

Precious Metal Processor Puts High Value on Gold Series

Product: Gold Series Collector
Size: GS32
Application: Fumes From Metal Scrap Processing
Customer: Enviro-Chem - Rogers, MN
Representative: Glacier Technology



Another "Hands On" GS Demo Success Story!

Challenge

Enviro-Chem is an established recycler of precious metal scrap including gold, silver, platinum, palladium and rhodium. Their modern facility includes the latest in processing, sampling and assaying equipment, but their existing dust collection system was not containing the fumes from four crucible ovens operating simultaneously and two incinerators. The system failed an emissions test performed by the Minnesota Pollution Control Agency (MPCA) and the operation was shut down. On top of that, a truck accidentally hit and damaged the existing fan.



Gold Series GS32 - Inlet and outlet plenums provide easy, convenient connections to vertically run duct work.

Solution

Farr rep Scott Clausen of Glacier Technology evaluated the situation and proposed a Gold Series GS32 with HemiPleat™ filters to replace the existing dust collector. Farr modified the standard leg assembly to reduce the footprint by 6", allowing the Gold Series to mount on the existing pad. Dual, top-entry inlets permitted easy connections to vertical duct work running to the roof. A programmable DCT1000 controller automatically pulses the filters clean when they load up with dust and the fine fume particulate.

Each crucible oven has a hood and slide gate to control airflow and ensure fume capture. Additionally, a variable frequency drive (VFD) was installed to enable the operators to adjust the air volume by adjusting the fan motor's RPM.

Farr APC Case Study (con't)

To keep the air stream temperature into the dust collector below 163 degrees Fahrenheit, dilution air is introduced through a slide gate in the duct work. This cools the air from the two incinerators, protecting the filter cartridges from melting.

Following installation in May 2006, Enviro-Chem passed the MPCA's particulate test with flying colors and was back in operation. The Gold Series continues to perform well and the customer is pleased with its performance. Owner Todd Meyer said, "Farr was easy to work with, and the equipment is user-friendly."

For further information regarding this application, contact Glacier Technology at 763-577-0102.



Fumes from incinerators are captured by the Gold Series after being cooled through the duct work with outside air.



32,000 CFM through the Gold Series provided by twin fans controlled by a variable frequency drive (VFD).