

# VAUTID 143

Tubular wire and welding rod

Hardfacing material for higher abrasion and impac



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<b>Specification</b>	Tubular wire electrode DIN EN 14700 T ZFe15 g Welding rod DIN EN 14700 E ZFe15 g
<b>Material type</b> <b>Alloy components</b>	High-chromium-high-carbon hard alloy on iron base with niobium and boron additions C – CR – Nb – Fe
<b>Weld deposit characteristics</b>	VAUTID 143 produces a wear-resistant, primary carbide-containing weld deposit which is extremely resistant to abrasion due to the finely dispersed hard niobium carbides. They exhibit good shock resistance. The material cannot be subjected to flame cutting, offers good resistance to scaling and cannot be machined. The weld deposit exhibits cracks
<b>Weld deposit properties</b>	Hardness (acc. DIN 32525-4): 61 – 65 HRC*
<b>Recommended applications</b>	Recommended particularly for the hardfacing of parts subjected to higher abrasion and average shock stress, e.g. dredging bucket front edges, sieves, sand slingers, top coats on dredger teeth and crushing rolls. The application temperatures should not exceed 350° C
<b>Standard sizes</b>	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 wires:

VAUTID 143 tubular wire is welded without inert gas on the +pole (a.c. possible). Weave technique is usual. The arc should be held as short as possible and the thickness of hard-surfacing deposits should be limited to 10 mm. Preheating decreases the generation of stress cracking on the hard-facing..

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 143 welding rods can be welded with d.c. on the +pole but also with a.c. It is not necessary to re-dry the electrodes prior to welding. VAUTID 143 welding rods are high-performance electrodes with a deposition rate of 200%.

Diameter (mm)	Voltage (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.

**VAUTID GROUP**  
Brunnwiesenstr. 5  
73760 Ostfildern  
Web: [www.vautid.com](http://www.vautid.com)

Distributed by:  
Temsol Innovation Co.,Ltd.  
341/193 Soi Sukhumvit 101/1 T.Bangchak  
A.Phrakhanong Bangkok 10260 Thailand

Phone : +6684 668 4871  
+6665 116 3951  
Email : [monara@temsolin.v.com](mailto:monara@temsolin.v.com),  
[t000003@temsolin.v.com](mailto:t000003@temsolin.v.com)

Web :  
[www.temsolin.v.com](http://www.temsolin.v.com)