

Farr APC Installs Gold Series In Its Own Shop

Product: Gold Series Collector
Size: GS48
Application: Welding Fume/Smoke
Customer: Farr APC - Jonesboro, AR

Challenge

In the Gold Series welding area of our own high bay facility, we relied on the large, open shop doors for ventilation. But business has been good! Production has greatly increased and so has the weld smoke and fumes. It was especially a problem during winter, when we kept the door closed as much as possible.

Solution

A Gold Series GS48 with high efficiency HemiPleat HE's and an integrated HEPA safety monitoring filter solved our problem. To get the 48,000 cfm we needed, we used (2) 50 HP top-mount fans. There was no noticeable vibration due to the standard, heavy duty construction of the collector.



Gold Series GS48 on Welding Fumes - Farr APC installs a Gold Series collector in its own welding shop.

Farr APC Case Study (con't)

A secondary bank of safety monitoring filters was integrated into the roof of the collector. The row of small doors above the diaphragm valves provides access to the HEPA's. Each 4-cartridge filter module has two 18"x36" HEPA's capable of handling 4,000 cfm per module. The HEPA's slide in on rails and use the same style clamp bars as the Gold Cone primary filters. This option was a little more expensive than using our standard MagnaPack (which is a remote-mount, side-access housing), but obviously saved a lot of ductwork, transitions, installation time and most importantly, space! It also keeps the HEPA filters under negative pressure.



Integral Safety Monitoring Filter on GS48- This new top-mount option saves installaion costs, time and space.

Look closely at the ductwork in the photos. You will see openings in the top of the duct every 20 feet. By facing the intake of the ducts upward toward the ceiling, we actually used the ceiling as a capture plenum to help draw in the weld smoke. This is much more effective than facing the openings downward.

Shown in the photo below are the right angle inlets. This option is actually offered as an "abrasion resistant inlet" for (abrasive dust applications), but has become a popular option just to get the right angle inlet into the GS without having to fabricate an elbow and transition. We found this handy ourselves for this installation.



Right Angle Inlets (normally offered as abrasion resistant inlets) facilitate easy transition of airsteam into the collector.

It took one day with two workers to assemble the whole GS together. It took three workers two full days to hang the duct work. The controls were installed in a day, so the whole process took only a week. As an added benefit, we no longer have to run our heaters in winter because the dust collector sucks all the heat off the ceiling and delivers it back down to where the workers are. Our own team cannot believe how warm it is in the shop with no heater on. This saves us \$80K to \$100K per year!

For further information regarding this application, contact Al Baker, plant manager of Farr APC at 800-479-6801.