

Omaha Works . . . Looking Ahead



Cover — Top: Eva Fetherkile, bench hand; Center:
George Mokay, strander operator; Bottom:
Andrew Allen, floor hand.

OMAHA
WORKS

25

YEARS
1958-1983

LOOKING AHEAD

The Omaha Works is one of many locations owned by Western Electric. Western Electric is a wholly owned subsidiary of American Telephone and Telegraph (AT&T).



TELECOMMUNICATIONS EXCELLENCE SINCE 1958

We're working for the future. We're working for you. We're the Omaha Works, and we're in the forefront of telecommunications manufacturing.

A quarter of a century ago, we had our beginning. It was an impressive beginning. Our groundbreaking was June 28, 1956. Construction began four months later, and when work was completed on November 15, 1958, our new structure included 12.8 tons of structural steel; 2.8 million bricks; 43,000 concrete blocks; 1.5 million feet of electrical conductors and 20,000 electrical light fixtures.

We've come a long way since 1958. We've come a long way to bring you the best in telephone cable, wire and network apparatus.

Our story is an endless one, with new chapters being added daily. Just as the telecommunications industry is changing, we're changing, too. We're changing to meet the needs of the Information Age.

We're putting the most advanced technology to work to supply you with literally hundreds of thousands of items each year, yet our standards of quality are always at their highest.

The quality of our employees is also at its highest. More than our new technologies, new products and enhanced resources, we depend on our greatest resource — our employees.

Tempered by experience and dedicated to the future, we are the Omaha Works — looking ahead to keep you ahead in the Information Age.

Cable

In the air, under ground and along the ocean floor, telephone cables — the nerve fibers of the telecommunications network — carry an endless stream of conversations, print messages and data. At the Omaha Works, we manufacture millions of miles of aerial, buried, underground and inside cable. This cable is divided into two types: exchange and vinyl.

