

here's how TELETYPE equipment can make all your data communications...





the most economical way

to handle a normal flow of communications is with Teletype keyboard send-receive sets.

For speed and economy, the best way to communicate the written word is with Teletype keyboard send-receive sets. As the operator types the message, it is printed in identical form on other Teletype units in the same building or city, or thousands of miles away.

But speed and economy are not the only benefits tens of thousands of companies of all sizes are getting from Teletype equipment.

Permanent, accurate record—The sender and receiver have the same permanent printed copy to avoid misunderstandings and errors. In addition, the new 4-row keyboard is familiar to any typist. This reduces the chance of errors.

Types on business forms—Invoices, sales orders, payroll checks, personnel records, reservations, freight bills—these are a few of the many types of data that Teletype machines will transmit and receive on business forms to provide multiple copies locally and at remote stations. This speeds internal clerical operations as well as order processing and delivery.

Simultaneous reception—Teletype KSR equipment can transmit to any number of stations at one time, and the exclusive "stunt box" provides automatic selection of stations to receive messages. It will even "edit" parts of the messages received by certain stations, as well as turn on and turn off unattended Teletype equipment.

General uses—Teletype units are used to link sales offices with company headquarters, warehouses with distribution outlets, and purchasing with outside suppliers. Teletype units speed the gathering of information for sales reports, expense figures, production sche-

dules, and account facts. Teletype equipment can help in speeding important management decisions on price changes or manufacturing and distribution changes, as well as new merchandising and special promotional activities. More specific applications are shown below.

receive, process, and ship orders in one day

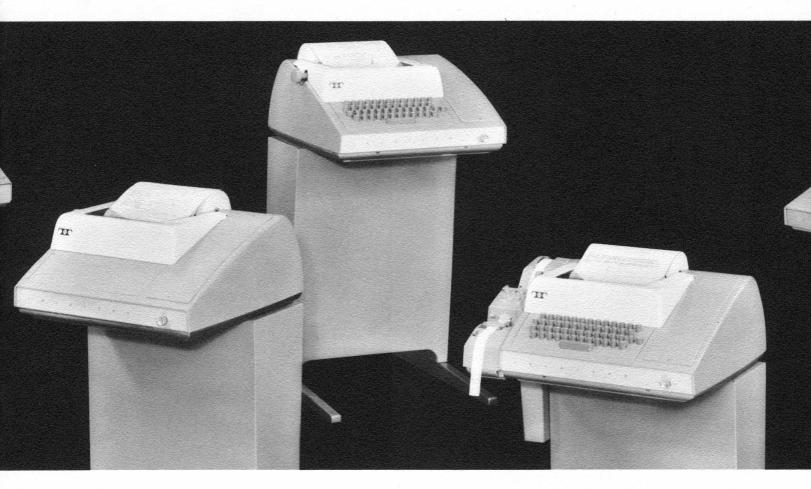
Supplying 15,000 different machine tool items by mail was both costly and slow for an Illinois company. So the firm established "instant" communication with its customers through Teletype KSR machines.

Orders are now received in minutes instead of days, processed directly from the forms received on the Teletype machine, forwarded to the warehouse to be filled and packaged, and within hours the supplies are on the way to the customer.

Paper handling has been cut so drastically through the use of Teletype equipment that low-ticket items have become profitable. Accuracy of printed communications has provided additional savings by improving legibility and eliminating copying mistakes.



An associated group of gas companies set up a central service center for purchasing and storage of supplies. Each uses a Teletype KSR set to transmit purchase requisitions to the center. The center then fills the request from the form received on their Teletype machine. Besides providing instant communications and



a permanent record of every transaction, the Teletype equipment has helped reduce the cost of supplies some 10 to 20% because the group is able to buy in larger quantities at lower cost.

A group of 11 hospitals have a network of Teletype KSR sets. The primary purpose is to send data from pathological and radiological tests to specialists at one hospital and obtain accurate written analysis more quickly than ever before. These hospitals are also using Teletype equipment to improve the handling of daily adminis-



trative reports and to centralize the purchasing of supplies.

the most automatic way

to send volumes of messages and data is with Teletype automatic send-receive sets.

Remarkable versatility for your communication needs are provided by the new Teletype automatic send-receive sets which are equipped with self-contained tape punch and tape reader units. These sets incorporate all the advantages of KSR sets plus the following benefits of punched tape and automatic operation.

Off-line punching—Operators can punch messages and data off-line, providing errorless copy for later transmission.

