



**FCAW LOW ALLOY STEEL (High Temperature)**  
**TIGFIL 90S-B3 SPL**

2.25Cr-1Mo COPPER COATED SOLID FILLER ROD FOR CREEP RESISTANCE



**CLASSIFICATION :** AWS A/SFA 5.28 EN ISO 21952-A

ER90S-B3

W CrMo2Si

**KEY FEATURES :**

- Copper coated low alloy steel solid filler rod
- Typical 2.25 Cr-1 Mo weld deposit
- Notch free welds with excellent mechanical properties
- Superior strength and toughness after PWHT
- Meets X factor requirement
- Radiographic quality weld

**WELDING POSITION :**



DCEN

Shielding Gas	Gas Flow Rate, LPM
Ar	10-15

**TYPICAL APPLICATIONS :**

- Welding of 2.25Cr-0.5Mo, 2.25Cr-1Mo type creep resistant steels
- Joining ASTM A 335 Gr.P22, A 387 Gr.22 materials
- Refineries, Petrochemicals and fertilizers plant
- Joining of P5A materials
- Cr-Mo and Cr-Mo-V bearing steels for high temperature applications
- Suitable for 12CrMo9-10, 10CrSiMoV7 German steels

**STORAGE / HANDLING :**

Keep dry during storage and handling

**CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :**

	C	Mn	Si	Cr	Mo	Cu*
Specification	0.07-0.12	0.40-0.70	0.40-0.70	2.30-2.70	0.90-1.20	0.15 max
	As	Sn	Sb	S	P	
Specification	0.005 max	0.005 max	0.005 max	0.010 max	0.010 max	

\* Including Cu in the coating

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -30°C, J
Specification	PWHT: 690°C for 1 Hr	620 min	540 min	17 min	27 min

**PARAMETERS - PACKING DATA :**

Ø, mm	Primary Box, Kg	No. of Primary Boxes	Net Wt. of Carton, Kg
1.6 x 1000	5	4	20
2.0 x 1000	5	4	20
2.5 x 1000	5	4	20
3.2 x 1000	5	4	20