MIG FENI60

Classification

ISO 1071 : S C NiFe-2

Description & Applications

Solid wire for GMAW and reparation of ferritic or martensitic spheroidal cast iron. Could be also used for heterogeneous assembly of nodular cast iron with steel or copper alloy or nickel alloy. Weld deposit characterized by good resistance against cracking and easily machinable.

Main applications: Cast iron pipe, flanges…

Typical Chemical Composition (%)

	C	Si	Mn	Ni	Cu	Al	Ti	P	S	Fe
Min			1.0	45						
Max	2.0	4.0	5.0	60	2.5	1.0	-	0.03	0.03	Rem.
Type	0.10	0.30	3.6	54.2	1.8	0.02	0.30	0.005	0.010	Rem.

All Weld Metal Mechanical Properties

	$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	Hardness	
Min	-	-	-	-	-
Max					
Type	300	500	25	As welded	~200HB

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

Preheating of massive cast iron parts: 150-200°C. interpass temperature: <120°C. Reduce the heat input to a minimum (low welding energy) to avoid cracks in base material.