DURAMAX®
Inspiring the future generations of welders

Product
Data Sheet

DURAMAX NICKEL ALLOY ELECTRODE DMHAST-B2

Classification: **ENiMo-7** **AWS A5.11 / ASME SFA 5.11**

Description, Characteristics & Applications:

DURAMAX HAST-B2 is a nickel-molybdenum flux-coated electrode developed specifically for welding similar base metals such as Hastelloy B2 to itself or to steel and nickel alloys. Common base metals that can also be welded would include ASTM B333, B335, B619, B622 and B626 all of which have UNS number N10665. DMHAST-B2 has a controlled low level of carbon, iron and cobalt which together with the nickel and molybdenum gives this electrode excellent resistance to pitting and stress corrosion cracking commonly caused by acids. The most common application of DMHAST-B2 would be in the chemical processing industries on parts exposed to all concentrations and temperatures of hydrochloric acid. It is also used on parts subjected to sulfuric, phosphoric and acetic acids. DMHAST-B2 should not be used in the presence of cupric or ferric salts which may develop where iron or copper bearing alloys have come in contact with acids.

Typical Chemical Composition (%)

C	Mn	Fe	P	S	Si	Cu	Ni	Co	Cr	Mo	W	TOE
0.02 max	1.75 max	2.25 max	0.04 max	0.03 max	0.20 max	0.50 max	REM	1.0 max	1.0 max	26.0-30.0	1.0 max	0.50 max

Deposited Chemical Composition (%) (Typical)

C	Mn	Fe	P	S	Si	Cu	Ni	Co	Cr	Mo	W	TOE
0.01	1.20	1.50	0.01	0.02	0.11	0.35	REM	0.40	0.60	28.50	0.45	<0.50

Typical Mechanical Properties as Welded

Tensile Strength (n/mm^2)	Yield Strength (n/mm^2)	Elongation (%)	Hardness (BHN)	Ferrite WRC (FN)	CVN Impacts (J) @ °C
807	-------	28% Min	-------	-------	-------

Typical Welding Parameters DCEP or AC

Diameter	Type of Current	Amperage Range		Voltage Range
		Flat	Out of Position	
3/32"	DCEP	70 - 80	65 - 80	20 - 23
1/8"	DCEP	80 - 110	75 - 95	21 - 24
5/32"	DCEP	120 - 160	110 - 120	22 - 25
3/16"	DCEP	170 - 190	Not recommended	23 - 25

NOTE: Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

POLARITY: DCEP
DCEP: DC, Electrode Positive (reverse polarity) has the most weld penetration
USE LESS AMPS ON THIN METAL; MORE AMPS ON THICK METALS

If additional information is needed visit us on the web at www.duramaxwelding.com

DURAMAX Brand **103 Queens Drive** **King of Prussia, PA 19406**
Phone: 484-808-4200 **Toll Free: 800-692-5930** **Fax: 610-265-7806**