



ULTRATENSAL-MH

CODIFICATION: AWS : SFA 5.5 E11018M

CHARACTERISTICS AND APPLICATIONS:

Basic coated, extra low hydrogen electrode ideally suited for welding high strength Q&T steels like Welten 80, SA517 grades and their equivalents. The weld metal has excellent crack resistance and displays high strength combined with good sub-zero impact strength. Ideal for welding high strength steels under 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	Ni	Mo	Cr	S	P
Percent	: 0.06	1.35	0.36	2.10	0.40	0.25	0.015	0.015

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	YS (MPa)	Elongation (L= 4d)%	CVN Impact Strength at minus 51 °C (Joules)
782	693	21	40

DIFFUSIBLE HYDROGEN CONTENT: 3ml/100gms of weld metal or less

CURRENT AND PACKING DATA: DC(+)

Size (mm)	:	6.3x450	5x350	4x350	3.15x350	2.5x350
Dia x Length						
Current Range (Amps)	:	270-320	180-240	140-180	90-140	50-90
Weight/carton:(kgs)	:	3.5	2.5	2.5	2.5	2.5

APPROVALS: BHEL, 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 heat input during welding to a minimum by controlling the preheat and interpass temperatures between 120-150°C.
3. Use stringer bead and minimise weaving.