

CASE STUDY

Product: Gold Series Dust and Fume Collector
Size: GS48
Application: Weld Smoke and Fumes
Site/Location: Camfil Farr APC, Jonesboro, AR



Camfil Farr APC Weld Fume System Passes With Flying Colors

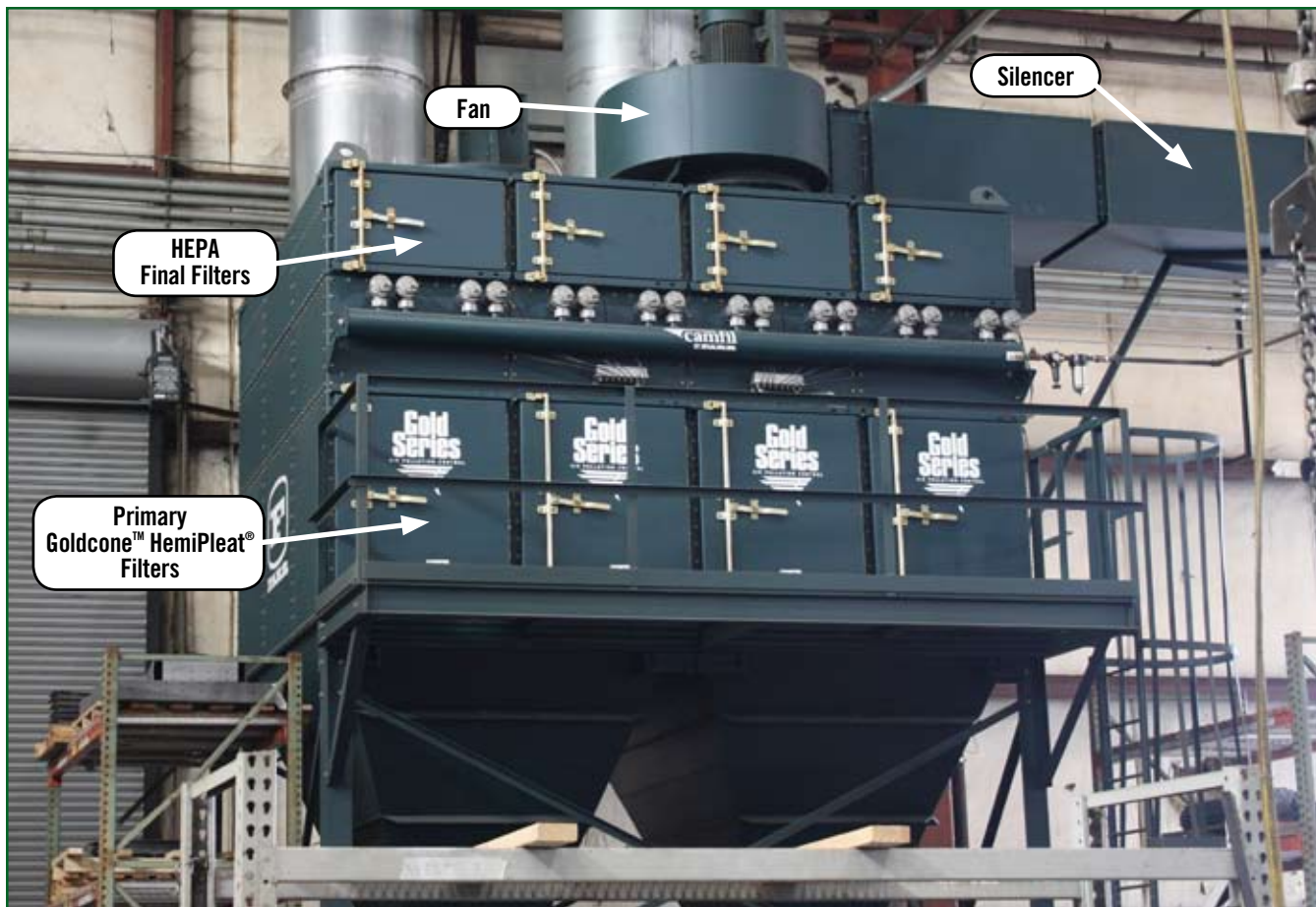


Smoke is collected at the ceiling level by the GS48 and clean air is returned to plant.

The Jonesboro facility of Camfil Farr APC installed an ambient weld fume collector for the welding department several years ago. The system was designed around the Farr Gold Series Collector. The smoke is collected at the ceiling level and clean air is returned back into the plant. You could see how well it cleaned the smoke from the area and the welders loved the new system. It was obvious that the system greatly improved worker conditions and safety but would it pass all the OSHA PEL (permissible exposure limits) for the hazardous materials in the weld fume an respirable dust exposure?



Gold Series right angle inlets



GS48 with integrated HEPA Safety Monitoring Filter on weld smoke and fume

Four welders were tested using sampling devices in their breathing zones, as well as the weld shop ambient air quality. The table to the right shows the results of the testing. All values are in milligrams per cubic meter. The average exposure from the four welders for each material is shown in the average exposure column. As you can see we are way below the PEL on all of the materials. Also, the ambient air quality of the weld shop was measured for respirable dust and the result was 0.20 mg/m³, Whereas the OSHA standard is 5.0 mg/m³. The testing was conducted by an independent lab. If you are having issues with meeting the standards for weld fume in your facility please contact us. We would welcome meeting with you to review our complete test results and help you solve your indoor air quality issues.

Material	OSHA PEL mg/m ³	Average 8hr TWA Breathing Zone Measurement of 4 Welders mg/m ³
Antimony	0.5	0.00084
Beryllium	0.002	0.00014
Cadmium	0.005	0.00014
Chromium	0.005	0.0028
Cobalt	0.1	0.00042
Copper	1.0	0.014
Iron Oxide	10.0	0.88
Lead	0.05	0.0035
Manganese	5.0	0.1
Molybdenum	5.0	0.00014
Nickel	1.0	0.00028
Vandium	0.05	0.0014
Zinc Oxide	5.0	0.038