



Coal Fired Utility

Southern USA

Initial Conditions

A coal-fired power plant operating with low-efficiency 10 oz. conventional fiberglass filter bags in parallel with an Electrostatic Precipitator found that fly ash build up on the cell plate caused the bag's chemical finish to burn off, and, as a result, the conventional bags failed. As a solution, the utility requested a large quantity of filter bags made with Tetratex® membrane bonded to 10 oz. Woven fiberglass. Donaldson supplied 150,000 yards of Tetratex® high efficiency membrane bonded to 10 oz. Woven Fiberglass, yielding 13,500 filter bags. The Tetratex® filter bags received 80% of the airflow through ducting and regulators.

Conditions

*Operating Flow	<u>1,250,000 ACFM</u>	*Air to Cloth Ratio	<u>2.74 : 1</u>
*Pressure Drop	<u><6" w.g.</u>	*Temperature	<u>500° F</u>
*Baghouse Type	<u>Reverse Air</u>	*No. Filter Bags	<u>13,500</u>

Success Story

After installation of the Tetratex® bags, the utility realized as much as a 30% increase in airflow, with the added benefit of keeping the cell plate clean. The increase of airflow has resulted in a 5% increase of Megawatt production. Superior surface filtration when compared to conventional fiberglass bags resulted in longer filter bag life.

Summary

Tetratex® filter media provide the solution to an array of pollution control problems. Expanded PTFE membrane provides surface filtration benefits to industrial customers, making it the Maximum Available Control Technology (MACT) of filtration media available in the market today.