MIG NI59

Classification

AWS A5.14 : ERNiCrMo-13 ISO 18274 : S Ni6059 (NiCr23Mo16)

Description & Applications

Nickel alloy for GMAW welding with high content of Cr and Mo, which gives it exceptional corrosion resistance. It is particularly recommended for cladding of carbon steels and for welding of C-276, C-22, alloy 59, other highly corrosion resistant Ni-alloys and special stainless steels.

Main applications: Works well in different environments, de-pollution (absorbers, chimneys), sea water and fertiliser, flue gas desulphurisation.

Base material

UNS	Alloy	DIN	Material N°
N06059	59	NiCr23Mo16Al	2.4605
N06022	C-22	NiCr21Mo14W	2.4602
N10276	C-276	NiMo16Cr15W	2.4819
N06455	C-4	NiMo16Cr16Ti	2.4610
N06625	625	NiCr22Mo9Nb	2.4856
N08825	825	NiCr21Mo	2.4858
N08926	254SMo	X1NiCrMoCuN25 20 6	1.4529

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Mo	Cu	P	S	Fe	Co	Al	Ti	V	Ni
Min				22.0	15.0						0.1			56.0
Max	0.010	0.10	0.5	24.0	16.5	0.50	0.015	0.010	1.5	0.3	0.4	0.5	0.3	
Type	0.005	0.05	0.20	23.0	15.5	0.20	0.005	0.002	0.50	0.02	0.20	0.01	0.02	>56.0

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	-	-	-	-	-
Max					
Type	400	700	25	-	-

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	0.8 1.0 1.2 1.6	70 - 180 80 - 220 150 - 320 220 - 380	18 - 26 18 - 28 22 - 32 24 - 34	ISO 14175: I1 (100% Ar) I3 (Ar+10-30%He) Z (Ar+He+H+CO_2) 15-20 l/min

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