VAUTID Ultra 302
Welding Rod
Hardfacing material for extreme abrasion and low impact

**VAUTID Material characteristics**

**Specification**
Welding rod DIN EN 14700 E Fe20 g

**Material type**
**Alloy components**
Hard tungsten carbides with a grain size of 0,25 – 0,7 mm embedded in a wear-resistant ledeburitic matrix. Fe – W2C – WC

**Weld deposit characteristics**
VAUTID Ultra 302 consists of the hardened matrix with embedded tungsten carbides. The weld deposit is magnetic and cannot be machined. Multi-layer welding with up to three layers is possible. VAUTID Ultra 302 exhibits low shock resistance

**Weld deposit properties**
Hardness of the matrix: ca. 700 - 900 HV10*
Tungsten carbides: ca. 2000 HV10* (DIN 32525-4)

**Recommended applications**
Core drilling tips, roller bore tips, deep well drilling tools, agitator blade webs, plough blades, grinding segments, strippers

**Standard sizes**
Diameters: 3,25 / 4,0 / 5,0 / 6,0 mm
Length: 350 mm
Packing: 5 kg packages

**Welding instructions:**
VAUTID Ultra 302 can be welded with D.C. (+ pole) and A.C.. Due to the colder arc, A.C. is preferable in order to avoid a strong melting of the tungsten carbides. Stringer bead technique shall be used rather than weave bead technique. Keep the welding current as low as possible

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Current (A)</th>
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</thead>
<tbody>
<tr>
<td>3,25</td>
<td>55 - 75</td>
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<tr>
<td>4,0</td>
<td>70 – 90</td>
</tr>
<tr>
<td>5,0</td>
<td>90 – 120</td>
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<tr>
<td>6,0</td>
<td>110 – 140</td>
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Welding position (EN ISO 6947): PA

* subject to common industrial fluctuations

This data sheet corresponds to the present state of production (October 2016) and can be changed anytime.