



Unibraze ER1100

Specification: AWS A5.10 ER1100 / ASME SFA 5.10 ER1100 UNS A91100

Description: Unibraze ER1100 is a 99% Aluminum wire that is highly resistant to chemical attack and weathering. It is recommended for GTAW and GMAW welding of 1060, 1070, 1080 1100, 1350 and 3003 base metals.

Typical Chemical Analysis %

	Al	Fe +Si	Cu	Mn	Zn	Ti	Others	Total others	Be*
AWS/ASME	Bal.	.95 max	.05 - .20	.05 max	.10 max	.05 – .15	.05 max	.15 max	.0003 max

*included in others

Typical Properties

Melt Point	1090-1215°F
Density	.098 lbs/cu in. Other
Post Anodize Color	White Gold

Typical Mechanical Properties **

Tensile Strength	13,000 – 24,000 psi
Yield Strength	5,000 - 22000 psi
Elongation	5% - 35%

**dependent on temper

GMAW Recommended parameters (DCEP)

Diameter	WFS ipm	Amps	Volts	LBS per 100'	Argon (cfh)
.030"	480-625	60-175	15-24	.65 – 1.25	25-30
.035"	450-750	70-185	15-27	1.0 – 4.25	30-35
3/64"	330-500	125-260	20-29	1.0-4.25	35-45
1/16"	250-450	170-300	24-30	38-66	45-75
3/32"	160-200	275-400	26-31	35-66	60-85

GTAW Recommended parameters (ACHF – with Pure or Ziconiated Hemisphere shape tungsten tip)

Base Thickness	Filler Wire Size	Tungsten	Amps	LBS per 100'	Gas Cup Size	Argon (cfh)
1/16"	1/16"	1/16"	60-80	.75	3/8"	20
3/32"	3/32"	3/32"	85-120	1.0	3/8"	20
1/8"	3/32"	3/32"	125-160	1.5	3/8"	20
3/16"	1/8"	1/8"	190-220	4.5-6.0	7/16"	25
¼"	5/32"	5/32"	200-300	8-10	½"	30
3/8"	3/16"	3/16"	330-380	15-20	5/8"	35
½"	¼"	¼"	400-500	25-40	5/8"	40