



MIG F61

Old reference: MIG 70SA1

Classification

AWS A5.28 : ER70S-A1
ISO 21952-A : G MoSi

ISO 14341-A : G 46 2 M21 2Mo

Description & Applications

Copper coated solid wire for gas (Ar + CO₂) metal arc welding of low alloyed steels and creep resisting steels (Mo alloyed) used at service temperatures up to 500°C. Excellent toughness values at low temperature down to -20°C.

Main applications: For piping systems, boilers and pressure vessels...

Base materials

Construction steels, Creep resisting steels :

EN	ASTM
16Mo3	A161/A209/A250 gr T1 ;A335 gr P1
P355GH	A537 Cl1; A414 gr G ; A612
S420N – S460N	A572 gr 65, A633 gr E
S500N	A225 gr C, A517 gr
P460N	A225 gr C
S420NL - S500NL	A633 gr E, A225 gr C, A517 gr
P420NH - P500NH	A633 gr E, A225 gr C, A517 gr

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	Al	Ti+Zr	V	P	S	O/T
Min	0.08	0.50	0.90			0.40								
Max	0.12	0.70	1.30	0.15	0.15	0.60	0.3	0.01	0.02	0.15	0.03	0.020	0.020	0.50
Type	0.09	0.60	1.1	0.09	0.05	0.50	0.15	0.003	0.005	0.005	0.005	0.015	0.01	<0.50

All Weld Metal Mechanical Properties

	R _e (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
Min	460	530	22	-20°C >47
Max		680		
Type	490	580	24	-20°C 120

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	0.8	60 - 200	16 - 28	ISO 14175: M21 (Ar/CO ₂) 12-15 l/min
	1.0	80 - 260	17 - 32	
	1.2	100 - 360	18 - 34	

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