

# Ultramag<sup>®</sup> S6

**Mechanical Properties** - As required per AWS A5.18

	Yield Strength MPa	Tensile Strength MPa	Elongation %	Charpy V-Notch J @ -30°C
<b>Requirements</b> - AWS ER70S-6	400 min	480 min	22 min	27
<b>Typical Results</b>	450	560	28	83

## Wire Composition

	%C	%Mn	%Si	%S	%P	%Cu (Total)
<b>Requirements</b> - AWS ER70S-6	0.06-0.15	1.40-1.85	0.80-1.15	0.035 max	0.025 max	0.50 max
<b>Typical Results</b>	0.086	1.57	0.86	0.012	0.014	0.08

## Typical Operating Procedures

Diameter, Polarity Shielding Gas	CTWD mm	Wire Feed Speed in/min	Voltage volts	Current amps
<b>0.9mm DC+</b>				
Short Circuit Transfer C1	9-12	100	18	80
		150	19	120
		250	22	175
Spray Transfer M21	12-19	375	23	195
		500	29	230
		600	30	275
<b>1.2mm DC+</b>				
Short Circuit Transfer C1	12-19	125	19	145
		150	20	165
		200	21	200
Spray Transfer M21	12-19	350	27	285
		475	30	335
		500	30	340
<b>1.6mm DC+</b>				
Short Circuit Transfer C1	12-25	210	27	325
		235	28	350
		290	29	430