CAMM-2

Model PNC-2300A

Open up a whole new world of 2D and 3D engraving.
A desktop engraver PNC-2300A, the machine you've been waiting for.

Roland's new CAMM-2 Model PNC-2300A is a professional engraving machine offering state-of-the-art technology at a very affordable price. All CAMM-2 functions have been meticulously engineered to offer the easiest possible operation, while increasing overall capabilities. The CAMM-2's engraving speed, higher torque motor, enclosed case, safety switch, and improved mechanical precision make it one of the most advanced engraving systems available today.

PNC-2300A, CAMM-2 Desktop Engraver

Large Work Area

The PNC-2300A offers a 12"x9" engraving area which gives you the flexibility of engraving large images or doing multiple jobs.

Sturdy, Safe Construction

The PNC-2300A's body and cover are constructed from high grade, sturdy metal to offer extra dependability. It also comes with a plexi-glass safety cover that features an inter-lock switch. If the cover is opened during operation, the machine will automatically shut down to prevent personal injury. The safety cover also prevents eye injury from flying debris, and reduces unnecessary noise to protect the operator's hearing. And in the unlikely event of an emergency, the PNC-2300A comes with an easily accessible emergency shut-off switch.

Versatile Tool Options

The PNC-2300A gives you a wide variety of tool choices right out of the box. You have the option of using two industry standard tool sizes: 1/8" (3.175mm) and 11/64" (4.56mm). In addition, the PNC-2300A includes the ability to use a diamond drag tool.

Re-plot Function

The PNC-2300A comes with a standard 1MB data buffer for quick and easy re-plotting. Re-plotting is an extremely effective way of increasing your productivity by not requiring you to continually output from your computer.

Multi-Functional, LCD Display

The PNC-2300A gives you a wide variety of functional controls within a very easy to use, LCD user display. Many functions, like speed and depth, can even be controlled by software to make your business more productive.

Wide Variety of Materials

Engrave, cut, and scribe on a wide variety of materials for added flexibility. Compatible materials include light metals like brass and aluminum, as well as plastics and acrylics. With a spindle speed of up to 15,000 RPM, you can engrave into these materials even faster.

Includes Feature Rich Dr. Engrave Software and Windows 95/98/ NT Driver

Dr. Engrave lets you use a wide variety of fonts and clip art. You have the option of using industry standard TrueType fonts, or even converting those fonts to single-line, engraving fonts. In addition, you can create your own designs or import a Windows bitmap file or Vector Art (DXF) files from vector art from Roland.

Dr. Engrave features an automatic layout function that allows you to import your CSV formatted database for faster engraving output. Dr. Engrave quickly and easily imports your data and optimally lays out your job to fit the material.

CAMM-2 Specifications

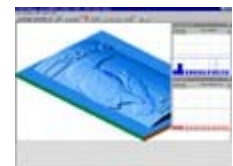| MODEL	PNC-2300A
TABLE SIZE	12" x 9" (305 mm x 230 mm)
MAX. WORKING AREA (X x Y x Z)	12" x 9" x 1.125" (305 mm x 230 mm x 30 mm)
SPINDLE MOTOR	30 W (DC Motor)
ROTATION SPEED	5,000 - 15,000 rpm
FEEDING RATE	X, Y axis: 141.688" (3600 mm)/min.; Z axis: 70.813" (1800 mm)/min. (MAX.)
MECHANICAL RESOLUTION	X, Y and Z axis: 0.00125 mm/step (micro-step control)
SOFTWARE RESOLUTION	0.01 mm/step or 0.025 mm/step (X,Y axis only)
SMOOTHING	Installed
POWER CONSUMPTION	1.8A/117V, 0.9A/220-230V, 0.9A/230-240V
INTERFACE	Parallel (Centronics), Serial (RS-232C)
BUFFER SIZE	1 MB
INSTRUCTION SYSTEM	CAMM-GL I (mode 1, mode 2)
DIMENSIONS (W x D x H)	23.313" x 20.875" x 14.063" (592mm x 530mm x 357mm)
WEIGHT	62.8 lbs.(28.5 Kg)
ENVIRONMENTAL REQUIREMENTS	Temperature: 41º - 104º fahrenheit (5 - 40º celsius) Humidity: 35% - 80% (non-condensing)
ACCESSORIES	Power Cord, Depth Regulator Nose, Character Cutter (3.175 mm diameter), Tool Holder (3.175 mm diameter), Collet (3.175 diameter),Tool Holder (for 4.36mm diameter), Collet (4.36 mm), Hexagonal Screw Driver, Wrench x 2, Spare Tool Securing Screw, Adhesive Sheet, Clamp x 3, Vacuum Adapter Set, Motor Brush x 2, User's Manual, Setup Guide, PNC-2300A 2.5D Driver for Windows® 95/98/NT, Dr. Engrave software for Windows® 95/98/NT, MODELA Player 3D software for Windows® 95/98/NT.

