



WA. ALLOY CO.

WASHINGTON ALLOY'S Quality
Management System is
Certified to **ISO 9001:2008**
Cert # 05-R0925

4043 ALUMINUM Welding wire



ALLOY DESCRIPTION AND APPLICATION; 4043 is a 5% silicon aluminum filler recommended for

welding of 3003, 3004, 5052, 6061, 6063, and cast alloy such as 443, 355, 356 and 214.

TYPICAL GMAW WELDING PROCEDURES; DCEP

Wire Diameter	Amps	Volts	Travel speed (ipm)	Argon (cfh)
0.030	60-175	15-24	25-45	25-30
0.035	70-185	15-27	25-40	30-35
3/64	125-260	20-29	24-35	35-45
1/16	170-300	24-30	28-38	45-55
3/32	275-400	26-31	14-20	60-75

TYPICAL GTAW WELDING PROCEDURES; ACHF with Pure or Ziconiated Hemisphere shape tungsten tip

Filler Wire Size	Tungsten	Amps	Volts	Gas Cup Size	Argon (cfh)	Base thickness
1/16"	1/16"	60-80	15	3/8"	20	1/16"
3/32"	3/32"	125-160	15	3/8"	20	1/8"
1/8"	1/8"	190-220	15	7/16"	20	3/16"
5/32"	5/32"	200-300	15	1/2"	25	1/4"
3/16"	3/16"	330-380	15-20	5/8"	25	3/8"
1/4"	1/4"	400-450	25	5/8"	25	1/2"

Procedures are base on flat position and may vary with change in position, base metals, filler metals, equipment and other changes.

TYPICAL CHEMISTRY AND PROPERTIES;

Silicon	Iron	Copper	Manganese	Magnesium	Zinc	Titanium	Beryllium
4.5-6.0	0.80	0.30	0.05	0.05	0.10	0.20	0.0008
Aluminum Remainder and others each 0.50 & total 0.15				All values are maximum percentage unless noted			

Solidus:1065°F Liquidus:1170°F Density: 0.097 lbs./cu. In. Anodize color: Gray
Average Tensile Strength All weld metal (as welded) 29,000 psi (200 mpa)

AVAILABLE SIZES: TA 4043 = Spools of .023, .030, .035, .040, 3/64, 1/16

TB 4043 = Cut lengths of .023, .030, .035, 3/64, 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4

SPECIFICATIONS; **ANSI/AWS A5.10** ER/ R 4043
 ASME SFA5.10 ER/ R 4043
 AMS 4190



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