

# RODA ALLOY 617



 **Rodacciai**  
SINCE 1956 ALL OVER THE WORLD



## DESCRIPTION AND APPLICATIONS

Roda Alloy 617 is a, Ni-Cr-Co-Mo alloy consumable, used for GTAW, GMAW of Ni-Cr-Co-Mo alloys (like UNS N06617), of Ni-Cr-Mo austenitic stainless steel and for cladding. Due to its composition is suitable for joining dissimilar alloys where high temperature strength and oxidation resistance are required up to 1150°C (i.e UNS N08800, UNS N08811).

## APPROXIMATE EQUIVALENT WITH OTHER STANDARDS

Rodacciai Denomination	Rodaalloy 617
EN ISO 18274:2010	Ni 6617 - NiCr22Co12Mo9
AWS A5.14/A5.14M: 2018	ERNiCrCoMo-1 - N06617
DIN Werkstoff Nr.	2.4627

## FILLER METAL PROPERTIES

Typical Chemical composition (nominal) in %

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Al	Ti	Co	Fe
0,06	0,05	≤0,15	≤0,005	≤0,005	21,5	56	8,8	≤0,02	1,3	≤0,4	11	≤0,8

## EXPECTED MINIMUM MECHANICAL PROPERTIES AS WELDED

Temperature		20°C	-196°C
Yield strength, Rp 0,2	MPa min	300	
Tensile strength, Rm	MPa min	700	
Elongation, A5	% min	50	

## TYPICAL WELDING PARAMETERS

Process	Diameter		Volt	Ampere	Gas
	mm	inches			
MIG	1,0	0.035	26-29	150-190	75% Ar + 25% He
	1,2	0.045	28-32	180-220	75% Ar + 25% He
	1,6	1/16	29-33	200-250	75% Ar + 25% He
TIG	3,2	1/8	29-32	350-450	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.

