



Unibraze 5556

Specification: AWS A5.10 ER5556 / ASME SFA 5.10 ER5556 UNS A95556

Description: Unibraze 5556 is an aluminum wire with higher levels of magnesium and zinc than Unibraze 5356, this increases crack resistance, tensile strength and improves ductility. It is recommended for welding 5083, 5086, 5254, and 5456.

Typical Chemical Analysis %

	Al	Fe	Cu	Mn	Zn	Mg	Cr	Ti	Si	Others	Total others	Be*
AWS/ASME	Bal.	.40 max	.10 max	.50 – 1.0	.25 max	4.7 – 5.5	.05 – .20	.05 – .20	.25 max	.05 max	.15 max	.0003 max

*included in others

Typical Properties

Melt Point	1065-1175°F
Density	.0967 lbs/cu in. Other
Post Anodize Color	White

Typical Mechanical Properties (as welded)

Tensile Strength	45,000 psi
Yield Strength	23,000 psi
Elongation	14%

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