

AUTOCRAFT AL4043

PRODUCT DATA SHEET



PREMIUM QUALITY
ALUMINIUM - NOMINAL 5%
SILICON ALLOY



GAS METAL ARC WELDING (MIG) WIRES

AUTOCRAFT AL4043

- For GMAW Welding of Selected Wrought and Cast Aluminium Alloys.
- Highest Quality Precision Layer Wound.
- Patented Lubrication Process for Superior Wire Feedability.
- Superior Wire Cleanliness for Improved Resistance to Porosity.
- Tight Wire Diameter Control for Smooth, Consistent Arc Performance.
- Standard 7.0 kg Spools for Fewer Spool Changeovers.

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

Single-vee butt weld with 6061-T6 Aluminium (reduced section tensile specimen) using welding grade Argon: Postweld heat.

	As welded:	Treated and aged:	
0.2% Proof Stress	124 MPa	276 MPa	
Tensile Strength	186 MPa	303 MPa	
Elongation (in 2 inches)	8%	5%	

CLASSIFICATIONS:

ISO AS/NZS 18273:	S AL 4043
AWS/ASME-SFA A5.10:	ER4043

WIRE ANALYSIS LIMITS:

Single values are maximum allowable, unless otherwise stated.

Si:	4.5-6.0%
Fe:	0.80%
Cu:	0.30%
Mn:	0.05%
Mg:	0.05%
Zn:	0.10%
Ti:	0.20%
Total Others:	0.15%
Ai:	Balance



DESCRIPTION AND APPLICATIONS:

Autocraft AL4043 is a premium quality Aluminium - nominal 5% Silicon alloy suitable for the Gas Metal Arc Welding (GMAW) of a wide range of cast and wrought Aluminium alloys. Autocraft AL4043 is used extensively for the repair welding of many aluminium alloy castings. It's lower weld deposit strength, and excellent crack resistance make it suitable for the GMA welding of cast (mainly 4XX & 6XX series) and wrought (selected 1XXX, 5XXX & 6XXX series) aluminium alloys, except where an accurate colour match is required after anodising. See CIGWELD Aluminium Alloy Selection Chart for detailed welding consumable selection criteria for a wide range of Aluminium alloy parent metals.

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.

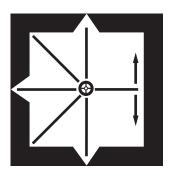
RECOMMENDED* SHIELDING GAS:

AS 4882:	SG-A SG-AHe-25 SG-HeA-25
ISO 14175 / AWS A5.32:	I1*- CERT SUPPLIED 13 13

Welding grade Argon or Ar+He (25%) or He+Ar (25%)

WELDING POSITIONS:

All positional welding applications.



PACKAGING & 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.
1.2	20-25	5.5-12.0	150-250	Spool	7kg	722237
1.6	23-28	5.0-9.5	200-350	Spool	7kg	722238

^{*} Spool (ø300mm);





