

Presentation of Data Relative to R&D Testing to Determine Incremental Performance Upgrades of FLEXIFIBER® Mist Eliminators.

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Abstract:

In an effort to create more value added FLEXIFIBER® mist eliminator products for the sulfuric acid industry, Koch-Otto York has tested a series of fiberbed mist eliminators at their Wichita, Kansas R&D facility. The data from the testing, and the implications of the data relative to fiberbed performance, are presented in the following paper.

Although fiberbed mist eliminators are fundamentally a mature technology, the product has been evolving to meet the needs and expectations of the industries it serves. This paper documents the product evolution within Koch-OttoYork, by initially establishing the methodology relative to the acquisition of the performance data. Secondly, a performance baseline for conventional fiberbed products is established. Thirdly, the data is evaluated to determine the incremental improvements witnessed by our R&D facility, and finally, the paper provides the potential economic and operational benefits for the equipment owner, if this new technology is incorporated.

The presentation of the data focuses on important aspects of the fiberbed from the customer's perspective such as; overall mist collection efficiency, incremental improvement in collection efficiency, overall saturated pressure drop through the fiberbed, incremental improvement in pressure drop, and the overall improvement in fiberbed volumetric capacities relative to a conventional design.

