# VAUTID Ultra 305

**Tubular Wire**

**Hardfacing material for extreme abrasion**

---

## Specification

<table>
<thead>
<tr>
<th>Material type</th>
<th>Tubular wire electrode</th>
<th>DIN EN 14700 T Ni20 cgz</th>
</tr>
</thead>
</table>

### Alloy components

Ni base material with embedded tungsten carbides, grain size 0.1 to 0.7 mm. The use of other grain sizes is possible if required

C – Ni – W2C – WC

### Weld deposit characteristics

The weld deposit is formed of hard metal grains. This structure of the weld deposit ensures that the hard metal grains cannot separate from the layer under abrasion stress during operation. VAUTID-Ultra V produces a corrosion-proof hardfacing with average impact resistance.

### Weld deposit properties

- **Matrix hardness:** 550-650 HV
- **Hard metal:** 2000 HV (DIN 32525-4)

### Recommended applications

Wear parts of earth moving equipment and for applications in the concrete industry, mixer blade webs, sand separators, plough blades, clay grinding disks, strippers.

### Standard sizes

<table>
<thead>
<tr>
<th>Diameters:</th>
<th>1.6 / 2.0 / 2.4 / 2.8 / 3.2 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing:</td>
<td>Mandrels 15 kg, Reels 25 kg, Drums 250 kg</td>
</tr>
</tbody>
</table>

---

## Welding instructions:

VAUTID Ultra 305 is usually welded at the +pole without inert gas. The material is preferably welded by string bead technique and with low amperage.

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Current (A)</th>
<th>Voltage (V)</th>
<th>Stick out (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6</td>
<td>140 – 180</td>
<td>21 – 23</td>
<td>20 – 35</td>
</tr>
<tr>
<td>2.0</td>
<td>180 – 220</td>
<td>22 – 24</td>
<td>20 – 35</td>
</tr>
<tr>
<td>2.4</td>
<td>220 – 260</td>
<td>23 – 25</td>
<td>25 – 40</td>
</tr>
<tr>
<td>2.8</td>
<td>260 – 300</td>
<td>24 – 26</td>
<td>25 – 40</td>
</tr>
<tr>
<td>3.2</td>
<td>300 – 340</td>
<td>25 – 27</td>
<td>30 – 45</td>
</tr>
</tbody>
</table>

Welding position (EN ISO 6947): PA

---

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

---

VAUTID GROUP
Brunnwiesenstr. 5
73760 Ostfildern

Telefon: + 49 711 / 44 04-0
Fax: + 49 711 / 44 20 39
E-Mail: vautid@vautid.de
Web: www.vautid.com