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 that 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