



LoTHERME



LoTherme - 510 N

A high Nickel-Cr-Mn-Nb Alloy for extreme thermal shocks resistance, high temperature and cryogenic applications exhibiting sustained creep properties for multiple number of years.

Characteristics :

LoTherme-510 N producing high quality Nickel alloy deposits. It operates in all conventional positions. Excellent weld finish, steady arc, and good slag remove-ability.

Applications :

LoTherme-510 N is a universal, all positional electrode, designed for joining and surfacing of Nickel & Nickel Alloys, Inconel alloys, Nickel-Cr-Fe based materials, 9% Ni Steels for cryogenic applications for very high-temperature applications and applications of extreme thermal cycles, possessing much higher UTS and Elongation compared to many other products. It is recommended for welding different steels, such as austenitic to ferrite steels, as well as for cladding on unalloyed and low-alloyed steels. Typical applications include cement kiln rings, blast furnace components, reformer tubes, chemical containers & liquid gas installations.

Typical Mechanical Properties Of All Weld Metal :

Ultimate Tensile Strength	: 640 MPa
Elongation (L=4d)	: 38%
CVN Impact Strength at RT	: 90 Joules
CVN Impact Strength at minus 196°C	: 60 Joules
Weld Metal Hardness	: 180 BHN

Welding Technique :

Ensure that the electrodes are dried at 250°C for 2 hours before use. Clean the weld area free of rust, oil, grease, paint, or any other surface contamination. To ensure minimal heat input, use short arc and stringer bead technique.

Current Conditions : DC(+)

Size (mm)	5x350	4x350	3.15x350	2.5x350
Dia x Length				
Current Range (Amps)	150-180	110-140	80-100	50-70