



MANGALAM®

S.S. Electrodes- F 310

Versatile Electrode For High-Temperature Applications

MANGALAM E 310 is a rutile-type, basic coated electrode ideal for welding AISI 310 stainless steel, containing 25% chromium and 20% nickel. It ensures smooth and uniform beads, low spatter loss, and easy slag removal. Designed for superior heat resistance and durability, it is perfect for demanding environments.

Reliable Performance Across Critical Industries

Joining Dissimilar Steels, Such As Mild Steel To Air-Hardening Steels (E.G., Cr-Mo Steels)

Welding Heat-Resistant Steels And 25% Cr/20% Ni Types

German Steels: 4762, 4828, 4841, 4846, And 4848

Cladding Side Of Clad Stainless Steels, Hydrogenation Plants

Gas Turbine Combustion Chambers, High-Temperature Furnace Components

Annealing Boxes, Carbonizing Pots, And Armor Plates

Packing Data

SWG Size	Size (Mm)	Electrodes/Packet	Electrodes/Carton	Current (Amps)
12	2.50 x 350	2 Kg	10 Kg / 5 Pkt	40 - 80
10	3.15 x 350	2 Kg	10 Kg / 5 Pkt	60 - 100
8	4.00 x 350	2 Kg	10 Kg / 5 Pkt	90 - 140
6	5.00 x 350	2 Kg	10 Kg / 5 Pkt	130 - 180

Chemical Composition Of Weld Metal (%)

Element	Composition (%)
Carbon (C)	0.08 - 0.20
Manganese (Mn)	1.00 - 2.50
Silicon (Si)	0.75 Max
Sulphur (S)	0.030 Max
Phosphorus (P)	0.030 Max
Nickel (Ni)	20.00 - 22.50
Chromium (Cr)	25.00 - 28.00
Molybdenum (Mo)	0.75 Max

Mechanical Properties Of Weld Metal

Property	Value
Ultimate Tensile Strength (N/mm²)	520 Min
Elongation (%)	30 Min

Test Performance:

Radiography Test

|| Blue Standard - Satisfactory

Storage Stability - Satisfactory



Current Conditions

Operates on AC current.

Operates on DC current.

Welding Positions: E, H, V-DOWN, V-UP, OH.