
TEKTRONIX

The Company and Its Product

Tektronix, Inc., with headquarters on a 300-acre industrial park near Beaverton, Oregon, seven miles west of Portland, is a pace-setter for the electronics industry throughout the world.

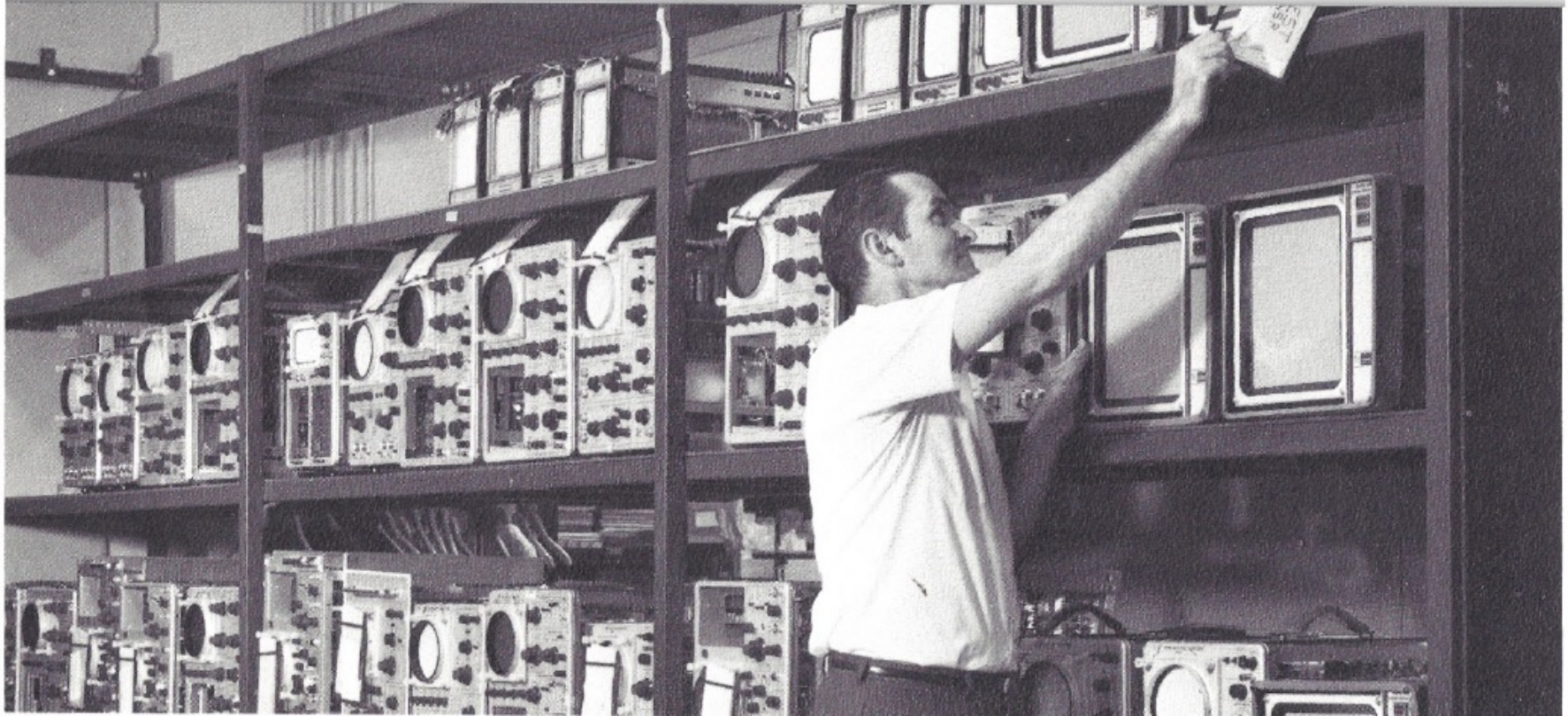
As the principal manufacturer of laboratory-type cathode-ray oscilloscopes, Tektronix has mushroomed in 22 years from a small plant to a world-wide organization with representation in 40 countries.

