



# TIGFIL 90S-B9

GTAW LOW ALLOY STEEL (High Temperature)

AWS A/SFA 5.28 **ER90S-B9**

### CLASSIFICATION:

EN ISO 21952-B  
W 62 11 9C1MV

### KEY FEATURES:

- Copper coated low alloy steel solid filler wire & rod
- Typical 9Cr-1Mo-V-Nb type weld deposit
- Uniform copper coating
- Smooth wire feeding
- Offers improved long-term creep properties
- Radiographic quality weld

**APPROVALS:** IBR/CE

### TYPICAL APPLICATIONS:

- Suitable for welding of Cr-Mo-V-Nb steels such as P91, T91 and F91
- Suitable for material 1.4903, SA 387 Gr.91, SA 213, T91, SA 335 P91
- For heavy wall components such as headers, main steam piping and turbine rotors in power generating plants

### TYPICAL CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt %:

C	Mn	Si	Cr	Mo	Ni	V	Al	Nb
0.1	0.5	0.3	8.7	0.95	0.35	0.2	0.02	0.04


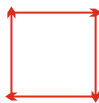
### MECHANICAL PROPERTIES OF ALL WELD METAL:

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%
Typical	PWHT: 760°C for 2 Hrs	680	570	18

### CREEP TEST DATA:

Temperature, °C	Stress, Mpa	Duration, Hrs	Strain% after 1000 Hrs
550	240	1000	2.26
600	160	1000	3.04

### PARAMETERS - PACKING DATA:

Ø x L, mm	Net Wt., Kg		
1.6 x 1000	20	 <b>DCEN</b>  <b>STORAGE / HANDLING :</b> Keep dry and follow handling instructions mentioned on the box	All Positions  
2.0 x 1000	20		
2.4 x 1000	20		

Shielding Gas	Gas Flow Rate, LPM
Ar	10-15

Available in Standard carton packing of 20 kg box, containing 4 plastic tubes of 5 kg each.