



Nexus 309L/309LSi

23Cr 12Ni Low Carbon Stainless Steel solid wires for MIG and TIG welding applications

Austenitic 309 low carbon MIG/TIG wires for joining and overlaying materials of similar compositions. The 309LSi MIG wire has higher Silicon level which increases weld pool fluidity, producing mitre finish fillet welds with good toe blending and low spatter.

International Standards

	ISO 14343 - A - :2007	AWS A5.9-93
TIG	W 23 12 L	ER 309L
MIG	G 23 12 L Si	ER 309LSi

Typical Wire Analysis (wt%)

C	Si	Mn	S	P	Cr	Ni
0.02	0.4	1.9	0.002	0.02	23.5	12.5
0.02	0.80	1.9	0.002	0.02	23.5	12.5

Typical All-Weld Metal Mechanical Properties

	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation %	Impact Strength -196 ^o C
TIG	>380	~600	>30	>40
MIG	>380	~600	>30	>40

Welding Positions

All Positions including vertical down

Materials

Dissimilar joints between all 300 series to itself and to mild steel, Austenitic Manganese steels, Cromweld 3Cr12

Packaging

Size mm	1.6	2.4	3.2
Plastic 5 kilo Tube	✓	✓	✓

Size mm	0.8	1.0	1.2
Metal spools 15 kilo	✓	✓	✓

Additional Information

Certification	BS EN 10204:2004 Type 3.1
Material safety data sheet	MSDS 02
BOC Shielding Gas MIG	Stainshield Light (<4mm) Universal (2-10mm) Heavy (>9mm)
BOC Shielding Gas TIG	Pureshield Argon Stainshield TIG <5mm
Related Nexus Products	Nexus E309L electrodes