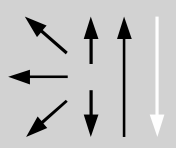


Classifications						
EN ISO 14343-A	EN ISO 14343-B			AWS A5.9		
W 19 12 3 L Si	SS316LSi			ER316LSi		
Characteristics and typical fields of application						
<p>TIG rod of W 19 12 3 L Si / ER316LSi type for welding austenitic stainless steel of 17Cr-12Ni-2.5Mo type or similar. Also suitable for welding steels that are stabilized with titanium or niobium, such as 1.4571 / 316Ti for service temperatures not exceeding 400°C. For higher temperatures a niobium-stabilized consumable such as BÖHLER SAS 4-IG (Si) is required. Excellent resistance to general, pitting and intercrystalline corrosion in chloride containing environments. Intended for severe service conditions, e.g. in dilute hot acids. Microstructure is austenite with 5 – 10% ferrite. Max. service temperature 400°C.</p>						
Base materials						
<p>1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4409 GX2CrNiMo19-11-2, 1.4429 X2CrNiMoN17-12-3, 1.4432 X2CrNiMo17-12-3, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-12-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4583 X10CrNiMoNb18-12 UNS S31600, S31603, S31635, S31640, S31653 AISI 316L, 316Ti, 316Cb</p>						
Typical analysis of the TIG rods (wt.-%)						
	C	Si	Mn	Cr	Ni	Mo
wt-%	0,02	0,9	1,7	18,5	12,0	2,6
Mechanical properties of all-weld metal - typical values (min. values)						
Heat-treatment	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact values ISO-V CVN J		
	MPa	MPa	%	+20 °C	-196 °C	
u	470 (>= 320)	610 (>= 510)	31 (>= 25)	140	58 (>= 32)	
u untreated, as-welded – shielding gas Ar						
Operating data						
	Polarity: DC (-)	Shielding gas: (EN ISO 14175) I 1	Marks: ✚ W 19 12 3L / ER316L	ø mm	L mm 1000	
				1,2		
				1.6		
				2.0		
				2.4		
				3.2		
4,0						
Approvals						
TÜV (00488), DB (43.132.35), DNV GL, CE						