

BOC Stainless Steel MIG Wire 307Si

GMAW Wire, Stainless Steel.



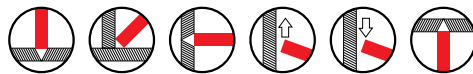
15 kg Spool

Description The BOC Smootharc 307Si MIG wire is a fully austenitic wire electrode for GMAW/MIG welding of high alloy steels to unalloyed or low alloy steels. It is also suitable for depositing crack arresting buffer layers on crack sensitive base metals, as well as cladding jobs. The weld metal is highly work hardenable and is also corrosion resistant. The deposit is non-scaling up to 850°C.

Application Smootharc 307Si has been designed for the welding of:

- 201, 202 stainless steels and 3Cr12 and 5Cr12 (1.4003) steels.
- Welding of armour plate, austenitic manganese steels and other difficult to weld steels.
- Welding of stainless steels to other steels eg. carbon and low alloy steels.
- Use as buffer layers under hardfacing.

Welding Positions



Recommended Shielding Gases

- Dip Transfer – Stainshield® Light
- Spray Transfer – Stainshield® Heavy, Stainshield® 69, Stainshield® Light

WARNING

Welding can give rise to electric shock, excessive noise, eye and skin burns due to the arc rays, and a potential health hazard if you breathe in the emitted fumes and gases. Read all the manufacturer's instructions to achieve the correct welding conditions and ask your employer for the Safety Data Sheets. Refer to www.boc.com.au or www.boc.co.nz

Specifications

Classification	AWS A5.9 ER 307Si*
	AS/NZS ISO 14343 A-G 18 8 Mn
Welding current	DC+
*Nearest AWS classification	

Chemical Composition, wt%

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu
Minimum	–	5.00	0.65	–	–	17.00	7.00	–	–
Typical as welded	0.07	6.8	0.75	0.01	0.02	18.7	7.8	0.10	0.12
Maximum	0.02	8.00	1.50	0.030	0.030	20.00	10.00	0.50	0.50
Ferrite No.FN 6.7									

Mechanical Properties
– All Weld Metal

	Typical (as welded)
Yield strength	≥ 450 MPa
Tensile strength	≥ 650 MPa
Elongation	40%
Impact energy, CVN	110J @ -40°C

Packaging Data

15 kg Spool	
Diameter	1.2 mm
Part No.	112307

Welding Parameters

Dip Transfer	
Diameter	1.2 mm
Current range (A)	90–160
Voltage range (V)	17–21
Wire feed speed (m/min)	3–7
Spray Transfer	
Diameter	1.2 mm
Current range (A)	180–260
Voltage range (V)	24–29
Wire feed speed (m/min)	5–9

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