



# AUTOMIG 90S-B3

GMAW LOW ALLOY STEEL (High Temperature)

AWS A/SFA 5.28 **ER90S-B3**

### CLASSIFICATION:

EN ISO 21952-B  
G 62 M13 2C1M

IS 6419  
SLA-4-M-561

### KEY FEATURES:

- Copper coated low alloy steel solid filler wire & rod
- Uniform copper coating
- Deposit notch free welds with excellent mechanical properties
- Typical 2.25 Cr-1 Mo weld deposit
- Superior strength and toughness after PWHT
- Radiographic quality weld

### APPROVALS: CE

### TYPICAL APPLICATIONS:

- Welding of 2.25Cr-0.5Mo and 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 hightemperature applications
- Suitable for 12CrMo9-10, 10CrSiMoV7 German steels

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

C	Mn	Si	Cr	Mo
0.09	0.6	0.5	2.45	0.95



### MECHANICAL PROPERTIES OF ALL WELD METAL:

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%
Typical	PWHT: 690°C for 1 hr	680	600	20

### CREEP TEST DATA:

Condition	Temperature, °C	Stress, MPa	Duration, Hrs	Strain% after 1000 Hrs
PWHT: 690°C for 1 Hr	550	140	1000	0.92
	600	80	1000	1.28

### PARAMETERS - PACKING DATA:

Ø, mm	Kg/Spool		
1.2	15	 <b>DCEP</b>  <b>STORAGE / HANDLING :</b> Keep dry and follow handling instructions mentioned on the box	All Positions  
1.6	15		

Shielding Gas	Gas Flow Rate, LPM
Ar/1-5O <sub>2</sub>	15-20