5356 ALUMINUM Welding wire

WA. ALLOY CO.

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

American Welding Society
Sustaining Company Member

GAWDA
GASES AND WELDING DISTRIBUTORS ASSOCIATION

ALLOY DESCRIPTION AND APPLICATION;
5356 is a 5% magnesium aluminum filler recommended for welding of 5050, 5052, 5083, 5356, 5454 and 5456.

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;

Magnesium	Titanium	Manganese	Chromium	Copper	Silicon	Zinc	Iron	Beryllium
4.5-5.5	0.06-0.20	0.05-0.20	0.05-0.20	0.10	0.25	0.10	0.40	0.0008

Aluminum Remainder and others each 0.50 & total 0.15 All values are maximum percentage unless noted

Solidus:1060°F Liquidus:1175°F Density: 0.096 lbs./cu. In. Anodize color: White
Average Tensile Strength All weld metal (as welded) 38,000 psi (262 mpa)

AVAILABLE SIZES: TA 5356 = Spools of .023, .030, .035, .040, 3/64, 1/16, 3/32
TB 5356 = Cut lengths of .030, .035, 3/64, 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4
Other sizes available – please inquire

SPECIFICATIONS; **ANSI/AWS** A5.10 ER/ R 5356
ASME SFA5.10 ER/ R 5356

8-2005 DC