



MANGALAM®

S.S. Electrodes- F 309L

Reliable And Corrosion-Resistant

Stainless Steel Electrode

MANGALAM E 309L is a rutile-type, extra low-carbon electrode designed for welding AISI 309 stainless steel. It offers excellent resistance to inter-granular corrosion and is widely used as a buffer layer for depositing 410 and 430 weld metals. This electrode ensures robust performance in applications requiring high corrosion resistance and durability.

Engineered For Diverse Industrial Applications

Joining Dissimilar Steels, Including Stainless Steel And Carbon Or Low Alloy Steel.

Welding Of AISI 309 Stainless Steel.

Buffer Layer For Low Alloy Or Carbon Steel.

Corrosion-Resistant Clad Steel.

Packing Data

SWG Size	Size (Mm)	Electrodes/Packet	Electrodes/Carton	Current (Amps)
12	2.50 x 350	2 Kg	10 Kg / 5 Pkt	50 - 70
10	3.15 x 350	2 Kg	10 Kg / 5 Pkt	70 - 100
8	4.00 x 350	2 Kg	10 Kg / 5 Pkt	100 - 140
6	5.00 x 350	2 Kg	10 Kg / 5 Pkt	140 - 180

Chemical Composition Of Weld Metal (%)

Element	Composition (%)
Carbon (C)	0.04 max
Manganese (Mn)	0.50 - 2.50
Silicon (Si)	1.00 max
Sulphur (S)	0.030 Max
Phosphorus (P)	0.040 Max
Nickel (Ni)	12.00 - 14.00
Chromium (Cr)	22.00 - 25.00
Molybdenum (Mo)	0.75 Max

Mechanical Properties Of All Weld Metal

Property	Value
UTS (N/mm²)	520 Min
Elongation (%)	30 Min
Ferrite No.	8

Test Performance:

Radiography Test

Blue Standard - *Satisfactory*

Storage Stability

- *Satisfactory*



Current Conditions

Operates on **AC** current.

Operates on **DC** current.

Welding Positions: F, H, V-UP, OH.