



TOTAL FILTRATION SERVICES

Developing a Custom Filtration Solution for an Aerospace Customer

Customer Case Study



PROFILE

This case study focuses on Total Filtration Services' success in delivering significant costs savings to a major aerospace customer located in the mid-western region of the United States as a result of its technical expertise and strong relationships with filter manufacturers.

CHALLENGE

The customer's facility includes a high production bond primer paint booth. Every aluminum part that gets built into a sub-assembly (wings, tail cone, or fuselage) gets a chromate coating from this booth, so keeping it running was of critical importance to the customer.

With production increases, the customer was changing filter bags every 22 hours to avoid filter failures resulting in paint defects and costly repairs. In addition to issues with short filter life, the existing filter bags required change-outs during production times instead of shift changes, downtime, and lunch times. This was an added cost to the customer due to shutting down the paint-line for 30 minutes to change the filters.

To meet the customer's needs, TFS sourced a new self-sealing bag filter for the bond primer paint booth that would last longer than the current solution and could be changed on a schedule.

THE TFS SOLUTION

As part of our total filtration management approach, TFS invests the time to learn about the key needs for each filter application throughout a customer's facility and regularly partners with top filter manufacturers to develop solutions specific

to a customer's needs. In this situation, the type of bag filter needed for the application did not exist, so a custom solution was required.

TFS worked with Viskon-Aire - a trusted manufacturer of disposable air filtration products - to develop an 8-pocket, frame-less self-sealing bag filter using their proprietary (Revolution) filtration media.



Viskon Aire - Revolution Bag Filter (without frame)

With the added surface area of the new filter and the higher quality media, the Viskon-Aire filter lasted 3x longer than the previous product!

RESULTS

TFS' ability to deliver timely technical support and call upon trusted manufacturing partners to develop a custom solution has resulted in significant costs savings due as summarized below:



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- The filter model change netted an annual savings of over 50%. In addition to the product cost savings, the filter efficiencies of the Revolution bag exceeded the previously used bag by 10%.

- The cost of filter change-outs with the previous product was \$3,430 per week with the cost of the Viskon-Aire bag being \$1,710, resulting in a labor and materials cost savings of \$1,720. per week.

- The TFS approach of working with its manufacturing partners to develop a customized solution resulted in an annual cost savings of \$82K and allowed the customers to time their filter change-outs to avoid production interruptions and costly downtime.