

Magnetic Tape Unit Produced By IBM

A self-threading magnetic tape unit, the fastest using standard computer tape, has been announced by International Business Machines Corporation.

The new unit, the IBM 2420, can record or read the equivalent of a 53,000 word book in one second.

Nearly twice as fast as previously available standard IBM tape drives, the 2420 can be used with most large scale System/360's including the new Model 85. It joins an IBM tape unit family that offers a wide range of performance levels to match user requirements.

Information is stored on or read from half-inch wide tape at a data rate of 320,000 bytes (640,000 digits) a second in the 2420—almost as fast as the IBM Hypertape unit. The latter, however, uses special one-inch computer tape.

A new mechanical concept has been incorporated in the tape transport to achieve unprecedented performance levels. For example, to thread tape all an operator has to do is place a tape reel on the machine's hub and press a button. The 2420 does the rest. It carries the tape on a cushion of air across the read/write head to the take up reel where the loose end is automatically secured by a vacuum. The entire operation takes eight seconds, less than half the time required to thread manually.

Automatic threading is especially important in the com-

puter installations where tape reels must be changed frequently.

Other key features contributing to the 2420's high performance include:

Tape speed of 200 inches per second, 500 ips during rewind—fastest of any IBM tape transport. This is made possible by a new, single capstan vacuum drive mechanism.

Anti-friction design in which the tapes recording surface touches nothing but the read/write head and tape cleaner.

1600 bytes per inch packing density. This means that a single inch of tape can record the equivalent of 3,200 decimal digits.

Multi-reel capability. The 2420 can accommodate reels ranging from the standard 10.5 inch diameter to the smallest made for computer use—5 1/2 inch Minireels.

Optional wrap-around cartridge can be used with the 2420 to minimize tape handling. With this cartridge the reel can be loaded in a single operation and the tape is drawn into the threading mechanism automatically.

Compatibility with existing 2420 tape units. The 2420's recording format is standard, allowing it to exchange tapes with any other tape-drive model using the same format.

Initial deliveries are scheduled for the fourth quarter of 1968. The new tape unit will be manufactured at IBM's facilities in Boulder, Col., where it was designed.