



# Unibrazed 825

**CLASSIFICATIONS:** AWS A5.14/ASME SFA 5.14 Class ERNiFeCr-1 UNS N08065

**DESCRIPTION:** Unibrazed 825 is used for welding of Ni-Fe-Cr-Mo-Cu alloy (ASTM B423 UNS N08825) It is highly corrosion resistant in sulfuric and phosphoric acids.

## TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Fe	Cu	Al	Ti
.01	21.5	38.4	2.7	.5	.15	.002	.001	33.6	2.0	.08	.70

## TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	88,500 psi (610 MPa)
Yield Strength	61,000 psi (420 MPa)
Elongation	34%

## TYPICAL WELDING PARAMETERS:

	Diameter	Volts	Amps	Shielding Gas
MIG	.035" (.9mm)	26-29	150/190	75% Ar/25% He
	.045" (1.14mm)	28-32	180/220	
	.062" (1.6mm)	29-33	200/250	
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	
SAW	3/32" (2.4mm)	28-30	275-350	Suitable Flux
	1/8" (3.2mm)	29-32	350-450	
	5/32" (4.0mm)	30-33	400-550	

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.