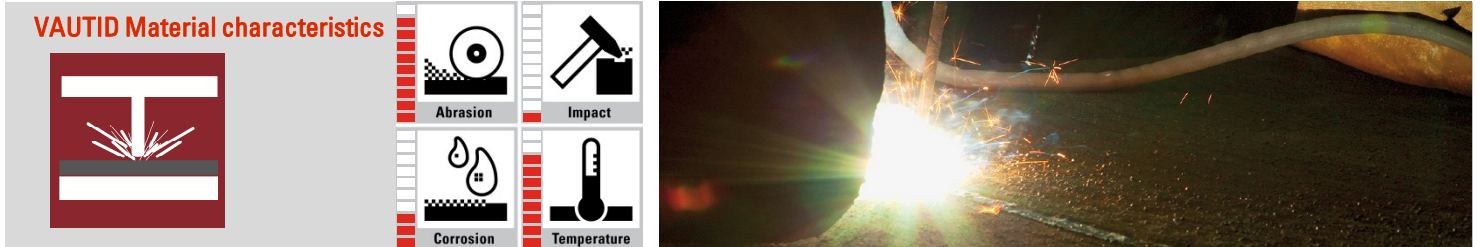


# VAUTID 145

Tubular wire and welding rod

Hardfacing material for highest abrasion and high temperatures

**VAUTID®**



|   |   |  |
|---|---|--|
| <b>Specification</b>                      | Tubular wire electrode<br>Welding rod   | DIN EN 14700 T Fe16 gtz<br>DIN EN 14700 E Fe16 gtz |
| <b>Material type<br/>Alloy components</b> | High-carbon-high-chromium-molybdenum alloy on iron base with tungsten, vanadium and niobium special carbides<br>C – Cr – Mo – Nb – V – W – Fe   |  |
| <b>Weld deposit characteristics</b>       | VAUTID 145 produces a wear-resistant, primary carbide-containing weld deposit with high hardness at high temperatures. The application temperatures should not exceed 750° C. The weld deposit exhibits cracks, cannot be machined and has limited shock resistance |  |
| <b>Weld deposit properties</b>            | Hardness (acc. DIN 32525-4):  | 60-65 HRC*   |
| <b>Recommended applications</b>           | Recommended particularly for the hardfacing of parts subjected to strong abrasion and average shock stress as well as high temperatures, e.g. fan components, furnace top bell facing, hot dust ducts, screens or sinter crushers                                   |  |
| <b>Standard sizes</b>                     | Tubular wire: Diameter 1,6 / 2,0 / 2,4 / 2,8 / 3,2 mm<br>Packing: Mandrels 15 kg, Reels 25 kg, Drums 250 kg<br>Welding rods: Diameter 3,25 / 4,0 / 5,0 / 6,0 mm<br>Packing: 5 kg packages   |  |

\* subject to common industrial fluctuations

## Welding instructions for tubular wires:

VAUTID 145 tubular wire is welded without inert gas on the +pole (a.c. possible). Weave technique is usual. Preheating of base material and VAUTID 18/8/6 – buffer layers are to be recommended on hard weldable, massive components. The amount of layers should be limited to 2.

| Diameter (mm) | Current (A) | Voltage (V) | Stick out (mm) |
|---------------|-------------|-------------|----------------|
| 1,6           | 150 – 270   | 24 – 27     | 20 – 40        |
| 2,0           | 180 – 300   | 25 – 28     | 25 – 40        |
| 2,4           | 230 – 350   | 26 – 29     | 25 – 50        |
| 2,8           | 260 – 420   | 27 – 29     | 30 – 55        |
| 3,2           | 290 – 470   | 28 – 30     | 30 – 55        |

## Welding instructions for welding rods:

VAUTID 145 welding rods can be welded with d.c. on the +pole but also with a.c. The amount of layers should be limited to 2. It is not necessary to re-dry the electrodes prior to welding.

VAUTID 145 welding rods are high-performance electrodes with a deposition rate of 220%.

| Diameter (mm) | Current (A) |
|---------------|-------------|
| 3,25          | 100 – 120   |
| 4,0           | 120 – 160   |
| 5,0           | 170 – 210   |
| 6,0           | 210 – 250   |

Welding positions (EN ISO 6947): PA, PB

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

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