



Unibraze 309LFCT

Flux Coated TIG

International Classifications: AWS A5.9/ASME SFA 5.9 ER309L EN 12072: W 23 12 L

Description: Unibraze 309LFC is a flux coated, low carbon, austenitic stainless steel TIG wire with a ferrite content suitable for welding dissimilar steels as well as stainless steel pipe in applications where a backing ring or a purge gas is required. It provides impurity free weldments, which is necessary during stainless steel pipe welding in the chemical and petrochemical industries. Flux Color: Yellow

Welding Techniques: Clean weld surface carefully to remove all scale and corrosion. Sections over 3mm should be beveled to permit complete penetration. Clean joint surface using a stainless steel brush. Use DC- (straight polarity), 2% thoriated tungsten electrode. Welding positions: Flat, Horizontal, Vertical up.

Typical Chemical Analysis (All weld metal%)

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Fe	FN*
.015	19	.40	.01	.02	23.2	13.8	.10	.08	Bal	6

*FN Range 3-9

Typical Mechanical Properties (Undiluted Weld Metal)

Tensile Strength	90,000 psi (620 MPa)
Yield Strength	66,000 psi (420 MPa)
Elongation	42%
Impact Energy	40J: -157°F (-105°C)
Hardness	Brinell 209, Rockwell B96

Amperage Recommendations (DC- Straight Polarity)

Diameter	Amps
3/32"	60-100
1/8"	80-120

Typical Deposition Rates

Diameter	Length	Weldmetal	Rod per lb of Weldmetal	Arc Time of Deposition min/lb	Amperage Setting	Recovery Rate
3/32"	18"	1.5 oz.	10	21	80	100%
1/8"	18"	2.0 oz.	8	18	100	100%

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 purpose with respect to its products.