



Unibraze 316-16/316H-16

CLASSIFICATIONS: AWS A5.4/ASME SFA 5.4 Class E316-16/E316H-16 UNS W31610

DESCRIPTION: Unibraze 316-16/316H-16 is an all position stainless steel electrode that is the same as E316-16 except the carbon content is restricted to .04 maximum. The carbon restriction provides higher tensile and creep strengths at elevated temperatures. Unibraze 316/316H-16 is suitable for welding and repair of 316H in applications requiring increased corrosion resistance of Mo bearing steels.

Typical Chemistry:

	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
AWS/ ASME	.04- .08	17.0- 20.0	11.0- 14.0	2.0- 3.0	.5- 2.5	1.0 max	.04 max	.03 max	.75 max	Not Required
Typical	.052	19.10	11.53	2.20	1.43	.64	.031	.006	.14	5.5

Typical Mechanical Properties:

	AWS/ASME	Typical
Tensile Strength	75,000 psi (520 MPa) min.	85,860psi (892 MPa)
Yield Strength	Not required	-
Elongation	30% min.	43%

Typical Welding Parameters: (DCEP or AC)

Dia.	Amps Flat	Amps Out of Position	Voltage
3/32"	70-90	65-80	20-23
1/8"	80-110	75-95	21-24
5/32"	110-160	100-120	22-25
3/16"	120-190	110-130	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.