



5356

Description Weldcote Metals 5356 (commonly referred to as AlMg5) is a 5% magnesium aluminum filler metal that is available for MIG or TIG welding processes. The weld deposit of Weldcote Metals 5356 offers much better corrosion resistance when exposed to salt water. Common applications would be base metals 5050, 5052, 5083, 5356, 5454 and 5456.

Approvals

Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.10 Class ER5356.

Chemical Composition

Silicon	0.250
Iron	0.400
Copper	0.050
Manganese	0.100-0.200
Magnesium	4.500-5.500
Chromium	0.050-0.200
Zinc	0.10
Titanium	0.060-.150
Beryllium	0.0003
Aluminum	Remainder

Mechanical Properties

Tensile Strength
39,000 PSI

Yield Strength
19,000 PSI

Elongation 17%

Physical Properties

Solidus	1060°F(571°C)	Density lbs./cu in	.096
Liquidus	1175°F(635°C)	Post Anodize Color	White

Recommended Welding parameters:

* **GMAW(MIG) PARAMETERS** (DC Reverse Polarity) Electrode Positive Spray transfer

<u>Metal Thickness</u>	<u>Wire Diameter</u>	<u>Amps</u>	<u>Volts</u>	<u>Argon(cfh)</u>
1/16"	.030	70-100	15-20	25
1/8"	.030-3/64	120-150	20-24	30
3/16"	.030-3/64	130-210	22-26	30-35
1/4"	3/64-1/16	170-225	24-28	40
3/8"	1/16	225-300	26-29	50

***GTAW(Tig) Parameters** (AC) ⁽¹⁾Hemisphere tip shape tungsten electrode

<u>Material</u>	<u>⁽¹⁾Pure or ziconiated</u>	<u>Filler Wire Size</u>	<u>Amps</u>	<u>Volts ACHF</u>	<u>Gas Cup</u>	<u>Argon(cfh)</u>
1/16"	1/16"-3/32"	1/16"-3/32"	70-100	15	3/8	20
1/8"	1/8"-5/32"	1/8"-5/32"	125-175	15	7/16	20
3/16"	5/32"-3/16"	5/32"-3/16"	170-225	15	7/16-1/2	25
1/4"	3/16"-1/4"	3/16"	220-275	15	1/2	30
3/8"	1/4"	3/16"-1/4"	330-380	15	5/8	35
1/2"	1/4"	1/4"	400-500	25	5/8	35

*All parameters are suggested as basic guidelines and will vary.