

PLAINTIFF'S EXHIBIT

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AMETEK, a diversified industrial manufacturer, produces both capital goods and components for consumer products, which makes possible the Company's participation in both the capital equipment and consumer goods markets. AMETEK serves these markets through four operating groups: Precision Instruments, Process Equipment, Electro-mechanical and Industrial Materials. The Company employs approximately 6,700 people at thirty plants in the United States.

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REPORT TO AMETEK'S SHAREHOLDERS

Although 1980 was a good year for AMETEK, with a very strong first and fourth quarter, results did not match the all-time record reported for 1979. We believe that the Company performed very well in the difficult economic environment of 1980, having achieved the following:

Sales topped \$400 million for the first time in AMETEK's history.

Earnings per share were \$2.02 compared with 1979's all-time record of \$2.11 per share.

The year ended on a strong note, with new orders received in the fourth quarter up more than 12 percent over 1979's fourth quarter, producing a record backlog at year end of more than \$194 million.

Two seven-week strikes at major plants were settled during the second and third quarters with new three-year labor agreements in each case.

AMETEK invested a record \$21.9 million in new plants and equipment, completing four of the five major plant expansions commenced in 1979 and began work on two new plants.

Research and development expenditures expanded to a record \$8.1 million and significant advances were achieved in AMETEK's solar photovoltaic and solid state instrumentation work.

AMETEK purchased a sizable industrial plastics company during the fourth quarter of 1980.

At year-end AMETEK's total assets, stockholders' equity and dividend payments to stockholders had increased over 1979 totals by ten percent or more.

Funds generated from operations were a record \$34 million.

COVER

SCORPIO undersea work vehicles, developed by AMETEK's Straza division, are now in service in many of the world's off-shore oil fields. These unmanned submersibles can work to depths of three thousand feet for unlimited periods, controlled by operators on a surface ship above the work-site.

◀ *A continuous run of yard-wide SILTEMP® silica fabric billows up and back down through a two-story high luminous wall furnace in a final purification process for this Havg material which is used as a replacement for asbestos in high temperature insulation.*

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OPERATIONS

The sluggish economy of 1980 and the higher costs experienced during the year had a slight effect on AMETEK's overall results. While the Electro-mechanical Group, led by a strong performance from the Lamb Electric and Straza divisions, showed solid growth, the Precision Instruments, Process Equipment and Industrial Materials Groups produced lower operating profits. Some strength in heat exchangers, filters and centrifuges benefited the Process Equipment Group but this was more than counterbalanced by the effect of a seven-week strike on our Valley Foundry division's winery equipment sales. The Industrial Materials Group, despite a minor increase in volume—mainly due to the addition of a new industrial plastics business in the fourth quarter—had a decrease in operating profits reflecting both the seven-week strike at Pacific Extrusion's Watsonville, California plant which was settled late in the second quarter, and the reduced demand for construction components reflecting the slow-down in the building industry. AMETEK's group results are detailed on pages 19 and 20 of the enclosed financial report.

New order rates, which lagged in the spring, strengthened significantly in the fourth quarter, enabling AMETEK to end the year with a record \$194 million backlog of unfilled orders. Your Company is providing increased capacity to meet this demand by adding manufacturing facilities for an instrument plant in Florida, plastics plants in Pennsylvania and Wisconsin and electric motor plants in North Carolina and Wisconsin. As part of AMETEK's record 1980 capital expansion program, new equipment systems were added to improve productivity throughout our manufacturing locations. Your Company has invested \$88 million in its manufacturing facilities since the beginning of 1975.

In early October your Company purchased the Haveg Industries plastics business in Marshallton, Delaware, for approximately \$5.4 million in cash from a subsidiary of Hercules, Incorporated. This purchase included Haveg's 240,000 square foot plant where approximately 250 employees produce three well-established industrial plastics product lines with annual sales in the \$14 million range. Haveg's operations have been included in AMETEK's results since the October 8th purchase. Your management's knowledge of this business should help expand Haveg sales and profitability; your president and chairman managed Haveg Industries during an 11-year period of rapid growth in the late '50's and early '60's and,

after Hercules purchased Haveg in 1964, continued the association before coming to AMETEK. We are delighted with the opportunity to work with the fine people at Haveg again, and welcome them to AMETEK.

RESEARCH AND DEVELOPMENT

The Company's record \$8.1 million investment in research and development programs during 1980 continued to produce valuable results. Our silicon-based development in microelectronic circuitry for instruments has been incorporated into new products marketed by AMETEK's Controls and U.S. Gauge divisions, where the technology will affect the next several generations of measuring devices. AMETEK is one of the few instrument manufacturers with integrated silicon production, and the interchange of theoretical and practical experience between our Microelectronics and Silicon Material specialists on the West Coast and instrument engineering groups on the East Coast helps to assure the Company's continued leadership in this field.

Two solar energy research programs have also been productive. Continued development of AMETEK's flat plate solar collector panels and their excellent performance in domestic hot water systems have enabled us to plan for increased commercial production.

Continued and significant progress in AMETEK's solar photovoltaic (electric) program was made during the year. Patent applications have been filed covering these developments. The laboratory results produced to date have been very encouraging. Your management's expectations for the potential of this development continue to increase. It is hoped to move the photovoltaic process from the laboratory to the pilot production stage later this year.

FINANCIAL

AMETEK's financial strength has provided the means to maintain the Company's growth even in a difficult year such as 1980. Assets grew 13 percent to \$254 million and equity increased 11 percent to \$127 million in 1980, a year in which the Company improved business slightly and increased cash reserves.

Annual dividend payments were increased to \$1.00 per share, providing the Company's stockholders with a yield over the past five years that has grown at a 13.5 percent compound rate. In prior years your Company has repurchased its own stock and may from time to time do so again.

OUTLOOK

Forecasted major economic trends should have a favorable effect on AMETEK over the next five years.

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Energy concerns are primary, and conservation of existing fuels is expected to provide growth in measuring and control instruments. Plans for large scale refinery conversion work should also benefit instrument sales, as well as AMETEK's heat exchanger, bellows and associated capital equipment lines, as would implementation of the syn-fuel program.

Beginning in 1981 your Company expects to participate significantly in alternate energy programs, especially in the market for solar energy equipment. Our current position in plastics, aluminum and instruments assures that your Company will continue to participate in the development of lighter, more efficient vehicles of all types, and a number of new products in the measurement and purification of water supplies offer AMETEK opportunities to meet this growing national concern.

ORGANIZATIONAL

We are pleased to announce that Raymond C. Roloff, general manager of the Process Equipment division, and Stanley A. Walker, who has managed the Straza operations for five years, were both elected Vice-President to head their respective divisions.

Over the past ten years a dozen new plants were added through both internal growth and acquisitions. Your management team has remained intact during this period, with the scope and demands of individual responsibilities significantly increasing as these executives created the growth in AMETEK during the decade. We are grateful for their continued commitment, and for the efforts of employees at every level of the corporation and to our customers, suppliers and shareholders for their contributions. We look forward to the challenge of 1981 and the coming years.



Robert L. Noland
President

Dr. John H. Lux
Chairman and
Chief Executive Officer

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RESEARCH AND DEVELOPMENT PROGRAMS

POWER SYSTEMS GROUP

APPLIED MATERIALS

Much of AMETEK's research and development work relates to expansion or technological advancement of existing product lines. The Company's solar energy programs, begun in 1973, are an exception; they reflect corporate decisions to follow-up on technical opportunities which suggested that more efficient use of solar energy was possible.

AMETEK's initial investment was moderate—a few hundred thousand dollars led to the development of a high efficiency flat plate solar collector panel capable of producing hot water temperatures well in excess of 200°F. In 1975 a patent was granted by the U.S. Patent Office covering this panel's selective coating which provides high solar heat absorption with very low re-radiation.

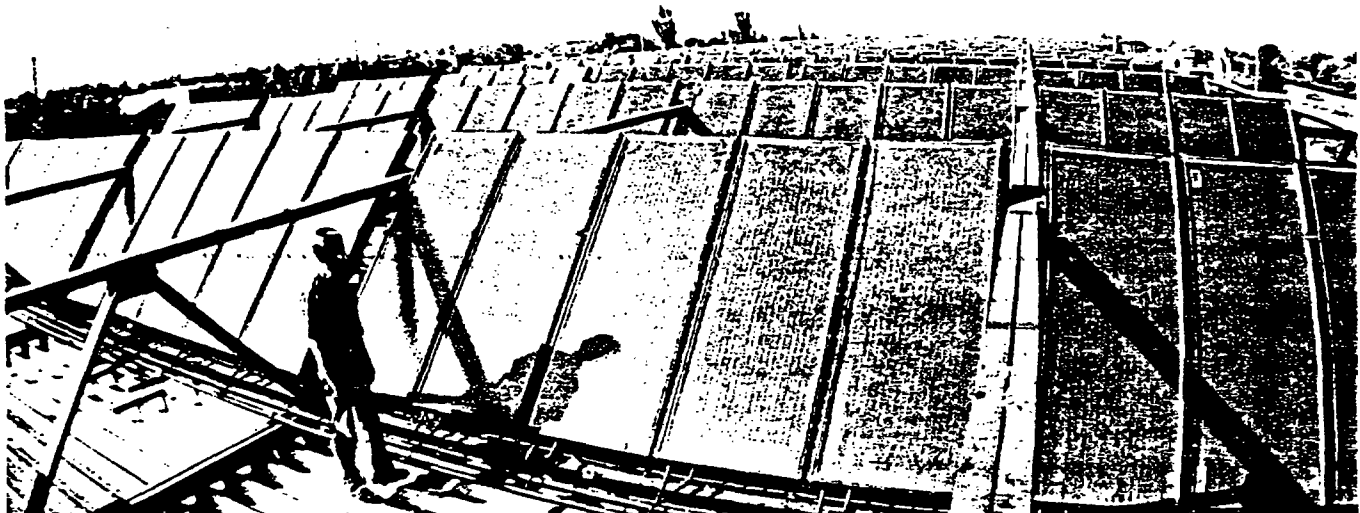
The investment grew into the multi-million dollar range as AMETEK's industrial engineering groups contributed to a panel package design capable of withstanding long-term exposure to the elements. Hundreds of these panels were supplied to computer-monitored test installations in various locations across the country and performance data were used to upgrade the design further. The technical staff noted that certain materials had photovoltaic properties, producing minute amounts of electricity in response to the sun's energy, and a group of physicists was assembled at the Applied Materials laboratory to follow-up on this discovery. Focusing on a very low

cost fabrication technique with similar materials led to a promising thin-film photovoltaic device and, by the end of 1980, this work had produced a patentable low cost solar cell.

Solar Collector Panels

In mid-1979 AMETEK's Power Systems group began commercial production and marketing of the Sunjammer® hot water panel from a new plant in Pennsylvania. These 26 square foot flat plate collectors, performance proven in large scale solar installations and home hot water solar systems across the country, have been rated as the most efficient equipment on the market in several state, federal and independent testing programs. Resistance to the relatively high price—\$400 plus per panel—was gradually overcome as distributors and installers recognized design and performance advantages of AMETEK panels.

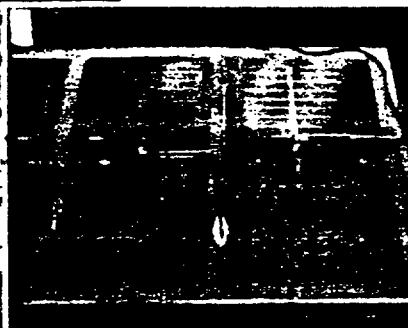
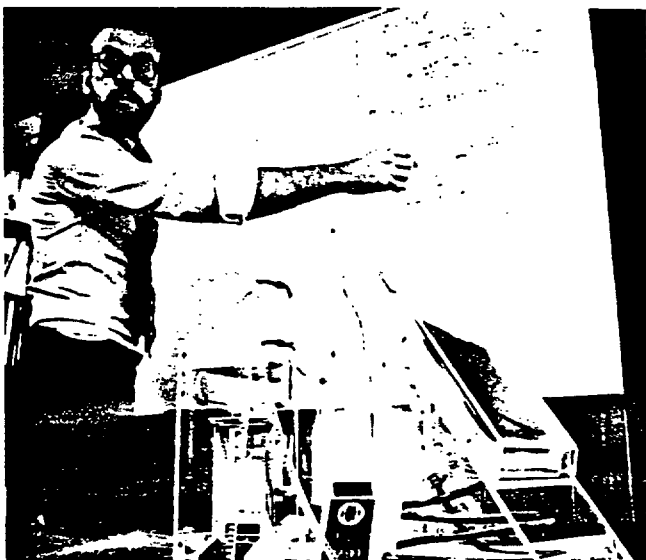
In 1980 the continually increasing cost of energy and a new federal tax credit for solar energy equipment (deduction of forty percent of cost to a maximum of \$4,000) gave further impetus to sales. A growing network of more reliable distributors and installers chose AMETEK equipment for the typical two-panel solar-assisted residential hot water system. By year-end Power Systems had introduced a lower cost panel for applications where high performance is not required, and a large national retailer had begun taking quantity shipments of panels for a test-marketing program in Hawaii and Southern California.



Solar Electric Cells

In 1979 AMETEK filed patent applications on its entirely proprietary, company-funded development of a very low cost photovoltaic cell, based on electro-deposition (a process comparable to electroplating) of a thin film consisting of common semiconductive materials. The basic patent covered the photovoltaic cell; a second patent application, describing methods for producing the cell, was subsequently filed. This program is still at a laboratory "bench-top" experimental stage; AMETEK expects to begin a pilot production program later in 1981.

Cost is the primary advantage to AMETEK's discovery; material costs right now appear to be considerably less than the cost of silicon, the common photovoltaic material available today. The potential market for an inexpensive photovoltaic cell is difficult to define: the availability of economical photovoltaic systems would have a major impact on undeveloped areas, residential use may be significant, and public utilities themselves may purchase this equipment in view of the environmental and financial risks involved in other power sources. The Department of Energy projects a multi-billion dollar market for solar photovoltaic products based on material that combines ten percent efficiency and costs of 70 cents per peak watt of power generated.



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PRECISION INSTRUMENTS GROUP

U.S. GAUGE

U.S. Gauge division maintained its position as the world's largest pressure gauge producer despite a difficult economy in 1980. The millions of instruments manufactured by U.S. Gauge appear in every sector of the economy, including instruments on residential heating and water systems, computers and advanced medical equipment, farm equipment and jet aircraft. There is also a significant replacement market for all of these products. As an indication of the breadth of U.S. Gauge's markets, the division serves more than five hundred customers and its five largest customers account for less than 18 percent of total sales. To structure this extensive business efficiently, the division operates through four marketing groups.

