



NEXALLOY ER5087 – PRODUCT DATA SHEET

Nexalloy ER5087 is similar to 5356 with 5% magnesium aluminum filler typically used on similar base metal as 5356 but may give higher tensile strengths on magnesium containing base metals. The alloying element, Zirconium gives improved properties against hot cracking during solidification.

NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10/A5.10M/ASME SFA 5.10 Classification ER5087, R5087, ISO 18273 Al 5087 / AlMg4,5MnZr(A), EN AW-5087 / Al Mg4,5MnZr, TUV, CE 0035-CPR-C809.

Chemical Composition (weight %)

Aluminum	Remainder	Silicon	0.025 Max
Manganese	0.70-1.10	Magnesium	4.5-5.2
Iron	0.40 Max	Chromium	0.05-0.25
Copper	0.05 Max	Titanium	0.15 Max
Beryllium	0.0003 Max	Zinc	0.1-0.2
Zirconium	0.01-0.20	Other Elements	0.05 Max & Total 0.15 Max

Typical Properties

Melting Range	1075 – 1080 F	579 – 582 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" 5/16"

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	25-31	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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