





QUAD PULSE PACKAGE

COMBINING PERFORMANCE WITH ECONOMY...



Many processes in the pharmaceutical industry can produce hazardous dusts in high concentrations. Cleanable filter systems are sometimes necessary to facilitate continuous manufacturing processes, preventing regular, expensive filter replacements.

The Quad Pulse Package PX utilizes segmented cleaning of the filter cartridge to provide the following benefits:

- Economical, space-saving cleaning unit requiring just a single primary filter cartridge.
- Cleaning during operation for production process and product quality control.
 - Low pressure drop across the filter for energy cost savings.
 - Camfil pleated filter technology provides exceptional dust release enabling extended filter service life and reduced filter replacement.
 - simple installation
 - built-in NFPA and ATEX compliance
 - integrated fan
 - self cleaning capabilities

The Ouad Pulse Package[®] PX

Compact filtration stages for pharmaceutical manufacturing processes:

Stage 1:

Primary filter with excellent filtration efficiency to remove the majority of the collected dust and prolong the service life of the second stage filter.

Stage 2:

HEPA filter to H14 providing 99.995% filtration efficiency to capture the finest, most harmful dust particles.

Compact design, small footprint

Space on the production floor and in the plantroom is at a premium. The NFPA compliant explosion protection capabilities of the device enable the Quad Pulse Package to be conveniently installed with easy access for all maintenance functions.

High Performance, low noise level

The integrated fan can provide the suction required for most individual applications. At the same time, the unit is insulated to make it very quiet during operation.

Controls Fire and Toxic Material Release Hazards

For combustible dusts the QPP will vent the deflagration through the HEPA filter eliminating the hazard of fire and toxic material release. The vented gases can be released through the outlet if it is open to the atmosphere (not ducted) or through a deflagration panel on the side of the unit. Smoke and noxious gases are not retained in the vessel so the hazard analysis should consider this.

... AND FOR THOSE HAZARDOUS DUSTS REQUIRING FULL SAFE CHANGE CAPABILITY:

Market leading BiBo (Bag-In/Bag-Out) system over all stages



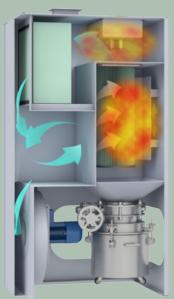
BIBO Safe-Change Primary Filter: Utilizes the market-lead ing Camtain metho ology with an antistatic BIBO bag <u>a safe-cha</u>nge workers and prevent cross-contaminatio

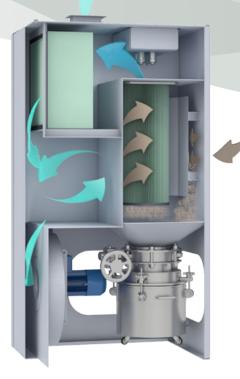


BIBO Safe-Change HEPA Filter: BIBO filter change. Ensures safe-change with the finest, most harmful dust particles.



BIBO Safe-Change Dust Discharge





The Quad Pulse construction provides explosion protection in accordance with NFPA standards.

Compact and strong unit construction incorporates a

Camfil APC Quad Pulse Package[®] PX – provides optimum cleaning performance and safety for a wide range of pharmaceutical manufacturing processes:

- tableting
- drying
- mixing
- coating
 filling
- blendinggranulation
- packaging

Also applicable for a range of applications within other industries with similar technical demands, including the chemical industry, cosmetics and nuclear industries.

- low energy consumption
- twenty-four-seven operation
- zero downtime during operation
- save time and money
- compact size for ease of installation
- explosion pressure shock resistance



