



Unibraze 100S-1

(ER100S-1)

Classification:

AWS A5.28 / ASME SFA5.28 Class ER100S-1

Description:

Unibraze ER100S-1 produces high tensile strength, high impact resistant weld deposits that retain their toughness to -70°F making it suitable for low temperature critical applications. Unibraze ER100S-1 is meant for the welding of HY80 and HY100 steels.

Typical Chemical Composition:

Carbon	0.06
Manganese	1.60
Molybdenum	0.40
Silicon	0.45
Nickel	1.60
Chrome	0.20

Typical Mechanical Properties:

Tensile Strength	104,000 psi
Yield Strength	92,000 psi
Elongation % in 2"	16.0%
Charpy V Notch @ -60°F	60 ft. lbs.

Welding Parameters:

Spray Transfer Short Arc

Diameter	Amps	Volts	Gas	Amps	Volts	Gas
.035"	160-200	28-32	98 Ar/2 O ₂	100-140	22-25	100% CO ₂
.045"	180-220	30-34	75 Ar/25 CO ₂	120-150	23-26	75 Ar/25 CO ₂

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.