



New product family of air quality systems for cabs and other enclosures

### Begin with a Fresh Air System



REV0001 (12 V)  
REV0003 (24 V)



### Optimise it with a Recirculated Air System



REV0002 (12 V)  
REV0004 (24 V)



### RESPA®-CFX

- Powered inline precleaner/pressuriser
- Advanced MERV16 filtration

### RESPA®-CF Vortex hyperFLOW™

- Powered precleaner/pressuriser
- Advanced, low-restriction MERV 16 filtration
- Debris is ejected out of the system
- Includes Electronic Pressure Monitor System
- Monitor can connect to remote telemetry system

### Not ready for Power?

### Choose Upgradeable, Low-restriction Filtration



Fresh Air System REV0010



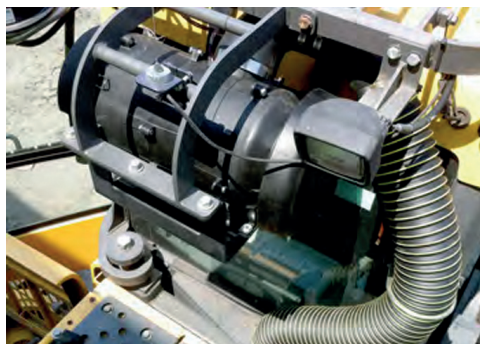
REV0005

### RESPA®-FF

- Includes Pressure Monitor
- Advanced MERV 16 filtration

### RESPA®-FFX

- Recirculation System
- Inline MERV 16 filtration



Our most advanced Cab Air Quality System delivers a POWERED PRECLEANER/FILTER/  
PRESSURISER in one compact, customisable unit!

NSF

Registered to  
ISO 9001:2008

**The Benefits of RESPA®-CF Vortex HyperFLOW™ Technology:**

**INCREASE UPTIME and REDUCE COSTS:**

**Affordable:** This cost-effective system extends HVAC system maintenance intervals. Dramatic filter life extension saves on filter and labour costs.

**MAINTAIN CAB PRESSURISATION:**

**Powered precleaning** allows cabs/enclosures to sustain positive pressurisation, keeping particulate out.

**MEET REGULATORY REQUIREMENTS UNDER ALARA**

(As Low As Reasonably Achievable):

RESPA®-CF can be a cost-effective solution to help **meet**

**Permissible Exposure Limits (PEL)** and protect operators. The RESPA®-CF reduces exposure to all forms of respirable particulate including diesel particulate matter (DPM), asbestos, and respirable crystalline silica (RCS).

**OPERATOR COMFORT:**

Cab stays cleaner, more comfortable, keeping operators happier, healthier, and more productive.



**Sy-Klone's Electronic Pressure Monitor System meets or exceeds compliance for pressure monitoring device for:**

- CE Compliant (EU)
- Canadian OSHA
- EN15695 (EU Ag Sprayer Cab Category 3-4 Cabs)
- MSHA (USA) underground mining applications
- AIOH (Australian Institute of Occupational Hygienist)
- Health Safety Executive (UK-AG7, CN8, CN11) Recommended Device



*"Installing Sy-Klone's RESPA® System and Pressure Monitor was less than the cost of one MSHA fine, and now we are back in compliance!"*

**Understanding Vortex HyperFLOW™**

**Creating the Vortex**

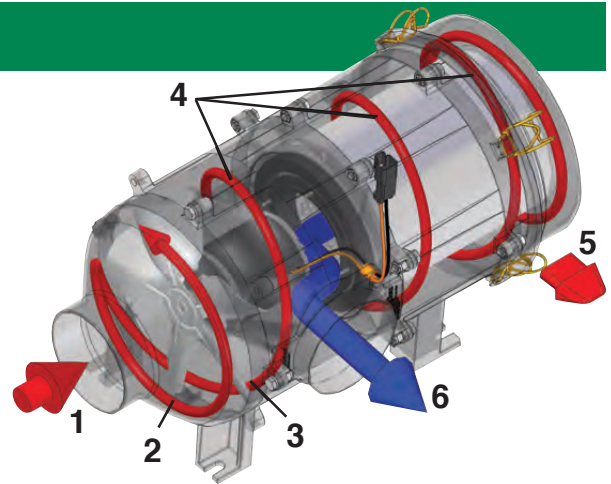
1. Particulate-laden air enters the precleaner inlet.
2. The fan creates a VORTEX, a tornado-like spinning motion, whipping the air and particulate to the outside wall as it approaches the fan blades.

**Creating the Hyper Spin**

3. Spinning air HYPER-accelerates as it passes through louvres, further enhancing centrifugal forces powerful enough to affect particle separation down to 5µ.

**Creating the Continuous Flow**

4. Particulate is spun against the outside wall of the device and propelled rapidly around the filter to the rear of the device in one continuous FLOW of air.
5. Particulate is ejected back into the environment through two ejection ports located at the rear of the device.
6. Precleaned air passes through the filter. Filtered air continues to the outlet.



