

AUTOCRAFT AL5356

PRODUCT DATA SHEET



PREMIUM QUALITY ALUMINUM



GAS METAL ARC WELDING (MIG) WIRES

AUTOCRAFT AL5356

- For GMAW Welding of Wrought and Cast Aluminium Alloys containing Magnesium.
- Patented Lubrication Process for Superior Wire Feedability.
- Superior Surface Cleanliness for Improved Resistance to Porosity.
- Tight Wire Diameter Control for Smooth, Consistent Arc Performance.
- DNV Shipping Society Approval.
- Standard 7.0 kg Spools for Fewer Spool Change-overs.

CLASSIFICATIONS:

ISO AS/NZS 18273:	S AL 5356
AWS/ASME-SFA A5.10:	ER5356

APPROVALS:

DNV	GRADE ER5356
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* with welding grade Argon

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

Single-vee butt weld with 5086 Aluminium (reduced section tensile specimen):

WELDING GRADE ARGON:

0.2% Proof Stress	130 MPa
Tensile Strength	269 MPa
Elongation (in 2 inches)	17%

DESCRIPTION AND APPLICATIONS:

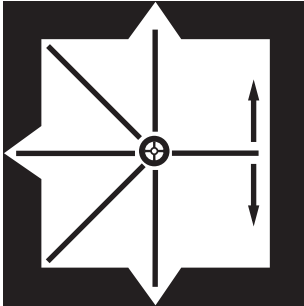
Autocraft AL5356 is a premium quality, Aluminium - nominal 5% Magnesium alloy suitable for the Gas Metal Arc Welding (GMAW) of a wide range of cast and wrought Aluminium alloys. Autocraft AL5356 is the most popular Aluminium alloy in the CIGWELD range. It produces intermediate deposit strength and good ductility and corrosion resistance for the GMA welding of a wide range of 3XXX, 5XXX, 6XXX and 5XX Aluminium alloys.

STORAGE AND HANDLING RECOMMENDATIONS:

- Store in a heated room with uniform temperature control and, if possible, with humidity control as well.
- Store unpackaged Autocraft AL series wires for long periods in a heated cabinet at 10-15°C above ambient temperature.
- Hold Autocraft AL series welding wires in the welding area for 24 hours before unpacking to allow its temperature to equalise with that of the surrounding area.
- Use dust covers on open wire feed units to protect wire during welding.

WELDING POSITIONS:

All positional welding applications.



WIRE ANALYSIS LIMITS:

Single values are maximum allowable, unless otherwise stated.

Si:	0.25%
Fe:	0.40%
Cu:	0.10%
Mn:	0.05-0.2%
Mg:	4.5-5.5%
Cr:	0.05-0.20%
Zn:	0.10%
Ti:	0.06-0.20%
Total others: 0.15%	0.15%
Al:	Balance

RECOMMENDED* SHIELDING GAS:

AS 4882:	SG-A SG-AHe-25 SG-HeA-25
ISO 14175 / AWS A5.32:	I1*- CERT SUPPLIED I3 I3
Welding grade Ar or Ar+He (25%) or He+Ar (25%)	

PACKAGING AND OPERATING DATA:

These machine settings are a guide only. Actual voltage and welding current used will depend on machine characteristics, plate thickness, run size, shielding gas and operator technique etc. For 5XXX type welding wires use welding current settings on the higher side of the range specified below and arc voltages on the lower side of the range. For 1XXX, 2XXX and 4XXX type welding wires use welding current settings on the lower side of the specified range and arc voltages on the higher side.

WIRE DIAMETER (MM)	VOLTAGE RANGE (VOLTS)	WIRE FEED SPEED (METERS/MIN)	CURRENT RANGE (AMPS)	PACK TYPE*	PACK WEIGHT	PART NO.
0.8	14-21	6.0-20.0	50-150	Mini Spool (4 per pack)	4 x 0.5kg	721221
0.9	16-22	6.0-17.5	80-180	Mini Spool (4 per pack)	4 x 0.5kg	721223
0.9	16-22	6.0-17.5	80-180	Handi Spool	2.0kg	720202
0.9	16-22	6.0-17.5	80-180	Spool	7kg	722226
1.0	17-23	6.0-17.5	110-220	Mini Spool (4 per pack)	4 x 0.5kg	721224
1.0	17-23	6.0-17.5	110-220	Handi Spool	2.0kg	723224
1.0	17-23	6.0-17.5	110-220	Spool	7kg	722224
1.2	20-25	5.5-12.0	150-250	Handy Spool	2.0kg	720231
1.2	20-25	5.5-12.0	150-250	Spool	7kg	722227

* Mini Spool (Ø100mm); Handi Spool (Ø200mm); Spool (Ø300mm).

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