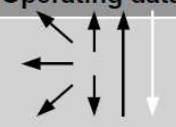


Classifications						
EN ISO 14343-A	EN ISO 14343-B	AWS A5.9	Mat. No.			
W 19 12 3 L	SS316L	ER316L	1.4430			
Characteristics and typical fields of application						
Stainless; resistant to inter-crystalline corrosion. Corrosion-resistant up to 400 °C. For joining and surfacing application with matching and similar – non-stabilized and stabilized – austenitic CrNi(N) and CrNiMo(N) steels and cast steel grades.						
Base materials						
TÜV-certified parent metal 1.4401 - X5CrNiMo17-12-2; 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 - GX2CrNiMo19-11-2; UNS S31603; S31653; AISI 316L; 316Ti; 316Cb						
Typical analysis of the TIG rods (wt.-%)						
	C	Si	Mn	Cr	Ni	Mo
wt-%	0.02	0.5	1.7	18.5	12.3	2,6
Structure: Austenite with part ferrite						
Mechanical properties of all-weld metal						
Heat-treatment	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V CVN J		
	MPa	MPa	%	+20 °C		
aw	450	580	35	100		
Operating data						
	Polarity: DC (–)	Shielding gas: (EN ISO 14175) I 1	Marks: † W 19 12 3L / ER316L	ø mm	L mm	
				1.6	1000	
				2.0	1000	
				2.4	1000	
				3.2	1000	
Welding instruction						
Materials		Preheating	Postweld heat treatment			
Matching and similar non-stabilized and stabilized steels / cast steel grades		Keine	Mostly none. If necessary, solution annealing at 1050°C (1922°F) – pay attention to tendency to embrittlement			
Approvals						
TÜV (12940), DB (43.132.41), CE						