



Unibraze16-8-2(-16)

CLASSIFICATIONS: AWS A5.4/ASME SFA 5.4 Class E16-8-2-16 UNS W36810

DESCRIPTION: Unibraze 16-8-2-16 is used to weld stainless steel, such as 16-8-2, 316, and 317, for high pressure, high temperature piping systems. The deposit has good hot ductility properties which offers relative freedom from weld or crater cracking even under high-restraint conditions. The weld metal is usable in either the as-welded or solution treated condition. These electrodes depend on a very carefully balanced chemical composition to develop their fullest properties. Corrosion tests indicate 16-8-2 weld metal may have less corrosion resistance than 316 depending on the corrosive media. Where the weldment is exposed to severely corrosive agents, the surface layer should be deposited with a more corrosion resistant weld metal.

Typical Chemistry: As welded

	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
AWS/ ASME	.10 max	14.5 – 16.5	7.5 – 9.5	1.0 – 2.0	.50 – 2.5	.60 max	.03 max	.03 max	.75 max	
Typical (As welded)	.06	15.7	8.0	1.3	1.05	.41	.02	.005	.05	7.1

Typical Mechanical Properties: (As Welded)

Tensile Strength	90,213 psi (622 MPa)
Yield Strength	-
Elongation	37%

Typical Welding Parameters: (DCEP or AC)

Dia.	Amps Flat	Amps Out of Position	Voltage
3/32"	70-90	60-85	20-23
1/8"	80-110	75-95	21-24
5/32"	120-160	100-120	22-25
3/16"	170-190	--	23-26

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.