

SUNTHERM 8018 G

Low Hydrogen Electrode



CLASSIFICATION

IS 1395-82 : E495 1Ni B12H5
AWS/A 5.5 : E 8018 G

CHARACTERISTICS

Hydrogen controlled, basic coated iron powder type electrode. Presence of Mn and Ni in appropriate proportion imparts to weld metal a high degree of low temperature notch toughness combined with high tensile strength. The electrode is thus well suited for welding fine grained steels, Q&T steels. Weld metal is tough and highly crack resistant.

APPLICATIONS

Suitable for joining steels containing 1% Ni and 0.5% Cu. Also find applications in Storage tanks, pipes, pressure vessels, heavy structures, boilers.

CHEMICAL ANALYSIS OF WELD METAL % (TYPICAL):

Carbon	Manganese	Silicon	Sulphur	Phosphorus	Molybdenum	Nickel
0.070	1.48	0.43	0.019	0.018	0.10	0.88

MECHANICAL PROPERTIES OF ALL WELD METAL (TYPICAL)

Yield Strength	Ultimate Tensile Strength	Elongation (GL=5d)	Reduction in Area	CVN Impact Values at minus 50°C
506.0 N/mm ²	596.0 N/mm ²	25.40%	62%	52 Joules avg

PACKING DATA:

Size (mm)	Length (mm)	Current (Amp) AC 70 V or DC (+)	Quantity of Electrodes in a Carton	Quantity of Electrodes in a Cardboard Box
2.50	350	80-100	5 Kg	20 Kg
3.15	450	100-130	5 Kg	20 Kg
4.00	450	140-180	5 Kg	20 Kg
5.00	450	180-240	5 Kg	20 Kg

RECOMMENDATIONS:

Re-dry the electrodes at 350°C for one hour or at 250°C for two hours. Minimize heat input and control interpass temperatures below 150°C to obtain optimum impact values.