CMAXX

DUST & FUME COLLECTION SYSTEM



IMPERIAL SYSTEMS



OUR MISSION

“TO IMPROVE THE HEALTH, SAFETY, AND QUALITY OF PEOPLE’S LIVES BY BUILDING THE BEST DUST AND FUME COLLECTORS ON EARTH”

IMPERIAL SYSTEMS, INC.

BREATHE BETTER, WORK SAFER

THE MOST ADVANCED & SAFEST DUST COLLECTOR ON EARTH



CMAXX IDA TESTING

The CMAXX, along with the proprietary IDA DeltaMAXX filters, has been PROVEN to isolate a deflagration and stop a flame front. Third party testing of the CMAXX shows explosive flame front being forced through the vent. With the explosion vent covered, 100% of the flame front was forced through the IDA DeltaMAXX filters and NO spark or flame was present.

Using a CMAXX without explosion venting, the unit's body was also tested to withstand a deflagration of corn starch at 185 KST with pressures exceeding 4 PSI. The entire explosion diverted through the IDA DeltaMAXX filters, which showed no sign of deformation. The internal cages of the filters remained in perfect shape and the seals were not deformed or melted whatsoever. All testing, proving that the CMAXX can be used as a flame front deflagration arrestor/arrester when used in conjunction with IDA DeltaMAXX filters, is backed by third party testing. Reports and test results can be provided upon request.

In addition, the IDA DeltaMAXX filters work off of the same primary cleaning system that the CMAXX uses, ensuring that the filters are consistently cleaned during operation. Similar systems that use after filters do not have any means for online cleaning.

The results conform to NFPA 69 12.2.5.2 Static Dry Flame Arrester Designs and Chapter 5 under performance based option, both NFPA 654 to prevent the "extension of the flame front outside the compartment or equipment of origin except where intentionally vented to a safe location" 5.2.5 (2) and NFPA 69 "to limit and risk of flame spread from vessel to vessel via interconnecting ducts" 5.2.4 (3), 5.2.5 (2).



INDUSTRY LEADING Lifetime WARRANTY

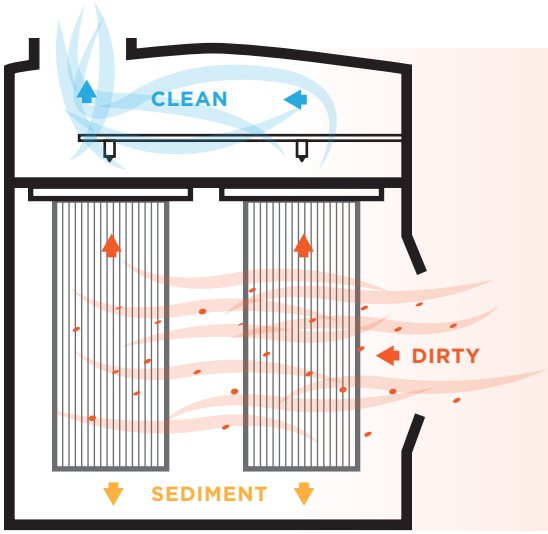
Imperial Systems, Inc. warrants to the original purchaser that the major structural components of the CMAXX™ dust collector will be free from defects in materials and workmanship for the lifetime of the equipment, if properly installed, maintained and operated under normal conditions. Imperial Systems, Inc. warrants filter cartridges to be free from defects in materials and workmanship for twelve (12) months from date of shipment. Imperial Systems, Inc. does not warrant damages which are due to corrosion, abrasion, normal wear and tear, product modification or product misapplication. Imperial Systems, Inc. also makes no warranty whatsoever as to any goods manufactured or supplied by others, including, but not limited to, electric motors and control components. After Imperial Systems, Inc. has been given adequate opportunity to remedy any defects in material or workmanship, Imperial Systems, Inc. retains the sole option to accept return of the goods, with freight paid by the purchaser, and to refund the purchase price for the goods on a prorated basis after confirming the goods are returned undamaged and in usable condition. Such a refund will be the full extent of Imperial Systems, Inc. liability. Imperial Systems, Inc. shall not be liable for any other costs, expenses or damages, whether direct, indirect, special, incidental, consequential or otherwise. The terms of this warranty may be modified only by a special warranty document signed by the President of Imperial Systems, Inc. There exist no other representations, warranties or guarantees except as stated in this paragraph. All other warranties, including merchant-ability and fitness for a particular purpose, whether express or implied, are hereby expressly excluded and disclaimed.

CMAXX IMPERIAL SYSTEMS INC.
Lifetime WARRANTY

Breathe Better, Work Safer
FOR LIFE

FAILURE TO USE GENUINE IMPERIAL SYSTEMS, INC. REPLACEMENT PARTS & FILTERS WILL VOID THIS WARRANTY.

