# MF 105



### EXTRA-LOW HYDROGEN MOISTURE RESISTANT ALLOY FOR HIGH STRENGTH STEEL

- Engineered specially for welding high-strength low alloy steels
- Suitable for unalloyed construction steels
- Better crack resistance even without preheating
- Superior moisture-resistance



## MF 105

#### SPECIAL BENEFITS

- MF 105 is quality engineered specially for outstanding results even on the most difficult-to-weld steels, including high-strength low-alloy steel
- MF 105 offers outstanding mechanical properties
- MF 105 provides superior crack resistance without preheating in some cases
- MF 105 enables you to weld higher tensile strength steels

#### **OUTSTANDING PROPERTIES**

- A unique low hydrogen alloy made in 1/16 (1.6mm) size
- Extremely smooth, Arc with good Arc stability
- Unusually good AC welding characteristics

#### APPLICATIONS

- **MF 105** is the right choice for welding low-alloy high-tensile construction steels.
- MF 105 has the potential for AC & DC applications
- MF 105 also has superior welding properties when welding all types of steel
- MF 105 gives goods results on some problem steel such as: Rusty Steel, Sulfur-Bearing Steel Alloys,

Free-Machining Steel, Cold Rolled Steel

### Low Hydrogen steel electrode for unalloyed construction steels

- Mf105 has self-annealing quality to eliminate under-bead cracking and similar metallurgical Discontinuities
- It gives good deposition rate
- The weld is fully machinable

#### **RECOMMENDED FOR:**

Joining and repairing boiler plate, pipe steels, shipbuilding steels and cast steels. Excellent for weather and corrosion resistant steels like as COR-TEN<sup>®</sup>.



#### **MECHANICAL PROPERTIES:**

#### **Undiluted Weld Metal**

Tensile Strength Yield Strength Elongation Impact Energy Maximum Value Up to: 84,000 psi (610 N/mm<sup>2</sup>) 69,000 psi (500 N/mm<sup>2</sup>) 32% 90J: -30°C

#### **RECOMMENDED CURRENT: DC Reverse (+) or AC**

#### **RECOMMENDED AMPERAGE SETTINGS:**

Diameter in (mm)	1/16 (1.6)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	30	65	140	100	190
Maximum Amperage	45	100	190	140	250

WELDING POSITIONS: All position

#### WELDING TECHNIQUES:

Remove all surface contaminants. Maintain a short arc gap and use a stringer technique. Chip slag thoroughly between passes.



MICROFUSION Maintenance Welding Alloys