



**GMAW / GTAW STAINLESS STEEL**

**MIGINOX 309L / TIGINOX 309L**

23Cr/12Ni TYPE STAINLESS STEEL SOLID WIRE



**CLASSIFICATION :** EN ISO 14343-A    AWS A/SFA 5.9    **APPROVALS :**

Miginox 309L: G 23 12 L	ER309L	-
Tiginox 309L: W 23 12 L	ER309L	IRS/NPCIL

**KEY FEATURES :**

- An extra low carbon 23Cr/12Ni type stainless steel wire
- Excellent corrosion and oxidation resistance up to 1100°C
- High ferrite content ensures highest cracking resistance
- Radiographic quality welds

**WELDING POSITION :**



**GMAW: DCEP**  
**GTAW: DCEN**

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
GMAW: 98Ar/2O <sub>2</sub> or Ar/1-5CO <sub>2</sub>	15-22	10-20
GTAW: Ar	10-15	-

**TYPICAL APPLICATIONS :**

- Welding of AISI 309, 309L type steels
- Dissimilar joints between stainless steels and low alloy or carbon steels
- Buffer layer on low alloy and carbon steels
- Joining corrosion resistant clad steels

**STORAGE / HANDLING :**

Keep dry and follow handling instructions mentioned on the box

**CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :**

	C	Mn	Si	Cr	Ni	Mo	S	P
Specification	0.03 max	1.0-2.5	0.30-0.65	23.0-25.0	12.0-14.0	0.75 max	0.03 max	0.03 max

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	Condition	UTS, MPa	EL%
Specification	As Welded	520 min	30 min

Mechanical properties will vary with the type of shielding gas used.

**SPECIAL TEST : IGC practice E as per ASTM A262**

**PACKING DATA :**

Miginox 309L	Ø, mm		Kg/Spool	
	0.8		12.5	
	1.2		12.5	
	1.6		12.5	
	2.0		12.5	
Tiginox 309L	Ø x L, mm	Primary Box, Kg	No. of Primary Boxes	Net Wt. of Carton, Kg
	1.6 x 1000	5	4	20
	2.0 x 1000	5	4	20
	2.5 x 1000	5	4	20

**EQUIVALENT :**

SMAW Electrode: **Betanox DL**

FCAW Wire: **Miginox FC 309L**