



**FUSION™ UNIVERSAL E** is a stick electrode that can be used for fabrication joining welds, repair, and maintenance on a wide range of steels. It repairs jobs where high strength and toughness are required. General hardfacing applications is used where impact resistance and work hardening is required. It is best to buffer the layer before hardfacing with high hardness material. UNIVERSAL E has exceptional corrosion resistance, cavitation and impact. Depending on the amount of impact, the weld deposit work hardens to different degrees. This product has excellent crack resistance. Weld deposit displays exceptionally high ductility and elongation.

### Typical Deposit Characteristics

|                            |                       |
|----------------------------|-----------------------|
| <b>Abrasion Resistance</b> | Moderate              |
| <b>Impact Resistance</b>   | Excellent             |
| <b>Hardness</b>            |                       |
| As Welded                  | 150 – 200 HB          |
| Work Hardened              | 47 – 50 HRC           |
| <b>Tensile Strength</b>    | 101,000 PSI (690 MPa) |
| <b>Yield Strength</b>      | 76,000 PSI (510 MPa)  |
| <b>Elongation</b>          | 40%                   |

### Operational Characteristics / Welding Parameters

|                   |            |    |             |
|-------------------|------------|----|-------------|
| <b>Diameter</b>   | 1/8" (3.2) | OR | 5/32" (4.0) |
| <b>Current, A</b> | 90 – 150   | OR | 120 - 170   |
| <b>Position</b>   | All        |    |             |

| TYPICAL ALL-WELD METAL ANALYSIS |     |     |      |     |      |      |      |
|---------------------------------|-----|-----|------|-----|------|------|------|
| C                               | Mn  | Si  | Cr   | Ni  | Mo   | S    | P    |
| 0.12                            | 4.7 | 0.5 | 19.0 | 9.0 | 1.00 | 0.01 | 0.02 |

### Typical Applications

- Fabrication, repair, and maintenance on a variety of steel.
- Restore jobs where high strength and toughness are required.
- General hardfacing applications where impact resistance and work hardening is mandatory.

### Standard Sizes & Packaging

**Diameter:** 1/8" (3.2) OR 5/32" (4.0)  
**Packaging:** 10 lbs.