Bundled Software

Roland DGA Corporation is an established leader in the manufacture of innovative digital input and output devices for a wide variety of industries, including engineering, engraving, graphic design, jewelry making, manufacturing, mold making, rapid prototyping, and signmaking. Each and every Roland machine is designed to establish a new benchmark for performance and price. Powerful, easy-to-use software compatible with popular industry standards is included in the price of the machines.

3D Engrave

3D Engrave uses 2D graphics or bitmaps to generate a 3D relief model. Importing a PIX file from a Roland 3D scanner is also available for creating 3D designs. The models can be viewed in complete 3D and have user-defined resolution settings to determine the final detail. Machining output is performed from within 3D Engrave and contains most of the same features found in MODELA Player. Included with PNC-2300 and 2300A; PNC-300,3000, 3100 and 3200; MDX-3, 15 and 500.

Virtual MODELA
Virtual MODELA enables simulation of finished 3D models and accurately estimates machining production time.Lighting effects, material color or bitmap overlays can be added for accurate finished product representation. Access can be directly achieved from 3D Engrave, MODELA Player or from import of a PRN file. Included with PNC-2300 and 2300A; PNC-300,3000, 3100 and 3200; MDX-3, 15 and 500.
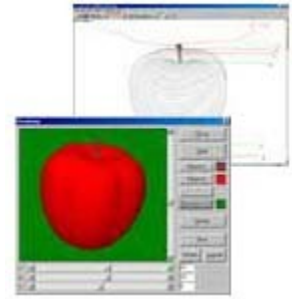

MODELA Player

MODELA Player is a CAM software application that accepts DXF and STL files exported from commercially available CAD/CAM software. It also allows for uniform 3D scaling, selection of milling direction and automatic generation and display of the tool path. Cutting depths and speeds are controlled from a predefined material library or can be set to user-defined specifications. Included with PNC-2300 and 2300A; PNC-300,3000, 3100 and 3200; MDX-3, 15 and 500.

MODELA 3D DESIGN

MODELA 3D DESIGN makes it possible to intuitively create 3D shapes called "objects." An object is created by taking a predefined shape such as a cylinder or sphere and using control rods called "reference lines" to modify the basic shape into the final design. The software also allows adding color for rendering the created shape. Similar to 3D TEXT, files are imported directly to MODELA Player or exported as 3D DXF files. Included with PNC-2300 and 2300A; PNC-300,3000, 3100 and 3200; MDX-3, 15 and 500.

MODELA 3D TEXT

MODELA 3D TEXT will turn any Windows True Type font into a 3D relief for automatic import to MODELA Player or a 3D DXF file format. Included with PNC-2300 and 2300A; PNC-300,3000, 3100 and 3200; MDX-3, 15 and 500.
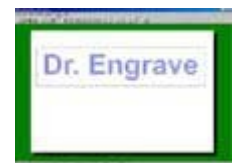
Dr. PICZA

Dr. PICZA is a comprehensive, dedicated scanning software. Packed with easy-to-use functions, it can reduce data volume by reducing the resolution of all or part of the captured data, or it can rescan part of the object at a finer scanning pitch and automatically combine it with the original data. Dr. PICZA is designed as an input GUI software controller for any of the PIX series scanners. It supports an array of data output formats including DXF (CAD data), STL 3DMF (3D format standard), gray scale BMP and coming soon, IGES export ability. Included with the PIX-3, 4 and 30; also the MDX-15.

Dr. Engrave

Dr. Engrave features an automatic layout function that allows you to import your Excel - CSV formatted database files for faster engraving output. Dr. Engrave quickly and easily imports your data and optimally lays out your job to fit the material. Automatic serialization is also a built-in feature. One of the true benefits is the ability to convert any Windows True Type font to a single line font for optimal engraving. Included with PNC-2300 and 2300A; PNC-300,3000, 3100 and 3200; MDX-3, 15 and 500.

Dr. STIKA Plus

Dr. STIKA Plus is designed specially for STIKA users. It allows you to create your own personalized graphics by just clicking and dragging designed shapes or fonts. It incorporates any Windows True Type font as well as a built-in raster to vector converter. Included with the STX-7 and 8.

Compatibility

	MODLEA Player	Virtual MODLEA	MODLEA 3D DESIGN	MODLEA 3D TEXT	3D Engrave	DR. Engrave	DR. PICZA	DR. STIKA PLUS	Driver for Windows
MDX-500	■	■	■	■	■	■			■
MDX-15	■	■	■	■	■	■		■	■
MDX-3	■	■	■	■	■	■			■
PNC-3200	■	■	■	■	■	■			■
PNC-3100	■	■	■	■	■	■			■
PNC-3000	■	■	■	■	■	■			■
PNC-300	■	■	■	■	■	■			■
PNC-2300A	■	■	■	■	■	■			■
PNC-2300	■	■	■	■	■	■			■
PIX-30								■	
PIX-4								■	
PIX-3								■	
STX-7								■	■
STX-8								■	■