

## **QUANTUM SERIES®**

DUST & FUME COLLECTOR FOR THERMAL CUTTING & WELDING

camfil

camfil





#### Dual Pulse Technology

✓ Integrated
Spark Arrestor

✓ Easy to Install

✓ Maximum Reliability

## camfilapc.com

## QUANTUM S E R I E S

## THE QUANTUM SERIES® IS A COMPACT DUST AND FUME COLLECTOR DESIGNED SPECIFICALLY TO MEET THE DEMANDS OF THE THERMAL CUTTING, METAL PROCESSING AND WELDING INDUSTRIES.

- Minimum footprint; maximum performance
- Newest pulse cleaning technology
- Integrated spark arrestor
- Easy to install
- Economical

The Quantum Series<sup>®</sup> is a compact and powerful, fine dust and fume collector designed for the metal fabrication, thermal cutting and welding markets. The Quantum Series' integrated spark arrestor and improved filter design allows this unit to provide the highest levels of efficiency and safety.

Designed to take up the minimum possible floor space, the Quantum Series can be located close to your processes in order to minimize ductwork and reduce fire hazards created by sparks.

Built with decades of proven filtration industry knowledge and expertise, the Camfil APC Quantum Series includes design features and high-end technology which has been tested and proven in our range of market-leading dust and fume collectors.

Incorporating Camfil APC's advanced filter design, the Quantum Series prevents the common filter failures suffered by competitive collectors. A patent pending filter segmenting and volume displacement design improves pulse cleaning efficiency and reduces the chance for re-entrainment and clogging, while also reducing pulsing energy and noise. A strategically placed and fully integrated spark arrestor allows for higher separation efficiency and smaller footprint.



► The Quantum Series is a unique solution that eliminates the need for an external spark arrestor, which takes up valuable floor space. The patent pending spark arrestor is integrated in this small footprint collector.

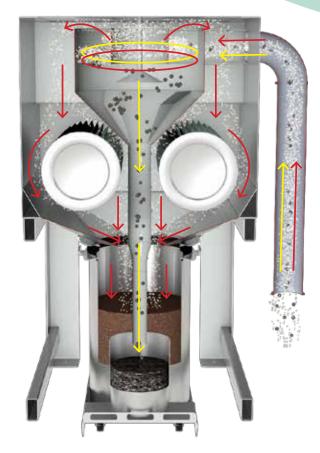


# Symmetrical Air Flow Effect DYNAMICS

#### **SPARK ARRESTOR**

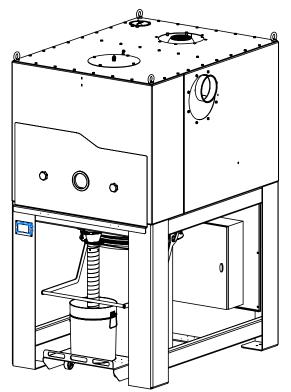
- Integrated in the unit
- Cyclonic separation of metal particles and sparks
- Coarse, hot particles collected in separate bin
- 1,500 5,500 m<sup>3</sup>/h
- Unique, patent pending design

As sparks can cause poor performance, damage the collector and filter media or present a fire hazard, many dust collectors require an external spark arrestor that is expensive and requires more floor space. The Quantum Series<sup>®</sup> has been designed to avoid these issues.



Particle flow illustrated:
Fine Particles
Coarse Particles

Compact unit has small footprint: 1,200 x 1,550 mm, up to 5,500 m<sup>3</sup>/h.



### QUANTUM S E R I E S

BY USING AN INNOVATIVE, INTEGRATED SPARK ARRESTOR, THE COST AND VALUABLE FLOOR SPACE ARE KEPT DOWN WITH NO REDUCTION IN SAFETY OR EFFICIENCY. WHAT'S MORE, THE QUANTUM SERIES® CAN PROVIDE LOW VOLUME AND LOW FLOW FUNCTIONALITY AT A MARKET LEADING VALUE.

#### FEATURES AND BENEFITS:

- Small footprint
  - Minimal floor space provides installation flexibility
  - All airflow capacities have same footprint
- Integrated spark arrestor reduces floor space and added costs
- Quiet, efficient integrated 3,500 Pa fan, IE3 premium efficiency
- · Simple "plug and play" installation no service professional required
- Easy maintenance low level access for filter change-out, single or dual side access for internal inspection/service
- High efficiency PTFE filter cartridges
- Integrated electrical control panel

#### **THREE MODELS:**

- Each can be configured to meet the specific challenges faced by the customer
- All models/capacities use same floor space
- Product range combines remarkable efficiency with unbeatable value

#### **KEY PERFORMANCE STATISTICS**

- Flow rate from 1,500 5,500 m<sup>3</sup>/h
- Noise level <75 dbA



QS6



#### **APPLICATIONS**

- Welding (laser and manual)
- Laser and plasma cutting
- Non-explosive, fine dust



QS4



#### **AVAILABLE OPTIONS**

- Control cabinet 50 Hz CE
- Control cabinet 60 Hz UL
- Control cabinet frequency converter VSD
- Equipment package "Falmmable dusts"
- Equipment package "Panels"
- HEPA afterfilter

#### SIMPLE PLUG & WORK INSTALLATION - NO SERVICE PROFESSIONAL REQUIRED.

▼ The Quantum Series<sup>®</sup> can be simply installed without a service professional – to ensure continued, efficient operation.