Combined messages—Messages and data can be collected from many sources at different times and transmitted on-line more economically at maximum speed in one continuous message. Stored messages—Punched tape makes it possible to store messages or basic data that can be used again and even combined with variable data to save retyping.

Communicates with computers—The Teletype Model 33 and 35 ASR sets operate on 8-level code, which conforms to the newly approved American Standard Code for information interchange. This means they can be connected directly with many business machines and help automate your data processing system even with remote stations.

General uses—Punched tape can be used to speed the flow of messages and data to branch offices, distribution outlets, and distant plants, as well as improve internal administrative communications. More specific applications are shown below.

special engineers for special projects ...in minutes

By sending a message on your Teletype equipment to a computer at a research and engineering center in Minneapolis, it is now possible to find the engineers best qualified to handle any special project or technical problem any time of the day or night.

This is how it works. The information is received at the engineering center on both printed page and 8-level punched tape. The tape is then processed into a computer, which reviews the qualifications of the thousands of engineers listed in its memory. Within minutes the computer's reply is ready for transmission by the Teletype ASR set, providing a detailed description of those most qualified.

automates order processing

A heavy equipment manufacturer formerly processed orders by hand-carrying a multitude of copies to various departments and



manually typing production control forms. All this led to many inaccuracies and time consuming delays.

The firm replaced this method with a system using Teletype ASR equipment, punched tape, punched cards, and a computer. Now the information used in producing one document is available on punched tape to produce the other forms.

For each of the 1400 orders received every month, a "master" tape is pulled from the files which contains the customer's name and address, shipping address, and customer codes. Using this tape the typist prepares a new sales order tape on the Teletype machine adding the customer's order number, routing requested, parts ordered, and quantity.

This new tape is run through the Teletype ASR set which prints it on a four-part order acknowledgment form and transmits the information simultaneously to production control, accounting, and order billing departments. The ASR set "edits" the message so that each department receives only the information necessary to perform its specific functions.

In production control, the information is received on a four-part production release form and punched on tape. Punched cards are then prepared and entered into the "on order" inventory record stored in the computer. When the order is filled, another punched card is fed into the computer and a subtraction made from the available inventory.

In the meantime, the accounting and billing departments have used the order information they received on their Teletype machines to prepare shipping and invoice forms utilizing punched tape, punched cards, and the computer.

This system has enabled the manufacturer to handle a greater volume of orders more economically, while improving the efficiency and speed of order handling, production, and inventory control.

Production run samples of high alloy steel must be analyzed in order to maintain the proper percentage of elements. However, manu-

ally transferring ratio values from dials to calculators, recording the results on laboratory forms, and reporting the information back to the steel making shops, led to errors and delays. Now a computer instantaneously calculates the actual percent concentration for each element. A Teletype ASR set is used to print the ana-



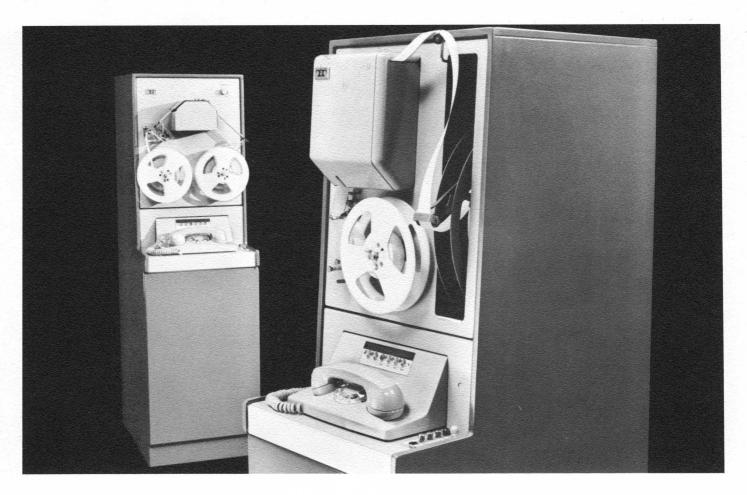
lysis on a lab form and punch it on paper tape. At this point, a lab technician examines the printed analysis and transmits the taped data to Teletype sets within the shop. This new system has reduced the time for analyzing production run samples to about two minutes per sample.



A large transportation company was able to standardize and improve its purchasing program by installing Teletype ASR equipment. Information on each supplier and a description of the parts he has furnished are kept on master punched tapes. When a request for a new supply is received in purchasing, the master tape

is fed through the ASR set along with a new tape containing current information on quantity and delivery.

