



# ESC 61



General purpose cellulosic electrode - AWS/ASME SFA - 5.1 E6011

### Key Benefits

- Medium coated, cellulosic electrode, especially designed for use in AC as well as DC.
- Due to its high penetration, it is suitable for root pass and fill passes in vertical down direction.
- Used in shipbuilding, storage vessels, boilers, pipeline constructions, assembly and repair works in mild steels, steel casting, galvanized sheets and machinery parts.
- AC or DCEN (-) is ideal in root passes and AC or DCEP (+) is recommended for fill and cap passes in vertical down direction.

### Welding Positions



### Typical application

- Used in shipbuilding, storage vessels, boilers, pipeline constructions, assembly and repair works in mild steels, steel casting, galvanized sheets and machinery

### Typical Analysis in %

<b>Requirements – AWS E6011</b> Typical Chemical Composition	%C 0.10	%Mn 0.60	%Si 0.20	%S	%P
<b>Requirements - AWS E6011</b> Typical Chemical Composition	%Cr	%Ni	%Mo	%Cu	%Ti

### Mechanical Properties

	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Impact Energy J
<b>Typical Results (all weld metal)</b> As Welded	470 MPa	530 MPa	24	-30°C → 27J -20°C → 50J

**Ordering Information**

Product Number	Product / AWS Specification	Dimension mm/inches	Single Pack Weight kg/lb	Box Weight kg/lb
1146110M15	ESC 61 (E6011)	2.50 x 350 mm (3/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1146116M15	ESC 61 (E6011)	3.25 x 350 mm (1/8" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1146120M15	ESC 61 (E6011)	4.00 x 350 mm (5/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1146128M15	ESC 61 (E6011)	5.00 x 350 mm (3/16" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)



Single Pack (5.0 kg)



Box (15.0 kg)