



TOTAL FILTRATION SERVICES

Dust Filtration Solution Saves Candy Manufacturer \$30,000

Customer Case Study



PROFILE

The company involved in this case study is a major candy manufacturer that employs over 500 workers at its 650,000 square foot location in the southern region of the United States. Operating for more than 30 years, this factory produces millions of candy pieces each day that are packaged and delivered to the general public.

CHALLENGE

The manufacturing plant uses a significant amount of dust collection cartridges to filter the cocoa powder and sugar in the production process. Sugar is a highly combustible dust and must be contained with the appropriate filtration to prevent an explosion. In addition to preventing safety incidents, dust cartridges must be changed consistently to avoid blow-outs, which causes production to shut-down.

The plant was struggling to maintain the appropriate level of stock for their dust cartridges. Deliveries from the current supplier were often delayed, which led to them not having the filters they needed for timely changeouts. Ordering additional stock was not an option, as the plant had limited storage space. Filter orders are highly varied and are stocked fairly close.

In addition to product availability concerns, the customer desired a true filtration partner that could offer improved filter life and price stability. The maintenance engineering manager at the plant reached out to TFS to explore a new dust cartridge solution.

THE TFS SOLUTION

The customer had been purchasing a widely-used dust cartridge from a highly respected OEM manufacturer. TFS partnered with Parker Industrial Gas Filtration and Generation Division to supply BHA filters to improve on the design and functionality of the original filter. Once the customer's filtration process was fully reviewed, the OEM product was inspected and measured so a replacement filter could be developed.

In a short period of time, TFS successfully introduced a new dust cartridge solution, which included Nanofiber technology. This technology offers superior surface loading media to enhance dust cake release and longer filter life.

TFS then moved forward with a month-long trial consisting of 32 cartridges in the customer's dirtiest collector. This collector was selected because of the amount of moisture buildup inside, which was causing the product to cake-up on the filter media.

In addition to using the newly developed cartridge, a TFS filter expert worked with the customer to install dampers in the ductwork to prevent moisture from infiltrating the dust collector during the wash-down process.



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RESULTS

Upon the conclusion of the filter trial, TFS confirmed the new aftermarket cartridge held up to the performance of the OEM product. The combination of the Nanofiber technology and the installation of the dampers improved filter life in the customer's most challenging collector. The same solution was then applied to over three dozen dust collectors at the facility, providing an estimated annual cost savings of \$30,000.

With TFS's network of stocking locations, the customer now places an order that can be stocked and shipped in one day, as opposed to the two (or more) days they experienced previously.

Once the customer used the remaining stock of the original product, they began ordering all of their dust cartridges from TFS. Since providing the solution for the dust cartridge challenge, the customer now depends on TFS for their dust, HVAC, and wastewater filtration needs.