

NEXALLOY ER4043 – PRODUCT DATA SHEET

Nexalloy ER4043 is 5% silicon all position aluminum weld wire used to weld heat treatable alloys such as the 6XXX base metals and cast alloys. Found in many common welding applications such as bicycles, trucks, trailers, automotive parts, and equipment. Silicon with this alloy gives improved wetting action yielding a less crack sensitive bright weld bead.

NEXAL WELDING PRODUCTS APPROVALS AND SPECIFICATIONS

AWS A5.10/A5.10M/ASME SFA 5.10 Classification ER4043, R4043, AMS4190, ISO 18273 S AL4043A /ALSi5(A), CWB, EN AW-Al Si5, TUV, CE 0035-CPR-C809.

Chemical Composition (weight %)

Aluminum	Remainder	Silicon	4.5-6.0
Manganese	0.05 Max	Magnesium	0.05 Max
Iron	0.80 Max	Titanium	0.20 Max
Copper	0.30 Max	Zinc	0.10 Max
Beryllium	0.0001 Max		

Typical Properties

Melting Range	1065 – 1170 F 574 – 632 C
Density	.097 lbs.\cu in.
Post Anodize Color	Gray
UTS	36ksi – 250MPA
Elongation	(2") 5%

Elements 0.05 Max & Total 0.15 Max

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
3/8"	3/16"	3/16"	330-380	15-20	5/8"	35



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