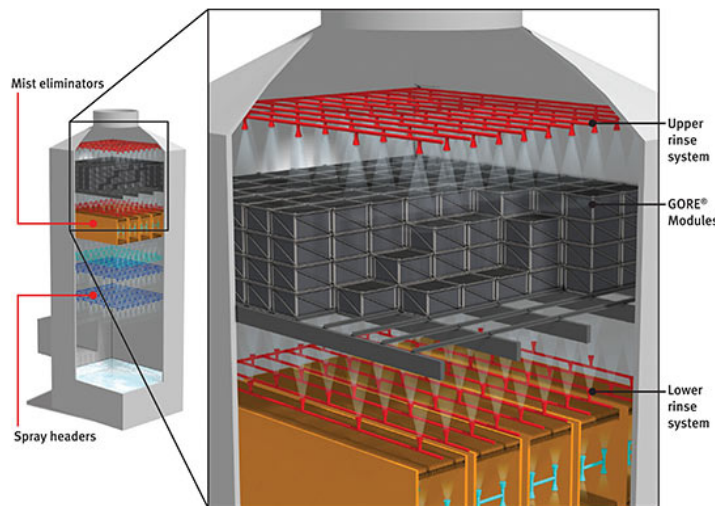


## Mercury and SO<sub>2</sub> Control by Fixed Sorbent Systems: Results from Installations in Coal Fired Power Plants

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The GORE™ Mercury Control System (GMCS) (see [http://www.gore.com/en\\_xx/products/filtration/mercury/mercury-control-coal-fired-boiler.html](http://www.gore.com/en_xx/products/filtration/mercury/mercury-control-coal-fired-boiler.html) for details) offers a variety of unique benefits over traditional methods of mercury control. This system is based on sorbent polymer composite (SPC) material housed within discrete modules which provide passive, continuous mercury control with minimal pressure drop. As a result, no injection of any sorbents or chemicals are required. The modules capture and retain mercury for many years of operation, resulting in an exceedingly easy-to-operate mercury control system, and very low ongoing operating costs. Modules can be installed inside of a wet flue gas desulfurizer (wFGD), which requires no additional footprint on site. GMCS has absolutely no impact on fly ash properties, thereby preserving the option of fly ash use in concrete and cement. Furthermore, unlike systems that inject oxidizing chemicals such as calcium bromide, this system presents no risk of air preheater corrosion, and does not impact the waste water treatment system on the scrubber effluent stream. The system is unaffected by SO<sub>2</sub>/SO<sub>3</sub> concentrations, which makes it very suitable for high sulfur coal sources, and may provide fuel flexibility options to a plant operator. In addition, the system can provide protection against scrubber re-emissions in a way that doesn't impact gypsum quality or the waste water treatment system. The modules also carry a co-benefit of SO<sub>2</sub> removal, which can help meet tighter SO<sub>2</sub> emissions limits and possibly avoid a scrubber upgrade. The GMCS has now been installed full scale in more than 20 incineration and coal fired power plants in the U.S. and in slip stream demonstration plants in Poland and Germany. Results from these installations will be presented.



Installation of GMCS inside a wet scrubber results in no additional footprint requirements.