Aerospace

The Aerospace Group set new records again in 1980, with the strongest growth in business aircraft and helicopter instruments and in export sales. U.S. Gauge now supplies airspeed, pressure and temperature sensors and instrument displays for most of the top-of-the-line business aircraft and helicopters built in this country, a market which is growing at an annual rate of nearly twenty percent, and for a growing number of European aircraft.

Instrument orders for commercial jet passenger aircraft, strong at the beginning of 1980, leveled off by mid-year as aircraft manufacturers responded to economic factors affecting their airline customers or adjusted schedules to begin production of new fuel-efficient designs. A number of new contracts, and many advanced new products combining liquid crystal

and other digital displays with microprocessor and semiconductor-based circuitry, assure that U.S. Gauge will continue as a major supplier to the aircraft industry.

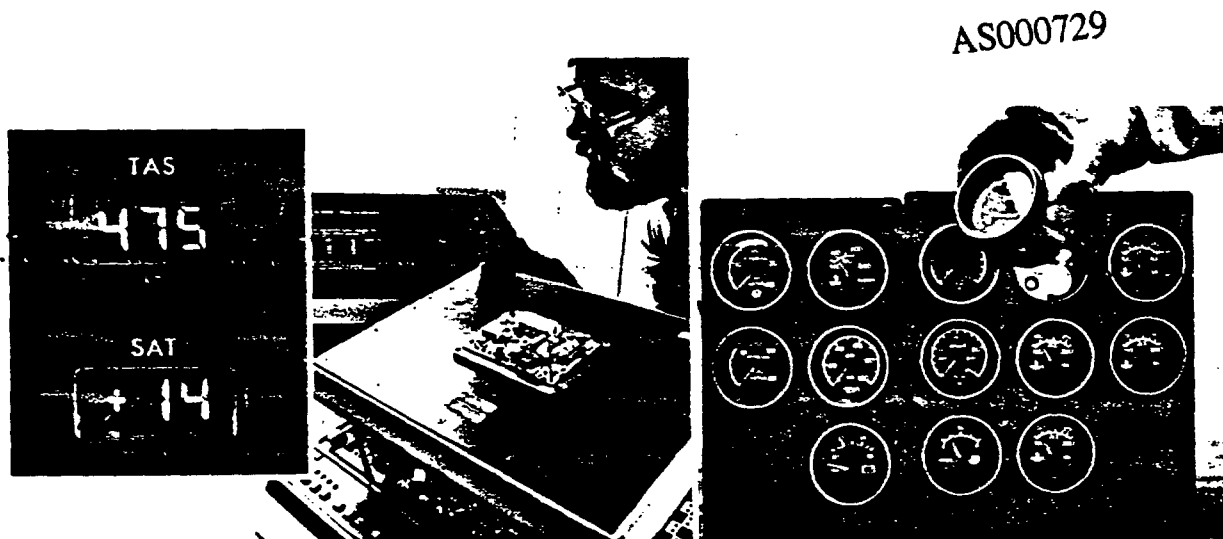
Automotive

U.S. Gauge has become a leading instrument supplier to every major truck and construction machinery manufacturer in the United States in the seven years since its automotive marketing group was formed in 1973. Sales had increased dramatically as this market adopted these high quality, advanced design instruments, but economic factors halted this growth in 1980 and are expected to restrict sales in 1981 as well.

New model trucks, construction and farm equipment products scheduled for introduction in mid-to-late 1981 will incorporate some very innovative instrument systems from U.S. Gauge engineering. New contracts based on complete pre-wired panels with push-in, snap-out gauges, will make installation and servicing much less expensive. Gauge now offers a complete line of electrical instruments, utilizing electric meter movements produced by AMETEK's Controls division, for this market. Solid-state sensors, along with more advanced instrument displays, are being introduced to mesh with on-board microprocessor systems which will first appear in farm and construction equipment.

Original Equipment Manufacturers

This group supplies pressure and temperature instruments to manufacturers of compressed gas and welding equipment, boilers, fire extinguishers, machine tools, pumps and compressors, medical equipment, hydraulic and refrigeration systems. The sluggish 1980 economy reduced demand for these in-



struments as customers extended delivery schedules and reduced inventories. While domestic sales lagged, export sales increased substantially during the year and order input strengthened by year-end.

Joining hundreds of established standard instruments marketed by this group, a number of new products achieved acceptance in 1980. A reliable medical gauge incorporating adjustable high and low pressure alarm switches was designed for kidney dialysis machines, complementing U.S. Gauge's instruments used in respirators and other medical equipment. A new pressure/temperature indicator for residential heating systems was introduced, well-timed to meet the unusual number of conversions to less expensive fuel systems during 1980.

Distributor

Many of the general equipment gauges mentioned above are also supplied through the U.S. Gauge distributor organization, considered to be the country's strongest instrument distribution network, for the replacement market. In addition, special purpose instruments are developed specifically for distributor sales, especially for oil and gas production and transmission systems, chemical process and refinery plants, and other major customers who prefer to buy through local distributors rather than stock a large inventory. Distributor sales have recorded steady uninterrupted growth for more than ten years and 1980 was no exception, with increases in domestic and export shipments, especially in process and energy-related instruments.

AMETEK CONTROLS

Controls division is becoming known as one of the more innovative manufacturers of pneumatic, electronic and force measuring instrumentation primarily for the process control industry. This market, ranked as the fourth fastest growing U.S. industry in Department of Commerce figures, is responding to technological developments and moving from mechanical and pneumatic hardware into electronically controlled solid-state systems. For several years the Controls division has maintained a growth rate somewhat better than the industries it serves. In 1980 sales and new orders increased better than twenty percent and the division closed the year with a record backlog of orders.

New products played a significant part in this growth. Controls engineering has been able to take advanced electronic concepts and AMETEK's solid-

state transducer technology and translate them into practical, cost-efficient products for its own marketing or for inclusion in U.S. Gauge or Hunter Spring divisions' product lines. In these products, the semiconductor technology is used to measure, control and transmit pressure, temperature and flow data by translating this data into electrical signals. Recently introduced products include a twenty-channel pressure to current "P/I" converter and a five channel digital display monitor for this system, which has found a ready market in the oil and petrochemical markets. A solid state differential pressure transmitter which handles flow or pressure data was introduced for the same market, complemented by Controls' very compact portable electronic calibrator for differential pressure transmitters.

Among the many applications for these products, one of the most interesting and potentially the largest, involves the need to measure the water level in the many deep wells that supply drinking and irrigation water for many Mid- and South-West communities. New water management regulations require continuous accurate measurement of the number of feet of water in each well, and Controls designed a "down-hole" transducer system to provide this data.

Controls has begun to staff and equip a major new department in its Pennsylvania plant for production, trimming, testing and assembling of solid-state transducers. These functions, previously perfected by AMETEK's Microelectronics group on the West Coast where the semiconductor sensing chip was developed, is being expanded at Controls. Procedures have now advanced from developmental status to pilot production.

RODAN

Rodan achieved a modest sales gain in 1980, and was invited to quote on a number of interesting new applications for its product. Rodan is a leading producer of thermistors, a small solid-state electronic device that causes electrical current to vary precisely as temperature changes.

Thermistors are incorporated into electric motors, precision power supplies and electronic equipment as a protective device which Rodan markets as its Surge Gard® current limiting product line. A growing use of thermistors as a reliable means to measure solar heating panel temperatures has put Rodan in the instrumentation/control market of this new industry.

MICROELECTRONICS

AMETEK began its Microelectronics development program in 1974 in an effort to develop a low-cost semiconductor pressure sensor for the Company's instrument products. At that time such devices, developed for the space program, cost hundreds of dollars each.

Today, through the work of this development group in Los Angeles and the two engineering groups at U.S. Gauge and Controls, AMETEK is approaching its goal of producing a competitively priced solid-state sensor package. To achieve this, it was necessary for Microelectronics to develop a completely integrated silicon chip-based capability to produce industrial quality instrument sensor packages. By 1979, this development program had produced marketable products for U.S. Gauge and Controls divisions; by the end of 1980 procedures had become so standardized that it was possible to begin transforming certain testing and assembly functions from Microelectronics to a new solid state sensor production department at the Controls division.

Microelectronics' design work for new special purpose sensors will continue during 1981, and this facility will also provide the circuits and sensing chips in the quantities required for the many new products created by this development.

MANSFIELD AND GREEN

Mansfield and Green builds two types of instrument-related equipment which is marketed by U.S. Gauge's Original Equipment and Distributor sales groups. In 1980 M & G maintained its history of steady sales growth which has made this division the leading producer of deadweight testers used to assure accuracy or to calibrate pressure instruments and pressure activated equipment used throughout industry. These highly accurate calibrators, available in laboratory bench-top designs or portable field models, enjoy steady sales in every area where accurate pressure measurement is important. With energy costs increasing, M & G's new RK pneumatic pressure calibrator, introduced last year, saw a substantial sales increase especially in the natural gas transmission industry. Other major customers include instrument manufacturers, petroleum-related plants and other process plants.

M & G is a developer and leading producer of diaphragm seals used as a protective device for in-

struments which must be separated from the fluids which they are monitoring to avoid contamination or instrument failure. In 1980 a new seal-protected instrument unit was developed and successfully marketed for use in specialized medical equipment. Other major markets for diaphragm seals include dairy and food processing, water and waste treatment systems, chemical and petrochemical plants and other instrument manufacturers.

THERMOX INSTRUMENTS

Thermox recorded the highest sales in its history during 1980, its first full year as an AMETEK division. As one of the country's leading developers of technology to measure oxygen and combustibles in industrial furnaces and boilers, Thermox sales have responded to the increase in fuel costs rather than the strength of the economy. The primary market for these instrument packages are the larger installations among the 65,000 industrial furnaces and boilers, units which now consume \$5,000 or more in fuel per month. Thermox's sophisticated instruments, and their accessory equipment which automatically balances a furnace's fuel-air mixture, can reduce oil, gas or coal consumption by five to 15 percent. For example, an electronic controls manufacturer credits Thermox's WDG IIIC oxygen/combustibles analyzers installed on five of its boilers with savings of more than \$65,000 in fuel costs, in the first six months.

The WDG IIIC analyzer, introduced in 1980, is a relatively inexpensive system which typically provides first year fuel savings far in excess of the cost of the equipment in large installations. In this market, Thermox designs are recognized as the most versatile and adaptable for nearly any process, with a history of low maintenance and simple servicing requirements. The sales growth indicates that initial purchases for testing quickly develop into a conversion program for all of that customer's furnaces and boilers. A new market for this equipment has recently developed with boilers used for steam generation in the tertiary recovery of crude oil.

In mid-1981 Thermox will move to a new 50,000 square-foot plant which AMETEK is building near the division's original Pittsburgh, Pennsylvania location. Design of this modern facility demonstrates Thermox's dedication to energy conservation, as the plant uses solar-assisted water heating powered by AMETEK solar collectors.

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McCROMETER

This leading manufacturer of propeller and turbine-type flow measuring instruments recorded strong sales growth in 1980 as water control regulations for irrigation and well use required more accurate measurement throughout the Mid-west and western states. McCrometer's basic product is a versatile, modular designed propeller-type flow meter which is widely used in irrigation systems and municipal water treatment plants. These attractively finished products display and record flow data in a variety of measurement units. McCrometer has built a reputation for high quality, reliability and accuracy in these markets.

New products, including remote reading electronic meters, flow controlling meter systems and high temperature units, have been developed for established markets and McCrometer is also introducing these products into industrial markets through an expanding system of manufacturers' representatives. The extension of computer support to engineering, materials control and manufacturing, plus expansion of in-house production capabilities during 1980, should strengthen this division's future performance.

HUNTER SPRING

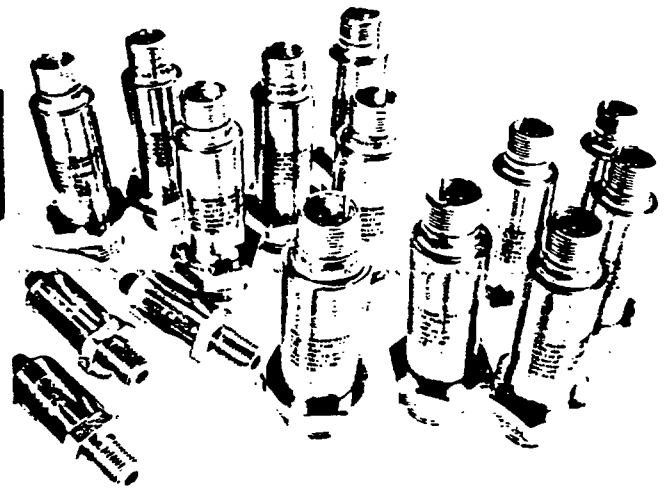
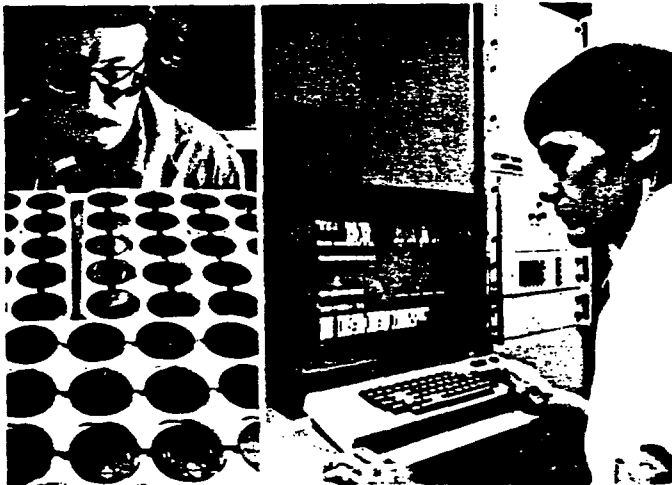
Hunter Spring division manufactures mechanical and electronic force gages, precision wire springs, constant force springs, spring motors and spring powered retractor reels.

Hunter is the original developer of the flat, ribbon-like constant force springs, and 1980 sales showed that new applications for these unique constant force designs are still being found. An encapsulated

SPIR'ATOR® designed for automatic fly fishing reels had strong first year sales, and constant force NEG'ATOR® designs were also successfully developed as a counterbalance for new energy-saving residential windows which are being marketed nationally. Other flat spring applications, including automotive seat belt retractors, typewriter and photocopier return mechanisms and appliance subassemblies, did moderately well during the year.

