



Unibraze 5554

Specification: AWS A5.10 ER5554 / ASME SFA 5.10 ER5554 UNS A95554

Description: Unibraze 5554 is an aluminum wire used to chemical storage tanks, automotive wheels, and applications that may be subjected to temperatures great than 150°F.

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	2.4- 3.0	.05 - .20	.05 – .15	.25 max	.05 max	.15 max	.0003 max

*included in others

Typical Properties

Melt Point	1155-1195°F
Density	.097 lbs/cu in. Other
Post Anodize Color	White

Typical Mechanical Properties (as welded)

Tensile Strength	35,000 psi
Yield Strength	16,000 psi
Elongation	17%

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