



ESR 13



General purpose rutile electrode - AWS/ASME SFA - 5.1 E6013

Key Benefits

- Suitable for joining and repair welding of light steel fabrications, iron works, wrought iron works, agricultural machines, boiler, chassis of vehicles.
- Suitable for all position except vertical-down. Particularly suited for the welding of horizontal fillets.
- Very smooth weld bead appearance, with easy arc striking and re-striking properties, quite and stable arc with fine-droplet metal transfer.
- Possible to use equally well both with AC and DC. Slag is completely self-releasing.

Welding Positions



Typical applications

- Suitable for joining and repair welding of light steel fabrications, iron works, wrought iron work

Typical Analysis in %

Requirements – AWS E6013 Typical Wire Composition	%C 0.06	%Mn 0.55	%Si 0.40	%S	%P
Requirements - AWS E6013 Typical Wire Composition	%Cr	%Ni	%Mo	%Cu	%Ti

Mechanical Properties

	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Impact Energy J
Requirements - AWS E6013 As Welded	500 MPa	560 MPa	28	0°C → 50 J

Ordering Information

Product Number	AWS Specification	Dimension mm/inches	Single Pack Weight kg/lb	Box Weight kg/lb
1113010M15	ESR 13 (E6013)	2.50 x 350 mm (3/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1113016M15	ESR 13 (E6013)	3.25 x 350 mm (1/8" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1113020M15	ESR 13 (E6013)	4.00 x 450 mm (5/32" x 18")	6.5 kg (14.0 lb)	19.5 kg (41.8 lb)
1113032M15	ESR 13 (E6013)	5.00 x 450 mm (3/16" x 18")	6.5 kg (14.0 lb)	19.5 kg (41.8 lb)



Single Pack (5.0kg)



Box (15.0kg)