



## FEATURES & BENEFITS

- Conveniently installed from the factory on top of the standard Farr Gold Series® dust collector.
- Allows access to the HEPA or Riga-Flo® filters via the same platform used to access the primary filters.

HEPA grade filters have a minimum DOP efficiency of 99.97% on 0.3 micron and are capable of handling 2650 cfm, (4248 cmh), of air per filter.

Riga-Flo® filters have a 95% ASHRAE efficiency and are rated for 2650 cfm, (4248 cmh), per filter.

- Reduces installation costs as there is no additional remote mounted system to be installed that typically requires additional consideration to access the filters when they need to be changed.
- Allows the total footprint of the dust collection system to be reduced, thus saving valuable manufacturing floor space.
- Each module incorporates two Camfil APC filters. These filters are easily clamped into position using the same style locking mechanism as those used on the primary filters. Filters are included, but not factory installed.
- Incorporates a Magnahelic gauge for easy monitoring of differential pressures across the final filters.
- Allows the filters to be located prior to fan, thus keeping them under negative pressure.
- Camfil APC also allows this option to be used as a flame arrester for combustible dust when recirculating the air back into the work space in most cases. (See next page.)



The Integrated HEPA Safety Monitoring Filter is mounted on top of the Farr Gold Series®.

### THE ISMF, WHEN USED AS A FLAME ARRESTOR FOR COMBUSTIBLE DUST

The iSMF, incorporating HEPA or Riga-Flow® filters, has been proven to isolate the downstream equipment from the progression of a flame front during an explosion. The Farr wGold Series dust collector with an integrated Safety Monitoring Filter allows you to recirculate exhaust air back into the work space when your dust is explosive. In some cases additional pressure wave protection could be required.

The key advantage of this device is that it prevents the transmission of explosive dust (fuel) from the collector. Remote mounted secondary filters cannot do this and are typically not designed to withstand the pressures associated with an explosion. Ducting design and location of remote mounted filters also injects excessive variables that have to be considered by a hazard analysis.

The iSMF sets up a redundant system that not only arrests the flame front but monitors the condition of the primary filters. With this feedback the operator knows when a primary filter starts leaking and can fix the leak before it becomes a safety issue. Also, the iSMF

protects the facility from the hazard of any dust passing through a damaged primary filter.

Based on extensive third party testing Camfil APC certifies that the integrated Safety Monitoring Filter, mounted on a Farr Gold Series® collector and equipped with Camfil APC Riga-Flo or HEPA filters, is an effective flame-front arrestor for ST1 and ST2 dusts per the Performance Based Design Options of NFPA 69, Chapter 5, and NFPA 654, Chapter 5. This system is a passive isolation device which meets all of the aforementioned criteria. To sustain this certification the owner is required to maintain this equipment per the manufacturer's recommendations and document periodic inspections as required in chapter 15 of NFPA 69 Standard on Explosion Prevention Systems.

Camfil APC offers a technical report, titled Integrated Safety Monitoring Filter (iSMF) Qualified as a Flame Front Arrestor, which describes the passive isolation allowed as prescribed in Chapter 12 of NFPA 69. It also details the test procedure and results of subjecting the Farr Gold Series with iSMF to multiple, controlled and measured internal explosions. This technical report is available upon request.



During explosion in a Farr Gold Series, no flames come out of the exhaust pipe. The inlet pipe is protected by a backdraft damper.