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 %

C	Si	Mn	Cr	Ni	Nb	Fe
0.45	1.0	0.8	35.0	45.0	0.9	balance

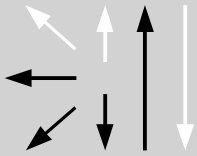
Mechanical properties of the weld metal

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 pre-heating or post weld heat treatment required. Keep heat input as low as possible and interpass temperature of max. 150°C. Re-baking: 2 h at 120-200°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

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.