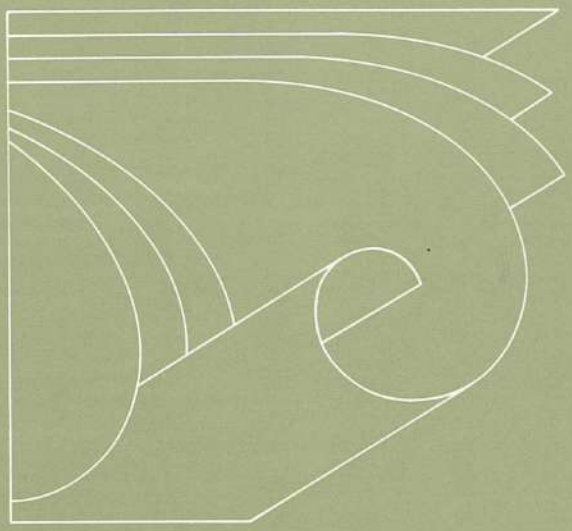
9700

XEROX



Xerox 9700 Electronic Printing System
The Leading Edge in Information Management

The Xerox 9700 Electronic Printing System is the first in a new generation of imaging systems... a system so advanced, it sets new standards for flexibility, quality, *effectiveness* in computer-generated business communications.

Now, the appearance of the printed output is entirely at the discretion of the user, rather than dictated by printing system limitations. Forms, type sizes and styles, page formats, even logos and signatures —all are stored within the Xerox 9700 system and are created electronically, upon demand, concurrently with the variable data.

The Xerox 9700 prints executive-quality reports— each page a xerographic original—on plain, 8½ - by 11-inch paper at two pages per second: up to 18,000 lines per minute, depending on data format. And non-stop operating features maximize productivity: production can continue at full speed while forms or page formats are changed, new jobs entered, paper loaded, or output removed.

Combining computer, laser, and xerographic technologies, the Xerox 9700 allows images of practically unrestricted size, shape, and orientation to be printed directly from digital information. The Xerox 9700 Electronic Printing System is the leading edge in imaging technology... a system so advanced, it challenges your creativity in managing your printed information.

The Leading Edge in Flexibility

What would you like to do that you can't do now?

The Xerox 9700 Electronic Printing System opens new worlds in flexibility of expression. The Xerox 9700 not only accommodates the kind of printing you're doing now, but also prompts you to reassess what you *might* do with computer printing. Executive-quality letters, or billing, for example. Jobs you may now be doing on a typewriter—or sending to a typesetter. Proposals and manuals you may now be sending to the printshop. Or applications that no one has even thought of yet.

With the Xerox 9700, the choice is yours. Here's why.

The Xerox 9700 has virtually no constraints in its formats or use of forms. While you may use the same fixed formats available with other computer printers (132 by 66, 150 by 66, or 132 by 88, for example), you are not limited to these formats. The key is electronic forms generation. Forms and page formats—tailored to meet your individual requirements—are created and stored electronically, giving you the freedom and flexibility to:

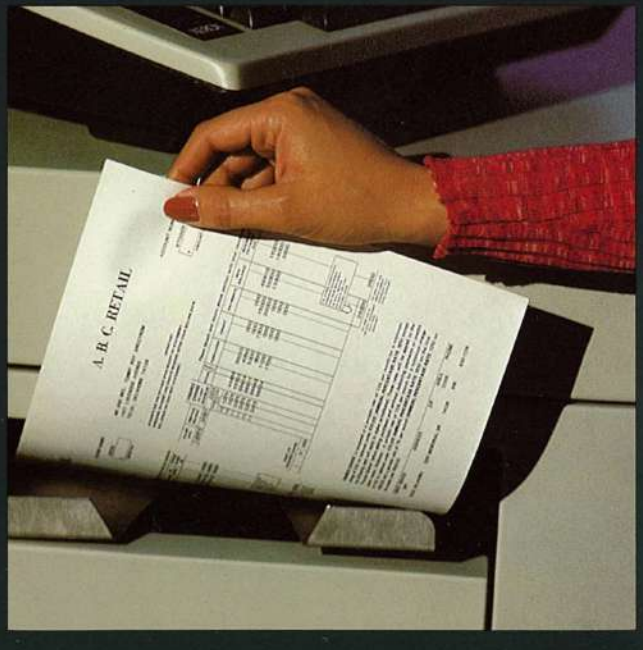
- □ Design and alter forms in minutes at your site
- □ Call forms into use instantaneously
- □ Highlight important form header fields by changing font styles and sizes
- □ Use logos, signatures, corporate type faces, and bar charts or graphs
- □ Rotate page orientation or mix horizontal and vertical type on the same page
- □ Use a different form for each page, up to six per report, with no reduction in printing speed
- □ Customize formatting of computer output without changing applications programs.

