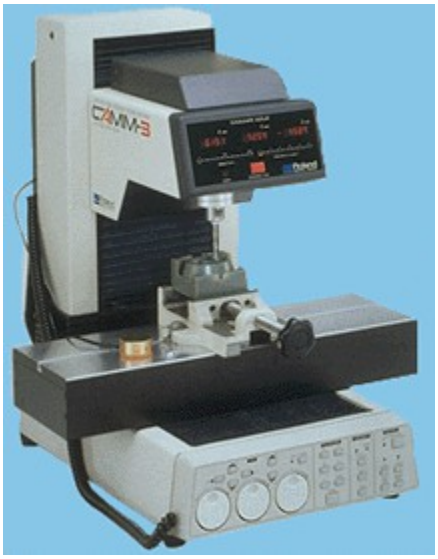
Roland CAMM3 Three-Axis Devices
PNC-3000



CAMM-3.. Three-Dimensional Modeling At A New Level.

The Roland CAMM-3 (Computer Aided Modeling Machine) is a totally new device on the microcomputer CAD/CAM scene. This compact, personal-use modeling machine allows the designer to try out the ideas in three dimensional form with the same data and programs for drawing plans on an X-Y plotter. The design/modeling process is shortened and places under total of the personal computer user.

But the CAMM-3 is more than a handy CAD/CAM peripheral – other interesting applications include letter engraving, PC board drilling, small lot production, and other jobs that would normally require expensive NC production machinery. Once again, Roland takes the latest in computer peripheral technology and makes it available to the personal computer user – and, as it always is the case with Roland products the possibilities are limitless!

The compact, easy-to-use CAMM-3 has been designed with the personal computer user in mind.

Just how does the CAMM-3 produce models with X-Y plotter graphic language commands? Note the X-Y table of the unit. This table moves to the left and the right, or forward and backward according to the X and Y axis related commands it receives. Now look up to the spindle unit above the table. The spindle holds a cutting tool which drills, mills, or routs the modeling material moved by the X-Y table. The up and down movement of the cutting control is controlled by the Z axis commands. X, Y and Z – three axes for three dimensional modeling.

The CAMM-3 can model, drill or engrave plastics, wax, wood, even aluminum and brass. All movement is in precise units of 0.01mm, and the largest block of material the CAMM-3 can model is 180mm (X) by 150mm (Y) by 150mm (Z).

The CAMM-3 can be used on a table top in most any room and has been designed so that it is no more difficult to operate or program than an X-Y plotter. It can be driven with most any computer on the market today. Plotter programs and CAD software such as AUTOCAD™ can be used to model on the CAMM-3.

For the user who wants to get the most out of the CAMM-3 with his or her own programs there is CAMM-GL1, the language that controls the CAMM-3. A knowledge of BASIC and plotter graphic lnguge commands is all that is needed to understand the basics of programming, and once the operator masters the additional Z axis commands (cutting tool up/down), even smooth, wavy shapes are easy to produce. Commands for special shapes such as circles, curves, rectangles and wedges are handy programming tools, and an international font set is included for name plates and signs in many languages.

The manual controls have been designed to make for safe, efficient operation and the CAMM-3 even has a built-in memory for movement withought porgramming if necessary. The operator "teaches" the CAMM-3 positions using the JOG controls and WRITE key. Press the START key and the CAMM-3 will move automatically to each position from start to finish.

Standard accessories such as a sensor switch help the operator to model with precision. The display panel gives an accurate view of the current position and the EMERGENCY STOP button is in an easy-to-reach location.

CAMM-3 Model PNC-3000 Specifications

XY TABLE SIZE	500mm x 170mm (19-11/16" x 6-11/16")
AXIS TRAVEL (XYZ)	180mm x 150mm x 150mm (7-1/8" x 5-15/16" x 5-15/16")
TOOL CHUCK	Collet Type (drill chuck optional)
PRECISION	0.01mm/step Internal Processing at 0.005mm/step
MAX FEED RATE (SPEED)	1.2M/min. (set either manually or by programming)
SPINDLE MOTOR	100W, AC Commulator Motor
WEIGHT	55kg (121.3lb.)
DIMENSIONS (WHD)	500mm x 580mm x 580mm (19-11/16" x 22-7/8" x 22-7/8")
SPINDLE RPM	3,000~8,000rpm (with manual control)
INTERFACE	Parallel (Centronics)/Serial (RS-232C)
DISPLAYS	X, Y and Z Axis Digital Coordinate Displays (unit-0.01mm), Table Feed Rate, Spindle RPM, Error Indicator
CONTROLS	Control-PAUSE, MOTOR ON/OFF, DISPLAY RESET, SENSOR, FEED RATE Data Input-ON/OFF, WRITE, START Positioning-Z0, Z1, Z2, P1, P@, HOME, ENTER JOG-Fast Feed Keys (X, Y, Z), Fine Adjust Dials (X, Y, Z), MANUAL ON/OFF Emergency Stop; Spindle Motor Control; Power Switch
CONTROL COMMANDS	CAMM-GL1 (CAMM Graphic Language 1)
STANDARD ACCESSORIES	Collect Chuck, Collet Wrenches (2), AC Cord, Carrying Bolts (4), Sensor Switch, Fuses (2), AC Motor Brushes (4), T Nut Sets (2), User's Manual, CAMM-GL1 Command Reference Manual.