

## Customer Requires Dust Collection While Passing Gas

**Application:** Dust and Solvent Fumes from Adhesive Process Line  
**Product:** Gold Series  
**Size:** GS12SQ  
**Customer:** Huntsman Advanced Materials - Los Angeles, CA  
**Representative:** J.E. Phillips Company, Inc.

### Challenge

Huntsman Advanced Materials is a manufacturer of synthetic and formulated polymer systems, producing high performance commodity materials. In early 2005, a new adhesive manufacturing process line was being installed at their Los Angeles facility. Not only would fugitive dust from mixing operations need to be collected, but extremely flammable solvent gas had to be captured as well. This normally called for two separate collection systems, but the owner wanted a single, dedicated system to do the job. He contacted several Farr competitors and presented an elaborate list of dusts and highly explosive fumes, but each declined the project due to the volatility and capture requirement of the solvent fumes.



### Solution

Farr sales rep Art Lester of J.E. Phillips Company worked with the owner and the Farr team to successfully install and start up a customized Gold Series system. The Farr model GS12SQ with DuraPleat filters efficiently collects the dust, yet allows the flammable solvent fumes to pass through the dust collector and go into a carbon absorption tower. The activated carbon in the tower absorbs the flammable fumes, permitting clean air to be safely exhausted to atmosphere.

Every safety precaution was expertly designed into this system. The Gold Series collector housing was designed to withstand a pressure of 3 PSI (approximately 81" w.g.) and has rupture-type explosion vents sized at an extremely high ratio. A broken bag detector monitors any dust leaks. The rotary airlock on the hopper discharge is explosion proof, as is the powerful blower which delivers 5,127 CFM at 42" s.p. The blower's high static pressure compensates for the pressure drop across the carbon tower and for the air traveling through long ducting systems. A backdraft damper with integral explosion vent mounted at the inlet of the collector will prevent an explosion blast and fire from traveling back through the ducting into the factory.

The entire system is working great and Huntsman Advanced Materials is very pleased with their Gold Series unit, which was painted blue to match another Farr collector that they've been using successfully for many years.

*For further information regarding this application, contact Art Lester of J.E. Phillips Company at 310-837-6173.*