

NEXALLOY ER5183 – PRODUCT DATA SHEET

Nexalloy ER5183 is similar to 5356 with 5% magnesium aluminum filler typically used on similar base metal as the 5356 but may give higher strengths on such base metals like 5083 and other magnesium containing base metals.

NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10/A5.10M/ASME SFA 5.10 Classification ER5183, R5183, ISO 18273 Al 5183 / AlMg4,5Mn0,7(A), EN AW-5183/ Al Mg4,5Mn0,7, CWB American Bureau of Shipping – ABS, LR - Lloyd's Register, TUV, CE 0035-CPR-C809.

Chemical Composition (weight %)

Aluminum	Remainder	Silicon	0.40 Max
Manganese	0.50-1.00	Magnesium	4.3-5.2
Iron	0.40 Max	Chromium	0.5-0.25
Copper	0.10 Max	Titanium	0.15 Max
Beryllium	0.0001 Max	Zinc	0.25 Max

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" 5/64"

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	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

