

1000 HPM™ Super Steel Electrode

1000 HPM is a dual-phase alloy with superior properties at low and high temperatures.

- Joins dissimilar alloys — excellent for stainless steel to nickel base alloys or to steel, manganese steels to carbon steels and other dissimilar alloys
- All-position — including overhead and vertical
- Superior strength — provides 150,000 psi tensile strength - twice as strong as ordinary steel electrodes
- Tough — withstands impact, vibration and stresses from heavy loads
- Corrosion resistant



SPECIFICATIONS

Tensile strength	
– as deposited.....	105,000 psi/724 MPa
– work hardened.....	150,000 psi/1034 MPa
– at 1200°F/649°C	~50,000 psi/433 MPa
Yield strength.....	
– at 1200°F/649°C	~30,000 psi/207 MPa
Hardness	
– as deposited.....	97 Rb
– work hardened.....	up to 37 Rc
Elongation	30%
Impact strength (Charpy)	
– room temperature	100 ft-lbs/135 Joules
– -75°F/-59°C	100 ft-lbs/135 Joules
Machinability.....	Excellent
Current.....	AC or DC



PROCEDURE: Same as XL Gold on previous page.



APPLICATIONS

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Lumber mills • Salt water pipe • Steel castings • Stainless steels • Joining tool steels • Stainless to steel | <ul style="list-style-type: none"> • Pressure vessels • Mining equipment • Carbon steels • HSLA steels • Die steels • Dissimilar steels | <ul style="list-style-type: none"> • Chemical lines • Construction maintenance • Nickel steels • High-alloy steels • Spring steels • Unknown steels |
|--|---|---|

Code #	Diameter	Amperage
003-3-000M	5/32"	95-145
003-4-000M	1/8"	60-100

For kits see page 1.6