

THERMOCOAT SEC-L

High Temperature, Anti-oxidation, Electrical Conducting Coating

Product: Thermo Coat (SEC-L) is heat resistant, anti-oxidation, anti-erosion and electrically conducting coating. It is applied on graphite electrodes to protect against oxidation and erosion in electric arc and ladle refining furnaces operating in steel manufacturing industry.

Thermocoat SEC-L is prepared by mixing dissimilar minerals in pre-determined proportions to form effective and strongly bonded chemical compound, which provide unique properties such as heat resistance, electrical conduction, anti-oxidation & anti-erosion at elevated temperatures. Bonding of the coating with graphite surface increases with the rise in temperature. The anti-oxidation and anti-erosion effect at elevated temperatures (around 1700°C) are notice-able by the change in colour of the coating; which means black color of the coating will turn into whitish gray. This change in colour of the coating on graphite electrode surface ensures the principal electrode surface is protected by Thermocoat SEC-L coating.

Features and Benefits:

- Clean the electrode surface and a single brush coat is to be applied on electrode surface.
- Easy to apply on graphite electrode surface.
- Highly electrically conducting property provides better skin effect in A.C power system.
- Anti-oxidation and anti-erosion effect is prominent at high temperature by the use of this coating.
- Acts as anti-corrosive coating at elevated temperature of 1700°C.
- Strong bonding of Thermocoat SEC-L with graphite surface does not allow coating to disintegrate at elevated temperature.
- Acts as heat resistant.
- Easily spreadable on cold electrode. If applied on hot eroded electrode surface, surface coverage will be low.

Technical data:

- Density: 1.10 to 1.15 Kg/Liter
- Colour: Black
- Drying time: Around 24 hours when dried at 100⁰ C.
- Service temperature: 1800⁰ C + 5%.
- Adhesion to metallic surface: Excellent.
- Storage: Store at a cool place. Do not store near furnace or high temperature area.
- Shelf life: 4 months.
- Toxicity: Non-toxic
- Thermal conductivity: Excellent
- Electrical conductivity: Highly conducting

Areas of application:

- Graphite electrodes in EAF, LRF