

Mini Gold Series Developed in Wrigley Flavor

Product:	Gold Series
Size:	Single-Cartridge GS-Mini™
Application:	Powdered Artificial Sweetener
Customer:	Wrigley Manufacturing - Flowery Branch, GA
Representative:	Scott Soncrant, Air Improvement Resources, Inc.

Challenge

Founded in 1891, the Wrigley Company has been led by four generations of the Wrigley family, providing high-quality chewing gum and confectionery products to over 180 countries. At their manufacturing facility in Flowery Branch, GA, they had a central dust collection system ducted to multiple gum wrapping stations in order to capture the powdered artificial sweetener coating the gum. However, the installation had two problems. First, Wrigley typically changed the factory equipment layout every 6 months according to production requirements.

The hard ducted system made this challenging. Also, when the dust collector had to be shut down for cleaning, filter change-out or hook up to another station, production essentially stopped in the entire area.



1 of 20 GS-Mini's in production for the Wrigley Company - in "Wrigley Beige."

Solution

Farr APC rep Scott Soncrant of Air Improvement Resources, Inc. visited the plant and spoke to Wrigley manufacturing operations personnel. Instead of a central dust collection system, they wanted small, efficient, portable collectors to hook directly to individual wrapping and packaging machines. Scott reviewed the benefits and features of the Gold Series and they liked it. But even the smallest 2-cartridge model (GS2) was too large for any one machine.

Scott worked with his Farr regional manager and Farr engineers to expand the Gold Series product line with a single cartridge Gold Series unit. It would have all the benefits of the standard Gold Series collector (heavy duty construction, tool-less filter access and change-out, PolyTech™ filter media and reverse-pulse cleaning,). In addition, it would also have food grade casters for portability, a spark-proof aluminum fan, high static pressure, prewired motor starter, integrated Magnehelic® gage for monitoring and a tool-less, quick-release dust drawer to remove dust.

Farr APC Case Study (con't)

This mini version of the Gold Series was a solution to the Wrigley challenge – a dedicated collector for one process machine. Named the GS-Mini™, it was designed and built. Wrigley was sent the first prototype off the Farr production line. Several design improvements were made including the exhaust fan wheel selection, noise reduction, motor horsepower, caster wheels and the dust collection pan. Then, Wrigley ordered 20 units and hooked them up to gum wrapping machines. Scott reported, “Wrigley Manufacturing could not have been more pleased with the appearance, quality and ruggedness of construction of these units. We heard nothing but positive comments

from several of the Wrigley people and the consensus was that these units were ‘Cadillacs.’”

In lieu of the supplied timer control for pulse cleaning each collector, they wired the cleaning components of each GS-Mini to their own programmable logic controller (PLC), a centralized computer that actuated each pulse system when they wanted. They later upgraded the filters to the new HemiPleat™ Gold Cone filters, which worked even better to release the powdered sweetener during cleaning cycles.



The first GS-Mini in standard alligator green sent to Wrigley for evaluation and testing.



Tool-less, quick-release dust drawer for removal of the captured powdered sweetener.



Optional automatic timer cleaning system - Wrigley decided to use their own central computer PLC to actuate the cleaning components.



Heavy duty food grade casters provided the portability that Wrigley wanted in order to configure machinery layout for changing production schedules and requirements.