## Looks like a safe because it's built like a safe.





## **Gold Series® for Pharmaceutical Compounds**

**Application Focus on Pharmaceutical Compounds** 

Gold Series® Camtain™

Air Pollution Control



## Farr Application Focus

"The Gold Series® contained dust collector is a winner for our pharmaceutical applications. It is way ahead of the curve of anyone in the dust collection industry. The results from the potent compound surrogate test are very positive. Nice work!"





Vitamin Manufacturing

#### Gold Series® Camtain™

Farr has named its contained dust collection system the Gold Series® Camtain™. Camfil Farr is the parent company of Farr Air Pollution Control and is the world leader in contained HEPA filtration systems.

Safe-change containment systems are available for both the filter cartridges and discharge system. The cartridge change utilizes a bag-in/bag-out (BIBO) method while the discharge uses continuous liner technology. The Gold Series® can also support traditional dust collection for nuisance dusts and fumes that do not require full isolation and containment. Farr APC has contained and non-contained dust collectors for pharmaceutical applications in the Americas, Asia and Europe.

Potent Compound Containment Collectors

## Benefits of the Gold Series® Collector

- High entry, cross flow inlet eliminates upward velocities that can hold fine particulates in the filter cartridges, reducing the re-entrainment of the particulate matter.
- Vertically arranged filters shed virtually all the particles versus horizontal filters which allow the particles to build on top of the filter.
- High efficiency filters stop 99.99% of the dust at 0.5 microns!
- Specially treated filter media repels fine particulates for a lower pressure drop and longer filter life.
- Gold Cone<sup>™</sup> design provides 25% more media for long service life
- Filter cartridges are sealed via an internal cam lock action, allowing convenient change-out through the BIBO bagging system.

## Gold Series® for Pharmaceutical Manufacturing Applications

The Gold Series® (GS) units can be used in a variety of pharmaceutical dust collection applications including tablet presses, coating, fluid bed drying, spray drying, blending, granulation and general room ventilation. The GS is perfect for high efficiency filtration for pharmaceutical manufacturing.

## on Pharmaceutical Compounds







#### Gold Cone Cartridge Key benefits:

- High filtration efficiency (up to MERV 16)
- Excellent energy performance
- Long element life

### **Surrogate Tested Dust Collection System for Performance Verification**

The Gold Series® Camtain™ contained dust collection system has been surrogate tested for validated performance verification. The ISPE GPG "Assessing the Particulate Containment Performance of Pharmaceutical Equipment" surrogate testing protocol was used as a guideline with an independently contracted, AIHA accredited laboratory (Bureau Veritas) performing the testing. Using 100% milled lactose as the surrogate, we collected over 48 personal, area and surface samples for both the BIBO cartridge filter change and continuous liner discharge operations. The GS Camtain™ can contain highly potent, toxic or allergenic compounds with an  $OEL \ge 0.4 \text{ mcg/m3}$  for a time weighted average (TWA). Full test report data is available upon request.



















# The Gold Series® Camtain™ dust collector combines enhanced performance, safe-change capability and ease of maintenance while protecting the workplace and environment from harmful dusts.

#### Safety and Health Considerations

Two key concerns are critical when handling pharmaceutical dusts – the potent, toxic or allergenic properties of the compound as it relates to personnel exposure and the explosion properties of the compound.

The first issue involves understanding the toxilogical properties of the material, reviewing the Occupational Exposure Limit (OEL) and performing a risk based exposure evaluation to determine the methods for proper control. In most cases, some level of isolation and containment is required due to the fact that the pharmaceutical dust is extremely potent while being captured in a non-production area and cannot be released into the surrounding environment. In most cases, Farr recommends a HEPA secondary polishing system. With HEPA backup systems after the dust collector, recirculation of the filtered air back into the HVAC system is possible. This can significantly reduce energy costs while providing the necessary level of filtration for discharge air required by the EPA.

The second concern involves deflagration and explosion potential. Control measures such as explosion venting, chemical suppression and isolation systems may be required depending on the physical characteristics of the dust relating to Kst, MIE and the location of the collector. When explosion vents are required, they must be vented to the outside by either placing the collector outdoors or ducting the vent exhaust a specified distance through the building structure. Farr recommends an independent PE specifies what explosion protection is required for a given material as it relates to standards in NFPA, ATEX and the major insurance carriers.

#### Pharmaceutical Compounds GS Users and Specifiers

Wyeth Abbott Bio Vail BMS Eli Lilly Boehringer Ingelheim Tyco Mallinckrodt (Covidien) Upsher Smith Merck J&J Ortho-McNeil

J&J Janssen Warner Chilcotte GSK Sandoz–Eon Labs Novartis Air Pollution Control
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Find out today why the Gold Series® is praised as the ultimate choice for a clean workplace.

EASTER Farr APC is a proud member of the Camfil Farr Group.

Additional APC offices and factories in Laval, Canada [450-629-3030] Manchester,
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