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% CO_2
- 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

Typical Applications

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

Conformances

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

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