

CLASSIFICATIONS:

AWS A5.5-96:E 8018-C2
BSEN499-95:E50 6 3Ni B 3 2 H5

PRODUCT DESCRIPTION:

Fully positional, basic coated, low hydrogen electrode depositing 3%Ni weld metal, exceptionally clean metal of radiographic quality with excellent de-slag and welder appeal. The addition of iron powder gives a recovery of ~120%

APPLICATIONS:

Used widely for the welding and fabrication of 3% Ni steels and fine grained steels. It is used extensively in the petro-chem industry for welding cryogenic pipework.

Typical material grades:- BS1501-503, BS1503-503, ASTM A350-Grade LF3. Suitable for operating temp down to -101°C.

ALL – WELD METAL COMPOSITION (WEIGHT %)

Element	C	Mn	Si	S	P	Mo	Cr	Ni	V	Cu
%	0.03-0.12	0.50-1.25	0.10-0.50	0.020 max	0.025 max	0.03 max	0.05 max	3.00-3.75	0.05 max	0.02 max

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES:

- 5. Ultimate Tensile Strength(N/mm²) : 621
 - 6. 0.2% Proof Stress (N/mm²) : 557
 - 7. Elongation(%) on 5D : 24
 - 8. Impact Strength CV@ -73°C(J) : 40
 - 9. Impact Strength CV @ -101°C(J) : 35
- Stress relieved @ 605°C/1Hr

CURRENT CONDITIONS:

SIZE mm		2.50 X 350	3.20 X 350	4.00 X 350	5.00 X 350
CURRENT-Amps	AC(OCV70) DC+/-	70-100	110-145	135-180	160-220

Storage and Re-Drying:

Storage: It is recommended that the electrodes are stored in a dry heated store at a minimum temp of 18°C and a maximum relative humidity of 60%. To avoid damage to the coatings no more than 6 cartons should be stacked on top of another.

Re-drying:Re-dry @ 350°C for 2 hours and then transfer to holding oven and hold @ 100-200°C, or 50-100°C in heated quiver.