



Cement Kiln

South America

Initial Conditions

Peruvian Cement Company chose to replace their aging Electro Static Precipitator's to meet new emission requirements placed on their cement kiln. Regulations required that particulate larger than 20 mg/Nm^3 be captured in this new baghouse. A pulse jet baghouse was chosen to handle the $187,000 \text{ M}^3/\text{hr}$ inlet flow of cement dust. Given the operating conditions including extreme temperature and chemistry, 22 oz. woven Fiberglass with Tetratex® High Efficiency expanded PTFE membrane was chosen. Without the use of Tetratex® expanded PTFE membrane, conventional filter media would not meet the emissions level, pressure drop and service life needs set by the client.

Conditions

*Design Flow	<u>$187,000 \text{ m}^3/\text{hr}$</u>	*Air to Cloth Ratio	<u>$60 \text{ m}^3/\text{min}/\text{m}^2$</u>
*Min. Temperature	<u>80°C</u>	* Max. Temperature	<u>130°C</u>
*Inlet Grain Loading	<u>$60 \text{ gr}/\text{m}^3$</u>	*Outlet Load	<u>$20 \text{ mg}/\text{Nm}^3$</u>

Success Story

A local source provided the 14 feet long snap band top cuff and disc bottom bags. 1,548 bags made with Tetratex® bonded to 22 oz. Woven Fiberglass were delivered and installed with assistance of this vendor. These bags have been in operation for two years and are exceeding the emissions requirement.

Summary

Donaldson is available around the world to solve your toughest pollution control issues. Tetratex® membrane is the best available technology in the industrial filtration market today.