



# Unibraze 347T1

All Position

## Classifications:

E347T1-1, E347T1-4 per AWS A5.22

## Description:

Unibraze 347T1 is a gas-shielded, flux cored, all position stainless steel electrode with a nominal weld metal composition of 19.5% chromium, 10% nickel and 0.5% columbium (niobium). The columbium forms a stable carbide which reduces chromium carbide precipitation and makes weld metal more resistant to intergranular corrosion.

## Characteristics:

Unibraze 347T1 has superb all position performance with excellent slag peeling and has very low spatter. It produces a flat, well washed bead that is achieved with minimal weaving.

## Applications:

Unibraze 347T1 is utilized in the welding of furnace parts, pressure vessels, chemical tanks and automotive parts. It is also used to weld Types 321, 347 and 348 stainless steels.

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

**Shielding Gases:** 100% CO<sub>2</sub>, 75-80% Ar/balance CO<sub>2</sub>, 40-50 cfh

**Welding Positions:** All positions

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

Ultimate Tensile Strength (psi) 94,000  
Yield Strength (psi) 63,000  
Percent Elongation 35 %

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

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

C - 0.05 Mn - 1.05 Cr - 19.60 Si - 0.70 Ni - 10.10 Cb - 0.55 N - 0.05  
Ferrite Number (WRC, 1992) - 8

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

Diameter	WFS (ipm)	Amperage	Voltage	ESO (in.)	Dep. Rate (lbs/hr)
.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>.

*Unibraze 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.