TOTAL FILTRATION SERVICES

Achieving $200K in Annual Savings for an Automotive Paint Process Application

Customer Case Study

PROFILE

The customer is a global manufacturer specializing in electrical and mechanical assemblies for the automotive industry. Their operations are primarily based in the Midwest, with some facilities in the South. The Veedersburg, IN location is one of their plants focused on painting automotive parts. Total Filtration Services (TFS) began working with this plant due to a long-standing relationship with the Paint Manager, who had previously worked at other companies where he had positive experiences with TFS. These past collaborations laid the foundation for continued business at the Veedersburg location.

CHALLENGE

The opportunity with this plant arose when the Paint Manager moved to the Veedersburg facility and reached out to TFS for filtration solutions, based on past positive experiences. Initially, TFS supplied various filtration products, but the challenge came when TFS discovered the customer was using a popular overspray media widely used throughout the industry to protect the floor grates of the paint booth (below the robot arms), as well as extend the life of their final filters about six inches below. While the original pre-filters was effective, it required frequent replacement—twice per shift.

The plant faced challenges related to cost and labor due to these frequent filter changeouts. Not only were they spending considerable amounts on their current filtration solution, but the labor involved in changing filters. The Paint Manager reached out to TFS, seeking a filtration solution that is longer lasting with improved performance while improving cost.

The plant's goals were clear: continue to protect the floor grates from paint overspray, reduce costs, improve airflow, fewer changeouts, and extended filter life for both the pre-filter and final filter. TFS was tasked with offering a solution that would not only meet these needs but also integrate smoothly with the plant's operations.

THE TFS SOLUTION

TFS responded by suggesting ATI's Channel Media, a product under the Parker HVAC brand, which was designed as a direct alternative to the current pre-filtration solution the customer was using for the paint booth floor area.

Drawing on past successes with similar applications, TFS recommended Channel Media as a cost-effective option that would extend the lifespan of the final filters and improve airflow.

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To ensure compatibility and effectiveness, TFS proposed a trial of the Channel Media, understanding that automotive plants require thorough testing before adopting new products. The customer purchased the rolls of ATI Channel Media and implemented the trial in the paint booths.

The trial lasted for two weeks, providing the plant with the opportunity to evaluate the product's performance in real-world conditions.

In addition to offering an effective filtration solution, TFS focused on stocking the product locally, ensuring fast delivery to avoid any operational delays.

RESULTS

The results from the Channel Media trial were immediate and impressive. The plant experienced several key benefits from the switch to Channel Media, including:

- **Extended Filter Lifespan:**
  The Channel Media lasted longer than the previous filtration solution, reducing the filter change frequency from twice per shift to once per shift.
- **Effective Prefiltration:**
  The Channel Media product prevented overspray from reaching the final filters, which allows them to perform better and last longer, reducing the frequency of changeouts.
- **Significant Cost Savings:**
  The reduced frequency of filter changeouts led to an estimated annual **savings of over $200,000** in product costs alone.
- **Improved Airflow:**
  The Channel Media allowed for better airflow retention compared to the previous solution, which had a tendency to load quickly, leading to reduced airflow. This improvement was critical for maintaining optimal painting operations.
- **Reduced Labor Costs:**
  With fewer filter changeouts required, the plant was able to reduce labor costs and minimize the disruption to production, allowing staff to focus more on core painting operations.
- **Decreased Waste:**
  The extended lifespan of the Channel Media resulted in fewer filters needing to be disposed of, reducing waste and further contributing to cost savings.

This transition to ATI's Channel Media, a Parker HVAC brand, was a success for both the customer and TFS. It not only provided a more effective and cost-efficient filtration solution but also reinforced TFS's position as a trusted partner.