



Unibraze 430

CLASSIFICATIONS: AWS A5.9/ASME SFA 5.9 Class ER430 UNS S43080

DESCRIPTION: Unibraze 430 is a ferritic stainless steel that provides good ductility in heat-treated conditions. Applications include welding of similar alloys. It can also be used for overlays and thermal spray applications. Pre and post weld preheat is recommended.

TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu	FN (WRC)
.10 max	15.5-17.0	.60 max	.75 max	.60 max	.50 max	.03 max	.03 max		.75 max	0

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	77,000 psi (530MPa)
Yield Strength	59,000 psi (407MPa)
Elongation	25%

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
TIG	100% Ar		1/16" (1.6mm)	14-18	90/130
			3/32" (2.4mm)	15-20	120/175
			1/8" (3.2mm)	15-20	150/220
SUBARC	Suitable Flux		3/32" (2.4mm)	28-33	275/350
			1/8" (3.2mm)	29-32	350/450

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.