

NEXALLOY ER5356 – PRODUCT DATA SHEET

Nexalloy ER5356 is a 5% magnesium all position non-heat treatable wire used to weld the 5XXX series alloys with some common welding applications such as boats, ships, bicycles, trucks, pressure vessels, automotive parts, and equipment.

NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10/A5.10M/ASME SFA 5.10 Classification ER5356, R5356, CWB, American Bureau of Shipping – ABS, ISO 18273 Al 5356/AlMg5Cr(A), EN AW-5356/Al Mg5Cr, TUV, CE 0035-CPR-C809.

Chemical Composition (weight %)

Aluminum	Remainder	Silicon	0.25 Max
Manganese	0.05-0.20	Magnesium	4.5-5.5
Iron	0.40 Max	Chromium	0.05-0.20
Copper	0.10 Max	Titanium	0.06-0.20
Beryllium	0.0001 Max	Zinc	0.10 Max

Other Elements 0.05 Max & Total 0.15 Max

Typical Properties

Melting Range	1060 – 1175 F 571 – 635 C
Density	.096 lbs.\cu in.
Post Anodize Color	White
UTS	68ksi – 470MPA
Elongation	(2") 5%

Wire and Rod Diameters Available

0.030" 0.035" 3/64" 1/16" 3/32" 1/8" 5/32" 3/16" 1/4" 5/64"

Packaging Available

Plastic Spools – 1LB/0.4KG, 5LB/2.2KG, 10LB/4.5KG, 16LB/7.2KG, 20LB/9KG

Metal Spools – 10LB/4.5KG, 15LB /6.8KG **TIG Rods** – 5LB/2.2KG, 10LB/4.5KG, 50LB/22.6KG

Drums – 150LB/68KG, 300LB/136KG

MIG Welding Procedures: DCEP

Wire Diameter	WFS ipm	Amps	Volts	Consumption LB/100FT	Argon(cfh)
0.030"	480-625	60-175	15-24	0.65-1.25	25-30
0.035"	450-750	70-185	15-27	1.00-4.25	30-35
3/64"	330-500	125-260	20-29	1.00-4.25	35-45
1/16"	250-450	170-300	24-30	3.8-66	45-75
3/32"	160-200	275-400	26-31	35-66	60-85

TIG Welding Procedures: ACHF

Base Thickness	Filler Wire Size	Tungsten	Amps	Consumption LB/100FT	Gas Cup Size	Argon(cfh)
1/16"	1/16"	1/16"	60-80	0.75	3/8"	20
3/32"	3/32"	3/32"	85-120	1.00	3/8"	20
1/8"	3/32"	3/32"	125-160	1.50	3/8"	20
3/16"	1/8"	1/8"	190-220	4.5-6.0	7/16"	25
1/4"	5/32"	5/32"	200-300	8-10	1/2"	30
3/8"	3/16"	3/16"	330-380	15-20	5/8"	35
1/2"	1/4"	1/4"	400-500	25-40	5/8"	40



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