Hunter's fastest-growing products are retractor reels and a full line of hand-held force gages. The retractor reel line, including spring and cable assemblies used to retract fuel hoses to gas pumps or as grounding devices to prevent static sparks in aircraft refueling systems, was expanded by the addition of ROTA•REEL™ spring powered electric cord reels, a premium quality product for lighting and tool connections in shops and assembly areas. Following a large investment in engineering and new tooling during 1980, Hunter is introducing a number of less expensive cord retractor reel models for commercial and consumer use.

Hunter's force gage product line, providing hand-held instruments used throughout industry to measure the strength of a connection or bond, or the force required to operate a switch, has also expanded to include digital electronic gages. The AccuForce® digital gage is based on load cell technology developed by Controls division, and provides three digit accuracy in a range of standard force measurement scales. These products have shown steady growth, maintaining Hunter Spring's leadership in the force gage instrument market.



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ELECTRO-MECHANICAL GROUP

LAMB ELECTRIC

The Lamb Electric division, with five plants producing specialty fractional horsepower electric motors, had a banner year in 1980 with sales at record levels. With 96 new motor models released for production from its Kent, Ohio engineering center during 1980, Lamb also built major manufacturing additions for two of the division's five motor plants. Programs included 40,000 square feet added to the Racine, Wisconsin commercial motor plant and a 98,000 square foot addition nearing completion at year-end which will double the size of the Graham, North Carolina appliance and business machine motor plant, providing additional capacity to meet the growing demand for these products.

Export sales, predominantly to Common Market manufacturers, increased to record levels in 1980. The majority of the million-plus motors exported during the year were vacuum appliance units, but an increasing volume was for computer and business machine use. This parallels Lamb's business development here in the United States, as the division has been the leader in motors for domestic vacuum cleaners since that industry began, but in the last decade has built a large business in industrial and commercial motors and air-moving products for computer peripheral equipment, photocopiers, other business machines and appliances.

These markets were generally strong in 1980; vacuum appliance motor sales held up well, while Lamb's WINDJAMMER® air moving products and permanent magnet motors for computers and business machines set new sales and profit records. With the most extensive product development and engineering group in the electric motor industry producing a

record number of innovative new motor designs each year, Lamb should continue its leadership in each of these markets.

Several years ago, Lamb developed a line of permanent magnet motors, primarily for computer applications, which are now being adapted for use in outdoor appliances including lawn mowers and weed trimmers. Initial orders from lawn equipment manufacturers are typically quite large, and additional applications in this market for permanent magnet and wound field motors are providing important new domestic and export business for Lamb as manufacturers of outdoor appliances add electric models to their gasoline-powered product lines.

For years Lamb designs have been supplied to Canadian customers through licensee-manufactured vacuum motors. Late in 1980, Lamb resumed the direct sales of motors to the total Canadian market, providing customer service and engineering from the division's United States plants.

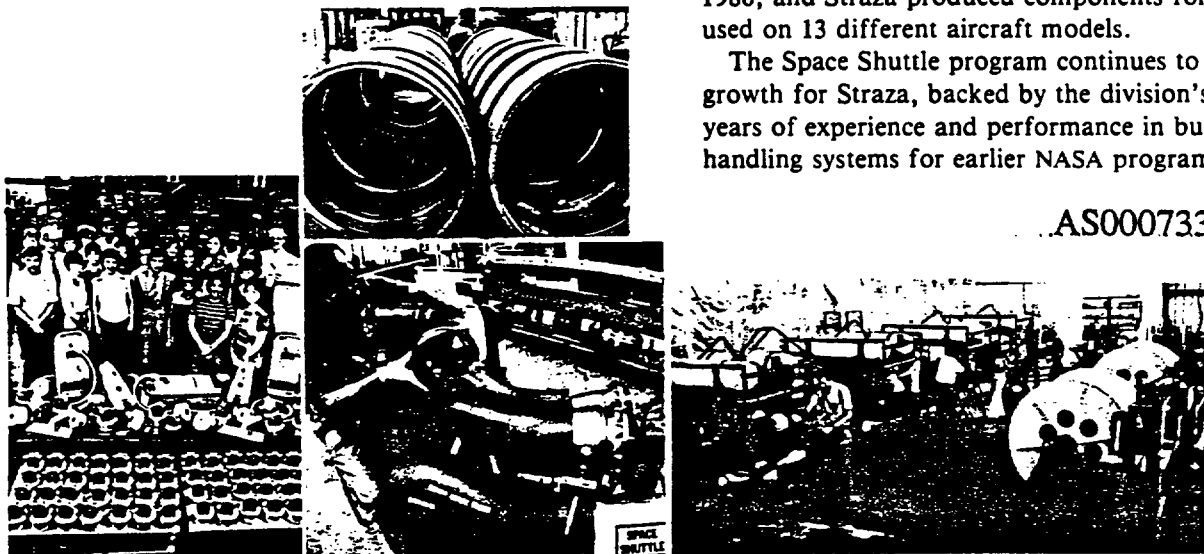
STRAZA

An especially strong market for Straza's marine electronic systems and aerospace products helped to produce the highest sales and operating profit in the division's history, with new order rate and backlog of orders at year-end also at record high levels.

Both of these markets should continue to grow. Straza's aerospace business is primarily in aircraft engine subassemblies and systems to handle cryogenic (ultra-cold) gases. Straza builds large, complex assemblies for jet turbine engines, using exotic metals and requiring sophisticated fabrication techniques. These engines are designed into most commercial jet aircraft built in the United States and Europe, and are also specified on the next generation of wide body jets. Demand for jet turbine assemblies was strong in 1980, and Straza produced components for engines used on 13 different aircraft models.

The Space Shuttle program continues to provide growth for Straza, backed by the division's twenty years of experience and performance in building fuel handling systems for earlier NASA programs. Straza

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has contracted to produce four sets of fuel lines for Space Shuttle vehicles, with an ongoing contract to provide at least two additional systems plus related equipment. As the Space Shuttle "Columbia" reaches testing and launch stages in 1981, additional cryogenic fuel handling systems may be required.

Straza's marine electronics also had an outstanding year in 1980, with strongest sales growth in energy-related markets where offshore oil activity has increased world-wide. Sales of its doppler-type sonar navigational system and speed log, providing increased safety and economy in the operation of large ocean-going ships, gained impetus in 1980 as major tanker fleet operators continued to retrofit Straza's systems as part of their regular vessel modernization program. Straza is also the acknowledged leader in developing Continuous Transmission—Frequency Modulated sonar, a high-accuracy sonar system especially for commercial and military submarine vessels.

With this established position in marine electronics, Straza began a program to develop practical unmanned submersible work vehicles several years ago. To date, Straza has sold twenty self-contained work vehicle systems, including six SCORPIO systems delivered in 1980; six more were under construction at year-end. The SCORPIO vehicle is a three-quarter million dollar, technically advanced product that can assist or replace divers in the most dangerous undersea work. While divers are limited by time and depth, the unmanned SCORPIO can work down to three thousand feet underwater for unlimited periods, controlled by an operator on a surface ship above the work-site.

Seven SCORPIO vehicle systems are now operating successfully in the North Sea oil area, considered to be the harshest test of equipment among the world's offshore oil fields. At year-end Straza introduced its new high-performance SCORPI, a smaller, less expensive television equipped vehicle designed for observation and inspection work which will be ready for delivery in April, 1981.

OFFSHORE RESEARCH AND ENGINEERING

The Offshore division, a design and engineering services group, was formed several years ago to develop opportunities and practical experience for Straza's marine electronic equipment, especially the unmanned work vehicle systems. As this equipment gained market acceptance, Offshore Research focused its efforts on other high technology offshore and undersea developments. In 1980, the scope of activity expanded under a variety of commercial and government spon-

sors. New high technology concepts and designs were originated and developed for a shipyard handling system for propellers, shafts and rudders with weights up to 100 tons, a complete shipboard prototype for underwater operation of an experimental very long-range sonar system, and a robot device for remote handling of large anchor cables with up to one quarter million pounds of tension.

U. S. BELLOWS

U. S. Bellows division posted a solid performance in 1980 and closed the year with new orders running substantially ahead of the previous year's rate. U. S. Bellows fabricates precision metal or elastomer fabric and metal assemblies which compensate for expansion and contraction of large diameter round and rectangular pipelines and ducting systems handling high temperature fluids and fumes. These bellows or expansion joints typically connect heat exchangers, fume handling or pollution control equipment to a high temperature industrial process system. Sales of these products are related to the rate of industrial construction, especially construction of new refineries, process and power plants.

During 1980 U. S. Bellows experienced a heavy volume of requests for quotes on equipment for energy-related systems. This appears to be the first phase of a multi-billion dollar industry-wide refinery construction program plus the beginning of the synthetic fuel program, both of which are expected to affect this business favorably over the next five years.

The division works very closely with major engineering and construction firms handling power plant and refinery projects. To solidify its position as a leading designer of industrial expansion joints, U. S. Bellows has organized engineering seminars—twenty were conducted in 1980—for these customers and sales representatives across the country.

LOS ANGELES DIE CASTING

Los Angeles Die Casting, a high volume producer of custom zinc and aluminum die cast components for commercial and industrial products, saw steadily increasing demand for aluminum components while zinc die casting sales were relatively stable in 1980.

Major customers include manufacturers of electrical and construction components and automotive after-market products. Los Angeles Die Casting has also enjoyed a growing business in precision optical and electronic equipment, business and credit card machine components and close tolerance assemblies for television and electronic transmission systems.

PROCESS EQUIPMENT GROUP

VALLEY FOUNDRY

As the country's leading manufacturer of winery equipment, Valley Foundry maintained its market position in a rather slow year for the winery industry, during which the division's performance was curtailed by a seven-week strike. Production workers returned to their jobs under a new three-year agreement in the second week of August, and Valley Foundry concluded 1980 with sales and operating profit considerably below 1979's all-time record results.

There were a number of bright spots in the year. Export sales improved, as Valley's large scale equipment and production technology gained recognition, especially in Mexico, Central and South America. A number of major projects, including construction of several new wineries in Chile and Mexico, are under way and Valley expects to design and supply equipment systems for these projects. During the last decade, the division provided design and construction services for the majority of wineries built in the United States.

During 1980 Valley's supply department—a distributorship for many leading industrial products—was not affected by the work stoppage and operated at record levels. Management is gratified to see that hydraulic equipment, which Valley introduced in the wine industry several years ago, has become the largest single contributor to the growing sales of this department.

In the previous year, Valley developed a new continuous 1000 millimeter press utilizing hydraulics, and installed the first prototype for testing at a leading California winery. During 1980 this press outperformed all other models of wine presses used in the industry, with higher production and a higher quality

product. Valley has begun taking orders for its new press as the top-of-the-line model complementing the full range of crushers and presses offered for nearly every commercial-sized winery operation.

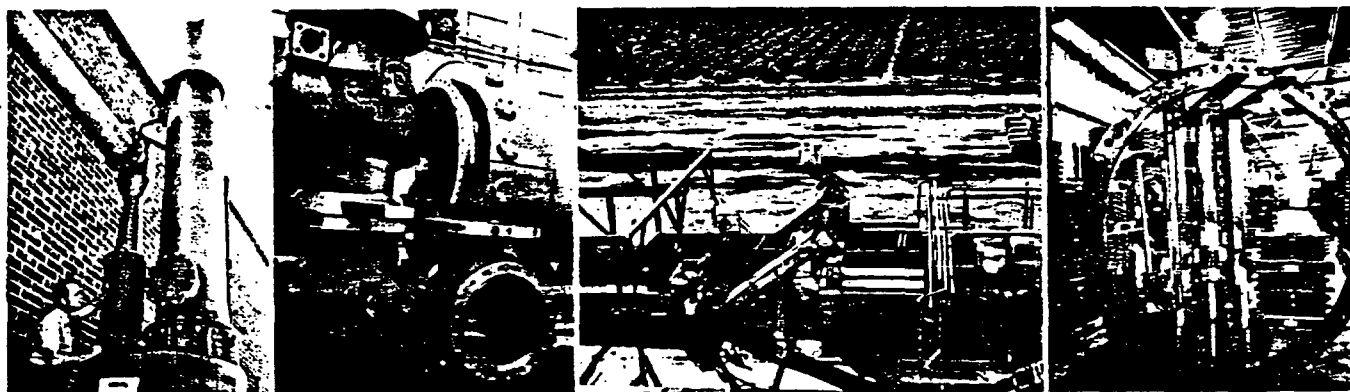
Per capita wine consumption in the United States has doubled in the past decade, yet only equals about ten percent of the average European per capita consumption. As the recognized winery design expert in the field, Valley provides planning, plant layout and cost data for any size and type of operation as part of its long-range marketing program for the growing number of smaller wineries which have begun operations throughout the United States in the last ten years. With domestic wine consumption growing at eight to ten percent per year, Valley Foundry believes that many new and smaller wineries will become major customers in the years to come.

PROCESS EQUIPMENT

In 1980, the Process Equipment division had its best year since AMETEK moved this business to a modern 200,000 square foot plant in Southern California three years ago. Sales of centrifuges, filters and other liquid-solid separation equipment to customers processing food, pharmaceuticals, fine chemicals, ore and industrial waste materials, increased more than 15 percent.

Several new products were introduced under the century-old Tolhurst name, including a quick-dismantling centrifuge to speed cleaning or product changeover, and a machine for centrifuging the contents of test tubes for larger scale pharmaceutical production. The "vial" centrifuge will handle more than a thousand test tubes at one time. The Filtration Fabrics department also introduced a new snap-in concept for filter media used in centrifuges.

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SCHUTTE & KOERTING

Sales and backlog of orders for Schutte & Koerting's process equipment increased in 1980 as food, chemical, petrochemical and fertilizer manufacturers showed a steady increase in new plant construction. S & K manufactures jet ejector and jet vacuum pump systems used in process product transfer and handling, and venturi fume scrubbers which can be found in many air pollution control systems. This wet scrubber product line has a very broad application and showed signs of strong growth during 1980.

S & K's flow measuring instrument products, found in many chemical process systems, had steady sales in 1980, and backlog of orders was up substantially by year-end. Foreign sales of these products have improved markedly over the past several years, with 1980 totals showing increased volume in Mexico, Central and South America and Africa.

Power equipment manufactured by S & K includes specialty valves marketed to the power generation industry plus desuperheaters—equipment designed to permit the re-use of steam in high temperature processes—especially in the utility, chemical and food processing industries. Valve sales were strong in 1980, and S & K is developing new valve designs to overcome high material and manufacturing costs which have restricted the profitability of this product line. S & K will terminate its business of manufacturing heat exchangers for the nuclear power generation market in 1981, while continuing to build and market heat exchangers for special industrial applications as a part of its process equipment line.

