

# GM 70SA1

## SOLID WIRE ALLOYED WITH MOLYBDENUM FOR IMPROVED PROPERTIES

### IDENTIFICATION

GM 70SA1, ER 70S-A1

### CLASSIFICATION

AWS A-5.28: ER 70S-A1

### DESCRIPTION

- GM 70SA1 copper coated filler wire for welding 0.5% Mo steels used for creep resisting service at temperatures up to about 500°C.
- This wire is copper coated to suppress corrosion but possible deterioration is minimised by storage at <60% RH and >18°C.

### CHEMICAL ANALYSIS (RANGE) %

C	Mn	Si	S	P	Mo	Cu	Ni
0.12 max	1.30 max	0.30 - 0.70	0.025 max	0.025 max	0.40 - 0.65	0.35 max	0.20 max

### MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value	
			Temp	Joules
550 min	450 min	25 min	-20°C	70 min

### MATERIALS TO BE WELDED

- ASTM A 335 Gr.P1
- ASTM A 336 Gr.F1
- ASTM A 185 Gr.F1
- ASTM A 204 A, B, C
- ASTM A 209 Gr.T1
- ASTM A 487 2B (cast)
- ASTM A 533 Cl.3

Steel type 16Mo3 high tensile steels having tensile strength in the range 550 - 600 MPa.

**SHIELDING GAS :** 80% Argon + 20% CO2

### PACKING PARAMETERS

Size (mm)	Packing / Spool (kg)
0.8	1.0 / 10.0 / 12.50 / 15.0 kg
1	1.0 / 10.0 / 12.50 / 15.0 kg
1.2	1.0 / 10.0 / 12.50 / 15.0 kg
1.6	10.0 / 12.50 / 15.0 kg