

Classifications					
EN ISO 18274	AWS A5.14			Material-No.	
S Ni 2061 (NiTi3)	ER Ni-1			2.4155	
Characteristics and field of use					
<p>UTP A 80 Ni is suited for joining and surfacing on commercial pure nickel grades, including LC nickel, nickel alloys and nickel-clad steels.</p> <p>Such materials are employed primarily in the construction of pressure vessels and apparatus in the chemical industry, in the food industry and for power generation, where good behaviour under corrosion and temperature is demanded.</p> <p>The weld metal has an excellent resistance in a lot of corrosive medias, from acid to alkali solutions.</p>					
Typical analysis in %					
C	Si	Mn	Ni	Ti	Fe
< 0,02	< 0,3	0,3	balance	3,3	< 0,1
Mechanical properties of the weld metal					
Yield strength $R_{P0,2}$		Tensile strength $R_m$		Elongation A	
MPa		MPa		%	
> 300		> 450		> 30	
				Impact strength $K_v$	
				J [RT]	
				> 160	
Welding instruction					
Clean the weld area thoroughly to avoid porosity. Groove angle about 70°. To be welded by stringer bead technique.					
Approvals					
TÜV (No. 00951), ABS					
Rod diameter x length [mm]		Current type		Shielding gas (EN ISO 14175)	
1,6 x 1000		DC (-)		I 1	
2,0 x 1000		DC (-)		I 1	
2,4 x 1000		DC (-)		I 1	
3,2 x 1000		DC (-)		I 1	