

ULTRATHERME-H

CODIFICATION: AWS : SFA 5.5 E10016-G

CHARACTERISTICS AND APPLICATIONS:

Basic coated, extra low hydrogen electrode ideally suited for welding high strength steels, Q&T steels. The weld metal is of radiographic quality and possesses excellent strength combined with good toughness. Ideal for welding high strength steels under the site conditions having high relative humidity and higher joint restraints, as the extra low hydrogen levels ensure freedom from hydrogen induced cracking.

TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL:

Element	C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
Percent	0.06	1.20	0.30	0.020	0.022	0.25	1.90	0.35	0.05	0.12

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	YS (MPa)	Elongation (L = 4d)%	CVN Impact Strength at minus 50°C (Joules)
740	650	19.0	50

DIFFUSIBLE HYDROGEN CONTENT: 3 ml/100 gms of weld metal Max.

MOISTURE CONTENT: 0.15 % Max.

CURRENT AND PACKING DATA: DC(+)

Size (mm)	5x350	4x350	3.15x350	2.5x350
Dia x Length				
Current Range (Amps)	190-260	140-190	100-150	70-100
Weight/carton (kgs)	2.5	2.5	2.5	2.5

APPROVALS: Indian Navy

PRECAUTIONS:

1. Rebake the electrodes at 400°C for one hour and cool them in the same oven to about 100°C and then transfer them to a holding oven maintained at 50°C and draw for use.
2. Keep the minimum heat input during welding.
3. Controlling preheat and inter pass temperatures between 120-150°C.
4. Use stringer beads and minimize weaving.