

AUTOCRAFT SILICON BRONZE



- ▲ For the GMAW Welding of Copper-Silicon Alloys including Cusilman and Everdur.
- ▲ Used for the Lower Strength Welding of Steels.
- ▲ Extensively used in Marine and Hot Water System Applications.

Classifications:

AWS/ASME-SFA A5.7: ERcCuSi-A.

Description and Applications:

Autocraft Silicon Bronze is a Copper based wire recommended for the Gas Metal Arc Welding (GMAW) of Copper-Silicon alloys used extensively in hot water systems, heat exchangers, calorifiers and marine components for their corrosion resistance.

Autocraft Silicon Bronze is highly recommended for the fillet welding of galvanised steels and irons and for the lower strength 'brazing' of light gauge steel sections as used in the automotive industry. It is also suitable for the MIG welding of Copper-Zinc alloys to themselves and to steels.

TYPICAL WIRE ANALYSIS:

Fe: 0.25%	Mn: 1.0%	Si: 3.40%
Sn: 0.90%	Zn: 0.90%	Cu: Balance

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

Welding grade Argon:	
0.2% Proof Stress	170 MPa
Tensile Strength	380 MPa
Elongation (in 2 inches)	50%

TYPICAL WELD DEPOSIT HARDNESS WITH

Argon + 16% CO₂ + 2.75% O₂:

	HR _B
Three Layers on Mild Steel	48

COMPARABLE CIGWELD PRODUCTS:

Comweld Silicon Bronze rod
AWS A5.7: ERcCuSi-A

RECOMMENDED SHIELDING GAS:

- Welding Grade Argon ISO14175: I1
- Ar + 10-15% CO₂ or equiv. gases ISO14175: M21, M24, M14
- Ar + 20-25% CO₂ or equiv. gases ISO14175: M21, M24
- Ar + > 0-3% O₂ or equiv. gases ISO14175: M13
- He + 25% Ar or equivalent gases ISO14175: I3



All positional welding applications

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.

Wire Diameter mm	Voltage Range (volts)	Wire Feed Speed (metres/min)	Current Range (amps)	Pack Type*	Pack Weight	Part No
0.8	15-20	4.5-10.5	65-150	Handispool	4.5kg	720159
0.9	21-26	7.5-14.5	100-250	Spool	13kg	720015
1.2	22-28	5.5-11.5	160-380	Spool	13kg	720255

* Spool (ø300mm).