VAUTID 50

Tubular wire and welding rod
Hardfacing material for high impact and shock















Specification	Tubular wire electrode DIN EN 14700 T Fe9 kp Welding rod DIN EN 14700 E Fe9 kp		
Material type Alloy components	Manganese steel, alloy on iron base with Chromium additions $\label{eq:continuous} C-Cr-Mn-Fe$		
Weld deposit characteristics	VAUTID 50 produces an austenitic (non-magnetic), tough and crack-free deposit with high strength. Shock loads result in strong, superficial work-hardening. The weld deposit is characterized by its good compatibility with all weldable steels. It is suited for flame-cutting		
Weld deposit properties	Tensile strenght: 850 N / mm² Yield point: 650 N / mm² Elongation A5: approx. 25% Hardness (acc. DIN 32525-4): 200 – 250 HB* in welding condition 40 – 55 HRC* work-hardened		
Recommended applications	Very well suited for hardfacing of parts mainly subjected to shock loads and for regeneration of black manganese steel, e.g. crusher rolls, beating arms, hammers, dredger teeth exposed to shock and rails switches		
Standard sizes	Tubular wire: Diameter 1,6 / 2,0 / 2,4 / 2,8 / 3,2 mm Packing: Mandrels 15 kg, Reels 25 kg, Drums 250 kg Welding rods: Diameter 3,25 / 4,0 / 5,0 / 6,0 mm Packing: 5 kg packages		

 * subject to common industrial fluctuations

Welding instructions for tubular wire:

VAUTID 50 tubular wires are welded without inert gas on the +pole (a.c. is possible). Several layers can be welded. The wire alloys welding with an extremely long stickout for a higher rate..

Diameter (mm)	Current (A)	Voltage (V)	Stick out (mm)
1,6	180 – 250	25 – 30	20 – 35
2,0	180 – 300	25 – 30	25 – 45
2,4	250 – 380	25 – 30	30 – 50
2,8	200 – 450	25 – 30	35 – 55
3,2	290 – 470	28 – 30	30 - 55

Welding positions (EN ISO 6947): PA

Welding instructions for welding rods:

VAUTID 50 – welding rods can be welded with d.c. on the +pole but also with a.c. Several layers can be welded. It is not necessary to re-dry the electrodes prior to welding..

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

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

