

## DATASHEET RW 310 – TIG rods

### Description and Applications

Solid drawn, corrosion resistant, chromium-nickel wire for welding of heat resistant austenitic steels of the 25% Cr, 20% Ni type. RW 310 has a good overall oxidation resistance, especially at high temperatures, due to its high Cr content. The alloy is fully austenitic and is therefore sensitive to hot cracking. Temperature limit for use under intermittent oxidation depend on cycle frequency. In no case shall a temperature of 1000 °C be exceeded. Common applications include industrial furnaces, annealing chambers, fused salt treatment installations, boiler parts, as well as heat exchangers.

### Rodacciai denomination and approximate equivalent with other standards

#### RW 310

EN ISO 14343-A:2009 W 25 20  
 EN ISO 14343-B:2009 SS 310  
 AWS A5.9-2012 ER 310

### Filler metal properties

Chemical composition (nominal) in %

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Co	Al	Ti	N	Ca	Nb	B	Ce
min	0,080	1,50	0,30			25,50	20,50										
max	0,120	2,00	0,60	0,015	0,015	26,50	21,00	0,30	0,20	0,20			0,060		0,050	0,003	

### Metal properties

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

### Expected minimum mechanical properties of all weld metal

Temperature	°C	20
Yield strength, Rp 0,2	N/mm <sup>2</sup>	390
Tensile strength, Rm	N/mm <sup>2</sup>	590
Elongation, A5	%	45
Impact energy, ISO – V	J	175

### 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 310 and RW 1.4842

### Packaging forms

White carton boxes of 5 kg.

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

Wooden crates of 250 kg.