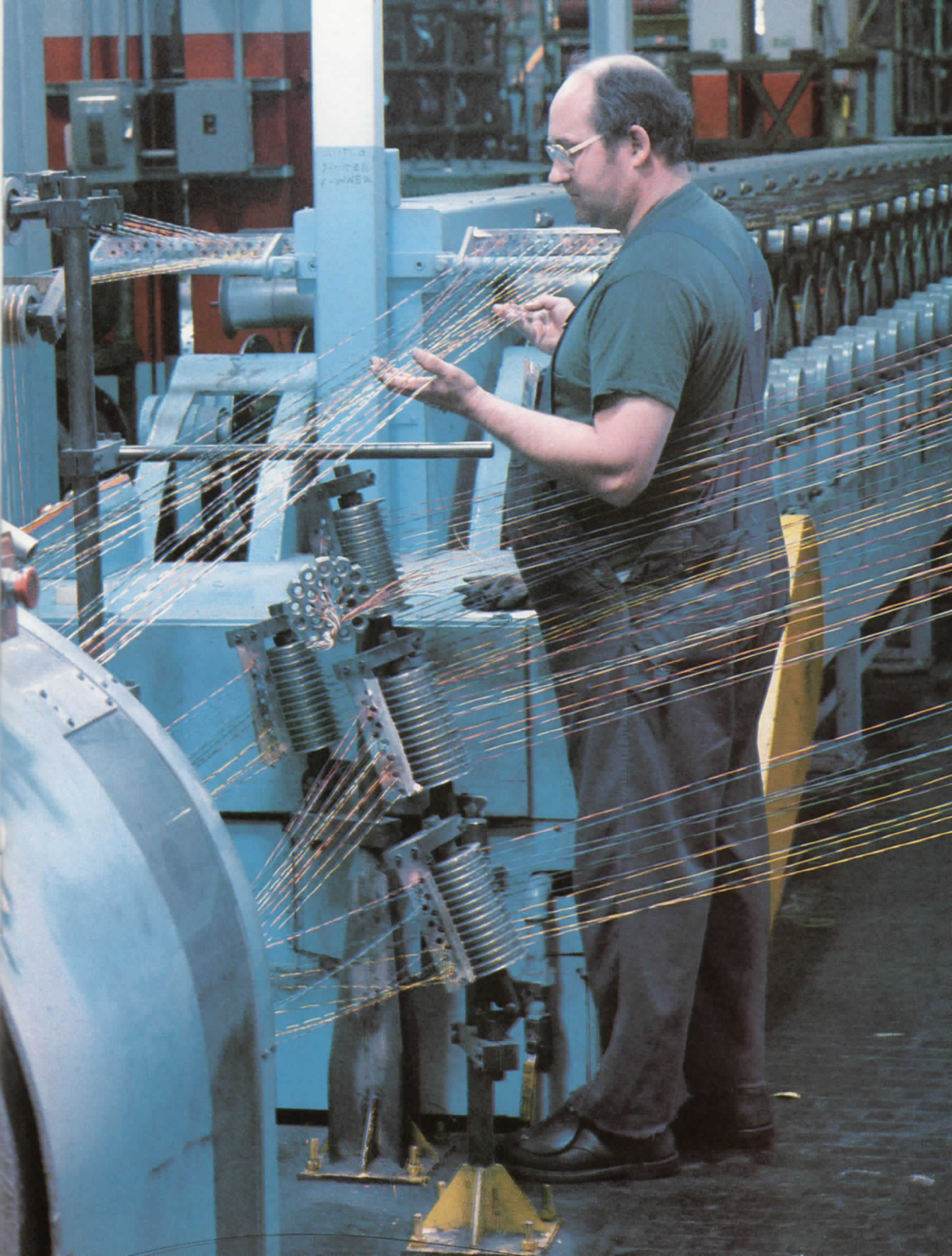
Exchange Cable

Exchange cable is the thick, multi-conductor cable used to connect telephone central offices with each other and with major business and residential areas. The only exchange cable made at the Omaha Works is PIC (polyethylene-insulated cable).



Dave Burrell, machine operator, has many responsibilities, including tying down the ends of 900-pair cables. The cable he's working on measures 1,550 feet, and it weighs approximately three tons.

Opposite page: Mel Wilson, strander operator, verifies that color-coded, twisted wire pairs are positioned correctly before entering cable.





Cable

King-size cable reels weighing up to four tons, and huge extruding machines filled with melted hot plastic are an awesome sight for the average visitor to the cable shop. But the point is well made, cable production is a big job at the Omaha Works.

Vinyl Cable

Just as important as the production of exchange cable is the manufacture of vinyl cable. Vinyl cable conductors are covered with a special type of plastic called polyvinyl-chloride (PVC). Among its many uses, vinyl cable is installed inside telephone central offices and customer premises to link various types of equipment to incoming exchange cable.

One of the vinyl cables manufactured at the Omaha Works is plenum cable. This low-smoke, fire-resistant cable for office buildings eliminates the need for conduit.



Nikki Cattano, assembler, tests A25B connector cable.

Opposite page: Ollie Thomas, assembler, has various responsibilities, including removing connector cable from trays for packaging and shipping.



Don Walraven (l.) and Steve Chaffin, floor hands, pack cable stubs for shipping.

How Cable is Made

The manufacture of both exchange and vinyl cable begins when copper rod, 5/16" thick, is reduced to extremely slender sizes. These wires receive a coating of plastic, and then two of the insulated wires are twisted to form the path along which our conversations flow. The wire pairs (as many as 900 at a time) are bound together into cable cores of varying sizes. To assure quality, high voltage testing is done. The wires are then covered with metal and polyethylene in the sheathing process to ensure years of trouble-free service.

