



Unibraze 110S-1 (ER110S-1)

Classification:

AWS A5.28 / ASME SFA5.28 Class ER110S-1

Description:

Unibraze ER110S-1 produces high tensile strength, high impact resistant weld deposits that retain their toughness to -70°F making it suitable for low temperature critical applications. Unibraze ER110S-1 is meant for the welding of HY100 steels as well as a variety of structural applications where tensile strength requirements exceed 100 ksi (690 MPa),

Typical Chemical Composition:

| | |
|------------|------|
| Carbon | 0.06 |
| Manganese | 1.60 |
| Molybdenum | 0.40 |
| Silicon | 0.40 |
| Nickel | 2.20 |
| Chrome | 0.30 |

Typical Mechanical Properties:

| | |
|---|-------------|
| Tensile Strength | 114,000 psi |
| Yield Strength | 98,500 psi |
| Elongation % in 2" | 15.0% |
| Impact Strength @ -60°F | 65 ft. lbs. |

Welding Parameters:

Spray Transfer Short Arc

| Diameter | Amps | Volts | Gas | Amps | Volts | Gas |
|----------|---------|-------|--------------------------|---------|-------|--------------------------|
| .035" | 160-200 | 28-32 | 98 Ar/2 O ₂ | 100-140 | 22-25 | 100% CO ₂ |
| .045" | 180-220 | 30-34 | 75 Ar/25 CO ₂ | 120-150 | 23-26 | 75 Ar/25 CO ₂ |

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 products.