▼ By combining horizontal PTFE filter cartridges, fan design and dual pulse system, Quantum Series will filter even the finest, most dangerous dust with no loss in efficiency or back-pulse cleaning of the filters.

▼ The unit's low noise, integrated fan delivers consistent pressure to remove fine dust, grit and sparks from your work space.



## QUANTUM S E R I E S

# QUANTUM SERIES® MODEL DATA

## QS2



Detail	Data
Air Flow Rate	1,500 - 2,500 Bm <sup>3</sup> /h / 5 - 55°C
Dust Load	< 450 mg/m <sup>3</sup> not explosive, fine dust, sparks
Clean Gas Emission	<0,3 mg/m <sup>3</sup> / PTFE filter media
Noise Level	<75 dB(A)
Pulsing Valves	Qty 4
Motor Rating	3-4kW / 50Hz CE / CE VSD / 60Hz UL
Transport Weight	about 900 kg
Dimensions	1,200 x 1,550 x 2,262 mm

### QS4



Detail	Data
Air Flow Rate	3,000 - 4,500 Bm <sup>3</sup> /h / 5 - 55°C
Dust Load	< 450 mg/m <sup>3</sup> not explosive, fine dust, sparks
Clean Gas Emission	<0,3 mg/m <sup>3</sup> / PTFE filter media
Noise Level	<75 dB(A)
Pulsing Valves	Qty 8
Motor Rating	7,5 kW / 50Hz CE / CE VSD / 60Hz UL
Transport Weight	about 1,300 kg
Dimensions	1,200 x 1,550 x 3,195 mm

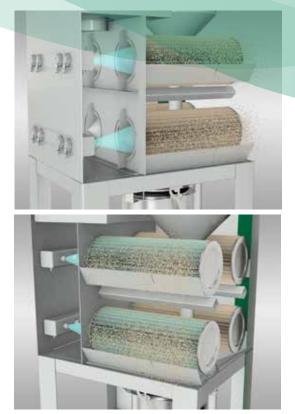
QS6



Detail	Data
Air Flow Rate	4,500 - 5,500 Bm³/h / 5 - 55°C
Dust Load	< 450 mg/m <sup>3</sup> not explosive, fine dust, sparks
Clean Gas Emission	<0,3 mg/m <sup>3</sup> / PTFE filter media
Noise Level	<75 dB(A)
Pulsing Valves	Qty 12
Motor Rating	11 kW / 50Hz CE / CE VSD / 60Hz UL
Transport Weight	about 1,500 kg
Dimensions	1,200 x 1,550 x 3,895 mm

## FILTER CLEANING SYSTEM

- Unique dual section design
- Prevents accumulation of dust on top of filters
- Permits uninterrupted collection airflow during pulse cleaning
- Provides longer, more efficient filter life
- Air distribution displacement technology reduces compressed air consumption
- High efficiency PTFE filter cartridges
- Advanced gasket seal design eliminates "blow by" leakage



 Dual chamber air distribution technology



#### **CONTROL SYSTEM**

- Integrated, easy use controls
- Manual or remote start
- Preasure or time-controlled cleaning
- Automatic stop on smoke detection
- Inputs for emergency stop

#### **MOBILE BIN PLATFORM**

- Easy access mobile platform has separate containers for fine and coarse particles
- Coarse, hot particles and larger pieces fall into a separate small container. This prevents potential ignition of flammable, fine dust particles.
- Fine dust falls into a larger container





## YOUR PARTNER FOR GLOBAL SOURCING

Camfil APC is a leading supplier of industrial exhaust air purification and part of the Camfil Group, the world market leader in air filters and air purification systems, with over 4,000 employees worldwide and more than 50 years of experience. With our comprehensive product portfolio and global service and delivery options, we offer absolute customer proximity and individual solution proposals for use in almost all production areas.



# TRUST THE EXPERT!



Our engineers and employees are absolute professionals with many years of experience in the development, production and technical support of air pollution control systems of all sizes. From a simple filter system to complex turnkey solutions, from the initial design of the plant to the final completion - we are looking forward to your inquiry!



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