

## Ratna E 6011

### CLASSIFICATION

- AWS/SFA A5.1 E6011
- IS-814 EC 4316X

### APPLICATIONS

- 6011 is designed for site welding of pipes and pipelines in all positions, using stove pipe and conventional techniques particularly for root bead.

### DESCRIPTION

- High cellulose coated, potassium type electrode for pipe welding in DC(+) as well as AC current condition. forceful and spray arc, ensures deep penetration and weld metal is of radiographic quality. Slag system that is a fast freezing, thin and easily removable.

#### TYPICAL WELD METAL CHEMICAL PROPERTIES (ELEMENT %)

CARBON (C)	MAGNESIUM (MN)	SILICON (SI)	SULFUR (S)	PHOSPHORUS (P)
0.20 MAX	0.40-0.80	0.30 MAX	0.030 MAX	0.030 MAX

#### CURRENT POLARITY

DC(+), AC

#### WELDING POSITION

FLAT, HORIZONTAL, VERTICAL, OVERHEAD

#### TYPICAL WELD METAL MECHANICAL PROPERTIES (ELEMENT %)

YIELD STRENGTH (N/MM <sup>2</sup> ) KSI	ULTIMATE TENSILE STRENGTH (N/MM <sup>2</sup> ) KSI	ELONGATION (%)	CVN IMPACT AT °C JOULES
330-450 (48-65)	430-560 (62-81)	22-30	-30°C : 50-80 J

#### SIZE AND CURRENT RECOMMENDATIONS

SIZE D X L (MM)	SIZE D X L (IN)	CURRENT (AMPS) DC+, AC
2.5mm x 350mm	3/32" x 14"	50-80
3.2mm x 350mm	1/8" x 14"	80-130
4.0mm x 350mm	5/32" x 14"	110-160

### RE-DRY CONDITIONS

- Not recommended

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