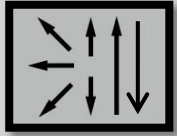


Classification						
AWS A5.9/A5.9M	EN ISO 14343-A	EN ISO 14343-B				
ER316L	W 19 12 3 L	SS316L				
Characteristics and field of use						
<ul style="list-style-type: none"> BOHLER TIG N 316L rod of type W 19 12 3 L / ER316L engineered to a very precise analysis to create a weld deposit of high purity, superior hot cracking and corrosion resistance. CVN toughness down to -196°C, resistant to intergranular corrosion up to +400°C. The filler metal is also suitable for welding titanium and niobium stabilised steels such as ASTM 316Ti in cases where the construction is used at temperatures not exceeding 400°C. 						
Base Materials						
1.4401 X2CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-13-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4583 X10CrNiMoNb18-12, 1.4409 GX2CrNiMo 19-11-2 UNS S31603, S31653, AISI 316L, 316Ti, 316Cb						
Typical Composition of solid wire (wt. - %)						
C	Si	Mn	Cr	Mo	Ni	FN (WRC-92)
≤0.02	0.37	1.58	18.37	2.65	11.50	4 - 10
Mechanical Properties of all weld						
Heat treatment condition	Yield strength R_e N/mm ²	Tensile strength R_m N/mm ²	Elongation ($L_0=5d_0$)	Impact Test Values		
	MPa	MPa	%	+20°C	-196°C	
As Welded	≥400	≥520	≥30	≥100J	≥32J	
Operating data						
Position 	Polarity DCEN	Size: Ø mm – 1.2, 1.6, 2.0, 2.4, 3.2 Length: 1000mm Packaging: 5Kg Plastic Tubes in 20Kgs Corrugated Box				
Shielding Gases: 100% Argon Rod Marking: Front: ER 316 L Back: W 19 12 3 L	Interpass Temperature: Max. 150°C Heat Input: Max. 2.0KJ/mm. Heat Treatment: Generally none (in special cases quench annealing at 1050°C). Scaling Temperature: Approx. 850°C (air) Corrosion Resistance: Excellent resistance to general, pitting and intercrystalline corrosion in chloride containing environments. Intended for severe service conditions, e.g. in dilute hot acids.					