ADDITIVE MANUFACTURING
POWDER
L625 AMPO / NI-BASED ALLOYS

Available Product Shapes

- 15 - 45 µm
- 45 - 90 µm

Product Description

BÖHLER L625 AMPO is a non-magnetic, corrosion and scale-resistant nickel-base alloy. High toughness and strength from the lowest temperatures up to 1000 °C. Good printability.

Properties

Particle size distribution 15 - 45 µm:

<table>
<thead>
<tr>
<th>D10(µm)</th>
<th>18 - 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>D50(µm)</td>
<td>29 - 35</td>
</tr>
<tr>
<td>D90(µm)</td>
<td>42 - 50</td>
</tr>
</tbody>
</table>

Apparent density* ≥ 3.5

Measurement of particle size distribution according to ISO 13322-2 (Dynamic image analysis methods);

* Measurement of apparent density is based on ASTM B964 resp. DIN EN ISO 3923-1 and relates to our typical measured values

Achievable mechanical properties of printed part after heat treatment*:

<table>
<thead>
<tr>
<th>Tensile strength (Rm)</th>
<th>850 ± 50 MPa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield strength (RP₀,₂)</td>
<td>550 ± 30 MPa</td>
</tr>
<tr>
<td>Elongation (%)</td>
<td>40 ± 5</td>
</tr>
<tr>
<td>Hardness</td>
<td>23 ± 5 HRC</td>
</tr>
</tbody>
</table>

*A mechanical strength according to heat treatment AMS5599

Particle size distribution 45 - 90 µm:

Details on request

Applications

- 3D Printing - direct metal deposition
- Automotive
- Comp. for Industrial Gas Compressors
- Oth. Automotive components (Turbochargers, Piston Rings, Sensors, etc.)
- 3D Printing - selective laser melting
- Automotive Racing
- CPI (inc. LNG, Urea)
- Other Aerospace Comps.
- Other Oil and Gas + CPI comps.
- Powder for additive manufacturing
- Aerospace
- Civil and mechanical engineering
- Oil & Gas
- Other Components
- Other Power Generation Components
- Unknown Components Application

Material designation

<table>
<thead>
<tr>
<th>2.4856 SEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N06625 UNS</td>
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</table>

voestalpine BÖHLER Edelstahl GmbH & Co KG
www.voestalpine.com/bohler-edelstahl
### Chemical composition

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>Cr</th>
<th>Mo</th>
<th>Ni</th>
<th>Co</th>
<th>Ti</th>
<th>Al</th>
<th>Nb</th>
<th>Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.05</td>
<td>21.50</td>
<td>9.00</td>
<td>≥ 58.00</td>
<td>≤ 1.00</td>
<td>0.20</td>
<td>0.20</td>
<td>3.65</td>
<td>≤ 5.00</td>
</tr>
</tbody>
</table>

For more information see [www.voestalpine.com/bohler-edelstahl](http://www.voestalpine.com/bohler-edelstahl)