



Unibraze 99

CLASSIFICATIONS: AWS A5.15/ASME SFA 5.15 Class ERNi-CI UNS N20215

DESCRIPTION: Unibraze 99 is machinable cast iron used for repair, overlay and buildup of malleable, ductile and gray cast irons. Dilution from the casting influences the mechanical properties of the weld. Preheat and interpass temperatures of 350°F (175°C) are recommended.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Fe	Cu	Others
1.0 max		90.0 min		2.5 max	.75 max		.03 max	4.0 max	.75 max	1.0 max

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	66,500 psi (460 MPa)
Yield Strength	36,000 psi (250 MPa)
Elongation	40%

TYPICAL WELDING PARAMETERS:

	Diameter	Voltage	Amperage	Shielding Gas
MIG	.035" (.9mm)	26-29	160 /210	75% Ar/25 He
	.045" (1.14mm)	28-32	180/250	
	.062" (1.6mm)	29-33	200/280	
TIG	.035" (.9mm)	12-15	60-90	100% Ar
	.045" (1.14mm)	13-16	80-110	
	1/16" (1.6mm)	14-18	90-130	
	3/32" (2.4mm)	15-20	120-175	
	1/8" (3.2mm)	15-20	150-220	
	5/32" (4.0mm)	15-20	150-220	
SAW	3/32" (2.4mm)	28-30	275-350	Suitable Flux
	1/8" (3.2mm)	29-32	350-450	
	5/32" (4.0mm)	30-33	400-550	

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.