



# Unibraze 307-16

**CLASSIFICATIONS:** AWS A5.4/ASME SFA 5.4 Class E307-16    UNS W30710

**DESCRIPTION:** Unibraze 307-16 is a rutile basic 5% Mn alloyed all position stainless steel electrode that is primarily used for armor steel, hard-to-weld steel and 14% high manganese steel. It has good crack resistance between dissimilar steels such as austenitic manganese steel and carbon steel forgings or castings.

## Typical Chemistry:

	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
<b>AWS/ ASME</b>	.04- .14	18.0- 21.5	9.0- 10.7	.5- 1.5	3.30- 4.75	1.0 max	.04 max	.03 max	.75 max	Not Required
<b>Typical (As welded)</b>	.09	19.74	9.85	1.0	4.25	.50	.01	.01	.13	7.0

## Typical Mechanical Properties:

<b>Tensile Strength</b>	87,200 psi (600 MPa)
<b>Yield Strength</b>	-
<b>Elongation</b>	42%

## Typical Welding Parameters: (DCEP or AC)

Dia.	Amps Flat	Amps Out of Position	Voltage
3/32"	50-85	45-85	20-23
1/8"	80-120	70-110	21-24
5/32"	100-150	90-135	22-25
3/16"	140-200	-	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.