



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 Welding Bureau –CWB

Chemical Composition (weight %):

Aluminum	Remainder	Silicon	0.40 maximum
Manganese	0.50-1.00	Magnesium	4.3-5.2
Iron	0.40 maximum	Chromium	0.5- 0.25
Copper	0.10 maximum	Titanium	0.15 maximum
Zinc	0.25 maximum		
Beryllium	0.0008 maximum		
Others elements	each 0.05 maximum & total	0.15 maximum	

Typical Properties:

Melting range	1075°– 1080°F 579°-582°C
Tensile Strength psi	40-48,000
Yield Strength psi	18-32,500
Elongation in 2"	12-16%
Density	.096 lbs\cu in
Post Anodize Color	white

Wire and Rod Diameters available:

.030, .035, 3/64", 1/16", 3/32", 1/8", 5/32", 3/16", 1/4", 5/16"

Packaging available:

Plastic Spools of 1lb, 5lb, 10lb, 16lb, 20lb
Tig rods of 5lb, 10lb, 50lb

Metal Spool of 10lb, 15lb,
Drums of 150lb & 300lb

MIG WELDING PROCEDURES; DCEP

Wire Diameter	WFS ipm	Amps	Volts	Consumption lb/100 ft	Argon (cfh)
0.030	480-625	60-175	15-24	0.65-1.25	25-30
0.035	450-750	70-185	15-27	1.0-4.25	30-35
3/64	330-500	125-260	20-29	1.0-4.25	35-45
1/16	250-450	170-300	24-30	3.8-66	45-75
3/32	160-200	275-400	26-31	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/100 ft	Gas Cup Size	Argon (cfh)
1/16"	1/16"	1/16"	60-80	.75	3/8"	20
3/32"	3/32"	3/32"	85-120	1.0	3/8"	20
1/8"	3/32"	3/32"	125-160	1.5	3/8"	20
3/16"	1/8"	1/8"	190-220	4.5-6	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"	400-450	25-40	5/8"	40

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