MIG F68

Old reference: MIG 90SB3

Classification

AWS A5.28 : ER90S-B3 ISO 21952-B : G 62 M22 2C1M

Description & Applications

Copper coated solid wire for gas (Ar + O_2) metal arc welding of creep resistant steels alloyed Chromium and Molybdenum (2.25% Cr - 1% Mo) applied at service temperature up to 600°C.

Main applications: Petrochemical industry, chemical industry.

Base material :

Creep resisting steels:

EN	*ASTM*
10CrMo 9-10	A 182 gr F22
12CrMo 9-10	A 199 gr T21, T22
G-17CrMo 9-10	A 200 gr T21,T22
	A 213 gr T22
	A 217 gr WC9
	A 234 gr WP22
	A 335 gr P22
	A 387 gr 21, 22

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	P	S	O/T
Min	0.07	0.40	0.40	2.30		0.90				
Max	0.12	0.70	0.70	2.70	0.20	1.20	0.35	0.025	0.025	0.50
Type	0.10	0.60	0.60	2.4	0.03	1.0	0.20	0.01	0.01	<0.50

All Weld Metal Mechanical Properties*

	R_e (MPa)	R_m (MPa)	A_5 (%)	KV (J)	
Min	540	620	17	-	-
Max					
Type	560	640	19	+20°C	150

* After PWHT at 690°C/1h

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	1.0 1.2	80 - 260 100 - 360	17 - 32 18 - 34	ISO 14175: M22 (Ar/O_2) 12-15 l/min

Preheating and interpasses temperature: 185-215°C

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