DURAMAX®
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Product
Data Sheet

CHROME MOLY WELDING WIRE DM80SB-2

Classification: **ER80S-B2** **AWS A5.28 / ASME SFA 5.28**

Description, Characteristics & Applications:

DuraMax DM80SB-2 is a chrome-moly welding wire for MIG (GMAW) and TIG (GTAW) welding. ER80S-B2 is used for gas metal arc welding of 1¼ chromium, ½ molybdenum steels in high temperature applications. A 300°F minimum preheat and inter-pass temperature are recommended during welding.

AWS Chemical Composition Requirements (%)

C	Mn	Si	P	S	Ni	Cr	Mo	Cu	Other
0.07-0.12	0.40-0.70	0.40-0.70	0.025 max	0.025 max	0.20 max	1.20-1.50	0.40-0.65	0.35 max	0.50 max

Deposited Chemical Composition (%) (Typical)

C	Mn	Si	P	S	Ni	Cr	Mo	Cu
0.09	0.55	0.48	0.012	0.006	0.10	1.35	0.55	0.15

Deposited Mechanical Properties (SR)

Tensile Strength	Yield Strength	Elongation	Charpy V-Notch Impact
85,000 psi	72,000 psi	22%	At +32°F: 60 ft. lbs.

Sizes Available and Recommended Welding Parameters

Process	Diameter	Amperage	Voltage	Gas/Flux
GTAW	.035 inches x 36	50 - 70	10 - 12	100% Argon
	.045 inches x 36	70 - 100	10 - 12	100% Argon
	1/16 inches x 36	100 - 125	12 - 15	100% Argon
	3/32 inches x 36	125 - 175	15 - 20	100% Argon
	1/8 inches x 36	175 - 250	15 - 20	100% Argon
GMAW Spray Transfer	.035 inches	165 - 200	28 - 32	98% Argon + 2% Helium
	.045 inches	180 - 220	30 - 34	75% Argon + 25% CO2
	1/16 inches	230 - 260	30 - 34	100% CO2
GMAW Short Arc	.035 inches	100 - 140	22 - 25	100% CO2
	.045 inches	120 - 150	23 - 26	75% Argon + 25% CO2

Notes Weld parameters are dependent upon the actual weld process being utilized.

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