GRAND PRAIRIE

AMETEK's Grand Prairie, Texas heat transfer equipment plant produces standard designs of shell and tube-type heat exchangers from two inches to 48 inches in diameter in various steel and stainless steel plus copper and copper-based alloys. These cylindrical devices, from small off-the-shelf units to special order exchangers weighing up to twenty tons, function much like an automobile radiator as they transfer heat from one fluid to another in a broad range of industrial, electronic and solar energy equipment and in process systems.

The primary users of these heat exchangers include machine tool, compressor and power equipment manufacturers, where these units are specified as

lubricating oil coolers for engines and transmissions. Oil, gas and pipeline transmission operations, power plant constructors and solar heating equipment manufacturers have provided growing new markets for heat exchangers, which are expected to have an important part in programs for refinery and synthetic fuel plant construction. AMETEK has become a qualified supplier to the major plant engineering and construction firms in the United States.

A new line of refrigerant condensers achieved immediate customer acceptance and provided entry into a new market for AMETEK heat transfer equipment. Another emerging market for this equipment has developed in liquid cooling systems for large scale computers where electronic components produce heat which must be dissipated. AMETEK heat exchangers are setting the standard in this field as the leading computer manufacturer has specified these units in its newest liquid cooled systems.

TEXAS FLANGE

Sales and backlog of orders increased steadily for Texas Flange, a manufacturer of forged steel pipe flanges for fabricating and construction companies serving the chemical, petrochemical, oil field and refining industries. Metalloy, purchased by AMETEK in mid-1979, produces forged and welded stainless and alloy steel fittings for high pressure piping used in refineries, petrochemical and power plants.

Stock products are distributed nationally through supply houses as well as directly to larger OEM customers along with specially designed flanges and fittings for specific equipment systems. Customer service has been a key to Texas Flange growth, where a large inventory of finished goods is maintained for quick response to customer needs. A similar program was implemented for the Metalloy product line during the year, with the production of standard items for inventory and off-the-shelf delivery to improve customer service.

Oil field sales were strong, and shipments of these products to distributors and wellhead equipment manufacturers showed considerable growth. Pipeline component sales were relatively stable as a number of major projects have just been completed while contracts for construction of several new pipeline systems were recently awarded for start-up in 1981.

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INDUSTRIAL MATERIALS GROUP

PACIFIC AND ALUMINUM EXTRUSION

AMETEK's Aluminum operations did an outstanding job in maintaining profitability, although not at the high level of 1979, in a year in which their major market—construction—was depressed by soaring mortgage interest rates. A seven week strike at Pacific Extrusion's Watsonville, California, plant, resolved when a new three year contract was approved in May, also curtailed the division's 1980 shipments which were nearly thirty percent below 1979's record.

The combined capacity of these two California plants makes AMETEK the largest independent aluminum extruder supplying the 13-state Western market. The current outlook for this market is favorable, with a steady improvement forecast for new construction and more stable pricing for raw material. AMETEK's aluminum operations augment their long-term supply agreements with prime aluminum producers through an in-house recycling facility that provides about one-third of their aluminum requirements.

These plants provide complete finishing services—clear, bright, gold or bronze anodizing or painted finishes, plus machining and assembly services—for their extrusion customers. This capability, which has been developed through AMETEK's large capital investment in anodizing and painting systems at both plants, permits handling of smaller contracts more profitably, and has attracted many new customers in industries unrelated to the construction materials market.

During 1980, AMETEK Aluminum achieved national distribution for its architectural products by designing a new lightweight exterior door and frame for a large national building products manufacturer. AMETEK

previously helped to develop a movable office panel wall system for the same customer. Both products are generating important new business.

Additional markets have opened up in related fields: AMETEK's aluminum division has become the leading producer of frames and enclosures for solar panels in California, supplying AMETEK as well as several other large manufacturers of solar heating systems. Volume is becoming substantial and most customers request partial fabrication of the solar panel enclosure components, requiring the aluminum division to expand fabricating facilities. Other heating/cooling opportunities are under consideration, sparked by solar panel growth and the impressive orders generated for a new heat sink design for electronic and cryogenic systems.

PLYMOUTH PRODUCTS

Through development of both new and improved products, Plymouth achieved another all-time record year with order input up strongly. Production at Plymouth's Sheboygan, Wisconsin plant is structured into three groups: Utility, Consumer/Commercial Filtration and Industrial Filtration.

The Utility products group offers a wide range of proprietary underground enclosures to the water and gas utilities and to the irrigation industry. These durable, light-weight thermoplastic units provide access to underground meter valves, piping junctions, and other sites requiring periodic attention or maintenance.

Filtration products continued in 1980 as the fastest growing segment of Plymouth's business with the consumer/commercial sector showing the strongest gains. Plymouth produces a range of injection molded filter housings and a choice of replaceable filter cartridges

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fabricated of paper, activated charcoal, charcoal impregnated paper, or charcoal bed designs to improve the taste, appearance and odor of drinking water. With the introduction of a new clear plastic filter housing, Plymouth rounded out its complete line of filtration systems for home, recreation vehicle and light commercial use.

Among the industrial markets which Plymouth serves are the paint, plating, beverage, and chemical fields. Custom tailored filter housings and cartridges are supplied to an OEM market which provided significant volume growth during the past year. In 1980 filtration products' sales increased 23 percent and continuing improvements are expected as water quality remains a priority of industry.

WESTCHESTER PLASTICS

Westchester's 1980 program of capital improvements included expansion of the Nesquehoning, Pennsylvania plant by 100,000 square feet which was completed during the year, and installation of new equipment capable of producing an additional 50 million pounds of plastics compounds. Two modern automated production lines were installed in this facility in 1980, and a third line will be added to the Wapakoneta, Ohio plant in the coming year.

Westchester is one of the nation's largest independent plastics compounders, with established leadership in markets requiring command of the complex technology of engineering plastics and custom color formulations. The division compounds thermoplastics, color concentrates and both glass and mineral filled polymeric materials to supply manufacturers of automotive components, appliances, packaging and outerwear. Growth in these markets is expected to ex-

pand as weight and cost reducing engineering plastics are used in a greater diversity of applications in the years to come.

Westchester's research and development programs are adding to that list of new applications. The division is exploring innovative means to produce reinforced compounds useful in automotive and appliance products because they afford greater strength with less weight than the metals which they replace.

SPECIAL FILAMENTS

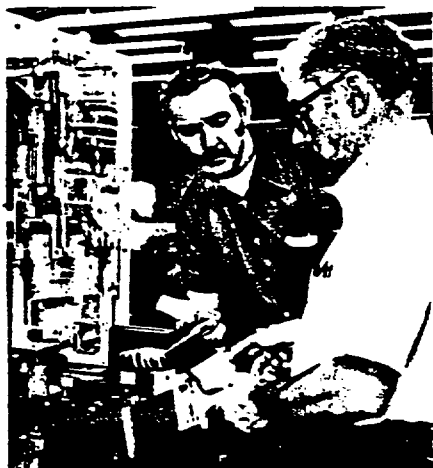
Special Filaments achieved a number of significant operational improvements in 1980. Production of standard lines—monofilament Saran, nylon, polyolefin, and polyester filaments used by recreational and outdoor equipment manufacturers as well as in the production of automotive, agricultural and flame retardant fabrics—benefited from improved production technology and quality control. A number of new products, including monofilaments used in the manufacture of products ranging from wall coverings to women's apparel, have been evaluated and approved by customers.

Special Filaments' technical leadership in the production of monofilaments for the premium paint brush market, one of the largest consumers of specialty synthetic filaments, was extended in 1980. With a goal of achieving lighter weight and better performing paint brushes, this division has developed products such as Amalon®, a low cost hollow filament, and a variety of polyester non-tapered filaments which provide both greater paint holding capacity and desirable flexibility characteristics, equal or superior to the materials they replace. Greater penetration of export markets is expected as overseas brush producers convert from animal bristle to synthetic filaments.

HAVEG

In October of 1980 AMETEK acquired the Marshallton, Delaware operation of Haveg Industries, one of the best known names in process equipment and synthetic silica fibers. For more than fifty years the Haveg® symbol has been synonymous with corrosion resistance in chemical process equipment and the standard of construction for the maintenance-free handling of many acids, solvents, alkalis, and other corrosive chemicals.

Haveg produces a complete line of thermosetting pipes, fittings, tanks, towers, agitators and other process equipment utilizing different grades of the unique Haveg material. These are not simply a coating or lin-



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ing applied to standard metal vessels, but are a combination of various synthetic resins blended with reinforcing materials which provides maximum chemical resistance and high structural strength throughout the mass of the finished equipment. Because of its expertise in this field, the division also provides process design and engineering services for chemical process equipment such as heat exchangers, absorption towers, and gas coolers as well as complete process systems.

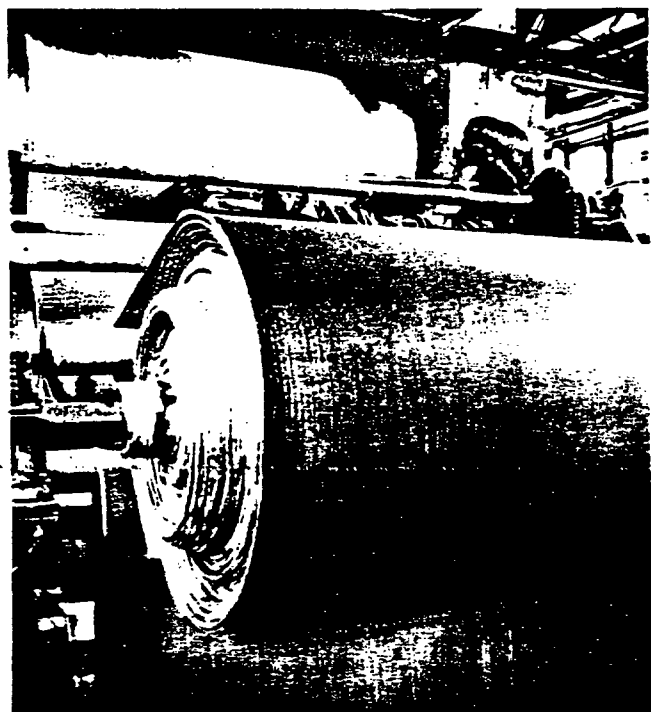
The recent expansion of the SILTEMP® family of products, now gaining wide acceptance in industry, also augurs well for Haveg. These are thermal barrier fabrics composed of refractory silica fibers capable of withstanding temperatures of molten steel and other processes up to 3,000°F. SILTEMP products are meeting a ready market as a much needed substitute for asbestos by combining the necessary high temperature characteristics with environmental safety.

SILTEMP was originally developed for the aerospace industry, where it was widely used as an ablative heat shielding in rockets and space vehicles and in other high temperature fabric applications. With the resurgent emphasis in aerospace programs, AMETEK has begun to increase the production capacity of the Haveg plant by more than fifty percent.

SILICON MATERIAL

Silicon Material completed its first full year as an AMETEK division with substantial improvements, although it operated at a loss in 1980. Production difficulties, not unusual in this highly complex manufacturing technology, encountered in the early part of the year penalized 1980 results. With the resolution of these problems and the increase in production recorded in the second half of the year, Silicon Material reported a significant increase in sales for the full year.

A proprietary process of reclaiming silicon wafers, a custom service for producers of solid-state chips, comprised 60 percent of 1980 sales. This service removes defective circuits and purifies the silicon wafer substrate to permit re-use of the wafers. With the installation and start-up of the sophisticated crystal growing equipment in 1980, the division also expanded its line to include production of monocrystalline silicon ingots and virgin wafers. A fully-integrated production facility is now in operation in the Sunnyvale, California plant, and growth in this division is expected to continue in the coming year.



FINANCIAL REVIEW

Sales and Earnings

Sales in 1980 were \$400.2 million, up slightly from the record set in 1979 of \$392.9 million. Net income in 1980 was \$21.7 million, down 3.5% from 1979 which was \$22.4 million. Earnings per share were \$2.02, down 4.3% compared to the \$2.11 earned in 1979. For the five year period beginning 1976, AMETEK has a compound earnings growth of 12.4% on a compound annual volume growth of 13.7%.

Backlog

Order backlog at December 31, 1980 totaled \$194.2 million, an increase of \$14.3 million or 7.9% over the prior year end. Order input was strong during the first quarter of 1980, declined during the second and third quarters, and recovered in the fourth quarter.

External Growth

During the fourth quarter of 1980, AMETEK purchased the Haveg Industries plastics business in Marshallton, Delaware from Hercules, Inc. Haveg is a manufacturer of corrosion-resistant plastic products serving the chemical industry, shipyards, and the electric utility and aerospace industries. Haveg also produces a flexible textile material widely used as an insulation or shield in high temperature operations. In the same quarter certain rights and inventories associated with the ATM line of centrifuges were purchased from Alfa-Laval, Inc. of New Jersey. Production of these products was added to the existing filtration and separation equipment product lines of the Process Equipment division in Temecula, California.

Stockholders' Equity

At the end of 1980, stockholders' equity was \$126.7 million, an increase of 10.9% during the year. Per share equity increased 9.6% to \$11.74. Return on stockholders' beginning equity was 19.0% and has averaged 21.3% during the last five years. The Company's equity capital increased through the issuance of 129,047 shares of common stock to employees upon exercise of stock options during 1980.

Dividends

Cash dividends of \$10.8 million were paid in 1980, a 9.4% increase over the \$9.8 million paid in 1979. Cash dividends have been paid every year since 1941 and have been increased every year for the last 31 years with the exception of 1971 when an increment was precluded by government regulations. Based on the current annual dividend rate of \$1.00 per share, AMETEK's dividends have increased at a 13.5% five year compound growth rate.

