

Kiln inlet and outlet lamella seals



The FLSmidth lamella seal is suitable for both FLSmidth and non-FLSmidth kilns. It is quick to install or replace, requires minimum maintenance and incorporates insulation to protect the lamella seal spring effect.

Superior sealing

Proper sealing between the kiln and the preheater and cooler is crucial. It prevents hot gas leakage and false air intake. The strong design of the FLSmidth lamella seal for the kiln outlet and inlet makes it superior to traditional pneumatic seals, and it can easily be fitted to both FLSmidth kilns and non-FLSmidth kilns.

Spring lamellae and heat-resistance

The lamella seal consists of two sets of spring lamellae. The inner set is exposed to the intense heat of the kiln. To enable the lamellae to maintain their resilience and spring characteristics, a layer of heat-resistant fabric is positioned between the two sets of steel lamellae. The spring effect forces the inner set of lamellae against the cooling mantle and provides a seal. To prevent overheating, a fan delivers cooling air to the space between the kiln shell and the cooling mantle. It also cools down the shell surface of the kiln riser transition piece.

Kiln inlet lamella seal

The kiln inlet lamella seal provides flexible, secure sealing between the kiln and the preheater. It includes a system of heat-resistant steel scoops to collect any spillage and return it to the kiln. In the smoke chamber, the exit gases suspend the spillage and carry it up into the kiln riser pipe.

Depending on process conditions, the kiln inlet lamella seal delivers 10,000–20,000 service hours.

The FLSmidth kiln inlet lamella seal provides:

- Secure sealing between kiln and preheater
- Integrated scoop system
- Long lifetime for wear parts

Kiln outlet lamella seal

The kiln outlet lamella seal provides flexible sealing between the kiln and the cooler. It consists of a non-rotating cylindrical ring of steel plates fitted around the kiln on the kiln hood. This cylindrical ring supports special steel lamellae, which slide on the circular cooling mantle surrounding the kiln outlet section. A material return system is included on either the first grate or the external drag chain. Escaping dust is collected in the concentric dust chamber and returned directly to the cooler via a chute. Depending on process conditions, the kiln outlet lamella seal delivers 7,000–14,000 service hours.

The FLSmidth kiln outlet lamella seal provides:

- Secure sealing between kiln and cooler
- Material return system
- Long lifetime for wear parts.



Kiln inlet lamella seal



Kiln outlet lamella seal

Lamella seal benefits:

- **Extremely flexible, secure sealing**
- **Independent of kiln rotation**
- **Insulation incorporated to protect the lamella spring effect**
- **Easy maintenance**
- **Straightforward installation, also for non-FLSmidth equipment**
- **Long lifetime**

Project Centre Denmark

FLSmidth A/S
Vigerslev Allé 77
DK-2500 Valby
Copenhagen
Tel: +45 3618 1000
Fax: +45 3630 1820
E-mail: info@flsmidth.com

Project Centre USA

FLSmidth Inc.
2040 Avenue C
Bethlehem, PA 18017-2188
Tel: +1 610-264-6011
Fax: +1 610-264-6170
E-mail: info-us@flsmidth.com

Project Centre India

FLSmidth Private Limited
FLSmidth House
34, Egatoor, Kelambakkam
(Rajiv Gandhi Salai, Chennai)
Tamil Nadu – 603 103
Tel: +91-44-4748 1000
Fax: +91-44-2747 0301
E-mail: indiainfo@flsmidth.com

www.flsmidth.com