



# ESR 14



General purpose rutile electrode with high deposition rate – **AWS/ASME SFA – 5.1 E7014**

### Key Benefits

- Preferably used in mild steel fabrication, sheet metal and ornamental iron works on poor fitup joints. Due to its iron powder addition in covering, particularly suited for the welding of horizontal fillets grooves with higher speed.
- Suitable for all position welding except vertical-down. High current carrying capacity, low spatter. Quite, stable arc characteristics with fine and fast droplet metal transfer.
- Very easy arc striking and re-striking. Very smooth welds blending into base metal without undercuts. Slag is completely self-releasing. Possible to use equally well both with AC and DC.

### Welding Positions



### Typical applications

- Used in mild steel fabrication, sheet metal and ornamental iron works on poor fitup joints. Due to its iron powder addition in covering, particularly suited for the welding of horizontal fillets

### Typical Analysis in %

<b>Requirements – AWS E7014</b> Typical Wire Composition	<b>%C</b> 0.06	<b>%Mn</b> 0.55	<b>%Si</b> 0.40	<b>%S</b>	<b>%P</b>
<b>Requirements - AWS E7014</b> Typical Wire Composition	<b>%Cr</b>	<b>%Ni</b>	<b>%Mo</b>	<b>%Cu</b>	<b>%V</b>

### Mechanical Properties

	<b>Yield Strength</b> <b>MPa (ksi)</b>	<b>Tensile Strength</b> <b>MPa (ksi)</b>	<b>Elongation</b> <b>%</b>	<b>Ferrite Number</b> <b>(FN)</b>
<b>Requirements – AWS E7014</b> As welded	500 MPa	560 MPa	28	0°C → 50J

**Ordering Information**

Product Number	Product/AWS Specification	Dimension mm/inches	Single Pack Weight kg/lb	Box Weight kg/lb
1114010M15	ESR 14 (E7014)	2.50 x 350 mm (3/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1114016M15	ESR 14 (E7014)	3.25 x 350 mm (1/8" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1114020M15	ESR 14 (E7014)	4.00 x 350 mm (5/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1114032M15	ESR 14 (E7014)	5.00 x 350 mm (3/16" x 14")	6.5 kg (14.0 lb)	19.5 kg (41.8 lb)



Single Pack (5 kg)



Box (15 kg)