



Unibrazed 718

CLASSIFICATIONS: AWS A5.14/ASME SFA 5.14 Class ERNiCrFe-2 UNS N07718

DESCRIPTION: Unibrazed 718 is used for GTAW welding of 718, 706, and X-750 alloys. The weld metal is age hardenable and has mechanical properties comparable to the base metal.

TYPICAL CHEMISTRY:

| C | Cr | Ni | Mo | Mn | Si | P | S | Fe | Cu | Nb + Ta | Al | Ti | Others |
|---------|-----------|-----------|---------|---------|---------|----------|----------|-----|---------|-----------|---------|------------|---------|
| .08 max | 17.0-21.0 | 50.0-55.0 | 2.8-5.5 | .35 max | .35 max | .015 max | .015 max | Bal | .30 max | 4.75-5.50 | .20-.80 | .65 - 1.15 | .50 max |

TYPICAL MECHANICAL PROPERTIES:

| | |
|------------------|-----------------------|
| Tensile Strength | 125,000 psi (860 MPa) |
| Yield Strength | 91,000 psi (630 MPa) |
| Elongation | 27% |

TYPICAL WELDING PARAMETERS:

| | Diameter | Voltage | Amperage | Shielding Gas |
|-----|----------------|---------|----------|---------------|
| TIG | .035" (.9mm) | 12-15 | 60-90 | 100% Ar |
| | .045" (1.14mm) | 13-16 | 80-110 | |
| | 1/16" (1.6mm) | 14-18 | 90-130 | |
| | 3/32" (2.4mm) | 15-20 | 120-175 | |
| | 1/8" (3.2mm) | 15-20 | 150-220 | |

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.