



## Unibraze E308-16

### DESCRIPTION:

Excellent for use on Type 301, 302, 304, 305 and 308 base metals, the UNIBRAZE E308H-16 all position electrode is specially formulated with more than .04 carbon to provide maximum elevated temperature strength. It has a smooth running arc that results in a uniform weld bead that is flat to slightly convex. It is also ideal for use as an intermediate layer prior to the deposit of hard-facing materials. It yields a concave weld bead that is smooth and refined.

### CONFORMANCES AND APPROVALS:

AWS/ASME A 5.4: E308-16 & E308H-16

### TYPICAL ALL WELD METAL PROPERTIES:

Microstructure: Austenite with ~4-10% ferrite.

#### Weld Metal Analysis

Carbon (C)	0.06	Manganese (Mn)	1.00
Silicon (Si)	0.50	Sulphur (S)	0.013
Phosphorus (P)	0.02	Chrome (C)	19.5
Nickel (N)	10.0	Molybdenum (Mo)	0..12
Copper (Cu)	0.10	Iron (Fe)	Balance

### TYPICAL MECHANICAL PROPERTIES:

#### Undiluted Weld Metal

Tensile Strength	Maximum Value Up to: 86,000 PSI (593 MPa)
Yield Strength	65,000 PSI (449 MPa)
Elongation	41%

### WELDING CURRENT & INSTRUCTIONS

#### Recommended Current: DC Reverse (+) or AC

Diameter (mm)	1/16 (1.6)	5/64 (2.0)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Minimum Amperage	25	30	55	75	90
Maximum Amperage	35	50	70	110	140

**Welding Techniques:** Material to be welded should be clean of all contaminants. Maintain a short arc and use stringer beads rather than a weave technique.

**Welding Positions:** Flat, Horizontal, Vertical up, Overhead

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its product.