

# **MIG F63**

Old reference: MIG 80SB2

## Classification

#### **Description & Applications**

Copper coated solid wire for gas  $(Ar + O_2)$  metal arc welding of creep resistant steels alloyed Chromium and Molybdenum (1.25% Cr - 0.5% Mo) applied at service temperature up to 550°C.

**Main applications:** Petrochemical industry, chemical industry.

Base material:

### **Creep resisting steels:**

EN	ASTM
13CrMo 4-5	A 182 gr F11, F12
25CrMo4	A 199 gr T11
14CrMo 4-5	A 200 gr T11
	A 213 gr T11, T12
	A 217 gr WC6, WC11
	A 234 gr WP11, WP12
	A 335 gr P11, P12
	A 377 gr 11, 12

### **Typical Chemical Composition (%)**

	С	Si	Mn	Cr	Ni	Мо	Cu	Р	S	O/T
Min	0.07	0.40	0.40	1.20		0.40				
Max	0.12	0.70	0.70	1.50	0.20	0.60	0.35	0.025	0.025	0.50
Type	0.09	0.60	0.60	1.3	0.03	0.50	0.15	0.01	0.01	< 0.50

## All Weld Metal Mechanical Properties\*

	R <sub>e</sub> ( MPa )	$R_{m}$ (MPa)	A <sub>5</sub> (%)	KV (	J)
Min	470	550	19	-	-
Max					
Type	490	580	21	+20°C	150

<sup>\*</sup> After PWHT at 620°C/1h

## **Welding Current & Instructions**

Welding mode	Wire Ø	Welding p	Shielding Gas	
vveiding mode	(mm)	Current (A)	Voltage (V)	Silleluling Gas
GMAW = +	1.0 1.2	80 - 260 100 - 360	17 - 32 18 - 34	ISO 14175: M22 (Ar/O <sub>2</sub> ) 12-15 l/min

Preheating and interpasses temperature: 135-165°C

FT En-MF03-191113