# UltraWeld E6013

**APPROVAL:** 



Classifications: AWS/A5.1E6013 IS814:ER4221

# **Characteristics:**

UltraWeld E6013 is a medium coated general purpose Mild steel Electrode. Easy to operate well on AC/DC in all position except vertical Down. The Electrode gives excellent arc stability and very easy slag Removal Weld Metal is of good Mechanical properties and Radiographic quality.

#### **Application:**

Welding of Mild steel for structural welding, Bus & Truck body building, Grills, steel furniture, steel tanks, frames, pipes, Maintenance and repair in mild steel etc.

#### Welding Polarity: DC ± AC50 volt

Size-mm	Ø2.50 X 350	Ø3.15 X 350	Ø4.00 X 450	Ø5.00 X 450
Current-amps	60-90	100-130	140-190	190-240

#### All weld metal chemical composition:

Element	Minimum %	Maximum%
Carbon	-	0.10
Manganese	0.35	0.60
Silicon	0.15	0.30
Sulphor	-	0.03
Phosphorous	_	0.03

#### All weld metal mechanical properties:

Description	Minimum	Maximum
Yield strength-N/mn <sup>2</sup>	330	-
Tensile stregth-N/mn <sup>2</sup>	410	540
Elongation% on GL=5.65		
Square root of area	22	-
Chrpy V-Notch Impact, Value		
at 0°C Joules	47 Joules	-

Coating Ration: Over 1.30 up to and including 1.50

Radiography: Grade 2 as per IS:814-2004



APPROVAL:



CLASSIFICATION: AWS : AS. 18. ER. 70S-6

IS: 6419.S.4

DIN: 8559.SG2

### APPLICATION

- Automobile Body, Chassis, Frames and Brackets
- Automobile Silencers, Petrol/Diesel/Gas Tanks all other Automobile, Scooter, Cycle spare parts and accessories
- LPG Gas Cylinders, Compressors, Railway Wagons, Boilers, Poles & Steel Towers
- Steel Furniture, scaffoldings & all other welding in general steel fabrication

#### WIRE ANALYSIS %:

С%	Mn%	Si%	S%	Р%
0.08	1.50	0.80	0.015	0.017

#### MECHANICAL PROPERTIES IN WELD METAL: SHIELDING GAS-100% Co2:

	YIELD	TENSILE	ELONGATI	CHARPY V-NOTCH	RADIOGRAPHY
	STRENGTH	STRENGTH	ON	IMPACT VALUES AT -30°C:	
			L=5Xd		
	MPa[N/MM <sup>2</sup> ]	MPa[N/MM <sup>2</sup> ]	%	JOULES	
Actual value	467	571	26.80	80,88,72,76,90 AVG.: 81.33	SATISFACTORY
Specn. value	420 MINIMUM	500-640	22 MINIMUM	AVG. 27 JOULES MINIMUM	

## WELDING CURRENT DC (+):

Wire Size (mm)	0.80	1.00	1.20	1.60
AMP	50,160	80,200	1,10,250	200-400