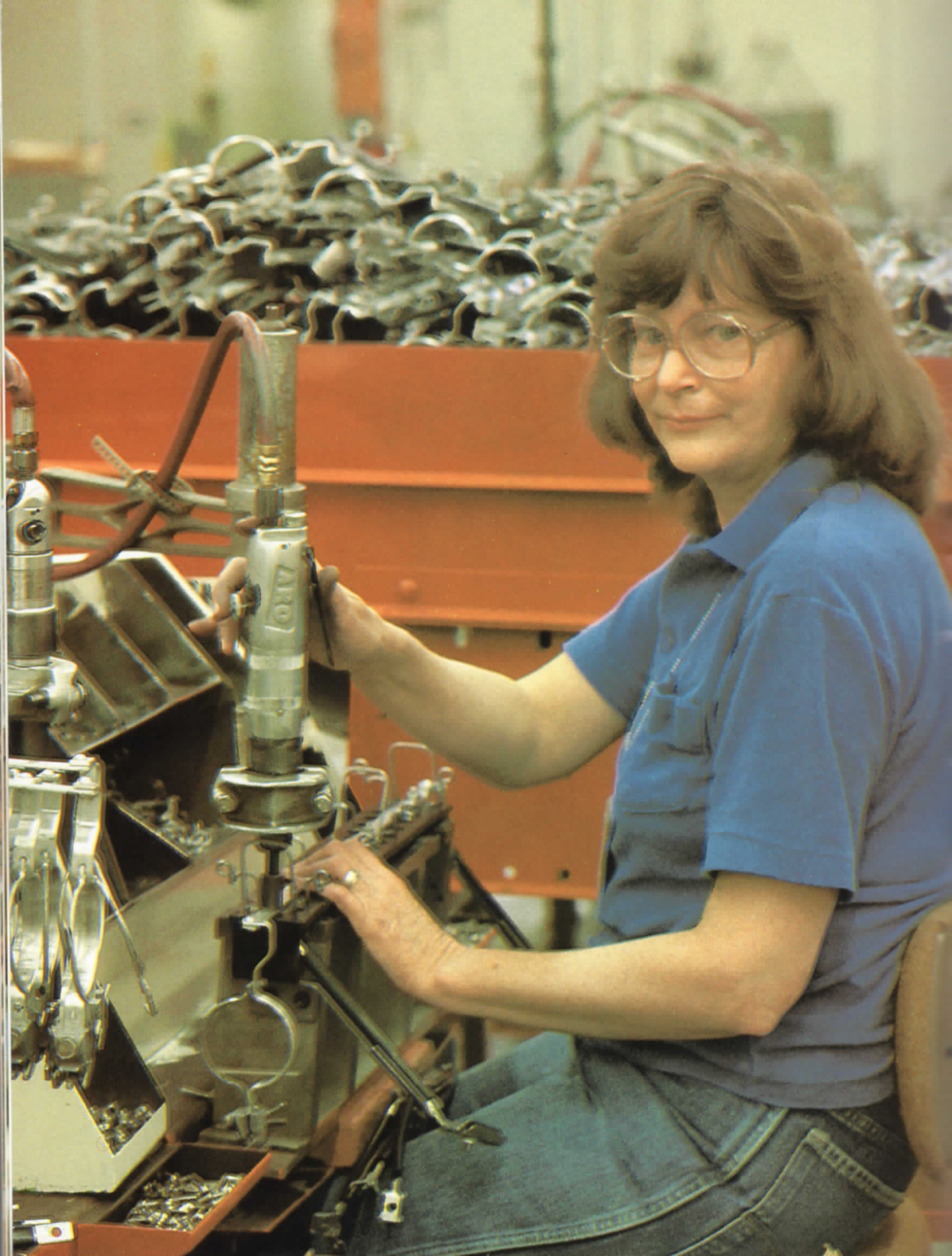
Cable Stubs

This cable has been rightly dubbed with the name "stub," meaning short. Cable stubs are short lengths of PIC (polyethylene cable). With one exception (the 90-type, which is simply a short piece of cable) all other cable stubs contain a pressure plug.

Cable stubs serve a variety of purposes, such as blocking air pressure between pressurized and non-pressurized cables when the two cables are joined.

Opposite page: Karen Moore, floor hand, has many responsibilities, including attaching ground straps to cable stubs. The ground strap will complete grounding during installation.





Cable Terminals

The function of the weather-proof cable terminals manufactured at the Omaha Works is to provide a junction or a link between distribution cables (those that lead up to your home or office) and service or drop wires (the telephone wires that lead inside your home or office).

Cable terminals we manufacture are the 49, 53, 105 and N types.

The B-type cable terminal, also made at the Omaha Works, is designed to provide cross-connections between feeder cables (those that lead from a telephone central office) and distribution cables.



Larry Standley, utility operator, bolts cable terminals to a box and cover assembly.

Opposite page: Julie Springer, bench hand, is responsible for assembling 49-type closures.

Connectors

"Getting it all together" is the job of the connectors. These small, heavy-duty plastic devices are used to join, splice or connect cable and wires.

In the early years of cable installation, an installer spliced wire pairs by twisting them together by hand.

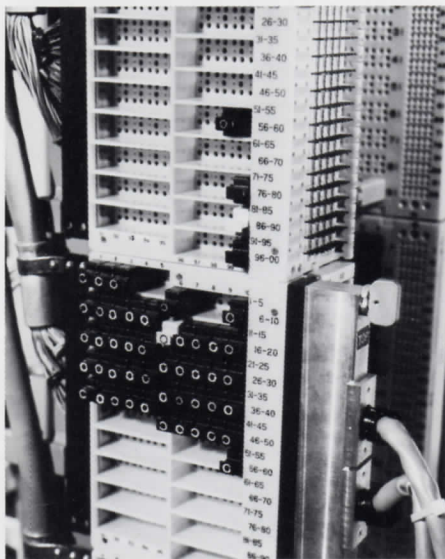
It was a slow process with about 150 wire pairs being twisted every hour. Today, with the mechanical aid of connectors, wire splicing is fast and uniform. Connectors also allow an installer to splice into an existing cable without cutting off power to that cable.

Types of connectors made at the Omaha Works are the 710, 711, 88, 108, 109 and 110.

Central Office Connectors

Serving somewhat the same function as the fuse box in your home or a simple breaker panel, the central office connectors serve as a link between the feeder cables (those that lead up to a telephone central office) and the telephone central office. They also provide voltage and current protection for people and equipment in the central office.

