



# ULTRA SPECIAL

## MILD STEEL ELECTRODE

**CLASSIFICATION :**

**IS : 814-2004 : ER 4311X**  
**AWS/A 5.1 : E 6013**

**CHARACTERISTICS :**

A rutile type medium-heavy coated electrode specially manufactured for radiographic quality welds. Low spatter, adequate penetration, easy slag removal and finely rippled smooth beads are the special features of ULTRA SPECIAL electrodes. Mechanical properties are very good and consistent. This electrode is suitable for subzero temperature service.

**APPLICATIONS :**

- \* Railway Boilers
- \* Ship Building
- \* Bridges
- \* Machine Bases
- \* Fire Boxes
- \* Pipe Lines
- \* Storage Tanks
- \* Structural Work

**RECOMMENDATIONS :**

To obtain best results use welding current within recommended range, store the electrodes in dry place. Moist electrode should be redried at 100°C for minimum 30 minutes.

**CHEMICAL ANALYSIS  
OF WELD-METAL(%) :**

C	Mn	Si	S	P
0.10max	0.60-0.80	0.25max	0.30max	0.30max

**MECHANICAL PROP-  
ERTIES OF ALL WELD-  
METAL (AS PER  
IS:814-2004)  
(TYPICAL):**

Yield Strength	Ultimate Tensile Strength	Elongation (GL=5d) (%)	CVN Impact Values at -20°C Joules
N/mm <sup>2</sup> 350 min	N/mm <sup>2</sup> 400-560	24 min	50 min

**CURRENT CONDITIONS : USE DC (±) OR AC (50V) ONLY**

Size (mm)	2.5x350	3.15x350 3.15x450	4.0x350 4.0x450	5.0x450	6.3x450
Amps	70-100	100-140	140-180	180-220	230-280

**MODI ARC ELECTRODES CO.**

Modinagar - 201 204 (U.P.)

Fax : 01232 - 242147

Phone : (01232) 325700, 325925, 243912

E-mail : modiarc@ndb.vsnl.net.in

Web Site : [www.modielectrodes.com](http://www.modielectrodes.com)