FLOW CONTROL SYSTEMS

FLUXES

PURGING PLUGS

SLIDE GATE REFRACTORIES

VAPEX PRODUCTS

viso products

Sealing Solutions

VESUVIUS ADVANCED CERAMICS (CHINA) CO., LTD
221 Xing Ming Street
China-Singapore Surface Industrial Park
Suzhou 215021, Jiangsu Province
Tel.: +86 512 6741 2088
Fax: +86 512 6741 1700

VESUVIUS INDIA LTD
P 104, Taratala Road
700088 Calcutta, India
Tel: +91 33 240 10 234
Fax: +91 33 240 11 235

VESUVIUS USA CORP.
250 Park West Drive
Pittsburgh, PA 15275
USA
Tel: +1 412 276 1750
Fax: +1 412 269 2480

VESUVIUS REFRATARIOS, LTDA
Av. Brasil 89 550
Distrito Industrial de Palmares
CP 22085-480 Campo Grande
Río de Janeiro, Brazil
Tel.: +55 21 2614 0026
Fax: +55 21 2614 0648

For more information on this product and on our complete package of solutions please contact our local service center.

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Airtight Gaskets

The connection between two refractory components in a casting channel is sensitive because of the possibility of air ingress, resulting in steel oxidation and nitrogen pick-up with consequent steel quality downgrading. To minimize the air suction between the refractory components, a suitable Vesuvius gasket can be designed. In addition to the cushioning effect between mating surfaces of a fibre gasket, our Sealbind™ gasket material creates an effective air tight solution for appropriate applications.

Gasket types

Vesuvius has a wide range of gasket materials to suit different customer needs and operating practices
•  Sealbind™ gasket - Standard - flexible ceramic material which absorbs surface irregularities
•  Sealbind™ gasket - Expanding - gasket material expands with elevating temperatures, improving the seal in use - ideal for preheat subentry shroud applications
•  Ceramic Fibre (including highly soluble) - cut fibre - vacuum formed impregnated

Vesuvius gaskets can be manufactured to the required dimensions to fill all ladle and subentry shroud applications.

Gasket sealing leads to:
1. reduced nitrogen pick-up
2. improved steel cleanliness by preventing the formation of inclusions due to reoxidation
3. reduced incidences of nozzle blockage due to re-oxidation and alumina formation
4. reduced damage to collector nozzles
5. better sealing of re-used ladle nozzles, due to the flexibility of the gasket.

Significant improvement using the Sealbind™ gasket solution versus reference fibre on twin strand slab caster

Metal Tight Gaskets

This type of material has been specifically designed for areas where metal or steel penetration is highly undesirable. These most critical areas are generally within the ladle sliding or rotary gate system typically between the stationary plate and the lower nozzle or between the sliding plate and the collector nozzle.

The benefits of using a Sealbind™ gasket for these applications are:
•  It is ultra safe, the material is highly resistant to metal penetration.
•  Using a pre-made gasket removes the variability associated with the manual application of either cement/mastic.
•  The gasket is exactly the correct dimension for the specific application thus avoiding excessive wastage.
•  The gasket is both simple and easy to apply.
•  The composition of the material makes it easy to remove after use.

Vesuvius is able to produce this material in a variety of sizes and thicknesses to suit the specific application.

Sealbind™ gasket ladle gate application

Remove foil from individual seal

Application of Metal Tight Seals

Apply seal with a flat side first onto spigot

Gentle press seal to ensure cohesion

Collector nozzle with gasket in position, ready to install in ladle gate
Airtight Gaskets

The connection between two refractory components in a casting channel is sensitive because of the possibility of air ingress resulting in steel oxidation and nitrogen pick-up with consequent steel quality downgrading. To minimize the air suction between the refractory components, a suitable Vesuvius gasket can be designed. In addition to the cushioning effect between mating surfaces of a fibre gasket, our Sealbind™ gasket material creates an effective air tight solution for appropriate applications.

Gasket types

Vesuvius has a wide range of gasket materials to suit different customer needs and operating practices:

- **Sealbind™ gasket - Standard**
  - Flexible ceramic material which absorbs surface irregularities

- **Sealbind™ gasket - Expanding**
  - Gasket material expands with elevating temperatures, improving the seal in use
  - Ideal for preheat subentry shroud applications

- **Ceramic Fibre (including highly soluble)**
  - Cut fibre
  - Vacuum formed impregnated
  - This type of material has been specifically designed for areas where metal or steel penetration is highly undesirable. These most critical areas are generally within the ladle sliding or rotary gate system typically between the stationary plate and the lower nozzle or between the sliding plate and the collector nozzle.

**Sealbind™ gasket ladle gate application**

Remove foil from individual seal
Apply seal «wet side first» onto spigot
Gentle press seal to ensure cohesion
Collector nozzle with gasket in position ready to install in ladle gate

Significant improvement using the Sealbind™ gasket solution versus reference fibre on twin strand slab caster

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<td>24</td>
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**Application of Metal Tight Seals**

Vesuvius gaskets can be manufactured to the required dimensions to fit all ladle and subentry shroud applications.

Gasket sealing leads to:

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2. improved steel cleanliness by preventing the formation of inclusions due to reoxidation
3. reduced incidences of nozzle blockage due to re-oxidation and alumina formation
4. reduced damage to collector nozzles
5. better sealing of re-used ladle shrouds, due to the flexibility of the gasket.

**Metal Tight Gaskets**

This type of material has been specifically designed for areas where metal or steel penetration is highly undesirable. These most critical areas are generally within the ladle sliding or rotary gate system typically between the stationary plate and the lower nozzle or between the sliding plate and the collector nozzle.

The benefits of using a Sealbind™ gasket for these applications are:

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- **Using a pre-made gasket removes the variability associated with the manual application of either cement/mastic.**
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- **The gasket is both simple and easy to apply.**
- **The composition of the material makes removal easy after use.**

Vesuvius is able to produce this material in a variety of sizes and thicknesses to suit the specific application.
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