



Unibraze 55
(No AWS Classification)

DESCRIPTION: Unibraze 55 is used for welding ductile, malleable, and gray cast iron components to themselves or to low-alloy or carbon steels. The weld metal is harder than Unibraze 99. It can be machined by using carbide tipped tools. A preheat and interpass temperature of 350°F (175°C) minimum is recommended during welding to prevent the weld and heat affected zones from cracking. Unibraze 55 can be used in all positions.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Fe	Cu	Others
.05		55.0		.25	.15		.03 max	44.0		1.0 max

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	89,500 psi (620 MPa)
Yield Strength	62,000 psi (430 MPa)
Elongation	35%

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.