

AUTOCRAFT 309LSi



- ▲ For the GMAW Welding of 23%Cr / 12%Ni Type Stainless Steels.
- ▲ Extra Low Carbon (< 0.03%) Weld Deposits for Resistance to Intergranular Corrosion.
- ▲ High Silicon level for Improved Arc Stability and Increased Weld Pool Fluidity and Edge Wetting.
- ▲ NEW Ultrafeed Matt Finish.

Classifications:

AS 2717.3: E309LSi.
AWS/ASME-SFA A5.9: ER309LSi.

Description and Applications:

Autocraft 309LSi is a premium quality, low carbon 24% Cr / 13% Ni stainless steel wire for the Gas Metal Arc Welding (GMAW) of matching 309L type stainless steel.

Autocraft 309LSi is also suitable for a wide range of other welding applications including;

- ◆ The dissimilar joining of "300 series" and selected "400 series" stainless steel grades to mild or low alloy steels,
- ◆ An intermediate or buttering layer in the butt welding of clad steels,
- ◆ A stainless steel overlay on mild or low alloy steel,
- ◆ A 'buttering' layer prior to hardfacing.

The low carbon content ensures immunity from carbide precipitation and intergranular corrosion when welding low carbon stainless steel grades and the higher Silicon level offers improved arc stability, bead shape and edge wetting.

TYPICAL WIRE ANALYSIS:

C: 0.02%	Mn: 2.10%	Si: 0.75%
Cr: 23.75%	Ni: 13.75%	P: 0.020%
S: 0.005%	Fe: Balance	

FERRITE NUMBER:

10 – 15 FN

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

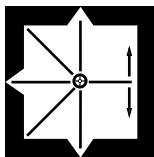
	Argon + 1-3% O ₂ :
0.2% Proof Stress	450 MPa
Tensile Strength	610 MPa
Elongation	36%
CVN Impact Values	90 J av @ -110°C

COMPARABLE CIGWELD PRODUCTS:

Satinchrome 309Mo-17 electrode
AWS A5.4: E309Mo-17
Comweld 309L TIG rod
AWS A5.9: ER309L
Shieldchrome 309LT FCAW wires
AWS A5.22: E309LT1-1/4

RECOMMENDED SHIELDING GAS:

- Ar + 1-3% O₂ or equivalent ISO14175: M13
- Ar + 2-5% CO₂ or equivalent ISO14175: M12
- Ar + 1-4% CO₂ + 1-5% H₂ or equivalent ISO14175: M11 (1)
- Ar + 1-4% CO₂ + 35% He



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
0.9	16-24	4.5-15.0	70-200	Spool	15kg	721276
1.2	20-28	3.0-10.0	150-280	Spool	15kg	721277

* Spool (ø300mm).