

UTP A 3545 Nb

Standards :

EN ISO 14343-A : W/GZ 35 45 Nb

Rods and wires for high temperature cast alloys with high carbon content in petrochemical industry

Application field

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.

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.

Mechanical properties of the weld metal

Yield strength R _{p0,2} MPa	Tensile strength R _m MPa	Elongation A %
450	650	8

Weld metal analysis in %

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

Welding instructions

Clean welding area carefully. No pre-heating or post weld heat treatment. Keep heat input as low as possible and interpass temperature at max. 180° C.

Welding procedure and availability

Ø (mm)	Current type	Shielding gas EN ISO 14175	Availability	
			Spools	Rods
		II	EN ISO 544	EN ISO 544
1,2	DC (+)	x	x	
2,0	DC (-)	x		x
2,4	DC (-)	x		x
3,2	DC (-)	x		x