



FARR APC
Air Pollution Control

Case Study

Desiccant Dust Causes Thirst for GS Solution

Product: Gold Series
Size: GS32 Designed for 18,000 CFM
Application: Silica Fines and Flakes
Customer: Munters, Inc. - Amesbury, MA
Representative: Ventilation Control Products



Another case where the GS Trailer helped close the sale!

Challenge

Munters is the world's leading manufacturer of desiccant based dehumidification systems for the HVAC industry. You may be familiar with desiccant as the small packets of drying agent often found packed with moisture sensitive items. Munters constructs large wheels of silica, often 4 to 6 feet in diameter and a foot thick. In a typical system, the wheel turns in an air handler where moist, humid air is blown through one half of the wheel while dry, hot air is blown through the other half, providing dehumidification without refrigeration. The process of cutting and machining these silica "wheels" produces lots of silica dust that looks similar to paper trim, but is more brittle and abrasive. Strips from 1/4" to 1" wide as well as fine dust (1 to 3 micron) must be collected.

The customer's existing baghouse/cyclone system had problems, including clogging in the discharge. Kevin Flynn of Ventilation Control Products was called in to evaluate the system and its poor performance.

Solution

Kevin determined that it was not just the rotary air locks and duct work that needed fixing, as the customer had speculated. Following his investigation and a dust sample analysis in the Farr test lab, he proposed a single Gold Series collector to replace the failing baghouse/cyclone combo. It turned out to be a very competitive situation against DISA (Norfab), who was pushing their horizontal baghouse. However, Munters was willing to spend the extra money to go with Farr, thanks primarily to the unique GS system that Kevin sized up and sold. The photo at left shows the inlet side of the dust collector with 24" and 14" inlet ducts with low velocity transitions to the GS32 inlet. A programmable logic controller (PLC) was wired to a 60HP fan with variable frequency drive and auto blast gates. The PLC switches the system automatically when they stop running one process or the other. DISA was going to use two separate fans. Farr wide-pleat PTSW cartridges with overbags keep larger pieces from wedging between pleats. An on-site, hands-on demonstration of the Gold Series' features and benefits was also instrumental in securing the order, thanks to a GS Trailer.



The GS system has been running successfully since April 2004, and Munters is happy with its operation.

For further information regarding this application, contact Farr rep Kevin Flynn of Ventilation Control Products at 207-985-4437.