STARCERAM® N
and STARCERAM® S Powders
## Carbides | Product Portfolio

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Short Description</th>
<th>Granulate Properties Size (after seaving) μm</th>
<th>Apparent Density g/cm³</th>
<th>Granulate Properties d₅₀ μm</th>
</tr>
</thead>
</table>
| **STARCERAM ® S Ready to Press Powder (RTP)** | Typical reachable density: 3.14 g/cm³  
Specific surface area of the raw material: 15 (BET) m²/g  
Green density (10⁴ kg/cm²): 1.8 g/cm³ | | |
| Grade RQ | Resin based rtp powder for excellent green machining | < 200 | 0.9 | 70 |
| Grade SQ | PVA/PEG based rtp powder for green machining and dry pressing | < 200 | 0.8 | 62 |
| Grade CQ | Like SQ but better flowability for dry pressing | < 400 | 0.8 | 100 |
| Grade HQ | Like SQ but smaller tolerance in granule distribution | < 150 | 0.8 | 60 |
| Grade HQ-F | Like HQ but smaller granule sizes for highest strength | < 75 | 0.7 | 27 |

<table>
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<tr>
<th>Product Type</th>
<th>Powder Particle Size d₅₀ μm</th>
<th>Specific Surface Area (BET) m²/g</th>
<th>Green Density (10⁴ kg/cm²) g/cm³</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STARCERAM ® S Raw Ceramic Powder</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade UF 5</td>
<td>2.0</td>
<td>4 - 6</td>
<td>1.8</td>
</tr>
<tr>
<td>Grade UF 10</td>
<td>0.7</td>
<td>9 - 11</td>
<td>1.7</td>
</tr>
<tr>
<td>Grade UF 15</td>
<td>0.55</td>
<td>14 - 16</td>
<td>1.7</td>
</tr>
<tr>
<td>Grade UF 25</td>
<td>0.45</td>
<td>23 - 26</td>
<td>1.6</td>
</tr>
</tbody>
</table>

## Typical Applications

- Sealing and bearing rings
- Mill coatings
- Screws for conveying and extruding
- Engineering parts
- Nozzles
- Rotors
Nitrides | Product Portfolio

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<th>Product Type</th>
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<th>Granulate Properties Size (after sieving) μm</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>STARCERAM ® N Ready to Press Powder (RTP)</strong></td>
<td>Typical reachable density: 3.2 g/cm³ Specific surface area of the raw material: 11 (BET) m²/g Green density (10³ kg/cm³) 2.0 g/cm³</td>
<td>Grade M.A Ready for pressing and sintering, optimized for green machining</td>
<td>&lt; 150</td>
<td>0.9</td>
</tr>
</tbody>
</table>

**Typical Applications**

- Thermo couple protection tubes
- Thermo protection tubes
- Welding rolls/ welding nozzles

- Forming rolls
- Valves
- Centerings


**Distribution**

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The values in this publication are typical values and do not constitute a specification.

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