Research and Development

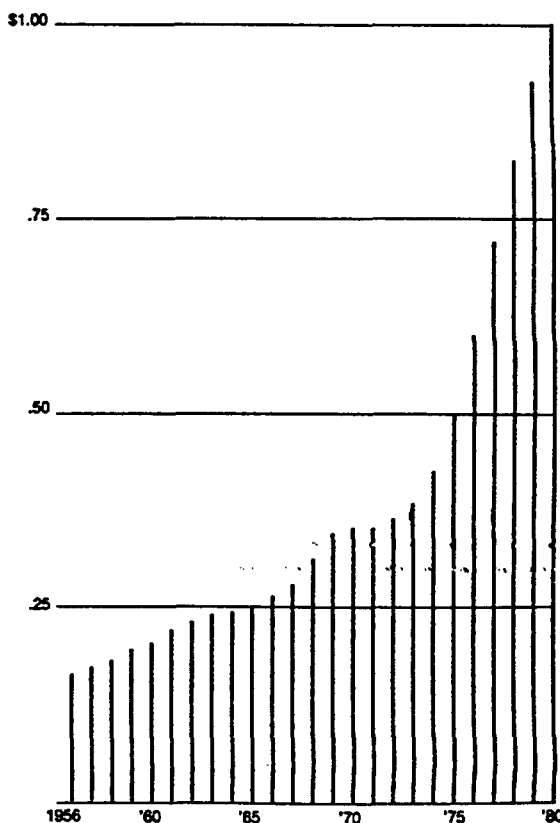
Expenses totaled \$8.1 million in 1980, a 3% increase over the \$7.8 million spent in 1979. Research work continues in the program to produce electricity from sunlight. AMETEK expects that the basic patent on its solar photovoltaic cell will be granted in the near future. Development work continues in electronics instrumentation with potential applications in aircraft, farm equipment, water conservation and other diverse fields. Additional development work is being carried on in connection with an expanded line of solar collector panels.

Long-Term Debt

At December 31, 1980, debt, including the current portion, amounted to \$58.1 million or 29.5% of the Company's total capitalization. Additional borrowings in 1980 were made under Industrial Revenue Bond financing agreements for a total of \$5 million at 7¾% for the construction of new plant facilities in Allegheny County, Pennsylvania and Pinellas County, Florida. Interest costs under existing debt obligations average 8.2%.

Dividends Per Share

(In dollars)



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Effects of Inflation

Inflation has a significant effect on the Company's operations. The increasing costs of replacing plant and equipment and inventories and supporting the Company's research and development projects must be recovered through higher prices for the Company's goods and/or more efficient ways of producing its products to maintain its financial strength. Since the Company follows the conservative accounting practice of costing its inventories on a LIFO basis, the effect of which is to charge against earnings the latest costs incurred, the current impact of inflation on operating costs is substantially reflected in the Company's historical financial statements. Other adjustments to reflect an allocation of costs which may result from inflation are reflected in the current cost basis financial statements shown on pages 33 and 34.

During 1980 the Company was not able to fully recover in its prices the rapidly rising costs experienced. Accordingly, margins on a number of product lines were lower in 1980. Although some difficulty was encountered during 1980, management believes that it will be successful in recovering future cost increases through price increases and productivity improvements.

The Company deals with the effects of inflation in a number of different ways. The Company has made substantial capital improvements in the last few years to provide for future growth and productivity improvements. Such capital expansion funded primarily through internal sources has resulted in a steadily increasing cash flow from operations. Prospective capital additions are measured by management in terms of ability to generate a satisfactory "real" return on investment. Product pricing is carefully monitored versus current production costs.

Financial Results by Quarter

Sales, profits and per share results by quarter for 1980 and 1979, are presented in Note 8 to the financial statements. The second and third quarters of 1980 were lower than comparable amounts for the prior year, the first time this has occurred since the fourth quarter of 1970. Earnings comparisons were affected by lower sales volume primarily attributable to two strikes and the weakened economy.

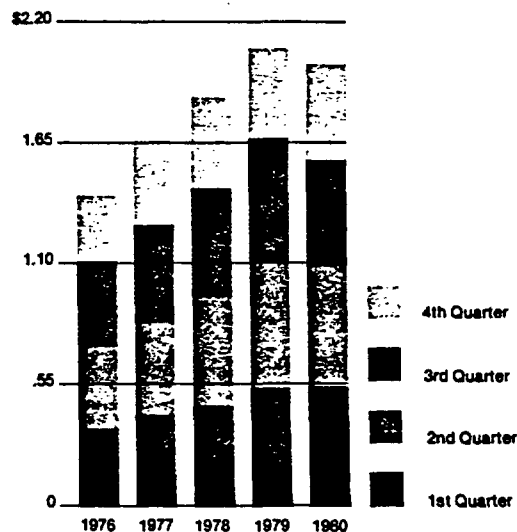
Common Stock Trading Range

The quarterly trading range of AMETEK common stock listed on the New York Stock Exchange is shown below:

Quarters	1980	1979
First	28%-18%	17% ¹ -14% ¹
Second	24%-19%	18% -15%
Third	27%-21%	21% ¹ -16%
Fourth	35%-26%	24% ¹ -18% ¹

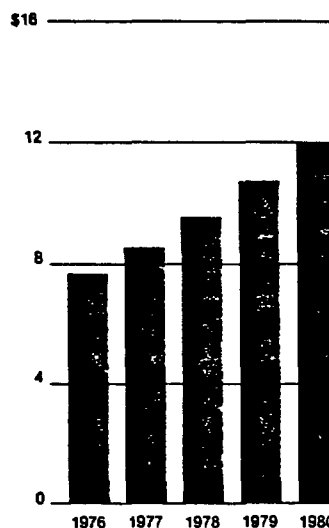
Earnings Per Share by Quarter

(In dollars)



Stockholders' Equity Per Share

(In dollars)



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INFORMATION BY BUSINESS SEGMENTS

The Company classifies its operations into four business segments: Electro-mechanical, Process Equipment, Precision Instruments and Industrial Materials.

THE ELECTRO-MECHANICAL GROUP produces fractional horsepower electric motors for floor care, computer and business machines and other consumer and industrial products, jet engine and airplane parts, undersea work vehicle and marine electronic systems, die castings, expansion ducting and other components for aerospace and industrial applications.

THE PROCESS EQUIPMENT GROUP manufactures centrifuges, filters and other separation and drying equipment, pipe flanges and fittings for high pressure piping, winery process and storage systems, parts for laundry and drycleaning equipment, flow measuring instruments and valves, and heat transfer equipment for the chemical process market.

THE PRECISION INSTRUMENTS GROUP manufactures pressure gauges, measuring and recording devices, automotive, aircraft and industrial instruments, testing equipment, calibration instruments, springs, thermistors, propeller flowmeters, semiconductor components and combustion analyzing instruments.

THE INDUSTRIAL MATERIALS GROUP produces aluminum extrusions, custom-finish aluminum and plastic components, thermoplastic compounds, color concentrates, corrosion-resistant tanks and pipes, insulating parts and heat resistant fabrics, synthetic monofilaments, molded thermoplastics and monocrystalline silicon for a wide variety of industrial, agricultural and consumer products. Aluminum products represent approximately 9% in 1980, (10% in 1979; 11% in 1978) of the Company's consolidated sales.

FINANCIAL INFORMATION BY SEGMENTS

(in thousands)

	1980	1979	1978
Identifiable Assets (Used by each segment at December 31):			
Electro-mechanical	\$ 49,697	\$ 48,387	\$ 42,313
Process Equipment	32,749	32,090	32,347
Precision Instruments	57,485	55,362	43,420
Industrial Materials	58,384	46,659	36,296
Total segments	198,315	182,498	154,376
Corporate (Principally cash and equivalents)	55,690	42,735	26,042
Total consolidated	\$254,005	\$225,233	\$180,418
Additions to Property, Plant and Equipment (1):			
Electro-mechanical	\$ 6,409	\$ 5,340	\$ 2,516
Process Equipment	1,095	1,790	1,917
Precision Instruments	6,840	6,313	5,475
Industrial Materials	10,151	9,122	3,641
Total segments	24,495	22,565	13,549
Corporate	18	25	149
Total consolidated	\$ 24,513	\$ 22,590	\$ 13,698
Depreciation and Amortization:			
Electro-mechanical	\$ 2,158	\$ 1,784	\$ 1,527
Process Equipment	1,083	972	800
Precision Instruments	2,129	1,716	1,160
Industrial Materials	3,402	2,952	2,296
Total segments	8,772	7,424	5,783
Corporate	60	60	25
Total consolidated	\$ 8,832	\$ 7,484	\$ 5,808

(1) Includes \$2,590,000, \$2,270,000 and \$1,962,000 in connection with businesses acquired in 1980, 1979 and 1978, respectively.

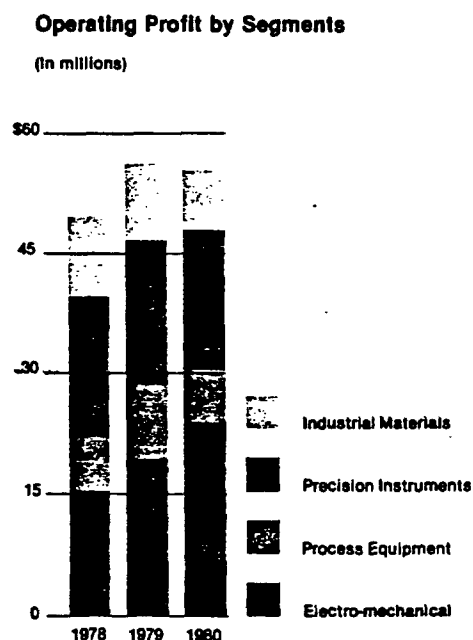
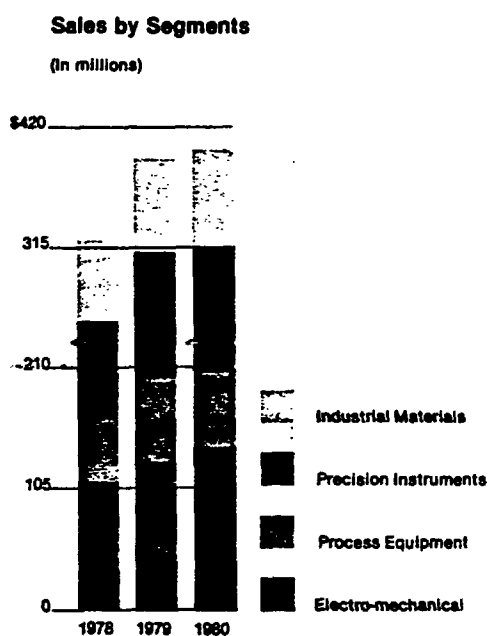
FINANCIAL INFORMATION BY SEGMENTS (continued)

(In thousands)

	1980	1979	1978
Net Sales			
Electro-mechanical	\$137,885	\$126,415	\$107,607
Process Equipment	70,742	76,312	58,375
Precision Instruments	108,076	107,696	85,740
Industrial Materials	83,477	82,450	68,979
Total consolidated ⁽¹⁾	\$400,180	\$392,873	\$320,701
Operating Profit			
Electro-mechanical	\$ 23,258	\$ 19,097	\$ 15,279
Process Equipment	7,232	9,605	6,330
Precision Instruments	17,378	18,246	17,869
Industrial Materials	7,526	9,020	9,980
Total consolidated ⁽²⁾	55,394	55,968	49,458
Corporate, administrative, research and net interest expenses	(13,135)	(12,472)	(10,146)
Income before taxes	\$ 42,259	\$ 43,496	\$ 39,312
Export Sales by Geographic Area (Included above):			
Europe	\$ 32,880	\$ 22,020	\$ 15,789
Canada	6,891	6,503	4,712
Other	12,687	5,815	4,066
	\$ 52,458	\$ 34,338	\$ 24,567

(1) After elimination of inter-segment sales, not significant in amount.

(2) Represents sales less all direct costs and expenses (including certain administrative and research expenses) applicable to each segment.



MANAGEMENT'S ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Liquidity

The Company considers its financial condition to be quite strong. Its debt represents 29.5% of total capitalization. Scheduled debt repayments in each of the next two years represent less than 6% of the Company's funds generated by operations. At the end of 1980, working capital amounted to \$95 million, a slight decrease from 1979. The ratio of current assets to current liabilities at December 31, 1980 was 2.61 to 1 and, at year end for the past five years, has averaged 2.74 to 1. Cash balances in excess of normal operating requirements are invested primarily in U. S. Government securities. Cash and such securities at year end totaled \$43.4 million compared to \$38.8 million for the prior year. Receivables and inventories totaled \$106 million at December 31, 1980 and 1979, although the inventory turnover rate improved to 7.4 in 1980 from 7.0 in 1979. The Company's liquidity requirements are supplemented by a revolving credit agreement made in November 1979 with a group of banks which provides for the availability of up to \$60 million, none of which was used at year-end. Interest rates on borrowings under the agreement range from the prime rate to ½ percent above prime. In 1980, AMETEK generated funds from operations of \$34.2 million compared to requirements of \$29.7 million for additions to property, plant and equipment, dividend payments, debt reduction and working capital needs.

Capital Resources

Additions to property, plant and equipment totaled \$21.9 million in 1980, up slightly from the \$20.3 million in 1979. This level was nearly double the average capital expenditures for the five preceding years, and represents AMETEK's commitment to provide additional capacity for the 1980's that will enable it to maintain or improve its market position. In 1980, four major plant expansions were completed. These were the Racine, Wisconsin plant for the Lamb Electric division, Bartow, Florida plant for the U. S. Gauge division, the Nesquehoning, Pennsylvania plant for the Westchester Plastics division and the new facilities for the Plymouth Products division in Sheboygan, Wisconsin.

Funds for these expansions were provided from operations and long-term borrowings of \$20 million in 1979 under a private placement of 8½% notes. In 1980, funds for two new plants were secured under Industrial Development Revenue Bond financing at 7¾%. The unexpended amounts for these plants in Pennsylvania and Florida are held in escrow under the Industrial Revenue Bond agreements and are temporarily invested in

U. S. Government securities. Capital expenditures in 1981 are expected to be somewhat lower than 1980 expenditures due to fewer planned major plant expansions. The 1981 expenditures will be primarily for equipment to improve productivity and to extend the vertical integration of certain manufacturing operations. It is anticipated that all of 1981's capital expenditures will be financed by funds generated from the Company's operations and from the remaining proceeds of the revenue bond financing. Additional commitments for solar and photovoltaic production may be required, depending on developments in these areas.

Results of Operations

Data on business segments are shown on pages 19 and 20.

Sales in 1980 of \$400.2 million exceeded the record level set in 1979 by 1.9%. Operating profit of business segments decreased 1% and net income declined by 3.5%.

Continued strong sales growth was achieved by the Electro-mechanical Group due to increased domestic and foreign demand for electric motors and improved volume for aerospace products and marine electronics. Related operating profit increased \$4.2 million or 21.8% due to the volume growth and improved margins.

Process Equipment Group sales were 7.3% lower than 1979 because of a decline in winery equipment sales from the record level experienced in 1979. This volume decrease, a plant strike and certain contract rework costs resulted in the \$2.4 million decrease in operating profit for 1980.

Sales of the Precision Instruments Group remained level with 1979 but operating profit declined by 4.8%, primarily a result of an unfavorable change in product mix, reduced margins and plant relocation costs.