The ASR set types out a purchase order and at the same time transmits the information to the receiving and tabulating departments. When the order is delivered, the receiving department will relay the punched tape to tabulating where a comparison is made of the original tape with the receiving report and invoice to be certain they all agree. This system has improved the accuracy, speed, and efficiency of the company's purchasing program.



the most rapid way

to send massive amounts of business data is with Telespeed tape-to-tape sets.

New Telespeed tape-to-tape equipment will transmit messages and data at 1,050 wpm (105 characters per second) from punched tape using conventional telephone lines. Business data can be accumulated throughout the regular working day on punched tape and transmitted at the fastest possible rate during non-working hours or at intervals when the line is not in use. And, data transmission can be alternated with voice communication on the same call.

One computer serves all remote locations—Operating on a compatible level with computers and business machines, the tape prepared on these Telespeed sets can be fed directly into them for further processing. This means data acquisition and other computer functions can be programed and coded at remote locations, then transmitted to the home office computer without errors.

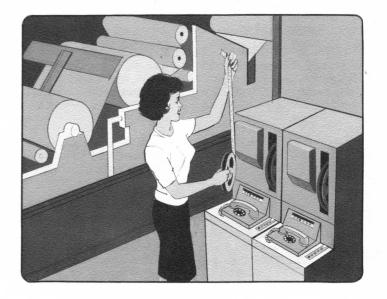
General uses—Applications cover a wide range of areas where volume and speed are important—trunk line transmission between message centers, data collection, data distribution, interchange, computer input and output.

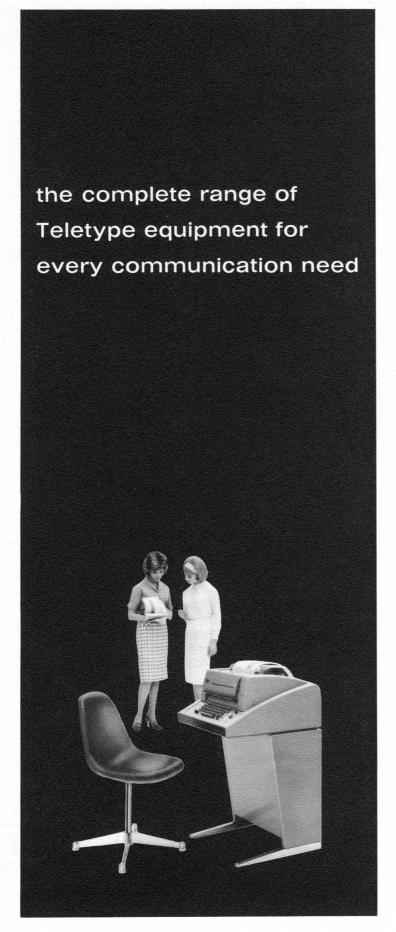
speeds stock prices into print

Newspapers are now able to print final stock returns much faster than ever before through use of the Telespeed tape-to-tape sets.

A computer in New York City keeps up with changes in stock prices throughout the trading session, and within minutes after trading is closed, the final returns are sent on punched tape by Telespeed tape-to-tape machines to receiving units in newspaper offices across the nation. This tape, as received, is compatible with automatic linecasting machines in the composing room.

The complete New York stock listing of more than 2,000 stocks can be fully transmitted within 11 minutes. This is one of many ways Telespeed tape-to-tape sets can improve the operation of sophisticated data processing systems.





Rugged, reliable, and versatile are rather simple words for the very real qualities of Teletype equipment—qualities that become advantages for your data communications systems at a surprisingly low cost.

The new Teletype Model 33 and 35 series are made for operation on 8-level code, which conforms to the newly approved American Standard Code for information interchange. Both series can be used for direct communication with data processing equipment and also have a 4-row keyboard that makes operation easy for any typist. The Telespeed tape-to-tape equipment can be used with Data-Phone and other communication services.

For more information on how Teletype equipment can be an important part of your data communications systems, please write Teletype Corporation.

MODEL 32 SERIES. This economical, standard-duty series has a 3-row keyboard and operates with a 5-level code at 100 wpm.

MODEL 33 SERIES. This low-cost standard-duty series has a new 4-row keyboard and operates at 100 wpm with an 8-level code.

MODEL 35 SERIES. A rugged, heavy-duty series that has a new 4-row keyboard and operates at 100 wpm with an 8-level code.

TELESPEED TAPE-TO-TAPE EQUIPMENT. Capable of 1,050 wpm tape-to-tape transmission, its universal design will handle 5-, 6-, 7-, or 8- level tapes.

Teletype Corporation manufactures this kind of equipment for Western Electric (our parent company), Bell System affiliates, and others who require dependable communications at the lowest possible cost.



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