UTP A 3545 Nb — TIG rod

Classifications			high-alloyed
EN ISO 14343-A:			
WZ 35 45 Zr			

Characteristics and field of use

UTP A 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 X-45NiCrNbSiTi 45 35.
The main application field is for tubes and cast parts of reformer and pyrolysis ovens at temperatures up to 1175° C / air.

Welding characteristics and special properties of the weld metal

The weld deposit is applicable in a low sulphur, carbon enriching atmosphere up to 1175° C and has an excellent creep strength and a good resistance against carburization and oxidation.

Welding instruction

Clean welding area carefully. No pre-heating or post weld heat treatment. Keep heat input as low as possible and interpass temperature at max. 150° C.

Typical composition of welding rod (Wt-%)

C	Si	Mn	Cr	Ni	Nb	Ti	Zr	Fe
0.45	1.5	0.8	35.0	45.0	1.0	0.1	0.05	balance

Mechanical properties of all-weld metal

Heat Treatment	*Yield strength 0.2%*	*Tensile strength*	*Elongation (L_0=5d_0)*	*Impact values in J CVN*
	MPa	*MPa*	*%*	
untreated	450	650	8	

Operating data

Polarity = –

Shielding gas:
I1

Dimensions (mm)

2.0	*2.4*	*3.2*