



MIG NI690

Classification

AWS A5.14 : ERNiCrFe-7 ISO 18274 : S Ni6052 (NiCr30Fe9)

Description & Applications

Solid wire for GMAW of Nickel alloys type Alloy 690. Excellent resistance to corrosion and high temperature oxidation. Could be used in cladding for low alloys or stainless steels but also for heterogeneous assembly between steel and nickel.

Main applications: Nuclear industry, chemical and petrochemical industry.

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Mo	Cu	P
Min				28.0			
Max	0.04	0.50	1.0	31.5	0.50	0.30	0.020
Type	0.02	0.15	0.60	30.0	0.10	0.01	0.007
	S	Fe	Nb+Ta	Al	Ti	Al+Ti	Ni
Min		7.0					54.0
Max	0.015	11.0	0.10	1.10	1.0	1.5	
Type	0.003	9.0	0.01	0.40	0.60	1.0	Rem.

All Weld Metal Mechanical Properties

	R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min	-	-	-	-
Max				
Type	410	640	37	+20°C 180

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	0.8	70 - 180	18 - 26	ISO 14175: I1 (100% Ar) I3 (Ar+10-30%He) Z (Ar+He+H+CO ₂) 15-20 l/min
	1.0	80 - 220	18 - 28	
	1.2	150 - 320	22 - 32	
	1.6	220 - 380	24 - 34	

FT-En-MI14-170113

Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company FSH Welding Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for FSH Welding Group. **Fumes:** Consult information on MSDS, available upon request.

www.fsh-welding.com - info@fsh-welding.fr