

Case Study

GORE® Low Emission Filter Bags – Cement Industry

Challenge

A global cement producer operated two existing wet process cement kilns with a combined approximate 1.7 million tons per year production when the plant embarked on a major plant modification project. The project included the replacing of the inefficient two wet process kilns with a single state of the art preheater/ precalciner kiln capable of producing approximately 2.8 million tons per year. The plant needed to meet NESHAP and New Source Performance Standards (NSPS) regulations with a federal limit of 0.02 pounds per ton of clinker emission level via the Continuous Parametric Monitoring System (CPMS). This equated to a filter bag particulate matter warranty of 2 mg/Nm³.

The Solution

The plant installed a brand new Fives Solios TGT® baghouse with significant portions of the clean air plenum manufactured from stainless steel construction to prevent corrosion. The baghouse was equipped with GORE Low Emission Filter Bags which reliably kept the plant in compliance with the extremely strict operating limits for 4 years. Gore and Fives Solios have a successful track record of partnering on over 20 kiln baghouses within the North American cement industry.

The Result

The plant confidently achieved the strict NESHAP and New Source Performance Standards (NSPS)



Seam Tape Content	ePTFE
Continuous Operation Temp.	240 °C (465 °F)
Maximum Surge Temp.	260 °C (500 °F)
Acid Resistance	Excellent
Alkali Resistance	Excellent
Durability	Highly durable in pulse jet and reverse air style collectors
Compatible Backing Materials	Woven Fiberglass, PTFE Felt, Aramid Felt, Woven PTFE, Polyester Felt

regulations. After 4 years of successful performance, the plant selected replacement filter bags from another supplier. Those filters did not meet the expected performance and were replaced after only 2 years of operation. The plant has once again installed a set of GORE Low Emission Filter Bags.

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

All technical information and advice given here are based on Gore's previous experiences and/or test results. Gore gives this information to the best of its knowledge, but assumes no legal responsibility. Customers are asked to check the suitability and usability in the specific application, since the performance of the product can only be judged when all necessary operating data are available. The above information is subject to change and is not to be used for specification purposes. Gore's terms and conditions of sale apply to the sale of the products by Gore.

GORE and designs are trademarks of W. L. Gore & Associates. © 2015–2023 W. L. Gore & Associates, Inc.