



Quality Management System  
in accordance with  
**ISO 9001:2000**  
Cert # 05-R0925

# 4047 ALUMINUM Welding and Brazing wire

U.S. ALLOY CO.  
dba Washington Alloy  
7010-G Reames Rd.  
Charlotte, NC 28216  
[www.weldingwire.com](http://www.weldingwire.com)



**ALLOY DESCRIPTION AND APPLICATION;**  
4047 (718) is a 12% silicon aluminum filler recommended for welding of 1060,1350, 3003, 3004, 5005, 5050, 6053, 6951, 7005, and cast alloy such as 710.0 and 711.0.

**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	Beryllium
11.0-13.0	0.80	0.30	0.15	0.10	0.20	0.0008
Aluminum Remainder and others each 0.50 & total 0.15				All values are maximum percentage unless noted		

Solidus:1070°F    Liquidus:1180°F    Density: 0.096 lbs./cu. In.    Anodize color: Gray-black  
Average Tensile Strength All weld metal (as welded) 27,500 psi (190 mpa)

**AVAILABLE SIZES:** TA 4047= Spools of .030, .035, 3/64, 1/16, 3/32  
TB 4047 = Cut lengths of .030, .035, 3/64, 1/16, 5/64, 3/32, 1/8, 3/16, 1/4

Other sizes available – please inquire

**SPECIFICATIONS;**    **ANSI/AWS A5.10**    ER/ R 4047  
                                  **ANSI/AWS A5.8**        BA1Si-4  
                                  **ASME SFA5.10**        ER/ R 4047  
                                  **AMS**                      4185

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