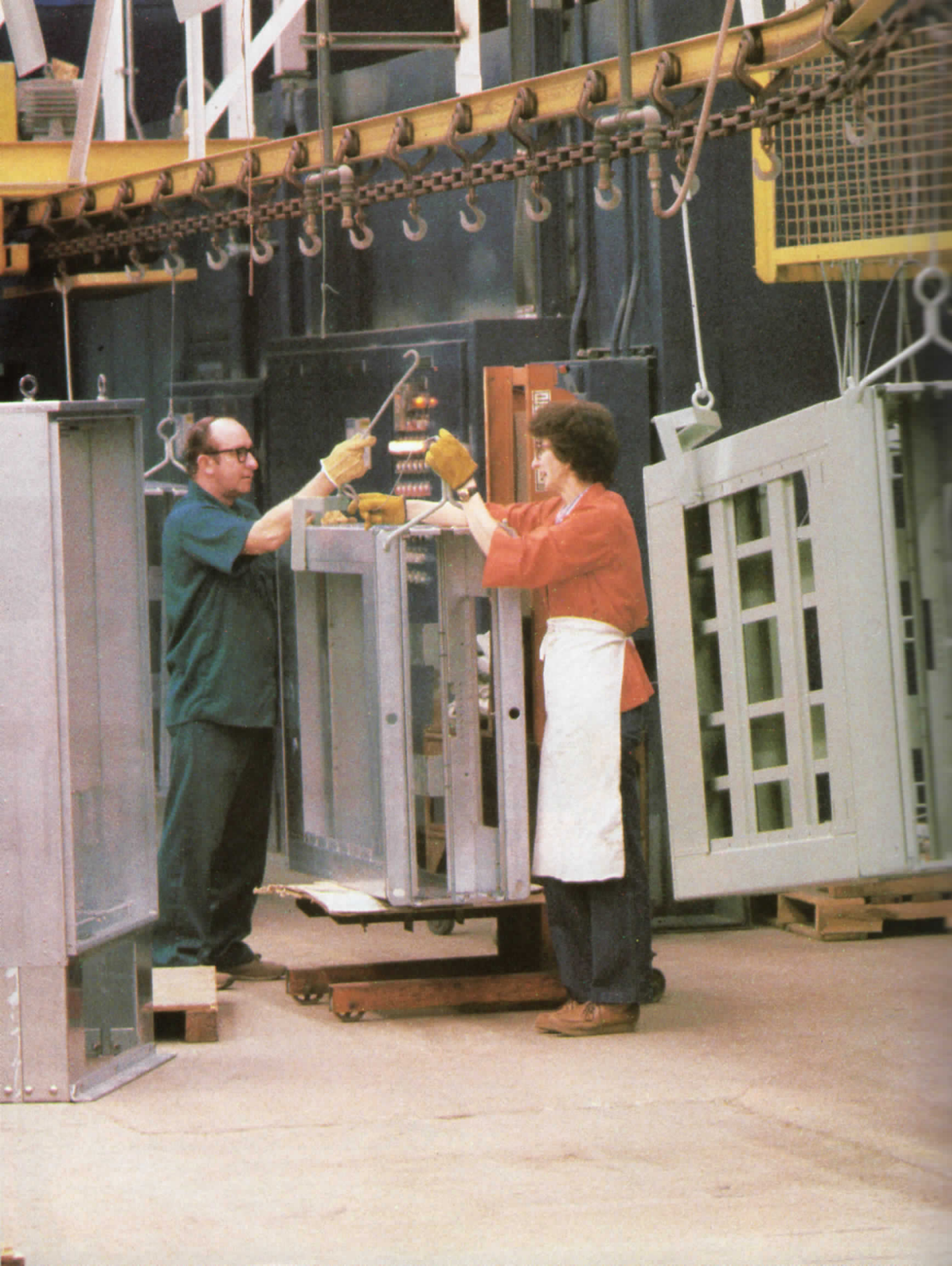
Central office connectors manufactured at the Omaha Works are the 305, 307, 308 and 310.



Central office connectors serve as a link between feeder cables and the telephone central office.

Opposite page: Margaret Wright, assembler, loads elements into a plastic module during initial assembly of 710 connectors.

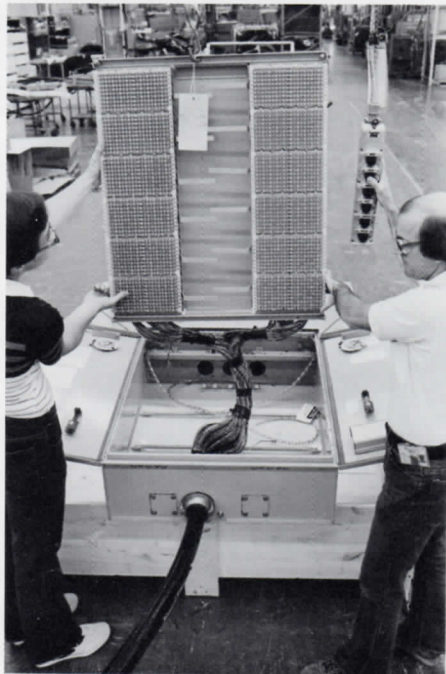




Cabinets

Making products to link the nation's phones is a big job. The products that do the job can be big, too. Among these products are the cabinets manufactured at the Omaha Works. Cable from a telephone central office is routed to these large, weather-resistant cabinets where cable pairs are assigned to customers. Devices for interconnecting feeder cables (those that lead from a telephone central office) to distribution cables (those that go to your home or office) are enclosed in the cabinets. FDI (Feeder-Distribution Interface) cabinets are for urban areas. RAI (Rural Area Interface) cabinets are for rural communities.

Types made at Omaha are the 40, 41 and 80. The 80-type, also called the Community Service Cabinet (CSC), is the largest, and it holds the most electronic equipment. Its designer look is especially pleasing to business and residential customers.



Joe Backes (l.) and Jim McDonald, packers, carefully lower a binding post frame into a "D" size aerial cabinet.

