







Wang, the company and its products

When the Massachusetts-based company moved its small office from Natick to Tewksbury, Massachusetts, in 1964, net sales and service revenues totaled \$1,628,387.

By 1971, Wang Laboratories had grown to a major international corporation and was firmly established as the world's largest manufacturer of programmable calculators.

Through offices across the United States, and subsidiaries and representatives in 35 countries, the company had sold thousands of calculator and desk-top computer systems in many different applications. The first to recognize the low end of the computer market as a major opportunity, Wang Laboratories had seized a sizable share of this market vears before other manufacturers became interested in it.

Wang Laboratories has earned considerable recognition since its founder arrived in Cambridge in 1945. Educated at Shanghai's Chiao Tung University, An Wang earned his Ph.D. in Applied Physics from Harvard University. Further research at Harvard brought him into the digital computer field where he became one of the pioneers in the

development
of the
magnetic
core
memory.
By providing
fast data
access at
relatively
low cost,
core
memory
made large

computers an economic reality.

In 1951, Dr. An Wang founded Wang Laboratories in Boston, Mas-

sachusetts. The company was incorporated in 1955. Working with

a small staff, Dr. Wang performed research and development in electronic systems and instruments. Early

products included specialpurpose data handling equipment for industry and government, and general-purpose computer peripherals such as paper tape-readers and digital logic modules. Other products, including encoders and position readouts, made the company a leading supplier for the machine tool industry.

Between 1962 and 1964, the company developed LINASEC, a special-purpose computer used by typesetters to justify newspaper columns.

In the early sixties, Dr. Wang recognized the need for a product that could bridge the gap between



large-scale digital computers and mechanical calculators.

In 1964, Wang Laboratories introduced the Logarithmic Calculating Instrument, or LOCI, a first in several respects. It was the first electronic calculator which produced the basic four functions $(+, -, \times, \div)$ at the touch of a kev. It was the first calculator capable of generating logarithms of numbers (and their antilogs). The completely innovative concept it used, hardwired mathematical functions available at the touch of a key, offered the scientist unimagined time-savings and opened up a new market that, within ten years, was to become a major industry.

Wang Laboratories expanded quickly into the market, providing the 300 Series of desk-top calculators from simple four-function units to programmable systems that could include many peripherals for input and output and that were the most sophisticated low-cost scientific computing systems of the time.

The Wang 700 Series Programmable Calculators added another boost to the company's growing

reputation. Designed for scientific, business and engineering use, the 700 Series was introduced in 1969 and with it, Wang scored yet another first: the use of magnetic tape cassettes for program input or storage. The inexpensive computerquality cassettes could store up to 78.000 characters of program instructions or data. Programs chained automatically under program control giving the 700 Series a problem-solving clout that often could rival the power of large computers at a minute fraction of the cost.

Introduced in 1971, the 500 and 600 Series Programmable Calculators filled the slot between the 300 Series and the 700. The 500 Series provided inexpensive calculating power and was particularly popular as a teaching tool in mathematics and computer science.

The 600 Series combined the keyboard simplicity of a small calculator with the power of a small computer. Providing a full range of peripherals for input, output and storage, it quickly became the most widely used desk-top computing

system. Another Wang first, the 600 Series offers the user special-purpose "plug-in" ROM's (Read-Only-Memory) for statistics, formula programming, surveying, etc.

By 1972, having added the 100 and 400 Series Programmable Calculators to its products, Wang had established a full line of desk-top programmable calculators ranging from under \$1000 to systems costing \$30,000 or more.

While developing its calculator lines, the company also began to expand its computer-related activities. Wang Computer Services, acquired as a subsidiary in 1969, became a division in January of 1973. Today it is one of the leading full-service data processing organizations providing specialized professional consulting services in systems analysis and design as well as commercial and systems programming.

Over 150 highly skilled systems analysts continually expand Wang Computer Services' extensive software products in such areas as payroll processing and other commercial computer services. Software for payroll, for pension and for pen-

The System nobody's been able to beat.



sion data processing, is an example of the kind of specialized services this division provides. Wang Computer Services also operates New England's largest data center where customers may buy time and programs on a central computer.

The introduction of Wang's System 1200 word processing line in 1971 seemed a departure from Wang's "traditional" markets.

But Wang's expertise in electronics, its extensive experience in the sale and servicing of magnetic tape cassette units and output writers for its computer systems made typewriter-based word processing systems a "natural" for Wang. Also, the word processing market was overdue for technical innovation.

Combining the most advanced editing features available with simple, straightforward operating procedures, the Wang System 1200 takes a "systems" approach to word processing. Options like Telecommunications, Photocomposition Input, a Video Display, and a Line Printer which increases output speed tenfold, allow the Wang System 1200 to be customized to the

user's specific needs.

Versatile and extremely competitively priced, the Wang System 1200 word processing line made a major contribution in Wang's history of growth. Wang now has 44 word processing sales and service centers throughout the United States, and the systems are marketed internationally through Wang's worldwide sales organization.

As early as 1972, Wang took the next logical step and introduced its first small computer system. Wang's 2200 Line of Small Computer Systems has set the pace for the industry ever since. The "giants" in the industry discovered their interest in the "small computer user" only after Wang had been successful for years in this market. And even though there are many manufacturers vving now for the market of the formerly neglected small businessman, Wang has not only survived but come out on top with a system that is, to quote a customer, "without a doubt, the most for the least in the industry."

Again, the Wang 2200 Line of Small Computer Systems includes

many firsts that have stood the test of time and competition.

Wang's 2200 line was the first to offer small computer systems with a high-level computer language. BASIC, until then a prerogative of large, expensive hardware. This and Wang's extraordinarily complete line of peripherals, with tape and card readers for input, with storage facilities ranging from magnetic tape cassettes and 9-track tape reels storing 78K to 20 million bytes of information, to diskettes and disk units from 262K bytes to 10 million bytes of online storage and virtually unlimited offline storage, and output on medium and high-speed printers or on plotters of various sizes, make Wang's small computer systems the industry's most formidable product.

The Wang Systems Sales and Support Organization, one of the largest of its kind, has had many years to grow and implement experience gained with the installation of thousands of systems. Their job is to translate applications into programs, programs that reduce overhead and increase profits.

Our worldwide field organization of over 200 offices is staffed with 1200 highly skilled sales and systems specialists, service engineers and support personnel. Located in 105 cities in the United States and Canada and 53 countries overseas, Wang Sales and Service Representatives are as near as the telephone.

Our company, then, started with the idea that we could find new and better solutions to data and infor-

Wang sales and service worldwide:

mation handling problems. Today, we have 230,000 square feet of manufacturing, R&D, and general office space in Tewksbury, Massachusetts. Here, we manufacture over 25 basic types of electronic calculators and small computers, over 35 specially designed peripheral units, and a complete line of word processing systems.

In addition, a newly acquired 81,000 square-foot facility in Bur-

105 sales and service offices throughout the United States and Canada.

International subsidiaries with 36 offices in 14 foreign countries.

International Representatives in 39 countries.

lington, Massachusetts, will help relieve the immediate pressure for additional manufacturing capacity and provide excellent long-term expansion flexibility.

We have come a long way in the process of "finding needs and filling them" . . . filling them in ways that have clearly saved our customers money and provided a sound return on investment to our shareholders.

