



Unibraze 316LSi

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER316LSi UNS S31688

DESCRIPTION: Unibraze 316LSi is used for welding low carbon molybdenum-bearing austenitic alloys. This filler metal is similar to Unibraze ER316L, with higher silicon content for optimum ease in welding and smooth bead appearance. Higher productivity could be realized in the MIG welding process.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
.03 max	18.0-20.0	11.0-14.0	2.0-3.0	1.0-2.5	.65-1.0	.03 max	.03 max	.75 max	8

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	86,500 psi (600 MPa)
Yield Strength	58,500 psi (400 MPa)
Elongation	36%

TYPICAL WELDING PARAMETERS:

	Shielding Gas	Gas Flow	Diameter	Voltage	Amperage
MIG	98/99% Ar +2/1% O 97% Ar + 3% CO ₂	30 to 50 CFH	.035" (.9mm)	26-29	160 /210
			.045" (1.14mm)	28-32	180/250
			.062" (1.6mm)	29-33	200/280

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.