Opposite page: Al Menks and Annie Davis, floor hands, load unpainted cabinet parts onto the powder-paint line conveyor.



Pat Dahlhauser, assembler, assembles piece parts onto the 66-type connecting block.

Connecting Blocks

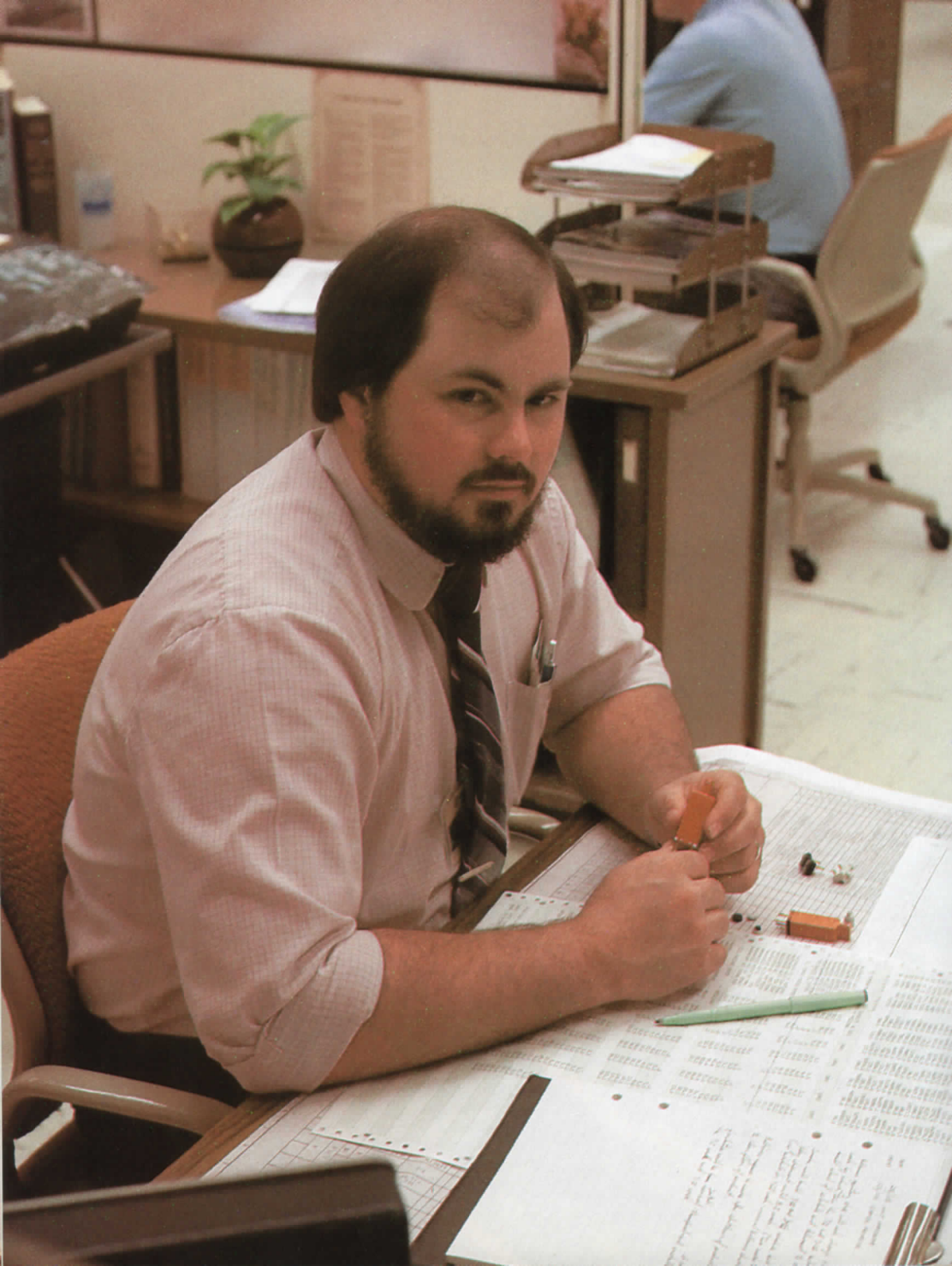
Connecting blocks help in the transfer of telephone signals from feeder cables (those that lead to a telephone central office) to wires and cables inside the central office, or to distribution cables inside of various terminals and customer premise applications.

This product features an insulating base or block mounted with binding posts or quick-clip terminals.

Some of the connecting blocks manufactured at the Omaha Works are the 66, 78, 89, 112 and 110.

Opposite page: JoAnn Vobrill, assembler, is responsible for putting together the 89-type connecting blocks.

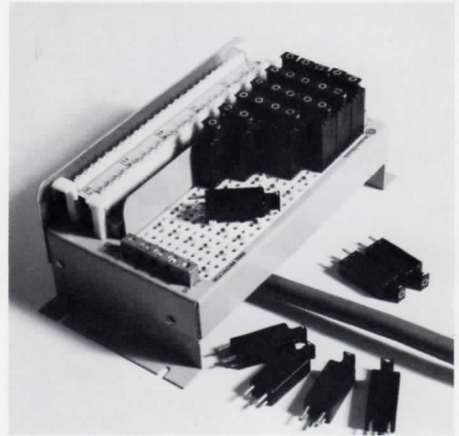




Protectors

Protectors are designed to protect people and telephone equipment from high voltage and lightning.

