

## Classifications

<b>EN ISO 14343-A</b>	<b>AWS A5.9 / SFA-5.9</b>
W 19 9 L	ER308L

## Characteristics and typical fields of application

TIG rod and wire of type W 19 9 L / ER308L for manual and mechanized gas tungsten arc welding and surfacing of matching and similar austenitic steels and cast steel grades. Good corrosion resistance. High 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

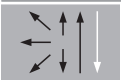
## Typical analysis

	C	Si	Mn	Cr	Ni
wt.-%	$\leq 0.02$	0.5	1.8	20	10.0

## 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 ( $\geq 30$ )	150 ( $\geq 100$ )	75 ( $\geq 32$ )
u untreated, as-welded – shielding gas Ar					

## Operating data

	Polarity	DC -	Dimension mm
	Shielding gas (EN ISO 14175)	I1	1.0 × 1000
	Rod marking	W 19 9L / ER308L	1.2
			1.2 × 1000
			1.6 × 1000
			2.0 × 1000
		2.4 × 1000	

## Approvals

TÜV (09451), DB (43.13.19), DNV, ABS, CWB, CE