Pinnacle Alloys

AN ISO 9001:2015 COMPANY
CERTIFICATE NO.: C755336

ER5554 DATA SHEET

Pinnacle Alloys ER5554
AWS CLASS ER5554, R5554
CODE AND SPECIFICATION DATA:
AWS A5.10 ASME SFA 5.10

DESCRIPTION:
Pinnacle Alloys ER5554 is an aluminum filler typically used on 5454 and similar base metals that may be used in chemical tanks and other storage where 150F may be found.

DIAMETERS: .030", .035", 3/64", 1/16", 3/32", 1/8", 5/32"

TYPICAL CHEMICAL COMPOSITION (Wt %):

Aluminum (Al)	Remainder
Beryllium (Be)	0.0008 max
Chromium (Cr)	0.50-0.20
Copper (Cu)	0.10 max
Iron (Fe)	0.40 max
Magnesium (Mg)	2.4-3.0
Manganese (Mn)	0.50-1.00
Silicon (Si)	0.25 max
Titanium (Ti)	0.05-0.20
Zinc (Zn)	0.25 max
Other elements	0.05 max each & 0.15 max total

TYPICAL MECHANICAL PROPERTIES:

Melting Range	1155°F-1195°F (640°C-646°C)
Ultimate Tensile Strength (psi)	32,000-35,000 psi
Yield Strength (psi)	14,000-16,500 psi
Percent Elongation in 2"	16-18%
Density	0.097 lbs/in^3
Post Anodize Color	White

TYPICAL MIG WELDING PARAMETERS (DCEP):

Diameter	WFS (ipm)	Amperage	Volts	Consumption (lb/100 ft)	Argon (cfh)
.030"	480-625	60-175	15-24	0.65-1.25	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	3.8-6.6	45-75

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TYPICAL TIG WELDING PARAMETERS:

Base Thickness	Filler Wire Size	Tungsten	Amperage	Consumption (lb/100 ft)	Argon (cfh)	Gas Cup Size
1/16”	1/16”	1/16”	60-80	0.75	20	3/8”
3/32”	3/32”	3/32”	85-120	1.0	20	3/8”
1/8”	3/32”	3/32”	125-160	1.5	20	3/8”
3/16”	1/8”	1/8”	190-220	4.5-6	25	7/16”
1/4”	5/32”	5/32”	200-300	8-10	30	1/2”

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 the use in the field. The manufacturer disclaims any warranty of merchantability of fitness for any particular purpose with respect to its products.

CAUTION: Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, “Safety in Welding and Cutting,” published by the American Welding Society, 550 NW LeJune Road, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.

Pinnacle Alloys MSDS sheet may be obtained at www.pinnaclealloys.com.