Types made in Omaha are divided into three categories: station (for protection in homes), building (for protection in buildings other than homes) and unit (for protection in telephone central offices). Types of station protectors we manufacture are the 123 and 128. The building protectors are the 188, 189 and 190. The unit protectors are the 3B and 4B.

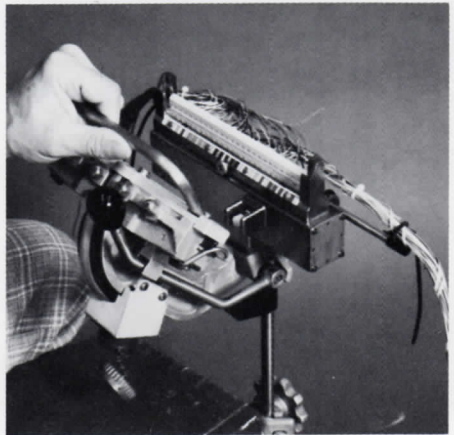


The 188 protector is a building protector, used in buildings rather than homes.

Opposite page: Mark Curtis, planning engineer, must analyze the dimensional characteristics of central office protectors.

Tools

When it comes to manufacturing and installing telephone cable and wire, the tools of the trade are a must. The Omaha Works manufactures a broad range of tools for just this purpose. Types made in Omaha are the 890A (to assemble the 710 25-pair connectors), the 945A (to assemble 710 5- and 25-pair connectors, the 840A (to cut wires), the 850A (to assemble 711 connectors), the 788 (to insert and cut off excess cable and cross-connecting wires in 88- and 108-type connecting blocks), and the 710A tool mounting (a universal system for mounting all cutter presser tools). We also make the "L" connector presser for splicing procedures.



The 890A tool splices 710 connectors.

Opposite page: Chris Madsen, machine operator, measures the dimensions of one of the piece parts used in the 890 cutter presser tool.









Closures

Rodents, weather and such things as ground vibrations and rock bruises are no match for the environmental protection provided by a closure. This equipment provides a secure, molded plastic "house" around cable splices (the point where two wires are joined to provide a continuous circuit). Closures are used in buried, underground duct and aerial cable systems.

Types made at the Omaha Works are the 2, 6, 16, 18 and 50/51.



Jerry Lohmeier, packer, is responsible for preparing 16A closures for shipping.

Opposite page: Sharon Yearsley, machine operator, must inspect closure parts as they come off the molding press.



Above: Larry Lamb, planning engineer, is responsible for the cable jacketing operation.

Below: Dan Dankof, senior planning engineer, designs and develops tools for assembling our products.



Opposite page: Art Clausen, design engineer, operates a computer graphics terminal to analyze a three-dimensional view of machinery designed at the Omaha Works.

Engineering

New technologies and increased competition offer us a wealth of opportunity. How we deal with this opportunity and its challenges depends primarily on our engineers.

We depend on these men and women for research leadership; product development; long-range capital planning and management; quality assurance; wage incentives; cost reduction; energy management; pollution control and work safety.

From product development through distribution, our engineers must plan more efficiently, manage more profitably and help us work smarter to produce the best possible product at the most reasonable cost — and on time.





Inspection

Only the best will do. That's how we feel about the materials and workmanship that go into our products.

From the time that raw materials enter the plant, to the time the finished product is shipped, it's everyone's business to make sure quality has top priority.

Inspection personnel are responsible for checking all raw materials. However, during manufacturing, it's the responsibility of the manufacturing organization to build quality into our products. When manufacturing is completed, inspection personnel are again on hand to check that the products we ship are the very best.

Quality Assurance

The next best thing to the customer checking our finished products is the quality check made by our people in quality assurance. This organization conducts an objective quality audit and reports the results to all levels of management.

In an increasingly competitive marketplace, the quality and reliability of our products are two of our most important selling points.



Above: Ed Shobe, quality assurance section chief, conducts quality assurance audits. **Below:** Jean Shane, inspector, checks product accessories before shipping.



Opposite page: Vern Faller, product quality, measures the jacket thickness of a new type of plenum cable.



Above: Vince Beisch, senior accounting specialist, is responsible for analyzing production results.

Below: Ron Johnson, information systems, uses a remote terminal to update payroll and accounting programs.



Opposite page: Shirley Patterson, invoice clerk, and Jackie Myhrberg, information systems; team up to check freight invoices. The invoices have been entered into the ARX accounting system which handles all vouchering at the Omaha Works.

Information Systems

The Omaha Works manufactures many of the telephone products that will keep you ahead in the Information Age. As a large manufacturing company, we too must keep ahead of the tremendous amount of information we deal with each day.

