



GTAW C-Mn Steel  
**TIGFIL 70S-2 SPL**

TRIPLE DEOXIDIZED COPPER COATED C-Mn STEEL FILLER ALLOY MEETS IMPACT AT -46°C



**CLASSIFICATION :** EN ISO 636-A      AWS A/SFA 5.18      **APPROVALS :**

W 42 5 WS2

ER 70S-2

ABS/BV/IBR

**KEY FEATURES :**

- Triple deoxidized C-Mn steel filler rod with very low impurities
- Uniform copper coating
- Strong, tough and ductile weld metal
- Meets impact requirement at -46°C
- Radiographic weld quality

**WELDING POSITION :** 



**DCEN**

**Shielding Gas:** Ar

**Gas Flow Rate, LPM :** 8-15

**TYPICAL APPLICATIONS :**

- Welding NACE pipes-type A106 Gr.B or equivalent material
- Recommended for root runs of pipes and tubes for offshore application
- Pressure vessels, Boilers involving unalloyed and micro-alloyed structural steels with specified UTS up to 520 MPa

**STORAGE / HANDLING :**

Keep dry during storage and handling

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

	C	Mn	Si	Ti	Zr	Al	Cu*	S	P
Specification	0.07 max	0.90-1.40	0.40-0.70	0.05-0.15	0.02-0.12	0.05-0.15	0.50 max	0.010 max	0.015 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 -46°C, J
Specification	As Welded	500 min	420 min	22 min	28 min

**Hardness, 3 Layers :** 210 BHN max

**SPECIAL TESTS :**

HIC and SSCC (NACE)

**PACKING DATA :**

Ø x L, 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
4.0 x 1000	5	4	20