DatagraphiX System 4500, 4550, offers unprecedented power and flexibility in a Computer-Output Microfilm Recorder. A result of over 20 years experience in the COM field, the mini-controlled 4550 incorporates the latest low maintenance solid state components with a design aimed at simplicity of operation and supporting a wide variety of input and output formats.

Through the use of a modern high speed mini-computer, the 4550 adds new dimensions in fiche management by eliminating the need for host computer data handling and reformatting. From almost any standard print tape, the 4550 can produce titled and indexed microfiche or 16mm roll film. The 4550 incorporates a new and quiet, non-impact, Electronic Data Terminal for communicating job set-up requirements. Repetitive jobs may be run from prerecorded set-up data placed on Diskettes and simply replayed. Additional speed and convenience are achieved through a character translator device utilizing a programmable semi-conductor, random access memory (RAM).

A unique camera design provides for interchangeable 16mm or 105mm camera transports and permits vertical or horizontal sequencing of images on 105mm with virtually no wear on the film. In addition, a revolutionary automatic focusing technique insures precise images on the film in any recording mode. The new "all magnetic" CHARACTRON® Shaped Beam Tube creates exceptionally high quality characters that are 12 times brighter than those from previous tubes.

Other features include 500 foot capacity 105mm supply and easy aligning cut-film form slides.
Input Formats

- 9 track phase encoded, 1600 bpi nine-bit parallel data magnetic tape and NRZ
- 566 and 800 bpi 7/9 bit parallel data magnetic tapes.
- Accepts standard fixed and variable length print records from a variety of general purpose computers.

Print Speed

Depending on tape format and density, a wide variety of throughputs are realized (normally in excess of 14,000 lines per minute).

Character Generation

Utilizes precision "all magnetic" CHARACTERON®
- Shaped Beam Tube producing 169 characters including OCR-B font, character highlighting, and many special symbols.

Output Formats

- Standard 105mm camera produces both horizontal and vertical page sequencing.
- Optional 16mm camera produces data in either comic or cine recording mode.
- Page formatting of 80, 132, 144 or 160 characters per line and up to 80 lines per page. Meets all NMA standards, as well as wide flexibility for other formats.

Printhead Circuitry

Modular solid state integrated circuits mounted in sockets on large panels with point to point wrapped wire terminations.

Mini-Computer Controller

Utilizes a 16 bit word, high speed, basic 16K word memory mini-computer; expandable to 31K.
- Accepts direct connection of peripheral devices without modification of the basic unit.

Controller Software

Model 4550 resident software provided which is specifically designed for the data and film management tasks associated with data organization on roll and fiche microfilm. Allows the user to record data from virtually any general purpose computer to organize the data onto titled and indexed microfiche. Offline Com Recorder simulators are provided.

Forms Projection

 Enables business forms to be projected with form lines over computer generated data. A cut-film negative of the form is used and can be changed from one form to another by the operator requiring no special adjustment.

Image Reduction

Choice of 24, 42 or 48X Lenses.

Job Set-Up

All operator communication is controlled through a non-impact all solid state Electronic Data Terminal (EDT). Built-in diskette allows fast set-up of repetitive jobs.

Tape Drive

Integral vacuum column unit operates at 37.5 ips (193.75 cm). Provides simple, one pass loading of tapes, quick release hub, and automatic unloading feature. Read only 556, 800, 1600 bpi drive standard. Optional read/write or additional read/write tape drive available. Controller will handle up to two tape drives.

Other Standard Features

- Error checking, fiche reticle, .25mm incremental film advance, software controllable, Expandol Character Set, bold.

Dimensions

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Weight

Approximately 1,500 pounds (675kg) (all components).

Power

The Model 4550 requires 4200 VA. It can be operated at 60 Hz from 200 or 230 VAC ± 10%, 15 amps per leg. Maximum heat output is 4200 watts or 14,280 BTU's/hour. Other selectable input voltages are: 60 Hz - 200, 206, 217 and 234 VAC, 50 Hz - 200, 215, 220, 230, 240, 246, 380, 400 and 415 VAC. Operating environment: 60°-80°F (159-27°C) ambient temperature 40% - 70% relative humidity.

Options

Memory expandable in 8K modules to 31K, 16mm camera, card reader, 600 LPM printer, and disk (4.8 megabyte), extra diskette three quick change lenses 24, 42, 48X.