To manage our daily information explosion, we depend on the staff in the information systems organization. These people are pros at operating highly technical computer equipment programmed for such things as records storage, filing, analysis, inventory and scheduling. You might say, our information systems people keep record of what's going on, and they distribute this computer data to the people who need to know.

Accounting

The way we figure it, accounting personnel handle the numbers — numbers as in people, expenses, hours, production quantities, efficiency ratings, wage incentives and cost reduction. Our accountants add it all up and calculate how we can manage our future wisely.

Most employees would sum it up by saying, "accounting manages the money, and their most popular product is the paycheck."





LIGHT GUIDE

Westam Electric
Omaha Works

Product Display Center

An invitation to the Product Display Center is an invitation to view, touch, hear and talk about the many products manufactured at the Omaha Works.

In an ever-increasing competitive environment, the center provides an atmosphere conducive to developing strong customer relationships. Here, we can learn how our current products are performing and what new products are needed. The Product Display Center is also open to employees, Western Electric marketing people and a wide variety of community groups.

Public Relations

Communicating what our company has to say is the job of our public relations people. They tell the Western Electric story (more specifically the Omaha Works story) — in fact and with impact, in pictures and in print and in short and in depth.

From planning and research, to packaging the finished public relations product, they are responsible for brochures, booklets, newsletters, press releases, speeches, audio-visual presentations and the company newspaper. Also coordinated through the public relations department are company contributions, community relations, tours and the company's Speakers Bureau.



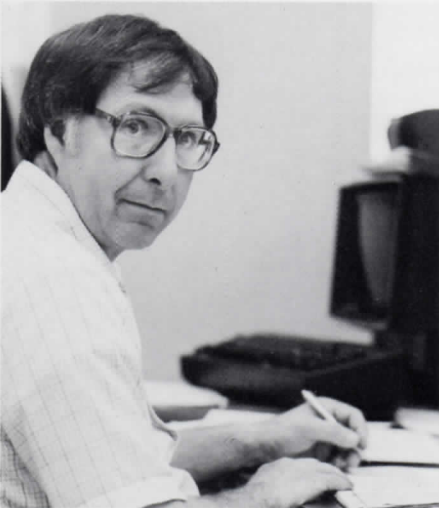
Above: Frank Markesi, engineering associate, sets up the multi-image slide show in the Product Display Center. **Below:** Sonja Coleman, public relations, reviews slides for the book you're now reading.



Opposite page: Art Meier, engineering associate, and Linda Giebler, information representative, examine a plug-in unit from the electronic carrier system inside the Community Service Cabinet (CSC).



Above: Lynn Landgren, purchasing, is responsible for processing requisitions for product parts.
Below: Gene Baier, customer service coordinator, services customer orders.



Opposite page: Bob Beardsley, stockkeeper, stores products in the central store.

Purchasing and Transportation

Thousands of purchase orders are issued each month for raw materials, supplies and equipment. Skillful buying and wise routing and transportation decisions help ensure product quality, fair price, efficiency and prompt delivery. In short, the job of purchasing is to buy, and the job of transportation is to get machinery, supplies, products and people where they need to be. (All business travel by our employees and travel arrangements for special guests are handled through transportation.)

Materials Management

Materials management people work throughout the factory. You'll find them outside where cable is stored, and in the office where production control employees plan factory manufacturing schedules. Their jobs include forecasting product demand, ordering materials, controlling inventory, transporting, shipping, receiving and storing. They're also responsible for customer service. In an emergency, such as a tornado, our customers often contact them first for needed items. Most important, these people make sure our products are delivered on time.



129 2
9

112
81

Western Electric

Western Electric

Western Electric

RAYMOND

RAYMOND



Environmental Health and Safety

Accidents don't just happen. That's why we work extra hard to provide the best environmental health and safety programs possible.

Our environmental engineers deal with the outside environment. They supervise and regulate all out-of-plant conditions such as liquid waste, roof exhaust and the treatment and disposal of chemical wastes. Inside the plant, our industrial hygienists deal with such things as noise, gases, solids and different types of dust.

In the area of on-the-job safety, the responsibility belongs to the people in the safety organization. They're responsible for identifying and correcting all potentially hazardous conditions. They make sure our employees understand safety procedures, and they coordinate various safety awareness programs to encourage positive safety attitudes.

Medical

Our highly professional staff of physicians, nurses and opticians work to help keep our employees healthy. As members of our occupational health team, they develop and administer programs and policies that include medical examinations, health education and on-the-job medical care.



Above: Rex Zeller, plant inspector, checks industrial vehicles and their drivers to ensure plant safety. **Below:** Kim Pearson, optician, fits safety glasses on Otto Dvorak, machinist.



Opposite page: Betty Wheeler, nurse, is a first-aid professional.



Above: Ray Perina, pipefitter, repairs plumbing.
Below: Duane Iwanski, personnel, is responsible for retirement procedures, including retirement interviews and paperwork. Iwanski also handles employee benefit questions.



Opposite page: Larry Fischer, toolmaker, repairs tools for the 710 connector.