And electronic forms generation also means freedom from the tyranny of preprinted forms. The need for most—if not all—preprinted forms is eliminated, eliminating at the same time the expense of forms obsolescence and the time delays from stocking forms and overlays.

The Xerox 9700 provides unprecedented flexibility in font selection. You can customize output for your specific needs because the Xerox 9700 offers unlimited type font styles in sizes ranging from 4 point to 24 point equivalents. Spacing is continuously variable from 3 to 18 lines per inch and from 4 to 30 characters per inch. And if none of the standard type styles or character sets meet your requirements, the Xerox Forms Design Center will help create one that does.

The Xerox 9700 produces executive-quality output. Every page is an original—no need to make do with barely legible carbon copies. Executive-quality appearance is achieved with a character resolution of 300 by 300 dots per square inch. And because there are no carbon copies, messy postprocessing operations such as bursting and decollating are eliminated.

The Xerox 9700 delivers a complete job. Entire reports, cover to cover—including the covers. The Xerox 9700 offers a flexibility in paper grades and weights matched by no other computer printer, ranging from economical 16-pound bond up to 110-pound card stock, including pre-drilled, pre-perforated, and colored papers. And because two stocks can be mixed within a single report, covers and section dividers can be printed and collated with the report itself. Moreover, each report may be customized to its recipient. If you wish to blank out certain portions of text and insert other data, delete paragraphs from some copies, or label other copies "confidential," the Copy Modification Feature allows you to do so—all while the report is running.



The Leading Edge in Technology

The storage, handling, and transmission of information in today's business community is performed increasingly in digital form, yet information use dictates its availability on the printed page. The Xerox 9700 takes digital information and, with a totally electronic imaging system, turns it into high-quality xerographic reports.

The Xerox 9700 merges three major technologies—digital computers, with their capacity for high-speed handling of information; lasers, with their high-resolution imaging capabilities; and xerography, with its ability to produce quality printed output at high speeds—into a system of extraordinary capabilities.

Computers

Digital input from either an IBM System/370 or System/360 computer on-line or a 9-track magnetic tape drive unit off-line is read under program control and buffered on the Xerox 9700 disk unit. This input data is brought into a digital processor memory together with previously stored digital information that will create a form image. The character dispatcher accepts the form and the input data, merges the two images, and sends them to the electronic image generator. Character fonts and forms are stored in the image generator memory as dot patterns; the image generator produces each character and form as electronic patterns which control a scanning laser beam.

