

# TECHNICAL DATA SHEET

**BRAND NAME: MANGALAM E6013**

**Classification:**

AWS A /SFA 5.1 E 6013

IS 814:2004 ER 4211 X

RDSO CLASS A2,

**Approval:**

**DESCRIPTION AND APPLICATIONS:**

It is medium coated all position rutile type electrode. It is suitable for light and medium structural works. The weld deposit is consistent in mechanical and radiographic quality. The slag is easy to remove. The electrodes weld with least amount of spatter and smoke. Can be used for pipes & Tubes up to 12 mm thickness.

Typical applications:

- Railway coaches, locomotive Fireboxes, Wagons
- General fabrication vessels, storage tanks & Boilers
- Bridge, structure and construction work
- Automobile frames & bodies
- Shipbuilding & pipelines
- Furniture work

**CHEMICAL COMPOSITION OF WELD METAL (%):**

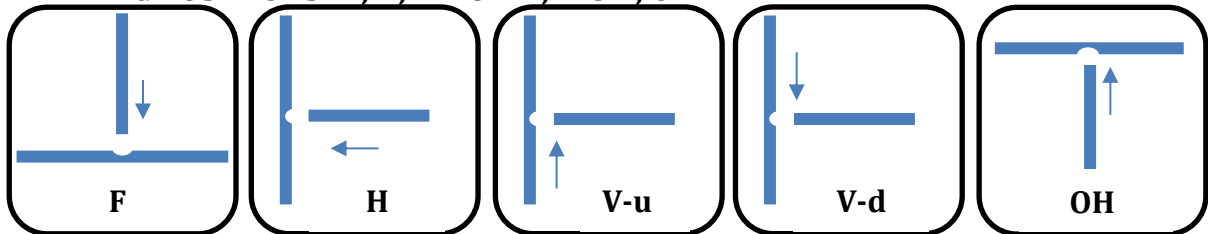
Elements	C	Mn	Si	S	P
%	0.10 Max	0.35-0.65	0.30 Max	0.030 Max	0.030 Max

**MECHANICAL PROPERTIES OF ALL WELD METAL:**

UTS (N/mm <sup>2</sup> )	YS (N/mm <sup>2</sup> )	Elongation %	CVN Impact at 0°C (J)
410 -540	330 Min	22 Min	47 Min

Bend Test 3 T 180°	Satisfactory
Radiography Test II Blue Standard	Satisfactory
Storage Stability	Satisfactory

**WELDING POSITIONS: F, H, V-DOWN, V-UP, OH.**



**CURRENT CONDITION: AC/ DC (-)**

**PACKING DATA:**

Size SWG	SIZE mm	No of electrodes /Packet	No of electrodes /Cartoon	Current in Amps
12	2.50 X 350	125	1500	80 - 110
10	3.15 X 350/450	90	1080	90 - 130
8	4.00 X 350/450	60	720	140 - 190
6	5.00 X 450	40	480	170 - 230