Works Service

We've got what it takes to be a self-sustaining manufacturing community — complete with the skills and trades of such people as machinists, pipefitters, electricians and toolmakers. These are only a few of the many professional tradespeople in the works service organization.

Personnel and Benefit Services

Our employees are our most valuable asset. They make the difference — the difference in why our products are the best. As a company, we want to be able to offer them our best. That's why our personnel and benefit services organization is ready to assist employees when needed. Assistance comes in many forms, including employee benefits, promotions, transfers, equal opportunity and affirmative action programs, retirements and pensions.





WISCONSIN

Local News
The newspaper page contains several columns of text under the heading "Local News". The text is too small to read but appears to be a standard news layout with multiple columns.



Labor Relations

Good, open, management-employee relations are important at the Omaha Works. The labor relations organization provides that important link between management and employees as it negotiates and administers all contracts and agreements with Omaha Works labor unions.

Reproduction

Each month more than two million sheets of paper pass through the copy machines and offset presses in reproduction. Employees in this group are responsible for providing quality printing and copying services for all departments and various employee organizations.

Items reproduced or printed include product tags, decals and forms; training manuals; company phone books; engineering blueprints and the company newspaper.

This group has the equipment to print color work, make microfilms and do the screened negative work for all black and white printing. They also print booklets and brochures for various nonprofit community groups.



Above: Ken Korinek, labor relations, discusses union business. **Below:** Deanna Traugh, reproduction equipment operator, handles reproduction jobs of 125 copies or less. Other work is done on the printing presses.



Opposite page: Peggy Walters and Mike Cochrane, reproduction equipment operators, examine copies of the company newspaper, the Westerner.



Above: Guy Godios, Pioneer, helps youngsters with their brand new "HOT" tricycles. The special bikes have a hand control for children who have little or no leg control. **Below:** The annual employee picnic, sponsored by the WEOMA Club, is a fun time for everyone.



Employee Organizations

"People who need people are the luckiest people in the world," according to a popular song from the '60s. The song reflects the attitudes of caring and sharing promoted by our two major employee organizations — the WEOMA (Western Electric Omaha) Club, and the Cornhusker Chapter of the Telephone Pioneers.

The WEOMA Club offers a wide variety of activities for all employees, including various hobby and sports clubs, the annual Christmas party and the company picnic. The WEOMA Club also coordinates Bloodmobile drives.

The Cornhusker Chapter of the Telephone Pioneers is open to employees who have at least 18 years of telephone service. It's an opportunity to serve, to enjoy the fellowship of other members and to renew the common bond of loyalty that grows with fellowship and working together. The Cornhusker Chapter is one of many chapters around the country associated with the Telephone Pioneers of America — the world's largest voluntary association of industrial employees.

Opposite page: A popular attraction for employees is the activities mall, adjacent to the main cafeteria. Features are the Pioneer store; the Pioneer/WEOMA meeting room, workshop and administrative offices; a branch office of the Bell Federal Credit Union and a life insurance office. The mall also features the Pioneers' collection of antique Western Electric products.

EMPLOYEE ACTIVITIES MALL

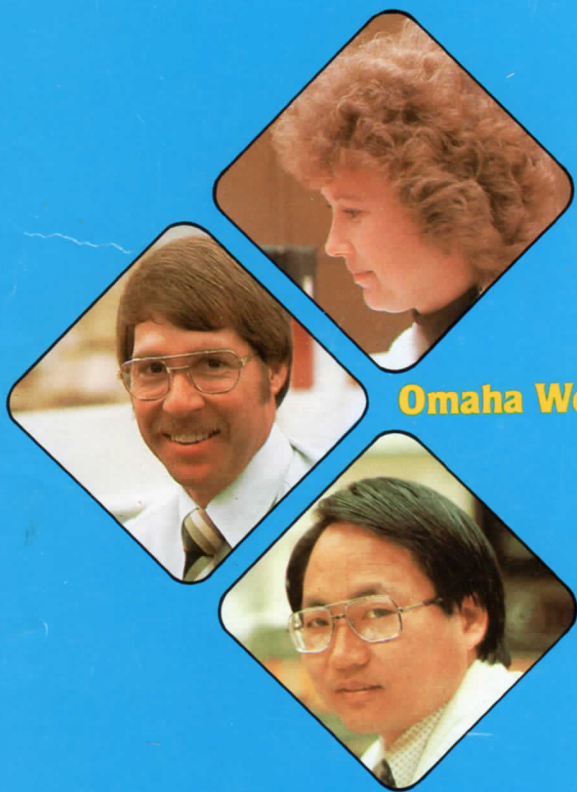




In addition to the employees already featured in this book, supervisors like Gene Saab and secretaries like Joan Siwa also contribute valuable skills to the wealth of talent we have at the Omaha Works. As employees, we're our own greatest resource in meeting and mastering the challenges of the future. We're looking ahead to keep the world ahead in the Information Age — we are the Omaha Works.

Book by Sonja Coleman and Roger Howard

Back cover — Top: Alice Lugert, service clerk;
Center: Jim Krambeck, section chief;
Bottom: Peter Wu, engineer.



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