

VAUTID 105

Tubular wire

Hardfacing material for abrasion and upstream position welding



VAUTID Material characteristics

Abrasion

Impact

Corrosion

Temperature

Specification	Tubular wire electrode DIN EN 14700 T ZFe13gp
Material type Alloy components	High-chromium-high-carbon hard alloy on iron base with chromium, molybdenum, vanadium and boron C – Cr – Mo – V – B – Fe
Weld deposit characteristics	VAUTID 105 produces a welding hard weld deposit, not sensitive to cracks and a high abrasion resistance combined with moderate impact resistance. The weld deposit is magnetic and cannot be machined. The tubular wire is suited for all welding positions with the exception of „overhead and downward“. The alloy composition results in a weld deposit with a smooth surface
Weld deposit properties	Hardness (acc. DIN 32525-4): 62-65 HRC*
Recommended applications	Perfectly suited for parts subjected to strong abrasion and medium shock stresses as well as metal-to-metal wear. Due to the small tubular wire diameters, VAUTID 105 is particularly suited for the hardfacing of edges. The various possible welding positions enable also regeneration of installed parts. Typical applications are hardfacing of dredging bucket front edges, top coats of pick hammers, repair of cyclone and sifter components, repair of installed wear parts. The operating temperature should not exceed 500° C.
Standard sizes	Tubular wire: Diameter 1,2 / 1,6 mm Packing: Mandrels 15 kg

* subject to common industrial fluctuations

Welding instructions for tubular wire:

VAUTID 105 tubular wires are welded open-arc with inert-gas (M12/M21) on the +pole (a.c. possible). We recommend vertically or slightly dragging wire position. Both the weave bead and string bead techniques can be used. The amount of layers should be limited to 2.

Diameter (mm)	Current (A)	Voltage (V)	Stick out (mm)
1,2	160 – 260	22 – 25	20
1,6	180 – 280	22 – 27	25

Welding positions (EN ISO 6947): PA, PB, PC, PF

This data sheet corresponds to the present state of production (August 2018) and can be changed anytime.