

Ultramag[®] S4

Key Features

- Medium levels of manganese and silicon deoxidizers resulting in lower levels of silicon island formation when compared with S6 grade materials
- Suitable for argon based gases or 100% CO₂
- Precision layer wound wire
- Robust copper coating aids electrical conductivity for good arc-starting and helps extend contact tip life
- Available in a wide range of sizes and pack formats

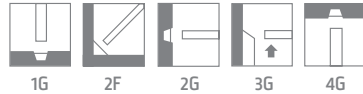
Conformances

AWS A5.18/A5.18M: ER70S-4
AS/NZS 14341-B: G 49A 3U M21/C1 S4

Typical Applications

- Medium to heavy mill scale base material
- Sheet and plate to 450 MPa yield strength
- General fabrication of Carbon Manganese steels

Welding Positions



Shielding Gas

- C1 : 100% CO₂
- M21 : 75-85% Argon / 15-25% CO₂
- Flow Rate: 15-20 L/min

Diameter / Packaging

| Diameter mm | Part Number | Packaging |
|-------------|-------------|----------------------|
| 0.9 | AUM0915S4 | Spool Plastic 15kg |
| 1.0 | AUM1015S4 | Spool Plastic 15kg |
| 1.2 | AUM1215S4 | Spool Plastic 15kg |
| 1.6 | AUM1615S4 | Spool Plastic 15kg |
| 1.6 | AUM16350S4 | Accu-Trak Drum 350kg |

Mechanical Properties - As required per AWS A5.18

| | Yield Strength MPa | Tensile Strength MPa | Charpy V-Notch J @ -30°C |
|---|-----------------------|-------------------------|-----------------------------|
| Requirements - AWS ER70S-4 As welded with C1 gas | 400 min | 485 min | 27 |
| Typical Results - As Welded with C1 gas | 450 | 550 | 98 |

Wire Composition

| | %C | %Mn | %Si | %S | %P | %Cu (Total) |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|
| Requirements - AWS ER70S-4 | 0.06-0.15 | 1.00-1.50 | 0.65-0.85 | 0.035 max | 0.025 max | 0.50 max |
| Typical Results | 0.09 | 1.44 | 0.75 | 0.013 | 0.010 | 0.13 |