

UTP A 3545 Nb										nickel alloys
<b>Classifications</b>										TIG rod
EN ISO 18274										
S Ni Z (NiCr36Fe15Nb0.8)										
<b>Characteristics and field of use</b>										
<p>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.</p> <p>The weld deposit is applicable in low-sulphur, carbon-enriching atmosphere up to 1,175 °C. It yields excellent creep strength and a good resistance against carburization and oxidation.</p>										
<b>Typical analysis in %</b>										
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		
<b>Mechanical properties of the weld metal</b>										
Yield strength $R_{p0.2}$					Tensile strength $R_m$					
MPa					MPa					
450					650					
<b>Welding instructions</b>										
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.										
<b>Form of delivery and recommended welding parameters</b>										
Wire diameter [mm]			Current type			Shielding gas (EN ISO 14175)				
2.0 x 1000			DC (-)			I 1				
2.4 x 1000			DC (-)			I 1				
3.2 x 1000			DC (-)			I 1				