Industrial Materials Group sales were up slightly from 1979. Sales of this group, in 1980, were significantly affected by a decline in aluminum extrusion volume, resulting from a plant strike and lower product demand due to the slow down of industrial and residential construction. Sales of a business acquired during the fourth quarter and other product volume improvements offset the aluminum shortfall. Operating profit in 1980 decreased by 16.6% due to an unfavorable change in product mix, the decrease in aluminum extrusion volume and higher operating costs.

Corporate, administrative, research and interest expenses were up over 1979 by 5.3% due primarily to inflationary cost increases, offset by a slight decrease in net interest expense. In relation to sales these expenses were substantially unchanged from 1979.

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Depreciation expense increased by \$1.4 million or 20.2% over 1979 due to the Company's major capital investment program to expand manufacturing capacity. Pension expenses increased by \$.7 million because of increased benefit levels and the inclusion of three new plans. Research and development expenses were \$8.1 million, up 3.4% from 1979. The effective income tax rate for 1980 was 48.7% compared to 48.4% in 1979.

Net income declined in 1980 compared to the prior year for the reasons described above. A discussion regarding the impact of inflation on the results of operations and financial position of the Company are presented on pages 32 to 34 of this Annual Report.

1979 Operations Compared with 1978

Sales in 1979 increased \$72.2 million or 22.5% over 1978. All four operating groups contributed to the volume increase. The strongest growth was achieved by Precision Instruments. The Electro-mechanical and Process Equipment groups showed improvements due to increased demand for electric motors and winery equipment.

Cost of sales increased \$62 million over 1978, due primarily to the increase in sales volume. However, cost of sales as a percentage of sales increased from 77.7% of sales in 1978 to 79.2% of sales in 1979 primarily due to inflationary cost increases in 1979, higher research and development expenses, and absorption of start-up costs associated with new operations and plants.

Selling, general and administrative expenses increased \$5.3 million or 20.9% over 1978 due to the higher sales volume. The ratio of such expenses to sales was substantially unchanged from the prior year.

Depreciation expense increased \$1.5 million or 25.6% over 1978 due to the Company's major capital investment program. Research and development expenses increased 36.7% over 1978 and reflect continued emphasis on product improvement and programs unrelated to our existing businesses. Pension expenses increased \$800,000 because of increased benefit levels, increase in employees, inclusion of plans covering employees of acquired businesses, and a shortened vesting period for employees covered by one of our major pension plans.

Other income (deductions) in 1979 was \$762,000 lower than in 1978 due to gains on the sale of assets of a discontinued product line, partially offset by increased net interest cost.

The effective income tax rate was 48.4% in 1979 compared to 50.6% in 1978. The decline was primarily due to the reduction in federal income tax rates applicable in 1979.

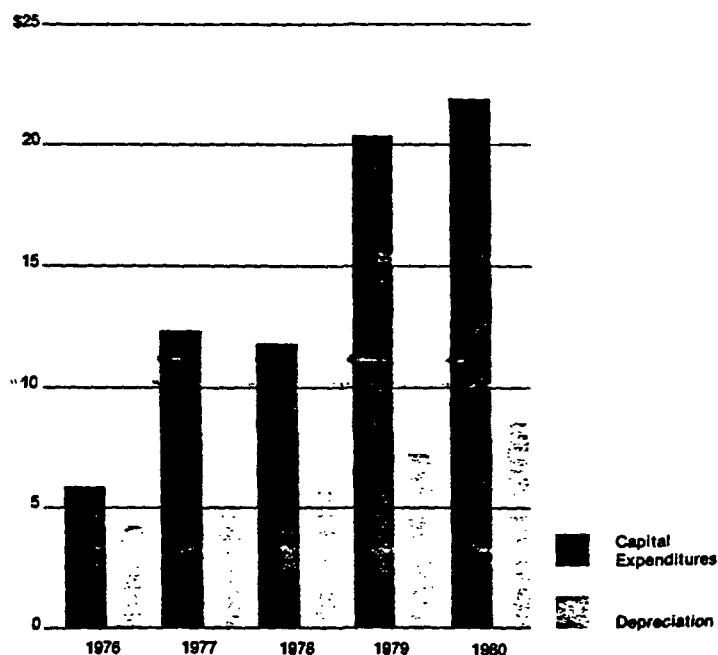
Net income in 1979 increased 15.7% over the prior year primarily because of the increased sales volume and the lower effective income tax rate, offset by lower operating margins.

Operating profits of the Electro-mechanical and Process Equipment segments showed substantial improvement over 1978. The improvement in both groups is attributable to increased demand for the products in these groups with higher profit margins. The Electro-mechanical group also benefited from gains on the sale of assets of a discontinued product line in 1979. The Precision Instruments segment showed a modest increase in operating profit in 1979, while operating profits of the Industrial Materials group were lower than in 1978. Both groups suffered from the absorption of start-up costs associated with new operations and plants, while Precision Instruments was also affected by higher research and development expenses.

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Capital Expenditures and Depreciation

(In millions)

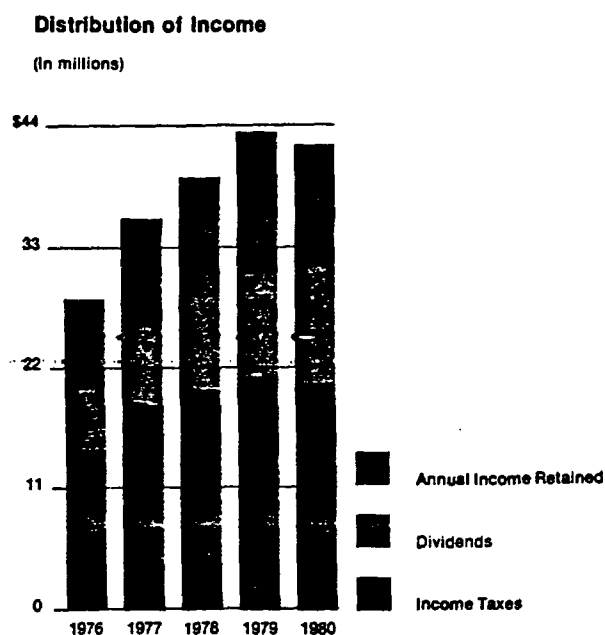


CONSOLIDATED STATEMENT OF INCOME AND RETAINED EARNINGS

	Years ended December 31,		
	1980	1979	1978
Net sales	\$400,179,564	\$392,872,657	\$320,701,403
Expenses:			
Cost of sales, excluding depreciation	313,056,333	311,278,543	249,292,655
Selling, general and administrative	35,344,001	30,709,477	25,400,967
Depreciation	8,568,593	7,128,823	5,673,987
	356,968,927	349,116,843	280,367,609
Operating profit	43,210,637	43,755,814	40,333,794
Other income (deductions):			
Interest expense	(4,447,730)	(3,683,932)	(2,512,849)
Other, net	3,495,977	3,424,474	1,491,204
	42,258,884	43,496,356	39,312,149
Income before taxes	42,258,884	43,496,356	39,312,149
Provision for income taxes, including deferred taxes (Note 6)	20,594,000	21,054,000	19,910,000
Net income	21,664,884	22,442,356	19,402,149
Retained earnings at beginning of year	100,632,108	88,028,620	77,294,054
	122,296,992	110,470,976	96,696,203
Cash dividends paid	10,758,808	9,838,868	8,667,583
Retained earnings at end of year	\$111,538,184	\$100,632,108	\$ 88,028,620
Average shares outstanding	10,747,383	10,625,494	10,496,466
Net income per share	\$2.02	\$2.11	\$1.85
Cash dividends paid per share	\$1.00	\$.92½	\$.82½

See accompanying notes.

AS000746



CONSOLIDATED BALANCE SHEET

ASSETS	December 31,	
	1980	1979
Current assets:		
Cash (including \$38,528,816 in 1980 and \$33,168,918 in 1979 of marketable securities-primarily U. S. Government securities)	\$ 43,411,473	\$ 38,768,255
Receivables, less allowance for possible losses	58,232,238	51,011,719
Inventories (Note 1):		
Finished goods and parts	17,615,706	17,784,955
Work in process	14,763,567	17,552,212
Raw materials	15,381,358	19,438,947
Total inventories	47,760,631	54,776,114
Deposits and prepaid expenses	4,636,712	1,416,404
Total current assets	154,041,054	145,972,492
 Property, plant and equipment, at cost:		
Land	4,057,094	3,048,246
Buildings	46,247,219	38,056,944
Machinery and equipment	93,218,057	80,711,016
	143,522,370	121,816,206
Less accumulated depreciation	55,879,679	49,453,726
Net property, plant and equipment	87,642,691	72,362,480
Other assets (Note 3)	12,320,905	6,898,373
	<u>\$254,004,650</u>	<u>\$225,233,345</u>

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LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities:

Accounts payable
Income taxes
Accrued employee compensation and benefits
Other accrued liabilities
Current portion of long-term debt
Total current liabilities

Long-term debt (Note 3)

Deferred federal income taxes and credits (Note 6)

Stockholders' equity (Note 4):

Preferred stock, \$1.00 par value, authorized 1,000,000 shares; none issued
Common stock, \$1.00 par value, authorized 35,000,000 shares; issued: 1980—10,995,773 shares; 1979—10,866,726 shares
Capital in excess of par value
Retained earnings

Less cost of 207,834 shares held in treasury

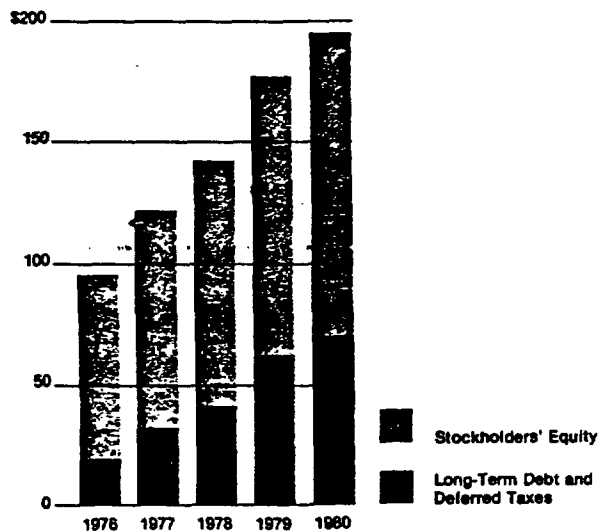
Total stockholders' equity

December 31,	
1980	1979
\$ 25,825,403	\$ 23,556,949
6,795,701	4,510,424
14,435,266	12,107,371
9,985,774	7,304,996
2,018,000	2,011,000
59,060,144	49,490,740
56,119,372	53,139,524
12,155,000	8,432,000
10,995,773	10,866,726
5,356,657	3,892,727
111,538,184	100,632,108
127,890,614	115,391,561
1,220,480	1,220,480
126,670,134	114,171,081
\$254,004,650	\$225,233,345

See accompanying notes.

Capitalization

(In millions)



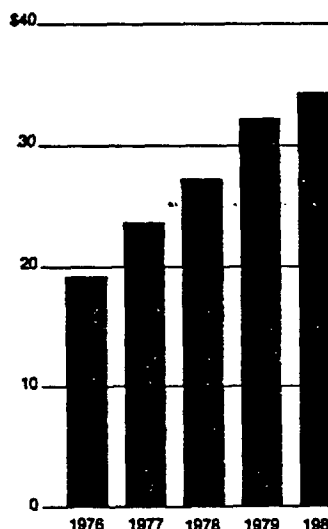
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CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

Source of funds:	Years ended December 31,		
	1980	1979	1978
Operations:			
Net income	\$21,664,884	\$22,442,356	\$19,402,149
Depreciation and amortization	8,832,169	7,484,464	5,808,354
Deferred federal income taxes and credits	3,723,000	2,064,000	1,733,000
Total from operations	34,220,053	31,990,820	26,943,503
Additional long-term debt	5,000,000	20,374,000	9,082,828
Proceeds from exercise of stock options	1,419,696	1,050,537	721,812
Net book value of property, plant and equipment sold or retired	664,234	1,538,396	95,270
	41,303,983	54,953,753	36,843,413
Application of funds:			
Additions to property, plant and equipment	21,923,180	20,320,328	11,736,202
Noncurrent assets of purchased companies	2,685,858	5,464,472	2,607,336
Dividends	10,758,808	9,838,868	8,667,583
Reduction in long-term debt	2,020,152	2,095,836	1,789,694
Other	5,416,827	373,100	(1,120,982)
	42,804,825	38,092,604	23,679,833
(Decrease) Increase in working capital	\$ (1,500,842)	\$16,861,149	\$13,163,580
Changes in components of working capital:			
Increase (decrease) in current assets:			
Cash (including securities)	\$ 4,643,218	\$16,772,463	\$ (1,034,157)
Receivables	7,220,519	2,853,002	9,792,120
Inventories	(7,015,483)	8,040,972	1,495,132
Deposits and prepaid expenses	3,220,308	(76,065)	4,930
	8,068,562	27,590,372	10,258,025
Increase (decrease) in current liabilities:			
Accounts payable and accrued liabilities	7,277,127	8,658,131	(2,878,078)
Income taxes	2,285,277	1,809,092	(1,377,767)
Current portion of long-term debt	7,000	262,000	1,350,290
	9,569,404	10,729,223	(2,905,555)
(Decrease) Increase in working capital	\$ (1,500,842)	\$16,861,149	\$13,163,580

See accompanying notes.

Funds Generated from Operations
(In millions)



AS000749

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and subsidiaries. A wholly owned insurance subsidiary is accounted for by the equity method.

Marketable Securities

Marketable securities are carried at cost plus accrued interest which approximates market.

Inventories

Inventories are stated at the lower of cost or market, cost being determined principally by the last-in, first-out method (LIFO), and market on the basis of lower of replacement cost or estimated net proceeds from sales. The excess of the first-in, first-out (FIFO) method of inventory valuation over the LIFO value was \$31,272,000 and \$28,061,000 at December 31, 1980 and 1979, respectively.

Costs relating to long-term contracts and programs are relieved from inventory on a unit of delivery basis. Progress payments (principally related to long-term contracts and programs) of \$12,408,000 at December 31, 1980 (\$9,999,000—1979) have been netted against inventories.

Property, Plant and Equipment

Expenditures for additions to plant facilities or which extend the useful life of the properties are capitalized. The cost of tools, jigs and dies, and maintenance and repairs are charged to operations as incurred. Depreciation of plant and equipment is determined principally on a straight-line basis over the estimated useful lives of the assets. Effective January 1, 1980 the Company began to capitalize interest costs associated with the construction of major plant and equipment to comply with new accounting rules. Interest costs capitalized in 1980 increased net income by an insignificant amount.

