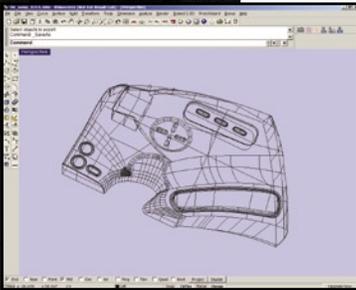
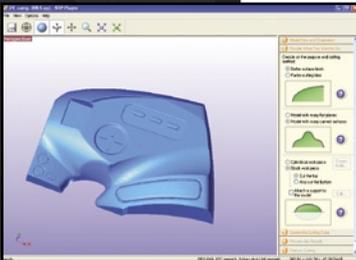


# MDX-540 SRP<sup>®</sup> SYSTEM

Precision Prototyping Made Easy



Generate 3D models with your favorite CAD software.



New SRP Player software is a user friendly, wizard based CAM program offering uniform 3D scaling, support for 4-axis milling and simulation of finished 3D parts.



Precision X,Y,Z motion control enables you to create smooth detailed prototypes from a wide array of non-proprietary materials.



Finished prototypes offer tighter dimensional accuracies and a smooth surface finish.



Shown with available options

Anyway you look at it – the MDX-540 SRP<sup>®</sup> Series is a winner. The MDX-540 combines precision desktop milling with powerful CAM software, making it easy to produce models with industry leading speed and accuracy.

Available in four models, the MDX-540 produces functional prototypes made from popular engineered plastics such as ABS, Delrin, and nylon. These prototypes are well-suited for structural, thermal, and electrical testing and meet a host of FDA and other government regulations. The MDX-540 can also mill small lot production of intricate metal parts, EDM electrodes for production tooling, and custom jewelry.

Bundled SRP Player CAM software automates the prototyping process and generates tool paths with high speed and precision. The user-friendly, wizard-based program offers uniform 3D scaling, support for 4-axis milling, and simulation of finished 3D parts. It lets engineers quickly review the simulated prototype on the monitor and send it to the MDX-540 for production. The end result is faster prototype production, tighter dimensional accuracies and smooth layer-free surfaces.