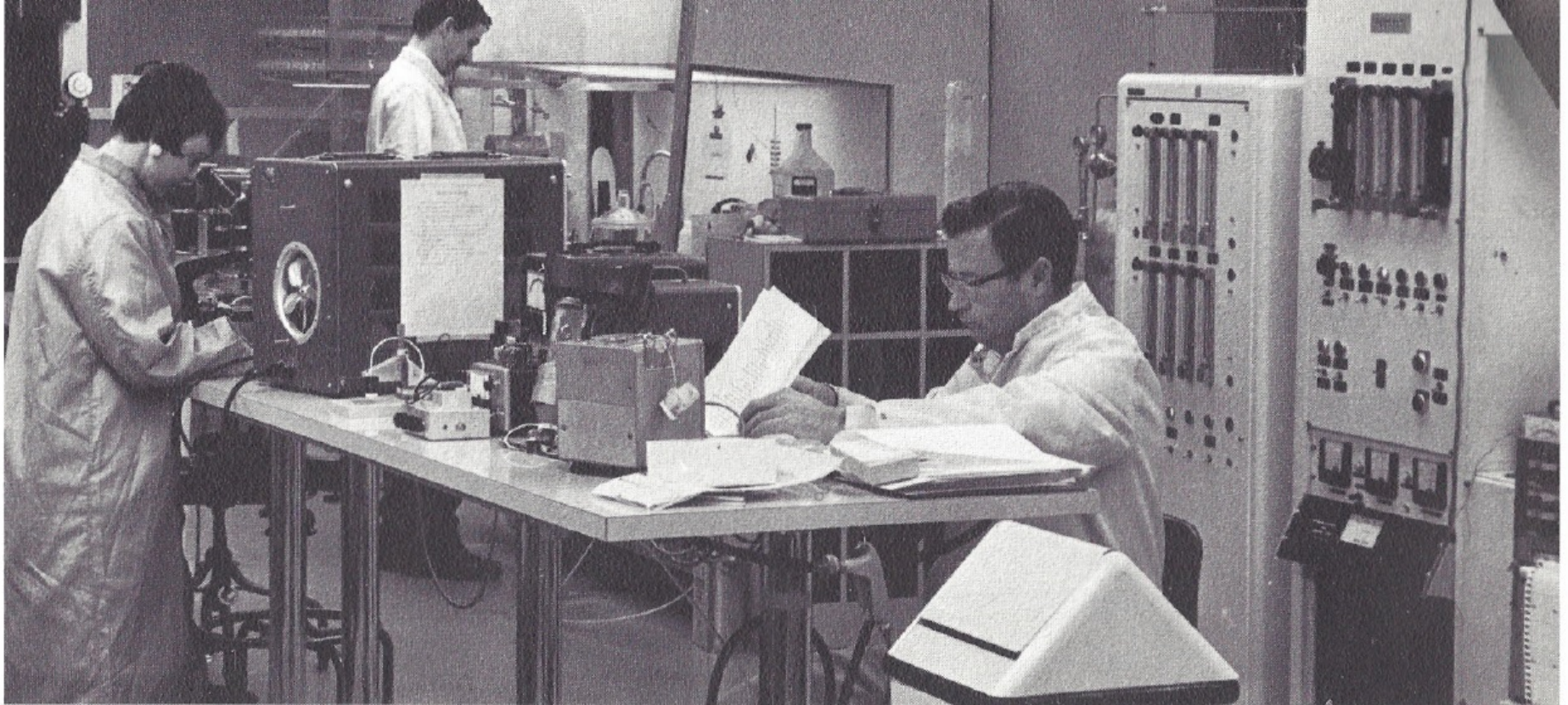
The company's main manufacturing facilities and offices are located at the Beaverton site, one of the largest and most beautiful industrial parks on the Pacific Coast.

Tektronix' major product, the finest oscilloscope available on the market, is an electronic test instrument that makes basic measurements in research and development laboratories, computer installations, TV stations, repair shops, fac-

tory inspection stations, missile monitoring stations and other facilities. The oscilloscope is used for evaluating performance of many types of equipment, from radio receivers to digital computers. It can measure phenomena occurring in a fraction of a millionth of a second and display the waveform or shape of an electrical signal on the fluorescent screen of its cathode-ray tube (CRT), similar to a television tube.

In 1967, Tektronix introduced two storage units for computer readout. These units, which are not oscilloscopes, make use of a specialized technology known as storage—the ability to retain a waveform display on the CRT screen after the signal ceases. With a storage tube, the computer output—in words, numbers or graphics—may be viewed as long as needed after having been put on the screen only once.





History and Growth

Tektronix was organized in January 1946 by a small group of ex-servicemen, including Howard Vollum and Jack Murdock, now serving as president and chairman of the board respectively.

