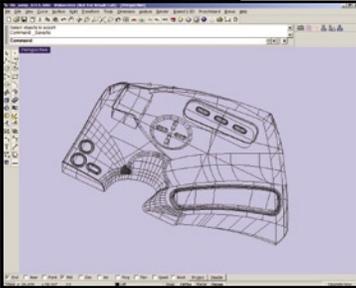
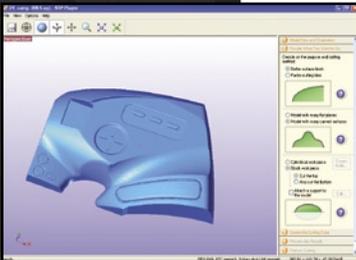


# MDX-540 SRP<sup>®</sup> SYSTEM

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.

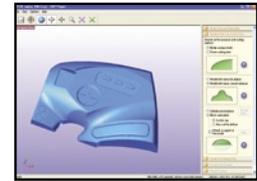
  
Advanced Solutions Division

# 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<br>[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<br>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:



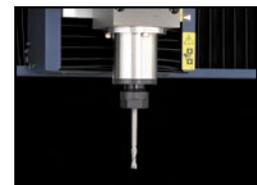
SRP Player Software



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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