



# Unibraze 420

**CLASSIFICATIONS:** AWS A5.9/ASME SFA 5.9 Class ER420    UNS S42080

**DESCRIPTION:** Unibraze 420 is used for surfacing applications that require the corrosion resistance provided by 12% Chromium and hardness higher than ER410 deposits. Unibraze 420 requires a preheat and interpass temperature of not less than 400°F, followed by slow cooling.

## TYPICAL CHEMISTRY:

C	Cr	Ni	Mo	Mn	Si	P	S	Cu	FN (WRC)
.25- .40	12.0- 14.0	.60 max	.75 max	.60 max	.50 max	.03 max	.03 max	.75 max	0

## TYPICAL MECHANICAL PROPERTIES:

<b>Tensile Strength</b>	145,000 psi (1000 MPa)
<b>Yield Strength</b>	120,000 psi (827 MPa)
<b>Elongation</b>	45%

## TYPICAL WELDING PARAMETERS:

	Diameter	Shielding Gas	Gas Flow	Voltage	Amperage
<b>GMAW</b>	.035" (.9mm)	98/99% Ar +2/1% O 97%Ar + 3% CO <sub>2</sub>	30 to 50 cfh	26-29	160-210
	.045" (1.14mm)			28-32	180-250
	.062" (1.6mm)			29-33	200-280
<b>GTAW</b>	1/16" (1.6mm)	100% Ar		14-18	90-130
	3/32" (2.4mm)			15-20	120-175
	1/8" (3.2mm)			15-20	150-220
<b>SAW</b>	3/32" (2.4mm)	Suitable Flux		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.