**Self-cleaning Filter:**

Vortex HyperFLOW hyper accelerates particulate-laden airflow around the filter, continually ejecting particulate out of the filter housing. Vibration causes the filter to continuously drop particulate which is immediately ejected from the filter housing. Unlike any previous technology, the entire filter housing remains essentially particulate-free.

**Harnessing the Pressure Surge:**

The RESPA®-CF with Sy-Klone's unique MERV 16 filter, harnesses the pressure surge that occurs whenever the door of the cab is slammed closed. The RESPA®-CF is designed to act as a pressure release valve that converts vibrations and pressure fluctuations into filter cleaning events by allowing the filter to flex, thereby releasing arrested particulate back into the filter housing to be ejected, thus lowering filter restriction and extending filter life.





# REVOLUTIONARY Applications

of Patented RESPA® Technology



Clean Room for Engine Rebuilding



Landfill Heavy Equipment Cab



Heavy Equipment Cab



Heavy Equipment Cab

## PARTIAL LISTING OF INDUSTRIES:

- Agriculture - all forms
- Waste - landfill, transfer station - recycling facilities - lift stations
- Mining - all mining (except where an explosion-proof motor is required)
- Construction
- Demolition
- Nuclear Decommissioning
- Radioactive Clean-up
- Stevedoring
- Military
- Cell Phone Towers
- Power Generation
- Utilities
- Trucking
- Law Enforcement
- Forestry
- Fire Fighting
- Computer Server Cabinets



Control Room

## PARTIAL LIST OF APPLICATIONS

### All enclosed operator cabs in all environments:

- Heavy equipment cabs
- Stationary equipment cabs
- Cranes
- Drills
- Pipe laying machines

### Environmentally controlled spaces:

- Electronic control rooms
- Portable field offices
- Military portable command posts
- Crusher cabins
- Clean rooms for engine rebuilding
- Dyno rooms
- Cell tower control rooms
- Crew quarters in mining applications

### Power Generation and Distribution:

- Ventilated electric boxes
- Electronic cabinets
- Electronic control rooms
- Computer server cabinets

### Miscellaneous:

- After burner coolers for Tier IV engine applications
- Alternator cooling
- Billboards

## Install the REVOLUTION

Our Universal Mounting Kit (GK011) provides all the parts you will need for a standard cab installation, including 8 feet of flexible hose, a flange adaptor, rubber elbow, clamps, sealant, hose adaptor and mounting plate.



**RESPA®-CF Vortex HyperFLOW™**



REV0001 (12 V)

REV0003 (24 V)



RESPA®-CF Vortex HyperFLOW™ was awarded the Agricultural Engineering Top 50 Products of the year by the American Society of Agricultural and Biological Engineers.

**Specifications:**

**Mounting:** Vertical or horizontal

**Filter Options:** MERV 16

**Precleaning Efficiency:** ≥ 90% @ 5 μ in normal operating range

**Operating Parameters:**

Ideal operation range: 0-130 C.F.M (0-3.68119 m³m)

Extended operation range: up to 250 C.F.M. (7.07921 m³m)

Operation temperature: -40°C to +85°C continuous; +100°C short exposure.

**Dimensions:** With Rain Cap installed, approximately 19.1" x 10.1" x 10.3" (48.51 x 25.65 x 26.16 cm); weighs 9.8 lbs. (4.45 kg) with rain cap

**Construction:** Glass-filled injection moulded polypropylene exterior; metal fan blade; 288 w initial start-up, 144 w constant; available 12 V or 24 Vdc motor with sealed housing and sealed ball bearings (CF).

**Cab Pressurisation:** Maintains designed cab pressurisation over extended operating periods even when A/C is off, resulting in increase in dramatically increased operator comfort.

**RESPA®-CFX**

REV0002 (12 V)

REV0004 (24 V)



**Specifications:**

**Mounting:** Vertical or horizontal orientation

**Filter Options:** MERV 16

**Performance:**

Efficiency is based on selected filtration package.

Operation range ideal: 0-130 C.F.M (0-3.68119 m³m)

Operation range extended: up to 250 C.F.M. (7.07921 m³m)

Operating temperature: -40°C to +85°C continuous; +100°C short exposure

**Dimensions:** With ducted inlet, approximately 18.9" x 9.9" x 10.3" (48.01 x 25.15 x 26.16 cm); weighs 8.9 lbs. (4.03 kg)

**Construction:** Glass-filled injection moulded polypropylene exterior; metal fan blade; 288 w initial start-up, 144 w constant; available 12 V or 24 Vdc motor with sealed housing and sealed ball bearings

**Cab Pressurisation:** Designed to promote cab pressurisation over extended operating periods when used in conjunction with the RESPA®-CF Vortex HyperFLOW™ even when A/C is off, resulting in dramatically increased operator comfort.

<p><b>Non-Powered Filtration</b></p> <p>REV0010</p> <p><b>RESPA®-FF</b> Fresh Air System Upgradeable</p>	<p><b>Universal Installation Kit</b></p> <p>GK011</p> <p><b>RESPA®-FFX</b> Recirculated Air System Upgradeable</p>
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These products may not be stock items. Please speak to our sales representative about lead times. Lead times, price and availability can only be determined on receipt of an official quote from our supplier. This can sometimes take up to 3 days.

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