The first oscilloscope was built the following year in the company's plant, located in an 11,000-square-foot building at S.E. 7th and Hawthorne Blvd. in Portland. Now, 22 years later, Tektronix manufacturers more than 70 models of high-frequency laboratory and industrial cathode-ray oscilloscopes.

Sixteen major buildings are located at the industrial park, including a four-level 230,000-square-foot Technical Center for engineering and research. The other 15 buildings, devoted to manufacturing and support operations, total about 970,000 square feet. Two other buildings, used for research and light manufacturing, total about 100,000 square feet on

a 14-acre tract northeast of the Sunset highway near Cedar Hills.

Overseas, a 27,000-square-foot manufacturing plant was established on the English Channel Island of Guernsey in 1959, and a 34,000-square-foot plant was constructed on an eight-acre tract in 1963. A 35,200-square-foot extension was added last year. Originally established as an assembly operation, the Guernsey plant now manufactures an increasing number of instruments and parts.

In 1961, a 40,000-square-foot plant was completed on 23 acres at Heerenveen, The Netherlands, which manufactures both parts and instruments. A 32,000-square-foot single-story general purpose building for shipping, metal shop, stock and transformers was added in 1966.

Manufacturing operations began in Tokyo, Japan, three years ago with formation of Sony/Tektronix, a manufacturing-marketing subsidiary owned 50-50 with Sony Corporation, Japan's best-known electronics firm. Sony/Tektronix manufactures Tektronix oscilloscopes and is developing its own complementary line of oscilloscopes, marketing both lines in free nations of the Far East. Tektronix will market Sony/Tektronix products in the Western world.

Telequipment, Ltd., a British manufacturer of oscilloscopes, located in London, was acquired by Tektronix in late 1966. About 300 persons are employed by Telequipment, whose instruments are in a different price and quality range from Tektronix. Telequipment oscilloscopes sell for about $70 to $840, while Tektronix oscilloscopes run from $500 to about $5000.

Sales and Distribution

Tektronix distributed its instruments in the US through manufacturers' representatives until its own sales organization was developed and the first of its 50 US field offices was opened in 1950. Overseas, Tektronix' first representation was opened in Sweden in 1948.

The company recognizes the importance of supporting its customers with competent instruction in the use, application and maintenance of its complex products, as well as the importance of keeping customers' instruments operating with readily available replacement parts.

As a result, Tektronix developed its own nation-wide sales engineering and field maintenance organization, staffed with technically competent, factory-trained personnel. This factory-customer relationship has contributed significantly to the company's growth.

Sales in the US, Canada, Australia, France, Switzerland and

the United Kingdom are made through field engineering offices located in principal market areas. In addition to sales, about half of these field offices also perform major maintenance and reconditioning of Tektronix instruments. Customer-training classes are provided at the Beaverton plant, in some field offices and on the customer's premises.

In most other countries, Tektronix sales are made by independent engineering representatives and distributors, with the company providing them direct technical and administrative assistance.

Principal Tektronix customers are private industries, military and non-military agencies of the US and foreign governments, educational institutions, computer manufacturers and radio and TV stations. US government agencies account for about one-eighth of the company's sales. Other sales

are distributed among several thousand customers, with none accounting for over 10 per cent.

Majority of sales are made in the US and Canada, with the balance overseas, principally in Europe and the United Kingdom, and to a lesser extent in Australia, Japan, Latin America, India and Africa. International operations accounted for almost 30 per cent of our total sales.