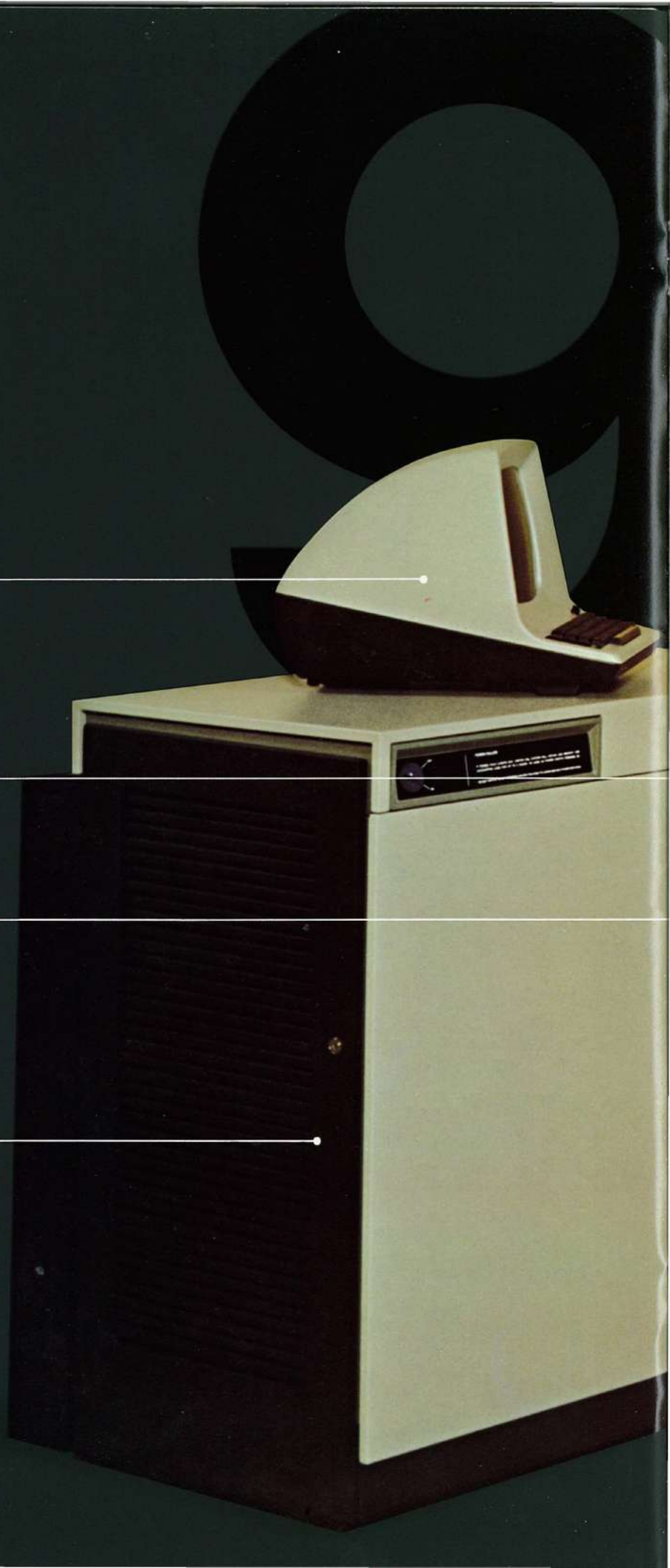
Lasers

The actual character image is formed by the laser beam which scans across an electrically charged, light-sensitive belt. Because light causes this belt to lose its charge, a character is formed by momentarily interrupting the laser light as the beam scans across the belt, similar to the way a pattern is formed by the electron beam on a television screen. And because the narrow laser beam has extremely high resolution—300 by 300 dots to the inch—the 9700 produces output of outstanding quality directly from digital information.

Xerography

The latent image of a printed page, in the form of a charged image on the belt, is moved past the dry ink developer, with the charged areas on the belt attracting the oppositely charged black particles of dry ink. This page image in the form of charged toner particles is transferred and fused to a sheet of paper which is delivered to either of the two output bins or the sample tray. The entire process produces pages at a continuous rate of two per second.

