RODA ALLOY 625

Rodacciai®

SINCE 1956 ALL OVER THE WORLD

Roda ALLOY. 625

DATASHEET RODA ALLOY 625 – MIG – TIG

VdTUV - Merkblatt 1153 Approved

DESCRIPTION AND APPLICATIONS

Roda Alloy 625 is developed for welding of Alloys 625 at working temperature from –269°C to above 1000°C. It's suitable for welding heat resisting alloys (as Incoloy 800/800H) with other alloys for power generation and petrochemical plants and furnace equipment. It's also suitable for overmatching corrosion-resistant welds in Alloy 825, 6%Mo superaustenitic stainless 254SMo, Alloy 28, 904L, and for overlays on valves, pumps and shafts in marine and offshore equipment where high pitting resistance (PRE>50) and tolerance to weld metal dilution is required. In addition to the above materials, Roda Alloy 625 can be used as filler metal for cladding and welding dissimilar base metals such as Ni-Cr-Mo alloys to stainless and carbon steels.

APPROXIMATE EQUIVALENT WITH OTHER STANDARDS

Rodacciai Denomination	Rodaalloy 625
EN ISO 18274:2010	Ni 6625 - NiCr22Mo9Nb
AWS A5.14/A5.14M: 2018	ERNiCrMo-3 - NO6625
DIN Werkstoff Nr.	2.4831 - 2.4856

FILLER METAL PROPERTIES

Typical Chemical composition (nominal) in %

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Al	Ti	Fe	Nb+Ta
0,02	0,2	0,2	0,005	0,005	22	63	8,5	0,06	0,2	0,2	≤0,5	3,5

EXPECTED MINIMUM MECHANICAL PROPERTIES AS WELDED

Temperature		20°C	-196°C
Yield strength, Rp 0,2	MPa min	480	
Tensile strength, Rm	MPa min	750	
Elongation, A5	% min	35	
Impact energy, ISO – V	J min	110	65
PRE	min	50	

TYPICAL WELDING PARAMETERS

Process	Diameter mm	Diameter inches	Volt	Ampere	Gas
MIG	1,0	0.035	20-25	110-150	100% Ar
	1,6	1/16	24-26	180-220	100% Ar
TIG	1,6	1/16	11-14	125-185	100% Ar
	2,4	3/32	11-14	115-165	100% Ar

Welding positions down hand, horizontal/vertical, vertical upward, overhead.
Highest operating temperature, in the short term range, as for base metal, but not higher than 1000 °C. Lowest operating temperature, as for base metal, but not lower than – 196°C

SIZES AND MARKING

Standard sizes : diam. mm 0,80 – 0,90 – 1,00 – 1,14 – 1,20 – 1,60 – 2,00 – 2,40 – 3,20 – 4,00
diam. inches 0.030 – 0.035 – 0.045 – 1/16 – 3/32 – 1/8 – 5/32

PACKAGING FORMS

TIG - White carton boxes of 5 kg / 10 Lb. Red, white or blue coloured cardboard tubes of 5 kg / 10 Lb. Wooden crates of 250 kg / 660 Lb.
MIG - Blue metallic wire baskets BS300 of 15 kg / 33 Lb. Plastic spools D300 of 12,5 kg / 25 Lb for diam. 0,80 mm and of 15 kg / 33 Lb for the other diameters. Plastic spools D200 of 5 kg / 10 Lb.

RA 1120 2F

Rodacciai S.p.a. - Headquarters
Bosisio Parini (LC) Via Giuseppe Roda 1, 23842
Tel. +3931878111 | Fax +3931878312
rodawelding@rodacciai.com

www.rodacciai.com