

CASE STUDY

Power Generation

Reducing Baghouse Emissions in Coal-Fired Power Plant
In China To Meet Demanding Regulatory Requirements

CHALLENGE

China has a strict policy around baghouse particulate emission levels and is under a high level of regulatory scrutiny, with violations attracting significant penalties and/or forced shutdowns.

An existing coal-fired plant needed to improve their emission compliance three-fold without a structural baghouse retrofit, and without adversely affecting differential pressure (DP) or filter bag life. They turned to our team to find a cost-effective solution for reducing baghouse emissions to meet increasingly stringent regulatory targets.

SOLUTION

Our technical team worked with the Chinese OEM to develop a customized solution, a low emissions filter media that specifically addressed the need to meet the lower PM benchmark.

Micro-denier fibers were introduced into the fabric structure to optimize the surface filtration media's efficiencies. This allowed improved particulate capture and increased the rate of dynamic filtration resistance.

Several media were developed and rigorously tested under dust load in the VDI machine in our In-House Laboratory. The resultant high-performing PPS filter media was then successfully trialed on-site at the plant before full installation of the SOLAFT® Low Emission Filter Bag.



As a result of our filtration solution, the Coal-Fired Power Plant achieved the following key benefits:

- 97% removal of PM benchmark particles under full-load capacity conditions
- Particulate emissions have been maintained below 3 mg/m³
- The baghouse has successfully maintained its operating Differential Pressure (DP)

You can rely on Micronics, now a part of Cleanova, to be your proven single source for solving complex baghouse challenges around the globe whether in China, Brazil, or the USA.