



# Unibrazed 308LT1

All Position

## Classifications:

E308LT1-1, E308LT1-4 per AWS A5.22. (Also meets E308T1-1, E308T1-4 per AWS A5.22)

## Description:

Unibrazed 308LT1 is a gas-shielded, flux cored, stainless steel electrode designed to weld in all positions. It has a nominal weld metal composition of 20% Cr, 10% Ni and a maximum carbon content of 0.04%. The low carbon in this alloy minimizes carbide precipitation and makes it more resistant to intergranular corrosion.

## Characteristics:

Unibrazed 308LT1 has superb all position performance with very low spatter and excellent slag peeling which minimizes cleanup.

## Applications:

Unibrazed 308LT1 finds wide application in the welding of components for the chemical, paper, textile and pharmaceutical industries. It may be used to weld 301, 302, 304L, 308, and 308L stainless steel. Types 321 and 347 may also be welded with Unibrazed 308LT1 as long as the service temperature does not exceed 500°F.

**Diameters:** .045", 1/16"

**Shielding Gases:** 100% CO<sub>2</sub>, 75-80% Ar/balance CO<sub>2</sub>, 35-50 cfh

**Welding Positions:** All positions

## Typical Mechanical Properties: (CO<sub>2</sub>)\*

Ultimate Tensile Strength (psi) 83,000  
Yield Strength (psi) 60,000  
Percent Elongation 38 %

\* Strength levels will be slightly higher w/Ar+20-25% CO<sub>2</sub>

## Typical Weld Deposit Chemistry: (CO<sub>2</sub>)

C - 0.03 Mn - 1.22 Cr - 20.30 Si - 0.87 Ni - 10.70 N - 0.05  
Ferrite Number (WRC, 1992) - 9

## Typical Welding Parameters: (CO<sub>2</sub>)\*\*

Diameter	WFS (ipm)	Amperage	Voltage	ESO (in.)	Dep. Rate (lbs/hr)
.035"	300	110	25	5/8-3/4"	3.4
<b>.035"</b>	<b>500</b>	<b>150</b>	<b>26</b>	<b>5/8-3/4"</b>	<b>5.4</b>
<b>.035"</b>	<b>600</b>	<b>165</b>	<b>27</b>	<b>5/8-3/4"</b>	<b>6.3</b>
.035"	700	175	28	5/8-3/4"	7.7
.045"	250	130	24	5/8-3/4"	5.4
<b>.045"</b>	<b>300</b>	<b>160</b>	<b>26</b>	<b>5/8-3/4"</b>	<b>6.3</b>
<b>.045"</b>	<b>425</b>	<b>200</b>	<b>28</b>	<b>5/8-3/4"</b>	<b>9.2</b>
.045"	780	270	34	5/8-3/4"	16.2
1/16"	150	170	25	3/4-1"	5.4
<b>1/16"</b>	<b>195</b>	<b>215</b>	<b>27</b>	<b>3/4-1"</b>	<b>7.0</b>
<b>1/16"</b>	<b>240</b>	<b>250</b>	<b>28</b>	<b>3/4-1"</b>	<b>8.6</b>
1/16"	320	305	29	3/4-1"	11.5

\*\* Optimum conditions are in boldface type. Reduce by 2 volts when using Ar+20-25% CO<sub>2</sub>.

## Unibrazed all position electrodes do not contain bismuth

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.