



## THE CUSTOMER

A global leader producing fine chemicals for pharmaceutical drugs approached Global Filter for help with processing of their high-purity products. As a manufacturer of active pharmaceutical ingredients and vaccines, protecting employees and consumers from harmful process components while ensuring product consistency, was a top priority.

## THE INITIAL SITUATION

Several products the customer manufactures are used as additives for pharmaceutical drugs, such as vaccines and medications. The production of these high-purity products requires the use of potentially harmful substances, which require adherence to strict quality and purity standards. The customer needed help optimizing their final filtration process while minimizing exposure to their operations personnel.

The customer's highest purity products required final filtration at a level of 0.2 micron absolute. The goal was to remove any remaining catalyst particulate not captured by the prefilter. Their existing 0.2 micron PTFE membrane cartridge met the required removal efficiency, but its outside to inside flow design allowed for potential operator exposure to the catalyst during filter changes. As a result, routine maintenance became complicated and time consuming, not to mention potentially dangerous.

## THE SOLUTION

Global Filter developed a custom 0.2 micron absolute 100% **Polypropylene High Flow** cartridge for this customer (**HF-series (PP)**) which offered a higher filtration area than the previous PTFE membrane cartridge. Additionally, the **HF-series (PP)** element provided increased chemical compatibility while securely retaining catalyst contaminants on the inside of the element rather than on the outside. Global Filter also replaced the customer's existing filter vessel with a duplex setup, which allowed for a simplified changeout procedure that did not require the process to be shut down.

As a result of switching to the **HF-series (PP)**, the customer was able to reduce maintenance time and costs as well as harmful chemical exposure to their employees. Ultimately, Global Filter was able to offer a significant cost savings, not only as a result of a **38% reduction in filter spend**, but also in the form of reduced changeout labor and improved employee safety.

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Global Filter's extensive knowledge of media characteristics and process optimization while offering flexible solutions proved to be of tremendous value to the customer.

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