Research and Development

Company funded research and development costs are charged to operations as incurred. Such costs during the past three years were: 1980—\$8,100,000, 1979—\$7,800,000 and 1978—\$5,700,000.

Net Income Per Share

Net income per share is based on the average number of common shares outstanding during the period. No material dilution of net income per share would result for the periods if it were assumed that all outstanding stock options were exercised.

2. Acquisitions

In October 1980 the Company acquired certain assets of Haveg Industries, Inc. and Alfa-Laval, Inc. for \$6.3 million in cash.

During 1979 the Company acquired the assets of Silicon Material, Inc., Thermox Instruments, Inc., Metalloy, Inc., The Benjamin Reel Products Company and

certain assets of ICT Instruments Company for approximately \$6 million in cash and assumed certain of their liabilities. In 1978 the Company acquired all of the outstanding capital stock of McCrometer Corporation for \$1 million in cash and \$3.2 million in 8½% installment notes due annually to 1984.

These acquisitions have been accounted for by the purchase method and accordingly, the results of their operations are included from the dates of acquisition. Had these acquisitions been made at the beginning of the year prior to their acquisition, there would be no significant impact on sales or earnings for 1978, 1979 or 1980.

3. Long-Term Debt

At December 31, 1980 and 1979 long-term debt consisted of:

	1980	1979
Notes payable:		
5¾%, due 1982 and 1983	\$ 2,465,000	\$ 3,284,000
8½%, due 1984 to 1992	40,000,000	40,000,000
8½%, due 1982 to 1984	1,600,000	2,134,000
Obligations under 5.1% to 7.75% industrial revenue bonds, due 1982 to 1994	9,815,000	5,085,000
Various notes, mortgage loans and capitalized lease obligations at interest rates from 6¾% to 10%, due 1982 to 1997	2,239,372	2,636,524
	<u>\$56,119,372</u>	<u>\$53,139,524</u>

The annual payments required by the terms of the long-term debt for the following years are: 1982—\$1,925,000; 1983—\$2,739,000; 1984—\$4,084,000; 1985—\$5,485,000.

Unexpended proceeds of 1980 borrowings under industrial revenue bonds of \$3,863,000 at December 31, 1980, are held in escrow and reflected in other assets.

The Company's revolving credit agreement with a group of banks, entered into in 1979, provides for up to \$60,000,000 with an option to convert into four-year term loans. Interest rates on borrowings under the agreement range from the prime rate to ½% above prime. No borrowings are outstanding under the agreement. A fee of ½% per annum is payable on any unused portion of commitments to December 31, 1986.

The terms of the Company's loan agreements place certain restrictions on working capital and the payment of cash dividends. At December 31, 1980 consolidated working capital was \$22,300,000 in excess of the required minimum and retained earnings of \$49,600,000 were not subject to the dividend limitation.

4. Capital Stock

At December 31, 1980, 832,693 (963,740—1979) shares of common stock were reserved under the Company's qualified and non-qualified stock option plans. These plans provide that options are exercisable at prices not less than market value on, and in equal installments over a five year period from, dates of grant.

Information on options for 1980 follows:

	Price Range	Shares
Outstanding at beginning of year	\$ 7.91-\$19.56	468,340
Granted	23.56- 31.63	211,000
Cancelled	8.28- 23.56	16,290
Exercised	7.91- 23.56	129,047
Outstanding at end of year		<u>534,003</u>
Exercisable at end of year		<u>193,633</u>

Options exercised in 1979 and 1978 were 128,464 and 49,721 shares, respectively.

The Company also has outstanding 278,850 stock appreciation rights exercisable for cash and/or shares of the Company's common stock when the related option is exercised. Subject to certain limitations, each right relates to the excess of market value of the Company's stock over the exercise price of the related option, for which a charge to income is made (not significant in amount).

Changes in capital in excess of par value during 1980 resulted from the excess of proceeds over par value of common stock issued upon exercise of stock options of \$1,290,649 (\$985,455 in 1979 and \$672,091 in 1978), tax benefits relating to employee stock options totaling \$173,281 in 1980 (\$90,366 in 1979 and \$143,276 in 1978), and the transfer, in 1979, of \$5,432,513 to common stock in connection with the December 1979 two-for-one stock split.

5. Leases

Minimum aggregate rental commitments under non-cancellable leases in effect at December 31, 1980 (principally for real property, office space and computers) amounted to \$6,300,000 consisting of annual payments of \$1,700,000 due in 1981, \$1,400,000 in 1982, and decreasing amounts thereafter. Rental expense of \$3,400,000, \$3,100,000 and \$2,800,000 was charged to income in 1980, 1979 and 1978, respectively.

6. Income Taxes

The provisions for income taxes consist of (\$000):

	1980	1979	1978
Current:			
Federal*	\$15,972	\$16,018	\$15,642
State	3,404	3,116	2,956
Deferred	1,218	1,920	1,312
	<u>\$20,594</u>	<u>\$21,054</u>	<u>\$19,910</u>

*Includes insignificant amount of foreign taxes; the foreign component of income before taxes is not significant.

Investment tax credits are reflected in income over the estimated useful lives of the related assets. Investment tax credits deferred to future periods were \$3,400,000 and \$2,700,000 at December 31, 1980 and 1979, respectively.

Federal income taxes are deferred or prepaid as a result of differences in timing of earnings determined for income tax and financial reporting purposes. These differences and the related tax effects are:

	(\$000)		
	1980	1979	1978
Accelerated depreciation	\$ 924	\$1,097	\$ 838
Unremitted earnings of a Domestic International Sales Corporation	608	443	341
Plant relocation costs	(400)	104	675
Reserves and other expenses deductible in future periods	(383)	(252)	(126)
Net interest expense	571	47	—
Other	(102)	481	(416)
	<u>\$1,218</u>	<u>\$1,920</u>	<u>\$1,312</u>

Balances related to current items are included in current prepaid expenses; non-current balances are shown separately.

The effective rate of the provisions for income taxes reconciles to the statutory rate as follows:

	1980	1979	1978
Statutory rate	46.0%	46.0%	48.0%
State income taxes, net of federal income tax benefit	4.3	3.9	3.9
Other	(1.6)	(1.5)	(1.3)
	<u>48.7%</u>	<u>48.4%</u>	<u>50.6%</u>

7. Retirement and Pension Plans

The Company maintains retirement and pension plans under which benefits for eligible salaried and hourly-rated employees are currently being funded through trusts established under the plans. The cost of this program together with contributions to multi-employer pension plans, is charged to income and amounted to \$5,500,000, \$4,800,000 and \$4,000,000 in 1980, 1979 and 1978. These amounts included amortization of prior service costs over periods of thirty to forty years.

The actuarial present value of accumulated benefits under Company sponsored plans, for employees' services already provided, and the plans' net assets available for those benefits as of the most recent actuarial valuation (various dates in 1980) is as follows:

Actuarial present value of accumulated plan benefits:

	(\$000)
Vested	\$45,000
Nonvested	6,000
	<u>\$51,000</u>
Net assets available for benefits	<u>\$40,232</u>

The weighted average assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 7½%.

8. Other Information

Information as to the Company's business segments is shown on pages 19 and 20. Unaudited quarterly results for the years ended December 31, 1980 and 1979 are (in thousands except per share amounts):

1980	Net Sales	Operating Profit	Net Income	Earnings Per Share	Dividends Per Share
First Quarter	\$104,893	\$11,289	\$ 5,622	\$.53	\$.25
Second Quarter	99,713	11,732	5,908	.55	.25
Third Quarter	95,852	10,251	5,303	.49	.25
Fourth Quarter	99,722	9,939	4,832	.45	.25
Total	\$400,180	\$43,211	\$21,665	\$2.02	\$1.00

1979	Net Sales	Operating Profit	Net Income	Earnings Per Share	Dividends Per Share
First Quarter	\$ 88,087	\$10,370	\$ 5,266	\$.50	\$.225
Second Quarter	102,377	12,784	6,380	.60	.225
Third Quarter	106,293	11,663	6,146	.57	.225
Fourth Quarter	96,116	8,939	4,650	.44	.250
Total	\$392,873	\$43,756	\$22,442	\$2.11	\$.925

STATEMENT OF MANAGEMENT RESPONSIBILITY FOR FINANCIAL STATEMENTS

Management has prepared and is responsible for the integrity and objectivity of the consolidated financial statements and related financial information in this Annual Report. The statements are prepared in conformity with generally accepted accounting principles consistently applied and include certain amounts based on management's best estimates and judgments.

Management maintains a system of internal accounting control, including an internal audit program. This system which undergoes continual reevaluation is designed to provide reasonable assurance that assets are safeguarded and records are adequate for the preparation of reliable financial data. Management uses its best judgment in balancing the benefits of this system with its cost.

Arthur Young & Company, independent auditors, are engaged to render an opinion as to whether management's financial statements present fairly AMETEK's financial condition and operating results. Their report is included below.

The Audit Committee of the Board of Directors meets with the independent auditors, internal auditors and management to satisfy itself that they are properly discharging their responsibilities. Both the independent and the internal auditors have direct access to the Audit Committee.

February 2, 1981

AMETEK, Inc.

REPORT OF CERTIFIED PUBLIC ACCOUNTANTS

We have examined the accompanying consolidated balance sheets of AMETEK, Inc. at December 31, 1980 and 1979, and the related consolidated statements of income and retained earnings and changes in financial position for each of the three years in the period ended December 31, 1980. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the consolidated financial position of AMETEK, Inc. at December 31, 1980 and 1979, and the consolidated results of operations and changes in consolidated financial position for each of the three years in the period ended December 31, 1980, in conformity with generally accepted accounting principles applied on a consistent basis during the period.

Philadelphia, Pa.
February 2, 1981

Arthur Young & Company

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TEN YEAR SELECTED FINANCIAL DATA⁽¹⁾

CONDENSED CONSOLIDATED STATEMENT OF INCOME

Years ended December 31

	1980	1979	1978	1977	1976
Net sales	\$400,180	\$392,873	\$320,701	\$298,651	\$241,061
Costs and expenses	356,969	349,117	280,367	262,139	212,733
Operating profit	43,211	43,756	40,334	36,512	28,328
Other (deductions) income—net	(952)	(260)	(1,022)	(677)	104
Income before taxes	42,259	43,496	39,312	35,835	28,432
Provision for income taxes	20,594	21,054	19,910	18,620	14,152
Net income	\$ 21,665	\$ 22,442	\$ 19,402	\$ 17,215	\$ 14,280
Net income per share	\$ 2.02	\$ 2.11	\$ 1.85*	\$ 1.66*	\$ 1.42*
Dividends declared and paid: Per share	\$ 1.00	\$.92½	\$.82½*	\$.72½*	\$.60*
Amount	\$ 10,759	\$ 9,839	\$ 8,667	\$ 7,523	\$ 6,043

CONSOLIDATED FINANCIAL POSITION

At December 31

Current assets	\$154,041	\$145,973	\$118,382	\$108,124	\$ 93,033
Current liabilities	59,060	49,491	38,761	41,667	36,923
Working capital	94,981	96,482	79,621	66,457	56,110
Property, plant and equipment—net	87,642	72,363	58,439	50,510	37,319
Other assets	12,321	6,898	3,596	3,937	1,279
Total	194,944	175,743	141,656	120,904	94,708
Long-term debt due after one year	56,119	53,140	34,861	27,568	15,305
Deferred federal income taxes and credits	12,155	8,432	6,368	4,509	2,534
Stockholders' equity	\$126,670	\$114,171	\$100,427	\$ 88,827	\$ 76,869

ADDITIONAL TEN YEAR FINANCIAL DATA

At December 31

Number of shares outstanding	10,788	10,659	10,530*	10,430*	10,164*
Stockholders' equity per share	\$ 11.74	\$ 10.71	\$ 9.54*	\$ 8.52*	\$ 7.56*
Total debt as a percent of capitalization	29.5%	31.0%	25.5%	23.1%	18.2%
Total assets	\$254,005	\$225,233	\$180,418	\$162,571	\$131,631
Number of stockholders of record	9,779	8,948	8,952	9,195	9,341
Number of employees	6,700	7,300	6,600	6,100	5,700

Years ended December 31

Capital expenditures	\$ 21,923	\$ 20,320	\$ 11,736	\$ 12,207	\$ 5,725
Depreciation and amortization	\$ 8,832	\$ 7,484	\$ 5,808	\$ 5,237	\$ 4,156
Return on beginning—					
Capital	13.5%	17.0%	17.0%	18.7%	16.8%
Stockholders' equity	19.0%	22.3%	21.8%	22.2%	21.3%
Return on net sales	5.4%	5.7%	6.0%	5.8%	5.9%
Sales per averaged employee	\$ 59.6	\$ 54.3	\$ 49.1	\$ 48.0	\$ 43.4
Common Stock trading range:					
High	35%	24½%	18%*	17½*	14½%*
Low	18%	14½%	13%*	13½*	9%*

(1) Dollars and shares in thousands, except per share amounts.

(2) Effective January 1, 1974, the Company adopted the LIFO inventory accounting method.

*Adjusted to reflect two-for-one stock split in 1979.

