

# **QUANTUM SERIES®**

INTEGRATED SPARK ARRESTOR. DUAL PULSE TECHNOLOGY.





Combining outstanding quality with reliability, easy installation and affordable pricing



# 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® 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.

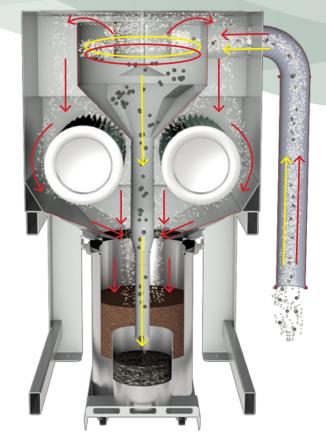


# Symmetrical Air Flow Effect DYNAMICS

### **SPARK ARRESTOR**

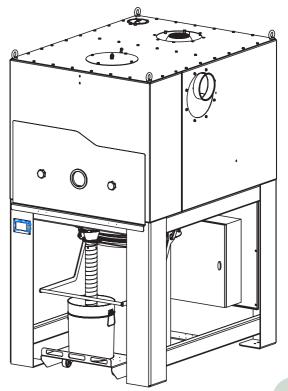
- Integrated in the unit
- Cyclonic separation of metal particles and sparks
- Coarse, hot particles collected in separate bin
- $1500 \text{ m}^3/\text{h} 6000 \text{ m}^3/\text{h}$
- Unique, patent pending design

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® has been designed to avoid these issues.





▼ Compact unit has small footprint: 1.2m x 1.66m up to 6000 m³/h



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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 3500 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
- · Advanced gasket seal design eliminates "blow by" leakage
- Integrated electrical control panel
- Delivers system status via GoldLink™ diagnostic system

### **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

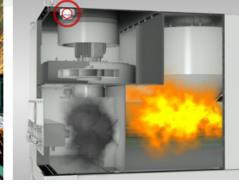
#### **KEY PERFORMANCE STATISTICS**

- Flow rate from 1500 m<sup>3</sup>/h up to 6000 m<sup>3</sup>/h
- Noise level <75 dbA</li>
- Pressure drop <1500 PA











#### **APPLICATIONS**

- Welding (laser and manual)
- Laser and plasma cutting
- Dry machining
- Non-explosive, fine dust
- Shot blasting

# **AVAILABLE OPTIONS**

- Fire suppression
- Smoke detection
- HEPA
- One-side service access

# SIMPLE "PLUG-AND-PLAY" **INSTALLATION - NO SERVICE PROFESSIONAL** REQUIRED.

- ▼ Standing less than 2.2 m high, the QS2 "plug-andplay" unit can be simply installed without a service professional, and can be easily accessed and maintained from the floor 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







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# **QUANTUM SERIES® MODEL DATA**

QS2



Detail	Data
Air Flow Rate	1500 Bm3/h - 2000 Bm <sup>3</sup> /h / 10 - 50°C (peak 70°C)
Dust Load	< 450 mg/m3 (burn velocity <=4, not explosive) grit, fine dust, sparks
Clean Gas Emission	<0,3 mg/m3 / PTFE filter media
Noise Level	<75 dB(A)
Pulsing Valves	Qty 4
Motor Rating	3 – 4 kW/ 50Hz/ IE3/ UL certified
Transport Weight	700 – 720 kg

QS4



Detail	Data
Air Flow Rate	2000-3500 Bm <sup>3</sup> /h / 10 - 50 °C (peak 70°C)
Dust Load	< 450 mg/m³ (burn velocity <=4, not explosive) grit, 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	4 – 7,5 kW/ 50Hz/ IE3/ UL certified
Transport Weight	1000 Kg

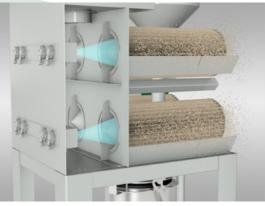
QS6



Detail	Data
Air Flow Rate	3500 - 6000 Bm <sup>3</sup> /h / 10 - 50 °C (peak 70°C)
Dust Load	< 450 mg/m³ (burn velocity <=4, not explosive) grit, fine dust, sparks
Clean Gas Emission	< 0,3 mg/m³ / PTFE filter media
Noise Level	<75 dB(A)
Pulsing Valves	Qty 12
Motor Rating	5,5 – 11 kW/ 50Hz/ IE3/ UL certified
Transport Weight	1200 Kg

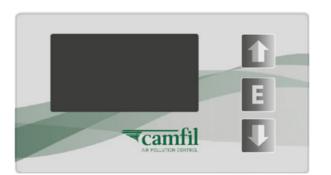
# FILTER CLEANING SYSTEM

- 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
- Local or remote start
- Pressure controlled cleaning
- Automatic stop on smoke detection
- Inputs for emergency stop
- Connects to GoldLink<sup>™</sup> for status and fault reports

# **MOBILE BIN PLATFORM**

- Easy access mobile platform has separate containers for fine and coarse particles
- Coarse, hot particles and larger pieces fall into smaller container
- Separation of coarse, hot particles prevent potential ignition of flammable, fine dust particles
- Fine dust fall into larger container





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# CLEANING UP THE WORKPLACE, FOR TODAY AND TOMORROW

Saving energy and increasing production efficiency while controlling indoor air quality is a challenging aspect of plant management. Dust, mist and fume collectors - whether used for pollution control or product recovery - can impact all these areas. Camfil APC can help solve your dust, mist and fume problems.



Camfil APC adheres to the values and principles of sustainable development and has established an organization to develop and maintain sustainable business practices. We would like to mention our initiative for sustainability, "Camfilcairing." This is our way of packaging all our industry-leading green initiatives into a comprehensive program. We believe firmly in being a sustainable supplier. We also believe it will be a requirement for the future. We aim to be the best in sustainability. It does not require a major effort because green is in our genes.

# TRUST IN OUR EXPERIENCE.

Our skilled and qualified team of engineers are engaged in designing and implementing the best solutions for all individual requirements. We employ the best technology and select optimal components and accessories. We ensure operational efficiency and economic availability.