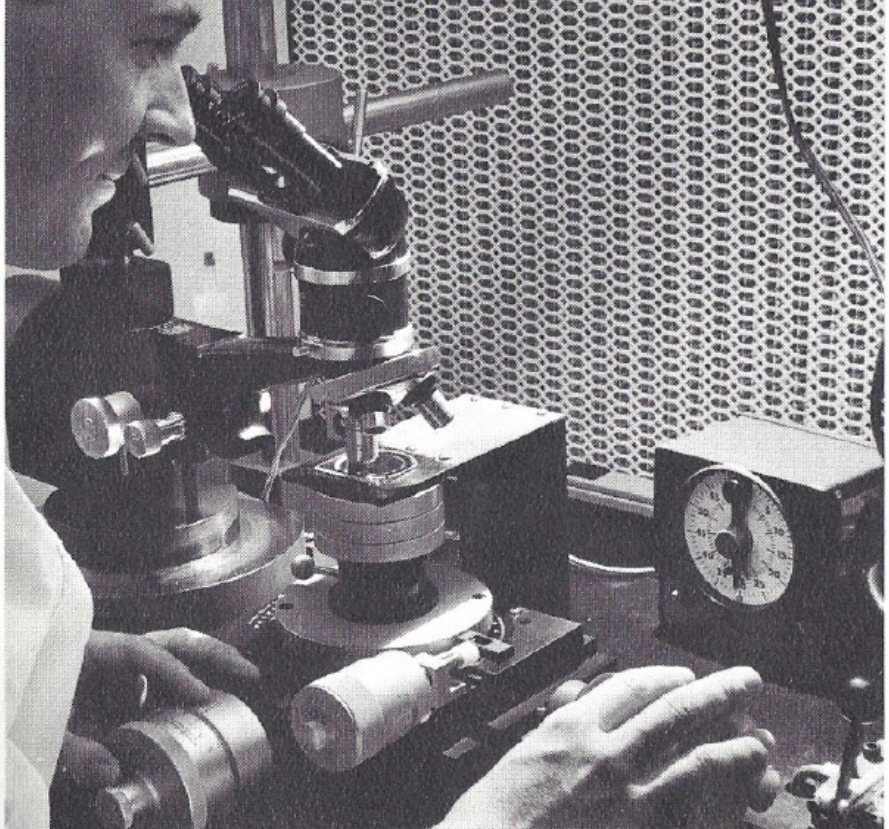
For the fiscal year ended May 25, 1968, the company's net sales totaled $133.7 million, with the US portion accounting for $90.2 million and markets outside the US totaling $43.5 million.

Many of the company's more than 70 models of oscilloscopes convert to a wide variety of performance characteristics by plugging in interchangeable units. More than 60 plug-ins, which do not function alone, are manufactured by the company.

Tektronix also makes about 30 other instruments—pulse generators, amplifiers, auxiliary oscilloscope equipment—and a variety of optional accessories, including probes, attenuators, and special cameras to record displayed waveforms.

In addition, Tektronix manufactures many of its own components for use in the company's instruments, including cathode-ray tubes, transformers, chassis and cabinets ceramic terminal strips, etched circuits, precision potentiometers, capacitors, resistors, inductors, coaxial cables and plastic parts.

These components can be manufactured more economically than they can be purchased from outside sources. This also permits the company to achieve higher standards of performance. With component manufacturing, the company's pro-



duction is more highly integrated and diversified than that of most manufacturers of similar instruments.

Tektronix plants in Guernsey and Heerenveen buy many standard European components. Those which cannot be purchased economically in small quantities are supplied with parts manufactured in Beaverton.

Research and development occupy a vital role at Tektronix, since the company's success depends on technical competence. About 10 per cent of the employees are in R & D, with about 1/3 of this group holding degrees in science and engineering. Expenditures for research average about 10 per cent of sales.

The R & D activities encompass a wide spectrum—from research on basic devices and techniques to design and development of Tektronix products and the specialized equipment and processes needed for production.

Employees and Benefits

Tektronix employs approximately 6000 employees at its Beaverton plant, including 2800 women and 3200 men. Some 300 persons are located in US field offices and about 1400 persons are employed overseas.

To provide a common interest in profitability and emphasize the importance of both individual and group effort, the company provides a number of incentives and benefits. These include the profit-share plan, in which 35 per cent of the company's total profit, before income taxes and charitable contributions, is set aside for employees.

Medical, surgical and hospital insurance is also provided for US employees and part of the cost of insurance for their dependents. Part of the employees' group life insurance cost is also paid by the company.

The accelerating rate of change in processes and methods; in science and technology, and in the industrial environ-

ment—as well as the social—serves to underline Tektronix' emphasis on self-renewal through continuous education.

This year, about 3000 of our men and women took part in some form of schooling, whether in our own extensive education program or abetted by full or partial tuition refunds at colleges in the area.

Our formal and our informal training seek both to improve employees' knowledge of present or future job skills, and to encourage the broadest individual development. Company courses are taught on our premises by selected instructors from local faculties as well as Tektronix personnel with specialized skills or knowledge.

Tektronix is an equal-opportunity employer, and an active participant in the National Alliance of Businessmen (NAB), which seeks to alleviate chronic unemployment in portions of the local community.

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