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1975	1974 ⁽²⁾	1973	1972	1971
\$224,084	\$227,550	\$191,794	\$160,558	\$134,509
198,030	203,300	173,382	146,351	124,289
26,054	24,250	18,412	14,207	10,220
(683)	(2,133)	(258)	(752)	(849)
25,371	22,117	18,154	13,455	9,371
12,667	11,035	8,979	6,837	4,690
\$ 12,704	\$ 11,082	\$ 9,175	\$ 6,618	\$ 4,681
\$ 1.27*	\$ 1.10*	\$.90*	\$.64*	\$.46*
\$.50*	\$.42½*	\$.38¾*	\$.36¼*	\$.35*
\$ 4,983	\$ 4,268	\$ 3,911	\$ 3,736	\$ 3,554

\$ 84,554	\$ 78,482	\$ 70,115	\$ 62,466	\$ 56,793
34,450	36,188	29,037	27,041	23,731
50,104	42,294	41,078	35,425	33,062
35,908	34,996	29,743	28,256	28,697
500	3,013	1,814	1,088	1,397
86,512	80,303	72,635	64,769	63,156
17,438	19,584	17,677	13,654	14,849
1,909	1,454	1,674	1,416	1,541
\$ 67,165	\$ 59,265	\$ 53,284	\$ 49,699	\$ 46,766

9,998*	9,978*	10,119*	10,301*	10,249*
\$ 6.72*	\$ 5.94*	\$ 5.27*	\$ 4.82*	\$ 4.56*
22.1%	26.3%	25.6%	22.6%	24.4%
\$120,962	\$116,491	\$101,672	\$ 91,810	\$ 86,887
9,161	8,908	8,738	8,357	8,707
5,400	5,900	6,000	5,500	5,300

\$ 4,991	\$ 9,370	\$ 6,557	\$ 3,844	\$ 2,814
\$ 3,732	\$ 3,397	\$ 3,397	\$ 3,541	\$ 3,435
16.4%	16.4%	14.8%	11.1%	8.5%
21.4%	20.8%	18.5%	14.2%	10.5%
5.7%	4.9%	4.8%	4.1%	3.5%
\$ 41.0	\$ 37.5	\$ 32.9	\$ 29.5	\$ 27.6
10%*	7%*	9%*	11*	9%*
5%*	4%*	5%*	8%*	7%*

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SUPPLEMENTARY FINANCIAL INFORMATION

ADJUSTED FOR EFFECTS OF INFLATION (Unaudited)

General

The following supplemental information is intended to provide certain measurements of the effects of inflation on the Company's operations and financial position. There is no universally accepted method for measuring the effects of inflation. In 1979, the Financial Accounting Standards Board prescribed two measurement methods, current cost and constant dollar, and both were used in calculating this information. These methods inherently involve the use of numerous assumptions and estimates; therefore, the results should be viewed in that context and not as precise indicators of the effects of inflation. The LIFO inventory accounting method results in charging the latest costs incurred to operations. Thus a major element of the inflationary effect on Company operations is already deducted in the primary financial statements. The accompanying inflation adjusted data reflects certain other adjustments, but not necessarily all inflation adjustments which could be made. Using these methods this information highlights that effective tax burdens are often greater than the statutory rate, which reduces funds that would otherwise be available.

A brief explanation follows of the current cost and constant dollar methods as well as a discussion of the computations utilized in deriving the information.

Current Cost

The objective of the current cost method is to present the Company's earnings and certain of its assets on the basis which would result if productive facilities as well as goods and services utilized were all acquired currently. For 1980, it is assumed that such items were acquired in average 1980 dollars; for 1979, average 1979 dollars were assumed. This method measures the assumed current costs of the Company's existing assets in their current condition. They do not include efficiencies that could be derived by replacing existing assets with technologically improved assets. To this extent the method differs from replacement cost information (previously disclosed under SEC requirements) which measured costs that would be incurred to replace productive capacity, including technological improvements.

The current cost of property, plant and equipment was developed by using independent appraisals and indices applied to engineering estimates, vendor quotations and historical costs. Depreciation expense has been calculated using identical depreciation techniques and asset lives as used in the historical financial statements. The increase in depreciation expense results from the adjustment of plant and equipment.

The estimated current cost of inventories was determined based on year-end raw material prices and production costs, including an adjustment for the difference between historical and current cost depreciation expense.

Cost of goods sold, exclusive of depreciation and an adjustment for the change in inventory quantities in 1980, is not adjusted from historical cost since the Company values its inventories on a LIFO basis, the effect of which is to reflect in cost of goods sold the latest costs incurred.

Constant Dollar

The objective of the constant dollar method is to present the Company's earnings and certain of its assets in dollars of equivalent purchasing power, so that the financial data reported is stated in a common unit of measure, for example, average 1980 dollars. This is accomplished by adjusting the data by the Consumer Price Index for all Urban Consumers (CPI). This method takes no account of differences in the actual inflation being experienced by the Company versus the general rate of inflation measured by the CPI.

The constant dollar amount of property, plant and equipment was determined by aging the assets and applying the appropriate Consumer Price Index to the historical cost amounts. The same depreciation techniques and lives were used as included in the calculation of depreciation expense in the historical financial statements. The increase in depreciation expense results from the adjustment of plant and equipment. The LIFO cost of inventory is restated so that base levels of inventory and subsequent incremental layers are each stated in average 1980 dollars.

Constant dollar cost of goods sold, exclusive of depreciation and an adjustment for the change in inventory quantities in 1980, is not adjusted from the amount included in the historical financial statements since the Company values its inventories on a LIFO basis.

Review of Data Presented

Net income in the accompanying tables reflects adjustments for depreciation and cost of sales as described earlier. No tax adjustments are included since United States tax policy does not currently take into consideration the effects of inflation other than through LIFO. Thus, the net income on the current cost method reflects an effective income tax rate of 59% and 53% in 1980 and 1979 versus the 49% and 48% rates in the primary financial statements. Accordingly, the Company appears to have a lower proportion of its current cost or constant dollar earnings available for reinvestment in

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the business or for distribution to its stockholders.

Three additional inflation-oriented measurements have been calculated. The first measures the gain from decline in the purchasing power of average monetary liabilities in excess of average monetary assets. Monetary liabilities are primarily payables and borrowings. Monetary assets include cash, receivables and long-term contract inventories not subject to price escalation. The reported gain represents the inflationary impact on the net amounts owed during the year. The Company may benefit from satisfying its liabilities with dollars which have declined in value. However, such gains are unrealized by the Company. This favorable impact or gain is included as an increase to stockholders' equity.

The second measurement is the excess of the increase in the general price level (constant dollar) costs of inventories and property, plant and equipment over increases

in the specific prices (current costs) of those items. This excess indicates that the general rate of inflation, in 1980, exceeded the measurable rate of inflation the Company experienced.

The third measurement is ending stockholders' equity adjusted to average 1980 dollars. This adjustment restates inventory and property, plant and equipment and includes the purchasing power gain as explained herein and other non-monetary assets and liabilities at amounts used in the historical financial statements.

The five-year table of selected financial data restates all amounts into average 1980 dollars using the CPI. The Company believes that a more realistic portrayal of AMETEK's five-year data would result if the Gross National Product (GNP) Price Deflator were used instead of the CPI, since the latter is based on retail prices.

SUPPLEMENTARY STATEMENT OF INCOME ADJUSTED FOR EFFECTS OF INFLATION

(In thousands, except per share amounts)

	Years ended December 31,			1979
	1980	1980	1980	
	Historical Cost As Reported	Adjusted For General Inflation (Constant Dollars)	Adjusted For Specific Prices (Current Costs)*	Adjusted For Specific Prices (Current Costs)*
Net sales	\$400,180	\$400,180	\$400,180	\$392,873
Cost of sales, excluding depreciation	313,056	315,819	315,798	311,432
Selling, general and administrative expenses	35,344	35,344	35,344	30,709
Depreciation	8,569	11,900	12,960	10,512
Other deductions, net	952	952	952	260
Income before taxes	42,259	36,165	35,126	39,960
Provision for income taxes	20,594	20,594	20,594	21,054
Net income	\$ 21,665	\$ 15,571	\$ 14,532	\$ 18,906
Net income per share	\$ 2.02	\$ 1.45	\$ 1.35	\$ 1.78
Purchasing power gain on net monetary liabilities held during the year		\$ 1,532	\$ 1,532	\$ 1,542
Increase in general inflation (constant dollar) on inventories and net property, plant and equipment held during the year			\$ 21,191	\$ 21,772
Effect of increase in specific prices (current cost)**			16,032	20,029
Increase in general inflation over increase in specific prices			\$ 5,159	\$ 1,743

*In nominal dollars.

**At December 31, 1980 and 1979 the current costs of inventory were \$81,143 and \$86,552, and the current costs of net property, plant and equipment were \$139,929 and \$117,313, respectively.

SUPPLEMENTARY FIVE-YEAR COMPARISON OF SELECTED FINANCIAL DATA ADJUSTED FOR EFFECTS OF INFLATION (IN AVERAGE 1980 DOLLARS)

(Dollars in thousands, except per share amounts)

	Years ended December 31,				
	1980	1979	1978	1977	1976
Net sales—as reported	\$400,180	\$392,873	\$320,701	\$298,651	\$241,061
—in constant dollars	400,180	445,798	405,061	406,100	348,938
Net income—as reported	\$ 21,665	\$ 22,442	\$ 19,402	\$ 17,215	\$ 14,280
—in constant dollars	15,571	22,657	*	*	*
—in current cost	14,532	21,453	*	*	*
Net income per share—as reported	\$ 2.02	\$ 2.11	\$ 1.85	\$ 1.66	\$ 1.42
—in constant dollars	1.45	2.13	*	*	*
—in current cost	1.35	2.02	*	*	*
Stockholders' equity—as reported	\$126,670	\$114,171	\$100,427	\$ 88,827	\$ 76,869
—in constant dollars	181,577	174,969	*	*	*
—in current cost	200,102	201,561	*	*	*
Purchasing power gain on net monetary liabilities held during the year—in constant dollars	\$ 1,532	\$ 1,749	\$ *	\$ *	\$ *
Increase in the general price level over increase in specific prices	\$ 5,159	\$ 1,978	\$ *	\$ *	\$ *
Cash dividends paid per share—as reported	\$ 1.00	\$.92½	\$.82½	\$.72½	\$.60
—in constant dollars	.99	1.04	1.03½	.98	.86½
Market price per share at year end—as reported	\$ 31.38	\$ 24.00	\$ 15.13	\$ 16.00	\$ 14.38
—in constant dollars	29.97	25.76	18.40	21.22	20.35
Average Consumer Price Index**	246.8	217.5	195.4	181.5	170.5

*Not computed

**Represents the U. S. Department of Labor Consumer Price Index for All Urban Consumers (1967 = 100).

Limitations to the use of inflation adjusted data:

1. Comprehensive restatement of all financial statement items was not attempted since not required. Accordingly, stockholders' equity as adjusted includes items presented in historical dollars as well as in constant dollars or current cost dollars.
2. The constant dollar measurement assumes that the Consumer Price Index is an effective measure of inflation as it affects the Company and its shareholders. The Company believes that the Gross National Product (GNP) Price Deflator is a more appropriate measurement for a manufacturing company.
3. The depreciation of property, plant and equipment determined on a current cost and constant dollar basis may understate earnings since no consideration is given

to the way these assets may be replaced and the productivity improvements therein.

4. The higher amounts shown for inventories, property, plant and equipment and stockholders' equity do not necessarily represent additional book values nor do they indicate that the Company's assets could be sold for such amounts.

5. The Company does not believe that LIFO inventory restated on a constant dollar basis and included in stockholders' equity is meaningful. The LIFO accounting convention is utilized to flow current costs through the income statement, but tends to substantially understate the carrying value of the inventory itself. Applying indices to these understated amounts does not result in useful information.

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OFFICERS OF THE COMPANY

CORPORATE OFFICERS

Dr. John H. Lux,
*Chairman of the Board and
Chief Executive Officer*

Robert L. Noland,
President

John P. Dandalides,
*Senior Vice President
Midwestern Operations*

Robert F. Lane,
*Senior Vice President
Eastern Operations*

Russell R. Menard,
*Senior Vice President,
Finance*

Wallace E. Cowan,
*Secretary,
Partner, Stroock &
Stroock & Lavan,
Attorneys*

Robert J. Coffman,
*Treasurer and
Assistant Secretary*

Allan Kornfeld,
Comptroller

Murray A. Luftglass,
*Vice President—Corporate
Development*

Robert A. Russell,
Vice President—Marketing

Dr. Ferenc Schmidt,
Vice President—Technical Director

Neal R. Stark,
Vice President

OPERATING OFFICERS

Walter E. Blankley, Group Vice President
*Aluminum and Pacific Extrusion
Los Angeles Die Casting
Process Equipment
Silicon Material
Texas Flange*

Roger K. Derr, Group Vice President
*Lamb Electric—Kent &
Cambridge, Ohio
Racine, Wisconsin
Graham & Carrboro, North Carolina*

Gerald G. Loehr, Group Vice President
*Straza
Offshore Research & Engineering
Rodan
U. S. Bellows*

Charles E. Rausch, Group Vice President
*U. S. Gauge
Mansfield and Green*

William E. Kell, Vice President
Texas Flange

Robert R. Kobak, Vice President
Westchester Plastics

G. Paul Lynam, Vice President
Schutte and Koerting

Leon S. Peters, Vice President
Valley Foundry

Raymond C. Roloff, Vice President
Process Equipment

Henry Schladen, Jr., Vice President
*Aluminum Extrusion
Pacific Extrusion*

William H. Spencer, Vice President
Hunter Spring

Stanley A. Walker, Vice President
Straza

John M. Ward, Vice President
Special Filaments

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BOARD OF DIRECTORS

Hulbert S. Aldrich,
*Retired Vice Chairman,
Chemical Bank*

Helmut N. Friedlaender,
*Financial Advisor to
Mr. William Rosenwald,
Chairman of the Board of
American Securities Corporation,
and his family*

Samuel Hoffman,
*Partner, Stroock &
Stroock & Lavan,
Attorneys*

Charles D. Klein,
*Financial Advisor to
Mr. William Rosenwald,
Chairman of the Board of
American Securities Corporation,
and his family*

Peter I. B. Lavan,
*Counsel, Stroock &
Stroock & Lavan,
Attorneys*

John H. Lux,
*Chairman of the Board and
Chief Executive Officer
of the Company*

Robert L. Noland,
President of the Company

Leon S. Peters,
*Vice President of the Company
and Chief Executive Officer
of AMETEK Valley Foundry*

Anthony A. Sirna, III,
*Director of
American Securities Corporation*

Executive Offices

21st Floor,
410 Park Avenue
New York, NY 10022
(212) 935-8640

Operations Headquarters

Station Square Two
Paoli, PA 19301
(215) 647-2121

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STOCKHOLDER INFORMATION

General Counsel

Stroock & Stroock & Lavan
61 Broadway
New York, NY 10006

Auditors

Arthur Young & Company
7 Penn Center Plaza
Philadelphia, PA 19103

Stock Transfer Agent

The Chase Manhattan Bank, N.A.
One New York Plaza
New York, NY 10015

Stock Registrar

Chemical Bank
20 Pine Street
New York, NY 10006

Stock Listing

New York Stock Exchange
Stock Symbol: AME

Form 10-K Report

For a copy of AMETEK's
Form 10-K Report
as filed with the Securities
and Exchange Commission,
write to Investor Information,
AMETEK, Inc.
Station Square Two
Paoli, PA 19301

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Executive Offices

21st Floor,
410 Park Avenue
New York, NY 10022
(212) 935-8640

Operations Headquarters

Station Square Two
Paoli, PA 19301
(215) 647-2121

Annual Meeting of Stockholders:

2:00 p.m. April 28, 1981
Corporate Trust Office
100 West 10th Street
Wilmington, DE 19801



AMETEK, Inc.

21st Floor, 410 Park Avenue
New York, NY 10022