STOPPING DISTANCES
80
60
40
20
0
SPEED - MPH
75
150
225
300
375
STOPPING DISTANCE - FEET

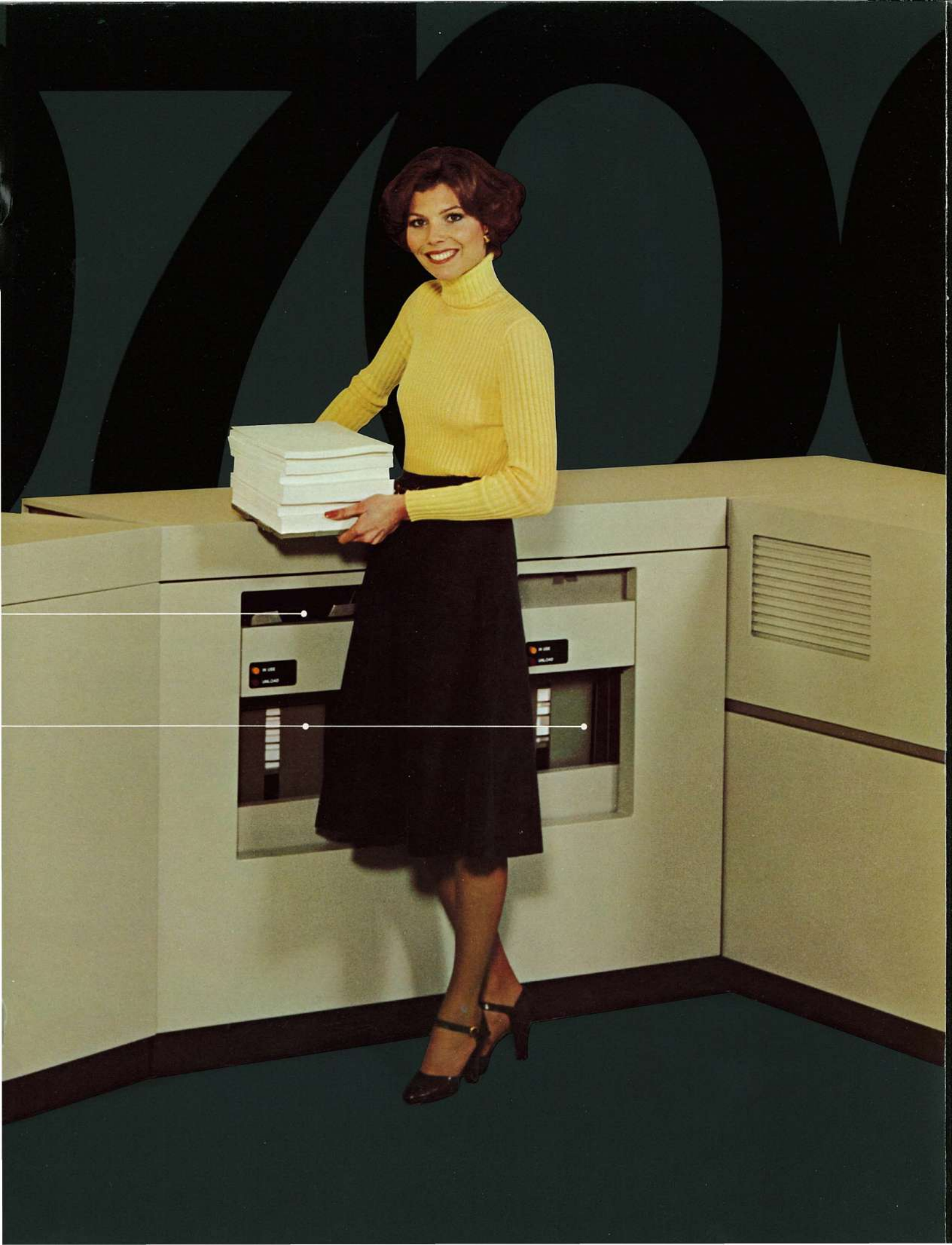


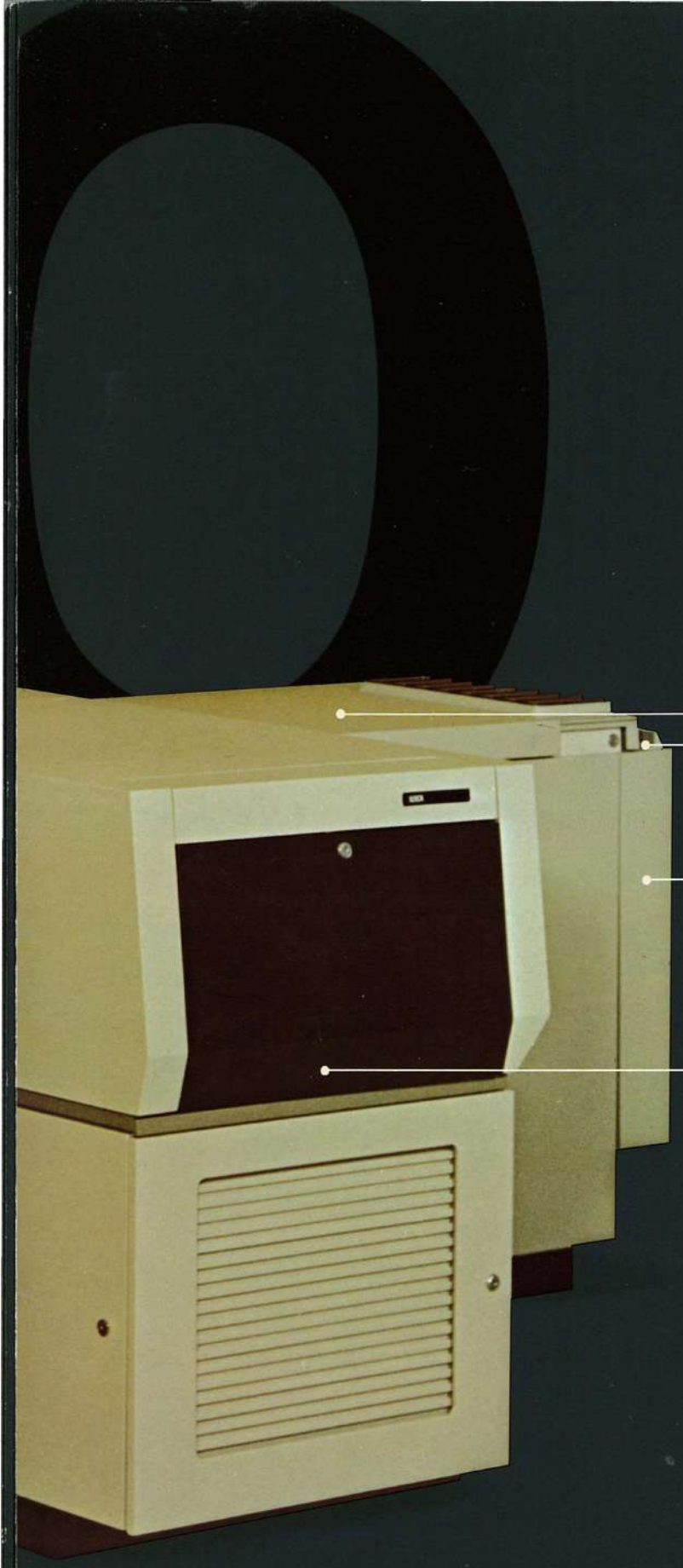
Operator's Keyboard Display Console
Provides the means of operator interaction with the 9700 printing system. Operator uses this console to initiate and monitor jobs. Instructions to operator can also be initiated by the 9700 system and communicated to operator via this CRT console.

Sample Print Tray
Test pages are diverted to this tray on request, allowing monitoring of system operation without interruption of printing.

Output Stackers
Two output stackers assure continuous printing. Output is automatically transferred to second bin after one bin is filled, and