



5183 – PRODUCT DATA SHEET

Nexalloy 5183 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 classification ER5183, R5183 Canadian Bureau of Welding - CWB American Bureau of Shipping - ABS

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	0.0003 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	

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- with Pure or Ziconiated Hemisphere shape tungsten tip

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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