

Meeting the demands of production in coreless furnaces means ensuring thermal consistency while protecting the interface between the induction coil and cast refractory crucible.

Induction furnaces come in different sizes and use various refractory materials in their processes. As a result, they will operate in different conditions to achieve the right temperature gradients for their specific purposes. Allied provides a range of mica roll laminates in several grades. Mica laminates in roll form provide superior heat and electrical and slip plane characteristics, making them ideally suited for use in furnaces.

Benefits:

- Versatile and easy to install
- Optimizes sintering conditions, maximizing lining life
- Reduces downtime and maintenance cost
- Withstand temperatures up to 1000°C
- Excellent electrical insulation qualities
- Acts as a vapor barrier against carbon gasses



ELMELEC GM 40 SRP

5300000412 - ELMELIN MICA GM40SRP .016X42X82' 273 SF

A flexible material made from silicone bonded phlogopite mica paper laminated on one side with closely woven glass fabric. This is an economic grade of induction furnace slip-plane material. Mica provides a smooth slip plane and consequently is usually positioned facing the main refractory lining. The woven glass cloth provides the material with additional mechanical strength and is usually placed against the induction coil.

ELMELEC CM 30 SRP

5300000290 - ELMELIN MICA CM30 SRP 0.13X40X41' 137SF

A flexible sheet material made from silicone-bonded phlogopite mica paper laminated to a 3 mm layer of ceramic paper. The combination of ceramic and mica paper on one material provides both a thermal and an electrical interface between the induction coil and the refractory material. A considerable saving in application time and effort will be found where in the past, both materials have been used separately. It provides a complete substitute for asbestos mill board.

ELMELEC CSML 19 SRP

5300002352 - ELMELIN CSML 19 SRP 1100 MICA

CSML 19 SRP is a flexible laminate material supplied in roll form and made from silicone bonded phlogopite mica paper laminated to a 2 mm layer of ultra-high performance CMS (Calcium Magnesium Silicate) paper. This newly developed product is particularly tough mechanically, because it contains within it a strong layer of woven glass fabric. The outer layer of the mica thus remains uncovered in order to retain the maximum slip plane characteristics.

ELMELEC Vapor Shield

5300000850 - VAPORSHIELD T-2 .025"X40"X33LF (110 SF)

Grade MVM SRP Type 2 is a flexible laminate material supplied in roll form. It is made from 2 thick layers of silicone bonded phlogopite mica paper, but between the layers of mica lies a thin layer of stainless steel foil. The stainless steel foil prevents vapor penetration, but by being positioned within the mica is fully electrically insulated and retains the characteristics of the full slip plane.

ELMELEC MR SSRM

5300000540 - ELMELEC MRSSM MICA SHEET .02X39.37X39.37

A rigid sheet material from silicone-bonded muscovite or phlogopite mica paper. This high temperature board has many applications for both electrical and heat insulation. This material is often used as a parting plane between the inductor and throat faces of channel induction furnaces. It is widely used in domestic appliances and heater manufacture and can easily be punched. A cost effective material with good mechanical strength.



Global **Refractory** Solutions