operator is notified that output is ready for removal. Easy-access containers can be placed in output stackers to make output easier to remove, carry, and store for distribution.

System Controller
Contains system disk for input buffering, digital processor memory for forms storage, and electronic circuitry for data input and overall system control.

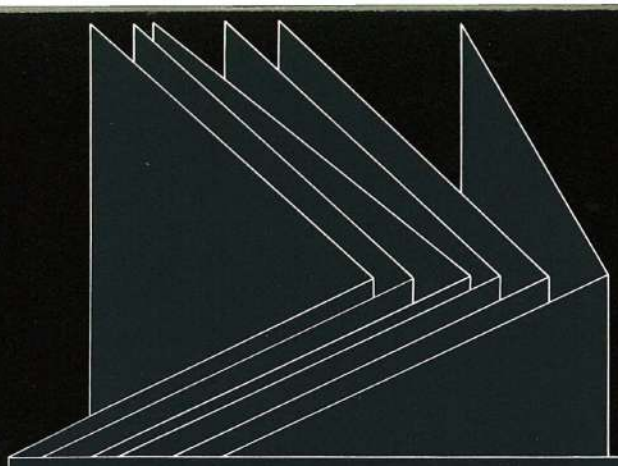




Xerographic Printer
Pages are printed xerographically in this unit at two-per-second speed (up to 18,000 lines per minute, depending upon data format).

Input Paper Trays
Two input trays assure continuous operation. When main tray approaches empty state, operator is signalled and paper feed is automatically transferred to auxiliary tray.

