# **MF 400**

# SUPER ELECTRODE FOR HASTELLOY C, NICKEL ALLOYS & STAINLESS STEEL



- Universal Alloy for Hastelloy C, Nickel & Molybdenum
- Universal alloy for all corrosion resistant applications
- Offers the best Resistance to oxidizing & reducing Acids and Alkalies elevated temperature
- Ideal for very high temperatures up to 2100°F (1150°C)
- Excellent crack resistance



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# **MF-400**

#### SPECIAL FEATURES

- MF 400 Deposits are rich in chromium, nickel and molybdenum.
- MF 400 can be used for high temperatures 2100°F (1150°C).
- MF400's highly alloyed make-up helps prevent cracking.
- MF 400 offers excellent resistance to oxidizing and reducing acids and alkalies even at elevated temperatures,
- MF400 gives a tough weld metal that work hardens

#### **OUTSTANDING PROPERTIES:**

- Is ideal for high-nickel alloys, including Hastelloy C, monel and inconel.
- Gives a non-porous deposit.
- Is readily machinable.
- Enables all-position welding.
- Provides outstanding physical and mechanical properties.
- Performs on AC as well as DC.
- Extremely tough weld metal that work hardens.

# **APPLICATIONS**

- Inconel to Monel
- Stainless Steel to Monel
- Wide variety of combinations
- Inconel to Inconel
- Steel-to-Cast Iron Welding
- Ferritic Stainless steel to Austenitic Stainless steel

The most outstanding, universal "one product" for all applications involving resistance to corrosion

#### **RECOMMENDED FOR:**

Ideally suited for applications involving both heat and corrosion, joining dissimilar nickel alloys or joining these alloys to the stainless steels. For fabrication and repairing chemical vats, retorts, valves and valve bodies, plating tanks, racks and supports, chemical pipelines, evaporators, digesters, hot-work forging dies, furnace racks, hoods and baffles, pumps, valves and controls.



400 - SUPER ALLOY FOR HASTELLOY C.

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- Clad Steel to Unclad Steel.
- Nichrome to Steel
- Cast iron architectural applications
- Monel to Monel.

MICROFUSION Maintenance Welding Alloys

#### **MECHANICAL PROPERTIES:**

#### Undiluted Weld Metal

Tensile Strength Yield Strength Elongation Hardness Work Hardness <u>Maximum Value Up to:</u> 85,000 psi (62kg/mm<sup>2</sup>) 78,000 psi (56kg/mm<sup>2</sup>) 32 % 220 Brinell, Rockwell C18 450 Brinell, Rockwell C44

### **RECOMMENDED CURRENT:** AC or DC reverse polarity

# **RECOMMENDED AMPERAGE SETTINGS:**

Diameter(mm)	3/32(2.5)	1/8(3.25)	5/32(4.0)
Minimum Amperage	50	75	120
Maximum Amperage	90	165	180

### WELDING POSITIONS : Flat, Horizontal

#### WELDING TECHNIQUES:

Clean area to be welded, removing all contaminating materials and old weld metal. Prepare joint edges. No preheat is usually necessary, nor desirable. Apply using any technique suited to the application - stringer bead, moderate or wide weaving, etc. Allow to cool and remove slag.



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