

GORE® Filtration Products

Cement Industry

Case History 3

Kiln/Mill Feed Baghouse

OPTIMIZATION POTENTIAL

In 1997, a plant modernization program was initiated to improve fuel efficiency and environmental performance and two older wet kilns were permanently shut down. In 1999, a new 3,000 tons per day kiln line with a 5-stage precalciner was commissioned. A Solios (formerly Procedair) TGT baghouse was built and high performance filters were required to meet efficiency and environmental targets.

SOLUTION

GORE® High Durability SUPERFLEX® Filter Bags were installed and a Gore applications team optimized all system settings.

RESULT

The GORE® High Durability SUPERFLEX® Filter Bags exceeded their four-year guarantee and extended performance to five years. The plant tried to duplicate the performance of the GORE® Filters with generic membrane bags from another supplier. However, the generic membrane bags failed to meet the guarantee offered, so the plant came back to Gore and purchased a set of GORE® High Durability SUPERFLEX® Filter Bags with a six-year bag life guarantee. As of their installation in March of 2009, the bags are meeting all performance expectations.



Process Description: Kiln/Mill Feed Baghouse

Collector Manufacturer: Solios/Procedair

Design Airflow Rate: 532,960 m³/hr (314,466 acfm)

(Raw mill on)

564,017 m³/hr (332,770 acfm)

(Raw mill off)

Design Temperature: 103°C (217°F) (Raw mill on)

225°C (437°F) (Raw mill off)

No. Bags/Compartment: 252

No. Bags/Collector: 3,024

Cleaning System: Pulse Jet

Air-to-Cloth Ratio Design: Gross 1.16:1 m/min (3.81:1 fpm)

Net 1.26:1 m/min (4.15:1 fpm)

Bag Material: GORE® High Durability Filter Bag

(GORE® SUPERFLEX™ Fabric, 630 g/m², 18.5 oz/yd²)

FOR INDUSTRIAL USE ONLY. Not for use in food, drug, cosmetic or medical device manufacturing, processing, or packaging operations.

Worldwide Sales and Support Contact Information

