PRODUCT DESCRIPTION:
Protolabs’ Inconel material is used in our DMLS process. Inconel is a high strength, corrosion resistant nickel chromium superalloy used at temperatures of -423°F to 1300°F. Its high-temperature strength is derived from its ability to create a thick, stable passivating oxide layer at high temperatures, protecting the material from further attack. Inconel also has good tensile, fatigue, creep and rupture strength. It is available in both high and normal resolution and can be used for parts as large as 10” x 10” x 11” in size.

APPLICATIONS:
Inconel is an excellent choice for rocket engine components and related equipment exposed to extreme environments.

KEY PRODUCT BENEFITS
- High strength
- Excellent High-temperature and corrosion resistance
- Good tensil, fatigue, creep and rupture strength

PROPERTIES:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Ultimate Tensile Strength (ksi)</th>
<th>0.2% Yield (ksi)</th>
<th>Elongation (%)</th>
<th>Hardness (HRB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM F3055-14A</td>
<td>180</td>
<td>150</td>
<td>6–12</td>
<td>35.5</td>
</tr>
</tbody>
</table>

All of the figures contained on this data sheet are approximate and dependent on a number of factors, including but not limited to, machine and process parameters. The information provided is therefore not binding and not deemed to be certified.