

UTP 3545 Nb

Basic-coated special stick electrode for high-temperature cast alloys with high carbon content in the petrochemical industry

Classifications

EN ISO 14172

E Ni Z 6701 (NiCr36Fe15Nb0.8)

Characteristics and field of use

UTP 3545 Nb is suitable for joining and surfacing on identical and similar high-heat-resistant cast alloys (centrifugal- and mould cast parts), such as G-X45NiCrNbSiTi45 35.

The main application field is tubes and cast parts of reformer and pyrolysis ovens.

Properties of the weld metal

The weld deposit is used in low-sulphur, carburizing atmosphere up to 1,175°C.

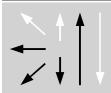
Typical analysis in %									
С	Si	Mn	Cr	Ni	Nb	Fe			
0.45	1.0	0.8	35.0	45.0	0.9	balance			

Mechanical properties of the weld metal					
Yield strength R _{p0,2}	Tensile strength R _m				
MPa	MPa				
480	680				

Welding instruction

Clean weld area thoroughly. Weld the stick electrode with a slight tilt and a short arc. No preheating or post weld heat treatment required. Keep heat input as low as possible and interpass temperature of max. 150°C. Re-baking: 2 - 3 hours at 250 – 300°C.

Welding positions



Current type DC (+)

Recommended welding parameters							
Electrodes Ø x L [mm]	2.5 x 300	3.2 x 350	4.0 x 350				
Amperage [A]	70 – 90	90 – 110	100 – 140				