Many product designers and engineers who are researching additive RP systems as a way to test form, fit and function of their prototypes may be unaware that there is a better, cheaper, faster solution. Roland subtractive RP systems (SRP™) produce form models faster than any 3D printer on the market and easier than any other CNC mill on the market. That’s because Roland offers a complete software/hardware solution that combines the ease of use of 3D printers with the benefits of CNC-machined parts.

On the following pages, you’ll find a comparison of actual parts milled with a Roland milling machine and a 3D printer. You’ll also find a Cost of Ownership comparison. Finally, we’ve included a testimonial by inventor and entrepreneur Joe Matteo.

Key Advantages of SRP Over 3D Printers:

- SRP (Subtractive Rapid Prototyping) provides a wide choice of materials, smooth surface finish, tight tolerances (MDX-40 +/- .002", MDX-540 +/- .001) and a low cost of ownership.
- All Roland products come complete with bundled CAM software. No G-Code programming required.
- Products include a 1yr parts/labor warranty and one way shipping.
- Mills use industry standard tooling.
## Roland MDX Product Comparison

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
<th>Build size</th>
<th>Materials</th>
<th>Options</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDX-15</td>
<td>$3,495</td>
<td>6” x 4” x 2.4”</td>
<td>Foams, plastics, wood</td>
<td></td>
<td>Includes probe scanner for 3D scanning</td>
</tr>
<tr>
<td>MDX-20</td>
<td>$4,995</td>
<td>8” x 6” x 2.4”</td>
<td>Foams, plastics, wood</td>
<td></td>
<td>Includes probe scanner for 3D scanning</td>
</tr>
<tr>
<td>MDX-40A</td>
<td>$7,995</td>
<td>12” x 12” x 4.1”</td>
<td>Foams, plastics, wood</td>
<td>4th axis, dust bin, probe scanner</td>
<td>G-Code supported, but not required</td>
</tr>
<tr>
<td>MDX-540</td>
<td>$20,995</td>
<td>19.6” x 15.7” x 6.1”</td>
<td>Foams, plastics, wood, light metals (brass, aluminum, copper)</td>
<td>4th axis, 1-slot table, cover</td>
<td>“S” = high precision ball screws provide ultra high surface smoothness and repeat accuracy “A” = Automatic tool changer included (4 tools)</td>
</tr>
<tr>
<td>MDX-540S</td>
<td>$26,995</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDX-540A</td>
<td>$31,995</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDX-540SA</td>
<td>$36,995</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Fit, Finish and Functionality**

**Tighter Tolerances**
Roland MDX SRP Mills deliver the exact precision required. By contrast, additive systems lay down material in layers, and the tolerances are limited by the thickness of these layers.

**Smoother Surface Finish**
When viewed side by side, the difference is clear.

**Details**
Subtractive parts were milled with Acetal Copolymer on the MDX-40A. Additive parts used ABS-based material.
Support for a wider range of materials – Choose from ABS, acrylic, aluminum, chemical woods, plaster, styrene, Acetal, Nylon and FDA approved plastics.

Acrylic wheel milled using Subtractive Rapid Prototyping (SRP).

Short-run industrial parts, prototypes and molds milled with SRP on wax, aluminum, ABS, Acetal and acrylic.

Acrylic and other plastic materials are perfect for SRP.

Tooling board gear shift knob prototype created with the MDX-40A, shown with finished parts.

ABS iPod prototype case milled with SRP.

Finished phone prototype with wood, ABS and aluminum parts milled by the MDX-540.