MIG NI90

Classification

ISO 18274 : S Ni 7090 (NiCr20Co18Ti3) AMS : 5829

Description & Applications

Solid wire for GMAW of nickel alloys like NIMONIC 80A and 90.

Main applications: Combustion chamber and engine, gas turbine, petrochemical industry, ovens.

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Cu	P	S	Fe	Co
Min				18.00					15.00
Max	0.13	1.00	1.00	21.00	0.20	0.020	0.015	1.50	18.00
Type	0.08	0.30	0.50	20.0	0.10	0.01	0.01	1.0	16.0

	Al	Ti	Ag	B	Bi	Pb	Zr	Ni
Min	1.00	2.00						50.0
Max	2.00	3.00	0.0005	0.020	0.0001	0.0020	0.15	
Type	1.5	2.5	0.0002	0.005	0.0001	0.001	0.05	>50.0

All Weld Metal Mechanical Properties

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

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