

**Classifications**

<b>EN ISO 14343-A</b>	<b>AWS A5.9 / SFA-5.9</b>
W 19 9 L Si	ER308LSi

**Characteristics and typical fields of application**

TIG rod of W 19 9 L Si / ER308LSi 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  $-196^{\circ}\text{C}$ . Application temperature max.  $350^{\circ}\text{C}$ .

**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**

	C	Si	Mn	Cr	Ni	FN
wt.-%	$\leq 0.02$	0.8	1.8	20	10.0	9

**Mechanical properties of all-weld metal - typical values (min. values)**

Condition	Yield strength $R_{p0.2}$	Tensile strength $R_m$	Elongation A ( $L_0=5d_0$ )	Impact energy ISO-V KV J	
	MPa	MPa	%	$20^{\circ}\text{C}$	$-269^{\circ}\text{C}$
u	400 ( $\geq 320$ )	550 ( $\geq 510$ )	38 ( $\geq 25$ )	150	75 ( $\geq 32$ )
u untreated, as-welded – shielding gas Ar					

**Operating data**

	Polarity	DC -	Dimension mm
	Shielding gas (EN ISO 14175)	I1	1.2 x 1000
	Rod marking	+ W 19 9L Si / ER 308 L Si	1.6 x 1000
			2.0 x 1000
			2.4 x 1000
		3.2 x 1000	

**Approvals**

TÜV (04164), DB (43.132.28), CE