

NiCrCo 617 Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Nickel based alloy with high heat resistance combined with excellent mechanical strength

APPLICATIONS NiCrCo 617 is a high temperature alloy which is used for welding of nickel-chromium-cobalt-molybdenum alloys (UNS Number N06617). This filler metal can also be used for overlay cladding where similar alloy is required such as gas turbines and ethylene equipment.

PROPERTIES Weld metal provides optimum strength and oxidation resistance above 1500° up to 2100°F, especially when welding on base metals of nickel-iron-chromium alloys.

CLASSIFICATION

AWS	A 5.14: ER NiCrCoMo-1
EN ISO	18274: S Ni 6617 (NiCr22Co12Mo9)
DIN: W.Nr.	2.4627
DIN	1736: SG-NiCr22Co12Mo

SUITABLE FOR Inconel alloys 600 and 601, Incoloy alloys 800 HT and 802 and cast alloys such as HK40, HP and HP45 Modified. UNS Number N06617, 2.4663, 1.4952, 1.4958, 1.4959, NiCr21Co12Mo, X6CrNiNbN 25 20, X5NiCrAlTi 31 20, X8NiCrAlTi 32 21, Alloy 617, N08810, N08811

APPROVALS CE approved

WELDING POSITIONS:



ALL WELD METAL DEPOSIT (WEIGHT %)

C	Fe	Si	Cr	Ni	Co	Mo	Ti
<0.15	<3.0	<1.0	20-24	Rem	10-15	8-10	<0.6

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness H _{Rc} / HV
				20°C	-40°C	-60°C	
AW	>480	>760	>32	>120			

AW: as welded

WELDING PARAMETERS / PACKING

D (mm)	Welding Parameters	Packing (kg)	
		single	master
1.6 x 1000	Current (A) DC-	5	25
2.0 x 1000	50-80	5	25
2.4 x 1000	70-110	5	25
3.2 x 1000	110-180	5	25
	150-250	5	25

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1, R1