Image Generator
This unit provides electronic control to the laser beam which creates the character images. It accesses the font memory where characters and forms are stored electronically as dot patterns.



The Leading Edge in Productivity

The two-page-per-second printing speed of the Xerox 9700 system—up to 18,000 lines per minute, depending upon data format—is only the beginning. The system's true speed to the user is measured in productivity—that is, the number of pages printed over a period of time that are available for distribution and use. The Xerox 9700 Electronic Printing System is designed to avoid interruptions, simplify and speed the operator's job, and maximize the efficiency of the printing environment.

Dual Input Trays
No need to stop because you run out of paper. Automatic switching and operator notification permit non-stop operation.

Dual Output Stackers
No need to stop the machine to remove output. When one bin is filled, output transfers automatically to the other bin and the operator is notified.

Containerized Output
Output is more easily available for quick distribution. Easy-access containers can be placed in the output stackers to make output easier to handle.

Disk Buffering for Digital Input
No need to stop for new data. The operator has time to mount the tape for a new job while the 9700 prints the end of the previous job. In on-line mode, disk buffering eliminates most retransmission of data from the computer to the 9700 when printing multiple copies of the same report, freeing valuable computer resources.

Electronic Forms Creation
No need to stop the system when changing to a new form or report format, because the data which creates the form is stored digitally. Stored forms can be requested by input data stream or by operator command on the CRT console.

Sample Print Tray
To monitor the printing operation without interruption, simply request a sample and an extra page is automatically generated and deposited in the sample print tray.

Automatic Job Routing
Routing information can be automatically printed on each copy of a report to hasten the distribution process.

Operational Simplicity
Operator intervention is minimal. The operator uses simple English-language commands or function keys to interact with the system.

Operating Mode Flexibility
The Xerox 9700 fits into *your* data processing environment. ON-LINE: The 9700 connects directly to most IBM System/370 or System 360 computers, providing on-line printing capabilities never before available. OFF-LINE: For high-volume print runs (and non-IBM installations), the Xerox 9700 accepts data from magnetic tape. ON-LINE/OFF-LINE SELECTABLE: This option allows either on-line or off-line printing with IBM systems, for the best of both worlds.

Availability
With more experience in non-impact computer printing than any other manufacturer, Xerox has developed system features and maintenance techniques that assure highest availability. The paper path is simplified to reduce the probability of jams. Built-in diagnostic aids reduce mean time to repair. And the Xerox support team provides unmatched maintenance service.

The Leading Edge in System Design and Operation

Take a look at the major system design features and operational units of the Xerox 9700 Electronic Printing System. Each was conceived and implemented with a single purpose: to enhance efficiency.

Keyboard Display
The keyboard display unit provides for operator interaction with the 9700 system. The operator uses this CRT console to initiate and monitor jobs. Conversely, instructions to the operator can be generated within a job and transmitted via the CRT console. The keyboard is used to enter dynamic job changes such as the number of copies desired, or to enter routing information to go with a particular report. The operator can also modify prestored job instructions or forms descriptors from the console.

Input Paper Trays
Two input trays provide for continuous operation. When the main bin, with a 2500-page (20-pound bond) capacity, approaches an empty state, the operator is signalled to prepare to reload. Paper feed is automatically switched to the 400-page auxiliary tray when the main tray is empty, and is automatically returned to the main tray as soon as the auxiliary tray is empty.

Output Stackers
Two output stackers, with a capacity of 1500 pages (20-pound bond) each, permit the system to run continuously. The Xerox 9700 automatically transfers output to the second bin after the first bin is filled, and the system signals the operator that output is ready for removal. The output is collated and the report copies offset from each other, for convenience in distribution.

Containerized Output
Containerized output provides a faster, more convenient way of removing the finished reports from the machine and reducing any possibility of spilled or scattered reports. Easy-access containers can be placed in the output stackers to make the output easier to handle.

Compatibility
The on-line version of the Xerox 9700 is compatible with the larger IBM systems, beginning with the 370/135 and 360/30, and runs under OS and DOS as well as OS/VS1 and OS/VS2. The off-line Xerox 9700 provides 9-track tape compatibility with IBM, Burroughs, Honeywell, and Univac operating environments.