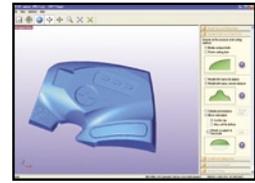
  
Advanced Solutions Division

# MDX-540 Milling Machine Specifications

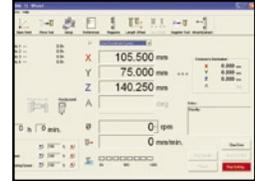
# MDX-540 SRP® SYSTEM

MODEL	MDX-540	MDX-540S	MDX-540A	MDX-540SA
Usable Materials	Plastic, resin, wood and non-ferrous metals			
XYZ-Axis Travel	19.6(X) x 15.7(Y) x 6.1"(Z) [500 (X) x 400 (Y) x 155 mm (Z)]		15.7(X) x 15.7(Y) x 6.1"(Z)[400 (X) x 400 (Y) x 155 mm (Z)]	
Milling Area with Optional Rotary Axis (ZCL-540)	7.0" Diameter x 14.6" Length [177.8mm Diameter x 370.8mm Length]			
Distance From Spindle Nose to Table	Maximum 10" (254mm)			
Table Size	21.7(W) x 16.5"(D) [550(W) x 420mm (D)]			
Loadable workpiece weight	At acceleration of 0.2G: maximum 26lb (12kg), 0.1G: 44lb (20kg), 0.05G: 44lb (20kg)			
XYZ-axis drive system	AC servo motor, 60W	AC servo motor, 80W	AC servo motor, 60W	AC servo motor, 80W
Operating speed	Maximum 295ipm (7.5m/min)			
Acceleration	0.2G, 0.1G, 0.05G			
Software resolution	RML-1 mode: 0.0004" (0.01mm), NC-code mode: 0.00004" (0.001mm)			
Mechanical resolution	0.00004" (0.001mm)			
Positioning accuracy	+/-0.004"/12" (+/-0.1mm/300mm), under no-load conditions			
Repeat accuracy	+/-0.002"/(+/-0.05mm), under no-load conditions	+/-0.0008"/(+0.02mm), under no-load conditions	+/-0.002"/(+/-0.05mm), under no-load conditions	+/-0.0008"/(+/-0.02mm), under no-load conditions
Origin reproducibility (when the power is switched on/off)	+/-0.002"/(+/-0.05mm)	+/-0.0008"/(+/-0.02mm)	+/-0.002"/(+/-0.05mm)	+/-0.0008"/(+/-0.02mm)
Spindle motor	DC brushless motor, maximum 400W			
Spindle speed	400 to 12,000 rpm; 400 to 3,000 rpm for positioning and centering			
Tool chuck	Collet method, maximum tool diameter: 0.4" (10mm)		Tool holder format, Taper shank: JBS4002 15T	
Control command sets	RML-1 and NC codes			
Interface	USB (compliant with Universal Serial Bus Specification Revision 1.1)			
Power supply	Voltage and frequency: AC 100 to 120 V/220 to 240 V +/-10%, 50/60 Hz Required power capacity: 7A (100 to 120V)/4A (220 to 240V)			
Power consumption	Approx. 700W			
Acoustic noise level	During operation (no cutting): 65dB (A) or less, during standby: 40dB (A) or less (according to ISO 7779)			
Dimensions	Width x depth x height: 29.3 x 37.6 x 33.8" (745 x 955 x 858mm)	Width x depth x height: 30.1 x 37.6 x 33.8" (765 x 955 x 858mm)	Width x depth x height: 29.3 x 37.6 x 33.8" (745 x 955 x 858mm)	Width x depth x height: 30.1 x 37.6 x 33.8" (765 x 955 x 858mm)
Weight	225lb (102kg)		249lb (109kg)	
Operating temperature	41 to 104F (5 to 40C)			
Operating humidity	35 to 80% (no condensation)			
Included Items	Handy panel, power cord, tool sensor, sensor cable, nut, nut wrench, wrench, hexagonal wrenches, Roland Software CD-ROM, SRP Player CD-ROM, User's Manual, Roland Software Guide, SRP Player Installation and Setup Guide, and NC Code Reference Manual		Handy panel, power cord, tool sensor, sensor cable, nut, nut wrench, wrench, hexagonal wrenches, Roland Software CD-ROM, SRP Player CD-ROM, User's Manual, Roland Software Guide, SRP Player Installation and Setup Guide, NC Code Reference Manual, and Automatic Tool Changer (Refer to the ZAT-540 specs below.)	
<b>Automatic Tool Changer (ZAT-540)</b>				
Number of tools housed	4			
Maximum tool length	4.3" (110mm)			
Maximum tool diameter	0.4" (10mm)			
Maximum tool weight	0.77lb (350g)			
Tool-holder format	Taper shank: JBS4002 15T			
Tool-selection method	Direct-changing type, fixed-address specification			
Compatible compressed air	102 to 145 psi, 1.8CFM (0.7 to 1.0 MPa, 50 L/min or higher)			
Spindle speed	400 to 12,000 rpm; 400 to 3,000 rpm for positioning and centering			
Weight	15lb (6.8kg) (total weight including spindle, magazine, control box, etc.)			
Included items	Control box, magazine unit, ATC spindle, air cylinder, base plate, Z-origin sensor, spacer, cap screws, hexagonal wrenches, retaining bands, cable retainers, and user's manual			

## Included Items:



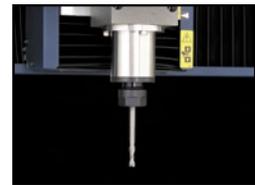
SRP Player Software



Virtual Control Panel



Handy Panel

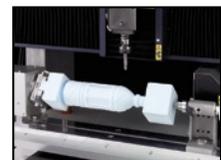


High Speed Spindle

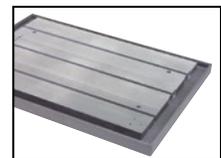
## Optional Items:



Automatic Tool Changer (ZAT-540)



Rotary Axis (ZCL-540)



T-Slot (ZTT-540)



Safety Cover (ZBX-540E)

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