

## **Cement Industry**

## Case History 10

# Cement Kiln/Raw Mill

### **OPTIMIZATION POTENTIAL**

Plant increased pre-heater fan capacity in order to increase productivity. The increased airflows resulted in higher pressure drop across the baghouse.

### SOLUTION

A new set of GORE<sup>®</sup> High Durability Filter Bags made of acidresistant fiberglass fabric were installed and all process settings were optimized.

### RESULT

Since installation in 1997, filter lifetime is over 12 years and has exceeded performance expectations for both airflow and pressure drop.

- Kiln feed rates have increased by 4.3%
- Airflow has increased by 15%
- Pressure drop has decreased by 10.5%



Process Description:	Kiln/Raw Mill
Collector Manufacturer:	Thermax
Design Airflow Rate:	750,000 m³/hr (442,500 ft³/hr)
Design Temperature:	Max 260°C (500°F)
No. Bags/Compartment:	108
No. Bags/Collector:	1,728
Cleaning System:	Reverse Air
Air-to-Cloth Ratio:	0.7 – 0.8 m/min
	(2.29 – 2.62 ft/min)
Bag Material:	GORE <sup>®</sup> High Durability Filter Bag (Acid-resistant Fiberglass Fabric, 339 g/m², 10 oz/yd²)

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