Reliability/Maintainability/Availability
State-of-the-art modular hardware, LSI technology, and built-in diagnostic software features combine to give the Xerox 9700 a high degree of availability. Control software logs system status while the 9700 is running and performs diagnostic procedures. The system also provides for predictive maintenance by logging any intermittent errors that occur. The customer engineer watches for these errors when he performs routine maintenance and can often correct problem areas before they become hard failures.

READY
$
START JOB01, 5 COPIES
STATUS
JOB-ID JOE-ID STATUS PAGES COPIES
JOB00 JOE00 PRINTING 90 6
JOB01 JOE01 RUNNING 75 5
SAMPLE
JOB00 COMPLETED
JOB01 COMPLETED
START JOB02_
XEROX

The Leading Edge in Cost Effectiveness

The Xerox 9700 lets you do nearly everything you could wish with electronic printing. But just as important, the 9700 can also help reduce your costs.

The elimination of preprinted forms and carbon sets saves printing and inventory costs. Use of plain, 8½ - by 11-inch paper provides savings of up to 50 percent or more in preprinted forms and storage costs. Because the Xerox 9700 can use paper as light as 16-pound stock, mailing as well as paper supply costs are reduced. And because the 9700 lets *you* format your output, you can, if you wish, increase productivity and save paper by simply printing in smaller type.

The Xerox 9700 offers savings in labor costs, too. Labor-intensive operations are greatly reduced because of the continuous-operation features and the elimination of postprocessing steps such as bursting and decollating. When printing on-line, the input buffering feature allows the host computer to transfer a large block of data in a single operation and return to its other computing tasks, reducing the load on the CPU.

The Xerox 9700 Electronic Printing System is the best idea yet for putting information on paper. It's fast and flexible. It produces reports that are easier to read and handle. And it is cost effective.

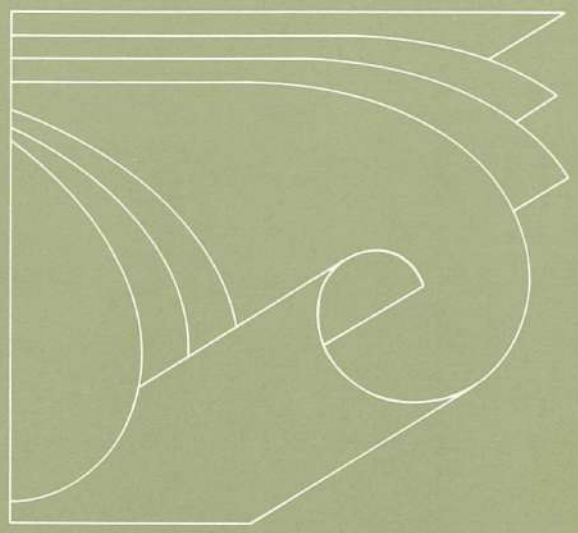
The Leading Edge in Non-Impact Printing Experience

The industry's most advanced computer printing system is made by the industry's most experienced manufacturer of non-impact computer printing systems.

Ever since 1938, when the first xerographic copy was produced, Xerox Corporation has been perfecting this printing process. We entered the computer printing field in 1967 with the Computer Forms Printer, an innovative device that took unwieldy computer fanfold and reduced it to 8½ by 11 inches in size. In 1973 we introduced the Xerox 1200 Computer Printing System, the first in the industry to combine xerographic printing with direct digital input. Now, we extend the limits of printing technology with the Xerox 9700 Electronic Printing System.

When you order a Xerox 9700, you receive far more than an electronic printing system. You get the expertise and support of a company that is dedicated to devising systems for handling information flow—from creation to storage, recall, reproduction, and distribution to the user. The Xerox 9700 system is backed by a Xerox support team of electronic printing specialists—and this team is backed by the company that's been the leading edge in xerographic printing longer than anyone else.

The Xerox 9700 Electronic Printing System is the leading edge in imaging technology... a system so advanced, it sets new standards in computer-generated business communications. To learn more about how you can move to the leading edge, contact a Xerox office near you. Ask for the Data Systems Division representative. Find out how much more electronic printing can do for you.



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