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Product
Data Sheet

NICKEL ALLOY WIRE DMHASX

Alloy: ERNiCrMo-2 (Hastelloy X) **Weld Process: GMAW & GTAW** **AWS A5.14 / ASME SFA 5.14**

Application

ERNiCrMo-2 is used for welding nickel-chromium-molybdenum base materials to itself, steel and other nickel base alloys. Can clad steel using GTAW, GMAW, welding processes. Can weld on high nickel base alloys exposed to high temperatures.

AWS Chemical Composition Requirements

C	Mn	Fe	P	S	Si	Cu	Ni	Co	Cr	Mo	W	Other
0.05 - 0.15	1.0 max	17.0 - 20.0	0.04 max	0.03 max	1.0 max	0.5 max	Remainder	0.5 - 2.5	20.5 - 23.0	8.0 - 10.0	0.2 - 1.0	0.50 max

Deposited Chemical Composition % (Typical)

C	Fe	Cr	Ni	Mo
0.10	19.5	22.0	Balance	9.75

Deposited All Weld Metal Properties % (AW)

Tensile Strength	Elongation	Charpy-V-Notch Impact
99,000psi	27%	Not applicable

Recommended Welding Parameters for TIG and MIG Welding of Nickel Alloys

Process	Diameter of Wire	Voltage (V)	Amperage (A)	Gas
Tig	.035 inches x 36	12 - 15	60 - 90	100% Argon
	.045 inches x 36	13 - 16	80 - 110	100% Argon
	1/16 inches x 36	14 - 18	90 - 130	100% Argon
	3/32 inches x 36	15 - 20	120 - 175	100% Argon
	1/8 inches x 36	15 - 20	150 - 220	100% Argon
MIG	.035 inches	26 - 29	150 - 190	75% Argon + 25% Helium
	.045 inches	28 - 32	180 - 220	75% Argon + 25% Helium
	1/16 inches	29 - 33	200 - 250	75% Argon + 25% Helium

Notes

Note: Other shielding Gases may be used for Mig and Tig welding. Shielding gases are chosen taking Quality, cost, and operability into consideration.

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