

DATASHEET RW 310 – MIG wire

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 G 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	N	Nb	B
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 MIG welding with M1 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 ²	390
Tensile strength, Rm	N/mm ²	590
Elongation, A5	%	45
Impact energy, ISO – V	J	175

Packaging forms

Blue metallic wire baskets BS300 of 15 kg.

Plastic spools D300 of 12,5 kg for diam. 0,80 mm and of 15 kg for the other diameters.

Plastic spools D200 of 5 kg.

Drum packaging of about 150 kg for diameter 0,80 mm and of about 250 kg for the other diameters.

Diameters : 0,80 – 0,90 – 1,00 – 1,20 – 1,60 mm.