

## SUPRATHERME (SPL)

**CODIFICATION:**                      AWS : SFA 5.1 E7018-1  
     IS : 814EB5626H<sub>3</sub>JX

### CHARACTERISTICS AND APPLICATIONS:

An iron powder, low hydrogen type electrode producing a tough and ductile weld metal for welding heavy and rigid structures subjected to dynamic loading and impact. The weld metal is of radiographic quality and displays remarkable impact strength even at minus 50°C.

Typical applications include welding of carbon steels, steels sensitive to hydrogen embrittlement, heavy and rigid structures, pressure vessels and equipment subjected to severe stress and requiring good toughness properties at sub-zero temperatures down to -50°C

### TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element	: C	Mn	Si	S	P
Percent	: 0.06	1.40	0.25	0.025	0.025

### TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	YS (MPa)	Elongation (L = 4d)%	CVN Impact Strength at minus 45°C (Joules)
550	455	28.0	50.0

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

Size (mm)	:	6.3x450	5x450	4x450	3.15x450	2.5x350
Dia x Length						
Current Range:	:	270-350	200-280	150-180	100-135	80-100
(Amps)						
Qty.(Pcs./Carton):		25	50	70	100	150

**APPROVALS:** ABS, Adani Infra, BHEL, CIB-MP, EIL, L&T Power, NPCIL, NTPC, PDIL, Reliance (Engineering)

### PRECAUTIONS:

1. Redry the electrodes at 250-300°C for one hour and cool them to 100°C transfer them to a holding oven at 50-60°C and use.
2. Minimise heat input.