



MODEL 75 TABLE

DESCRIPTION

Large area drawing capability up to 5' x 20' is the foremost design feature of the Gerber Model 75 Graphic Display Table. Basically, the table consists of (1) the drawing surface with rubber platen and dust protected carriage racks; (2) digital step motors for carriage drives; (3) an X carriage which spans the width of the table top and travels lengthwise on steel ways; (4) a Y carriage which travels on steel ways mounted within the X carriage; (5) a table base section which supports the top and houses the vacuum unit and table elevation mechanism, (Model 75 Table is adjustable for operation from full horizontal to full vertical); and (6) a sectionalized vacuum hold-down system.

Drawing tools for inking and scribing can be mounted in accessory heads on the Y carriage. A closed circuit TV camera or a line follower head can be mounted on the Y carriage to view graphical data when the graphical display unit is used in the digitizing mode.

All positioning commands, acceleration and deceleration instructions, and tool control signals are received directly from Gerber controls without additional interface. Precise squareness is mechanically fixed; not held by electrical means.

Slew controls can be provided, either on the control system console or on the table's X axis carriage, for manually positioning (or parking) the X and Y carriages.

Size, speed, and accuracy characteristics provide unparalleled

application potential for the Model 75 Table. In the automotive, aircraft, and marine industries, scaled loft drawings of almost any length can be achieved when this table is directed by a control with decimal scaling and zero offset capability. More generally, wherever data volume reaches a magnitude requiring large area graphics presented accurately and at high speeds, the Model 75 Table offers efficient solutions.

MODEL 75 TABLE SPEEDS AND ACCURACIES

Control	Speed*	Accuracy#	Repeatability#
500, 600	400 ipm	± 0.004 inch	± 0.002 inch
	600 ipm	± 0.008 inch	± 0.004 inch
2000B only	500 ipm	± 0.004 inch	± 0.002 inch
	750 ipm	± 0.008 inch	± 0.004 inch

*Speeds are reduced by 20% when table is operated in any but the horizontal position.

#For 5' x 8' through 5' x 16' table areas. For 5' x 20' area, accuracy specifications increase .002 inch, repeatability specifications increase .001 inch.

MODEL 75 TABLE STANDARD SPECIFICATIONS

Type

Flat bed, electrically tiltable from full vertical to full horizontal. (Fixed horizontal model, optionally available less tilt mechanism.)

Active Working Surface

- 5' x 8' (7 vacuum areas)
- 5' x 12' (10 vacuum areas)
- 5' x 16' (11 vacuum areas)
- 5' x 20' (14 vacuum areas)
- A special 8 foot wide table is optionally available

Drive Mechanism

- X Axis: Rack and pinion
- Y Axis: One precision pre-loaded recirculating ball screw

Carriage Positioning

Gerber digital step motor system

Accessory Heads

- Drafting (including wet pens, ball pens, scribing tools):
 - 1 tool head
 - 6 tool head
 - Cutter Simulator Head
- Digitizing:
 - Television Camera (with or without single tool)
 - Television Zoom Lens Head with 2 tools
 - Line Follower Head

Drawing Material Hold-Down

Vacuum pump manifolded to rubber platen drawing surface

Dimensions (inches)

140, 187, 234 or 281 long, 96 deep, 43 high (horizontal)

Weight

4400, 5000, 5500 or 6000 pounds

Construction

Top is a precision manufactured aluminum plate structure fastened to a box and rib configuration secured to two rigid trunion points. Racks and ways are steel.

Power Requirements

120/208 VAC $\pm 10\%$, 3 phase, 4 wire wye plus ground.

MODEL 75 TABLE OPTIONAL ACCESSORIES

Reversible Vacuum — A reversing feature is available on the vacuum system which provides positive pressure to aid in positioning and aligning metal draft and loft plates.

Alignment Aids — Illuminated plexiglass reticles flush-mounted in the table surface are available to aid in relocation of drafting or digitizing materials.

Slew Control — Slew controls can be installed, either within the operator's console or on the X axis carriage, for use in manually positioning (or parking) the X and Y carriages.

Six-Position Head — A drawing head with six positions plus seventh station for magnifying reticle is available for equipping the Model 75 Table to provide automatic selection from six different drawing tools. Wet ink cartridges, ball point pens, or scribing devices can be positioned manually or under program control to distinguish graphic data by varying color and/or line width.

Cutter Simulator Head — A head which can simulate the path of an N/C cutter is available. This head contains a single pen plus a rotating marking device with sweep diameter adjustable up to five inches. The head is used with pressure-sensitive paper or over carbon paper at speeds up to 300 ipm.

Digitizing Heads — Several heads are available for digitizing or digitizing and drafting capability. The TV Camera Head contains a 729 line scan closed circuit television camera with illuminated crosshair reticle for viewing the table surface during digitizing operations. This head is available with or without a single tool holder which accommodates inking and scribing devices.

The TV Zoom Head contains a 729 line scan closed circuit television camera and 10:1 ratio zoom lens system with illuminated reticles for viewing the table surface during digitizing operations. This head is equipped with two tool holders which accommodate inking and scribing devices.

The Line Follower Head includes a video sensing system, 729 line scan closed circuit television camera for viewing the table surface during digitizing operations, and a single tool holder for drafting operations.

Manual Roll Feed — A manual roll feed device provides for drawing or scribing material storage and take-up. Roll holders and axles are located at one end of the table and can be adjusted to accommodate any drawing material size.

Optical Magnifier — A magnifying reticle, used for visual alignment of scribing material. Several configurations are available, mounted independently or on other heads.



THE GERBER SCIENTIFIC INSTRUMENT COMPANY
P.O. BOX 305 HARTFORD, CONN. 06101 TEL. (203) 644-1551 TWX 710-427-2218