

## DATASHEET RW 308 LAWS – TIG Rods

### Description and Applications

Austenitic stainless steel TIG rod, suitable for welding steels like AISI 304 and AISI 304 L. This alloy has a good general corrosion resistance. The RW 308 LAWS has a low C content which reduces the possibility of intergranular carbide precipitation and therefore makes this alloy particularly recommended where there is a risk of intergranular corrosion.

### Rodacciai denomination and approximate equivalent with other standards

	RW 308 LAWS
EN ISO 14343-A:2009	W 19 9 L
EN ISO 14343-B:2009	SS 308 L
AWS A5.9-2012	ER 308 L

**Approvals**  
TÜV  
CE  
CWB

### Filler metal properties

Chemical composition (nominal) in %

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Co	N	Nb	B
min		1,50	0,30			19,50	9,50						
max	0,020	2,00	0,50	0,015	0,020	20,50	10,50	0,20	0,20	0,20	0,060	0,050	0,0018

### Metal properties

The following data are typical for non-heat treated weld metal from TIG welding with I1 DIN EN ISO 14175 as shielding gas.

### Expected minimum mechanical properties of all weld metal

Temperature	°C	20	-196
Yield strength, Rp 0,2	N/mm <sup>2</sup>	465	
Yield strength, Rp 1,0	N/mm <sup>2</sup>	490	
Tensile strength, Rm	N/mm <sup>2</sup>	630	
Elongation, A5	%	35	
Reduction of area Z	%	60	
Impact energy, ISO – V	J	261	59

### Welding parameters

The welding parameters for TIG welding depend on the wire diameter and the welding application.

Electrode negative and a shielded gas of argon or helium has to be used to avoid burn-up of the tungsten electrode.

Welding positions : down hand, horizontal/vertical, vertical upward, overhead.

Wall thickness : max. 20 mm

Highest operating temperature, in the short term range, as for base metal, but not higher than 350 °C

Lowest operating temperature, as for base metal, but not lower than – 196°C

Resistance to intergranular corrosion proven in accordance with EN ISO 3651-2

### Sizes and marking

Standard sizes : diam. 1,00 – 1,20 – 1,60 – 2,00 – 2,40 – 3,20 and 4,00 mm

Tolerances on diameter : + 0,01 / - 0,04 mm

Marking : Each rod is stamped one end with ER 308L and RW 1.4316

### Packaging forms

White carton boxes of 5 kg.

Red, white or blue coloured cardboard tubes of 5 kg.

Wooden crates of 250 kg.