



Unibraze 5356

Specification: AWS A5.10 ER5356 / ASME SFA 5.10 ER5356 UNS A95356

Description: Unibraze 5356 is a 5% magnesium all position non-heat treatable wire used to weld 5050, 5052, 5083, 5356, 5454, and 5456 base metals. It offers corrosion resistance when exposed to salt water. Common welding applications include, boats, ships, bicycles, trucks, pressure vessels, automotive parts and equipment.

Typical Chemical Analysis %

	Al	Fe	Cu	Mn	Si	Mg	Ti	Zn	Cr	Others	Total others	Be*
AWS/ASME	Bal.	.40 max	.10 max	.05 – .20	.25 max	4.5 – 5.5	.06 - .20	.10 max	.05 - .20	.05 max	.15 max	.0003 max

*included in others

Typical Properties

Melt Point	1060-1175°F
Density	.096 lbs/cu in. Other
Post Anodize Color	White

Typical Mechanical Properties **

Tensile Strength	27,000 – 46,000 psi
Yield Strength	12,000 – 30,000 psi
Elongation	10% - 17%

**dependent on base alloy welded

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