Material data

<table>
<thead>
<tr>
<th>Test Standard</th>
<th>PA12**</th>
<th>PP*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young’s Modulus (XY) ISO 527 - 2:93 - 1A</td>
<td>1716 ± 89 MPa</td>
<td>984 MPa</td>
</tr>
<tr>
<td>Young’s Modulus (Z) ISO 527 - 2:93 - 1A</td>
<td>1725 ± 59 MPa</td>
<td>-</td>
</tr>
<tr>
<td>Tensile Strength (XY) ISO 527 - 2:93 - 1A</td>
<td>52 ± 1 MPa</td>
<td>27 MPa</td>
</tr>
<tr>
<td>Tensile Strength (Z) ISO 527 - 2:93 - 1A</td>
<td>46 ± 2 MPa</td>
<td>25 MPa</td>
</tr>
<tr>
<td>Elongation At Break (XY) ISO 527 - 2:93 - 1A</td>
<td>10 ± 1 %</td>
<td>45 %</td>
</tr>
<tr>
<td>Elongation At Break (Z) ISO 527 - 2:93 - 1A</td>
<td>5 ± 1 %</td>
<td>12 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Standard</th>
<th>TPUs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part density voxeljet method</td>
<td>&gt; 1.12 g/cm³</td>
</tr>
<tr>
<td>Tensile strength ISO 527 - 5A</td>
<td>3 - 7 MPA</td>
</tr>
<tr>
<td>Elongation at break ISO 527 - 5A</td>
<td>200 - 500 %</td>
</tr>
<tr>
<td>Shore hardness A ISO 868</td>
<td>≥ 75</td>
</tr>
<tr>
<td>Young Modulus ISO 527 - 5A</td>
<td>3 - 35 MPa</td>
</tr>
</tbody>
</table>

trusted partners & customers

*Various materials - available on request. All data refer to fresh powder.
**All data refer to a refresh rate of 20%

Applications of HSS

› Functional production parts
› Automotive
› Aerospace
› Sports & leisure
› Consumer goods & electronics
› Interior design
› Packaging
› Design models

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High Speed Sintering
HSS

With High Speed Sintering we give our customers incredible flexibility and customization of the additive manufacturing process of functional polymer parts. By using the High Speed Sintering process, customers can achieve properties similar to injection moulding and freely adjust all system parameters to a wide variety of qualified materials or can individually tailor the process settings to qualify own materials. Whether it's PA12, PP, TPU etc., the material of choice can be changed within minutes for increased efficiency and flexibility of polymer part production.

**System Features**
- Fully customizable process parameters: in-house material development possible.
- Full access to telemetric data for optimal material process interaction.
- Industrial inkjet printheads for industry leading reliability.
- Constant layer times with high resolution and detail.
- Binder Jetting technology allowing for scalability.

**Technical data**

<table>
<thead>
<tr>
<th>Printing process HSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build space LxWxH</td>
</tr>
<tr>
<td>Medium grain size</td>
</tr>
<tr>
<td>Layer thickness</td>
</tr>
<tr>
<td>Print resolution x, y</td>
</tr>
</tbody>
</table>