



## SUPRATHERME-R

**CODIFICATION:** AWS : SFA 5.1 E7018  
IS : 814 EB 5326H<sub>2</sub>JX / EB 5426H<sub>3</sub>JX

### CHARACTERISTICS AND APPLICATIONS:

Supratherme-R is a basic coated, Hydrogen controlled, Iron powder type high yield electrode. The electrode possesses excellent operating characteristics and is suitable for welding in all positions. Radiographic quality welds having high strength and excellent cracking resistance. Weld metal of excellent toughness to withstand heavy dynamic loading and impact. It is ideally suited for fabrication of component made of steels IS: 8500-91 Gr. 440B & 490B, IS: 2002-92 Gr. 1 & 2, IS: 1875-92 Class 2, 2A & 3, IS 2062-99 Gr. C or similar. Also suitable for repair welding of cast steels to IS: 1030 Gr. 230-450W. Supratherme-R also used for joining of stainless Steels type 3Cr12, IRS M-44 or it's equivalent with Mild Steel / Low Alloyed Steel / Carbon Steel.

### TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element	: C	Mn	Si	S	P	Cr	Ni	Mo	V
Percent	: 0.06	1.02	0.44	0.022	0.022	0.028	0.036	0.003	0.004

### TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS	YS	Elongation	% RA	CVN Impact (Joules)
(MPa)	(MPa)	(L= 5d)%		at minus 30°C at minus 20°C
540	450	28	65	70 65

- **TRANSVERSE ROOT AND TRANSVERSE FACE BEND:** SATISFACTORY (with 3T Mandrel Diameter at 180°)
- **DIFFUSIBLE HYDROGEN CONTENT:** 5ml/100gms of weld metal Max By Mercury method
- **MOISTURE CONTENT:** 0.15% Max. As received or conditioned (As per code 0.6% Max.)
- **DEPOSITION EFFICIENCY:** 115%
- **ACCELERATED STORAGE STABILITY TEST:** After this test we have not found any peeling off flux coating, cracking of flux coating, loss of texture of flux and rusting of core wire inside flux coating.
- **COATING FACTOR:** Heavy (1.51-2.20)

### CURRENT AND PACKING DATA: AC/DC (+)

Size (mm)	:	6.3x450	5x450	4x450	3.15x450	2.5x350
Dia x Length						
Current Range	:	260-320	200-250	150-190	100-150	70-100
(Amps)						
Qty. (Pcs./Carton)	:	25	35	55	75	125

**APPROVAL:** IRS Class B2 & A4

### PRECAUTIONS:

1. Re-dry the electrodes at 250-300°C for one hour.
2. Use short arc length.