UTP A 3545 Nb

Solid wire for high-temperature cast alloys
with high carbon content in the petrochemical industry

Classifications

EN ISO 18274

S Ni Z (NiCr36Fe15Nb0.8)

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 GX-45NiCrNbSiTi45 35.
The main application field is tubes and cast parts of reformer and pyrolysis ovens.

Properties of the weld metal

The weld deposit is applicable in low-sulphur, carbon-enriching atmosphere up to 1,175°C.

Typical analysis in %

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

Mechanical properties of the weld metal

Yield strength $R_{p0,2}$	Tensile strength R_m
MPa	MPa
450	550

Welding instruction

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

Wire diameter	Shielding gas (EN ISO 14175)
1.2 mm	I 1