



# 3D Workbench Solutions

## Simpler, More Powerful 3D Scanning And Milling Solutions From Start To Finish

Roland makes your 3D projects come roaring to life with a full line of high performance 3D scanning and milling machines — each designed from the ground up to make product design, benchtop prototyping, reverse engineering, animation and more easy, whether you're just adding 3D capabilities to your shop or you are already an industry expert. Plus, each comes with a complete software suite to help you get the most out of your new machine.



### Combo Machines — Scan and Mill

#### MDX-15, MDX-20, MDX-40 Desktop Rapid Prototyping.

Benchtop prototyping has never been easier. Ideal for jewelers and product designers on a budget. These desktop machines mill tooling board, resins, and plastics with ease. So you can test form, fit, and function with ease, making them the perfect choices for prototypes, parts, and precision models. While the MDX-15 and MDX-20 models feature scanning and milling in one at a resolution of up to 0.002" scanning and 0.001" milling, the MDX-40 offers unattended 360-degree milling and

accommodates an optional 3D scanning head that uses Roland's innovative Active Piezo Sensor technology — ideal for reverse engineering. Powerful CAM and simulation software included enables you to get started immediately. Work volumes: MDX-15: 6" x 4" x 2.37"; MDX-20: 8" x 6" x 2.37"; MDX-40: 12" x 12" x 4.12". Bundled with MODELA Player4™, MODELA 3D Design™, Dr. PICZA™ and Virtual MODELA™, Dr. Engrave™, and 3D Engrave. **MDX-15 Price: \$2,995 MDX-20 Price: \$4,495 MDX-40 Price: \$10,995**

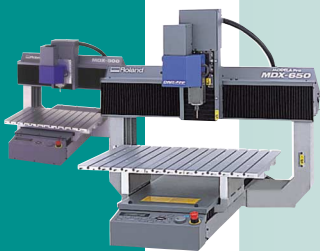


### Milling Machines

#### MDX-500 and MDX-650 Benchtop SRP® and CNC Milling.

Turn CAD files into 3D prototypes and molds quickly and inexpensively with virtually no finishing required. These advanced milling machines run on AC Servo motors on all three axes and use Feed Forward Processing technology to mill ABS, modeling wax, aluminum, brass, and other non-ferrous metals with speed and precision. With its optional rotary axis, the MDX-650 can mill an object's full circumference. The Roland Automatic Tool Changer further reduces product development

time and cost by enabling you to run the MDX-650 completely unattended. Both machines mill up to 200 inches per minute at up to 0.000039" step resolution. MDX-650 work volume: 25.59" x 17.72" x 6.10"; MDX-500 work volume: 19.69" x 12.99" x 4.13". Bundled with MODELA Player4, MODELA 3D Design, Virtual MODELA, Dr. Engrave™ and 3D Engrave. **MDX-500 Price: \$19,995 MDX-650 Price: \$23,995 MDX-650 Price: \$29,995 with automatic tool changer**



### Scanning Machines

#### PIX-4 and PIX-30 Power, speed, and innovation built-in.

Powerful 3D scanning at an affordable price — right from the desktop. Roland's Active Piezo Sensor technology ensures exceptionally high-precision scanning and the ability to generate wire-frame models for reverse engineering, rapid prototyping, and computer graphics and animation.

The PIX-30 offers a maximum work area of 12" x 8", while the PIX-4 offers 6" x 4". Both have a Z-axis height of 2.38" and a minimum scan pitch of 0.002". Bundled with Dr. PICZA. **PIX-4 Price: \$1,995 PIX-30 Price: \$3,495**



**Roland**  
Advanced Solutions Division



## LPX-250 and LPX-1200 Dual Mode Scanning.

The LPX series has revolutionized laser scanning by combining both rotary and plane scanning in one — at a breakthrough pricepoint. One-button operation gives engineers, designers of prosthetics and other products, animators, and game developers the ability to quickly, easily, and accurately scan objects right from the desktop. The LPX-250 can

scan objects up to 16" height x 10" diameter at 0.008" resolution, while the LPX-1200 scans up to 8" height x 5" diameter at 0.0039" resolution. The 1200's powerful software supports robust polygon to NURB surface conversion editing. Bundled with Dr. PICZA3 and Pixform™ or PixformPro.

**LPX-250 Price: \$9,995**

**LPX-1200 Price: \$21,995**

## Supercharge your projects with powerful prototyping and editing suites.

Roland 3D machines come with easy-to-use software that makes it simple to begin using your new scanning and milling tools right out of the box. Each comes complete with step-by-step tutorials and all are designed to work with popular industry standards in a wide range of industries, from product design, to jewelry making, to animation.

**Dr. Engrave™** gets you started fast, automatically sizing your job to fit the specified material. It comes with Windows® TrueType™ fonts and can convert them to single-line fonts for optimal engraving. Plus, it gives you the ability to import Excel™ and CSV database files — useful for nametags and nameplates.

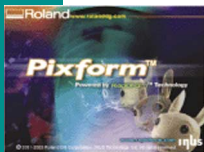
**MODELA Player** makes it possible to scale 3D images uniformly and select milling direction, depth and speed. MODELA Player accepts DXF, IGES, and STL files from all popular CAD/CAM software.

**MODELA 3D Design** gives you the ability to create and add color to 3D objects, such as cylinders and spheres. Import files directly or export MODELA files in 3D DXF format.

**Dr. PICZA** is a comprehensive, dedicated scanning software that reduces data volume by minimizing resolution on all or part of the captured data. It can also rescan part of the object at a finer scanning pitch and automatically combine it with the original data. It supports an array of data formats, including DXF, STL, 3DMF, gray scale BMP, and can export as IGES files.

**Virtual MODELA** simulates finished 3D models and accurately estimates machining production time. Add lighting effects, material color, and bitmap overlays to simulate finished products.

**Pixform and Pixform Pro.** Pixform, included with the LPX-250, enables you to decimate, edit, and heal scanned data. Convert a polygon solid to a NURBS surface in one easy step, then export it as an IGES file to industry-standard MCAD software. Pixform Pro, bundled with the LPX-1200, makes it easier and more efficient to edit 3D models. It enables you to merge scans for increased quality, change shapes around curved surfaces, sharpen edges, extend shapes, add thickness, and perform Boolean operations on polygon surfaces.



Roland reserves the right to make changes in specifications, materials or accessories without notice. Your actual output may vary. For optimum output quality, periodic maintenance to critical components may be required. Please contact your Roland dealer for details. No guarantee or warranty is implied other than expressly stated. Roland shall not be liable for any incidental or consequential damages, whether foreseeable or not, caused by defects in such products. All trademarks are the property of their respective owners.

 **Roland**® Authorized Dealer:  
Advanced Solutions Division

[www.RolandASD.com](http://www.RolandASD.com)

Certified ISO 9001: 2000 © 2005 Roland ASD

RASD-3DWB-04