Ratna E 309L

CLASSIFICATION

- AWS/SFA-5.4 E 309L-16
- DIN 23 12 LR 23
- IS-5206 E 23.12LR 26
- BS 23 12 LR

APPLICATIONS

- Suitable for welding 24/12 stainless steel grades of AISI 309L.
- Welding similar and dissimilar steels.
- Stainless steel to carbon steel and low alloy steels.
- Straight chrome steels.

DESCRIPTION

- An extra low carbon, all position electrode giving 24/12 deposit with excellent resistance to chemical corrosion, corrosion at elevated temperature and oxidation. Gives stable arc, low spatter, smooth weld profile, easily removable slag. The weld deposits are radiographically sound.

TYPICAL WELD METAL CHEMICAL PROPERTIES (ELEMENT %)						
CARBON (C)	MAGNESIUM (MN)	SILICON (SI)	SULFUR (S)	PHOSPHORUS (P)	CHROMIUM (CR)	NICKEL (NI)
0.04 MAX	0.50-2.50	1.00 MAX	0.030 MAX	0.040 MAX	22.00-25.00	12.00-14.00

CURRENT POLARITY	WELDING POSITION
DC(+), AC	FLAT, HORIZONTAL, VERTICAL, OVERHEAD

TYPICAL WELD METAL MECHANICAL PROPERTIES (ELEMENT %)				
YIELD STRENGTH (N/MM²) KSI	ULTIMATE TENSILE STRENGTH (N/MM²) KSI	ELONGATION (%)	CVN IMPACT AT °C JOULES	FERRITE (FN)
-	520-660 (75-96)	30-45	+20°C :60-100 J	8-14

SIZE AND CURRENT RECOMMENDATIONS		
SIZE D X L (MM)	SIZE D X L (IN)	CURRENT (AMPS) DC+, AC
2.5mm x 350mm	3/32" x 14"	50-80
3.2mm x 350mm	1/8" x 14"	75-100
4.0mm x 350mm	5/32" x 14"	110-140

RE-DRY CONDITIONS

- Re-dry the electrode at 250°C for 1 hour.