

Classifications

EN ISO 14343-A	EN ISO 14343-B	AWS A5.9
W 19 9 L	SS308L	ER308L

Characteristics and typical fields of application

TIG rod of W 19 9 L / ER308L type for joining and surfacing applications with matching and similar stabilized and unstabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 18/8 CrNi(N)-steels. Excellent weld metal toughness down to -196°C . Application temperature max. 350°C .

Base materials

1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4307 X2CrNi18-9, 1.4311 X2CrNi18-9, 1.4312 GX10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10
UNS S30400, S30403, S30453, S32100, S34700
AISI 304, 304L, 304LN, 302, 321, 347

Typical analysis of the TIG rods (wt.-%)

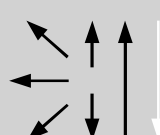
	C	Si	Mn	Cr	Ni
wt-%	≤ 0.02	0.5	1.8	20.0	10.0

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	-269 °C
u	400 (≥ 320)	550 (≥ 510)	38 (≥ 25)	150	75 (≥ 32)

u untreated, as-welded – shielding gas Ar

Operating data

	Polarity:	Shielding gas:	Marks:	Ø mm	L mm
	DC (-)	(EN ISO 14175) I1, I3	✦ W 19 9L / ER308L	1,2	1000
				1,6	
				2,0	
				2,4	
				3,2	
				4,0	

Approvals

TÜV (09451), DB (43.132.19), DNV GL, ABS, BV, CE