

2CRMO

Low Alloy Steel ■ AWS ER90S-G

KEY FEATURES

- Designed for high strength and improved hardness to resist metal-to-metal wear
- Developed to provide corrosion resistance to Sulphur bearing crude oil
- Superior feedability

WELDING POSITIONS

All

SHIELDING GAS

95% Argon / 5% CO₂

CONFORMANCES

AWS 5.28 ER90S-G
BS EN ISO 21952-A CrMo2Si

TYPICAL APPLICATIONS

- Steam Generating Power Plant
- Piping
- Coal Liquefaction Plant
- NH₃ Pressure Vessels

DIAMETERS / PACKAGING

Diameter mm (in)	15 kg (33.1 lb) Spool
0.8 (0.035)	M2CRMO-08
1.2 (0.045)	M2CRMO-12

MECHANICAL PROPERTIES⁽¹⁾ – As Required per AWS A5.28

	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft-lbf) @-10 °C (14 °F)	Hardness HV
Requirements AWS ER90S-G	540 (78) min	620 (90) min	17 min	-	-
Typical Performance⁽³⁾ As-Welded	540 (78)	655 (95)	23	>95	220

DEPOSIT COMPOSITION⁽¹⁾ – As Required per AWS A5.28

	%C	%Mn	%Si	%S	%P
Requirements AWS ER90S-G	0.06-0.12	0.80-1.20	0.50-0.80	0.02 max	0.02 max
Typical Performance⁽³⁾	0.1	1	0.6	0.01	0.015
	%Cr	%Ni	%Mo	%Cu	
Requirements AWS ER90S-G	2.30-2.70	-	0.90-1.10	0.4 max	
Typical Performance⁽³⁾	2.4	<0.1	1	0.15	

TYPICAL OPERATING PROCEDURES

Diameter mm (in)	Polarity	Amperage	Voltage
1.2 (0.045)	DC+	280A	26V

⁽¹⁾ Typical all weld metal ⁽²⁾ Measured with 0.2% offset ⁽³⁾ See test results disclaimer ⁽⁴⁾ Preferred polarity is listed first.

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at www.lincolnelectric.com

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

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