COMPARISON CHECKLIST	CMAXX DUST & FUME COLLECTION SYSTEM	Leading Vertical Filter Cartridge Dust Collector	Leading Horizontal Filter Cartridge Dust Collector
Arched Roof	●		
Vertical Cartridge Filters	●	●	
No External Bolt Holes	●		
Modular Design	●	●	●
Heavy Duty Doors	●		
7 & 10 Gauge Construction	●	●	
Various Filter Medias	●	●	●
Variety of Applications	●	●	●
Easy Filter Access	●	●	
Custom Powder Coat	●	●	
Even Lock Technology Lift Rails	●		
Anti-Ramp Filter Rail	●		
Lifetime Warranty	●		
In-line Pulse Valves	●		
Custom Design	●		



HOW IT WORKS

Dirty air is pulled in from duct work and particulates are captured by the DeltaMAXX™ filters. The clean air is pulled through the filter media and up into the clean air plenum. The air then exits the collector and goes to the return air duct. Compressed air pulses down into the filter cleaning it from the inside out. The dust cake built on the filter is then knocked down into the grating below or into a hopper.

CMAXX APPLICATIONS

GRAIN INDUSTRY

Imperial Systems has a long line of successful grain dust collection systems installations. Our CMAXX dust collection systems span from small processing mills to some of the country's largest grain export terminals.





PLASMA CUTTING

Imperial Systems' CMAXX is the perfect modular collector for plasma cutting dust collection. The CMAXX comes in many different variations and is modular in design so making a standard model custom is an easy task.

WELDING FUMES

The CMAXX Dust Collector is the perfect solution for welding shops and schools. From Source Capture to Ambient Systems, the CMAXX easily handles any of your welding fume extraction needs and more.





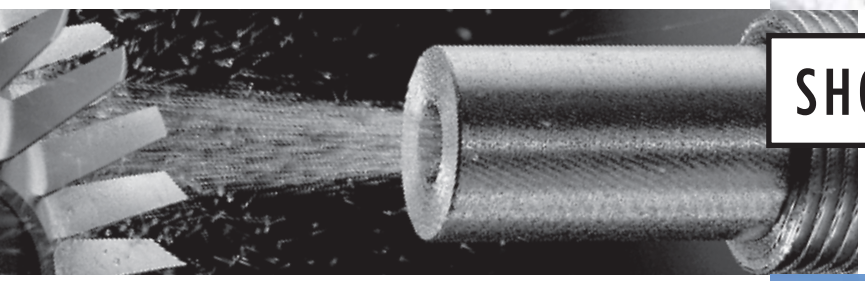
SILICA DUST

The CMAXX Silica Dust Filtration System can be customized to fit your dust collection needs. The CMAXX dust collector with DELTAMAXX Cartridge Filters will make most any Silica Dust application process an easy task. We work with many customers that need custom solutions.

FIBERGLASS DUST

Imperial Systems has a long line of successful dust collection installations in fiberglass. With our turn key capabilities and extensive background in fiberglass dust collection we are truly one of the country's biggest names in the fiberglass industry.





SHOT BLASTING

Blasting is a very diverse market and includes a large variety of different medias from sand to plastic. The CMAXX Dust Collector System has specially designed features that are suitable for all blasting applications.

WOODWORKING

Imperial Systems has a long line of successful woodworking dust collection system installations in the industry. Our woodworking dust collection systems span from small cabinet shops to some of the largest names in flooring.



COMBUSTIBLE DUST & FIRE ACCESSORIES

1 SPARK TRAP

Extinguishes sparks and burning embers.
Reduces the risk of fires and explosions.
Heavy duty construction.
No moving parts and No maintenance.
Can be installed vertically or horizontally.

2 EXPLOSION ISOLATION VALVE

The installation of an explosion isolation device on all suction side ducts that transport material with a Kst value above zero is an NFPA requirement. Installing a Explosion Isolation Valve will protect workers and facilities from the damaging effect of a baghouse or filter explosion.

3 FAST ACTING SLIDE GATE

Pneumatic Slide Gates are engineered to control air flow and conserve energy. These gates deliver a positive shut-off to service machinery or to divert air.
Remote operation, machine integrated.
Safety guards reduce the risk of injury.

4 SPARK DETECTION

Fire and explosion prevention.
Explosion and spark is registered to the millisecond.
Eliminates Ignition source.
Risk management of your production process.

5 FIKE FIRE SUPPRESSION

Fike fire protection systems are effective, easy to use, and safe for people, key assets, facilities and the environment. Whether your needs are industrial, commercial or special hazard applications.
Total flooding suppression agent.

6 FIRE TRACE

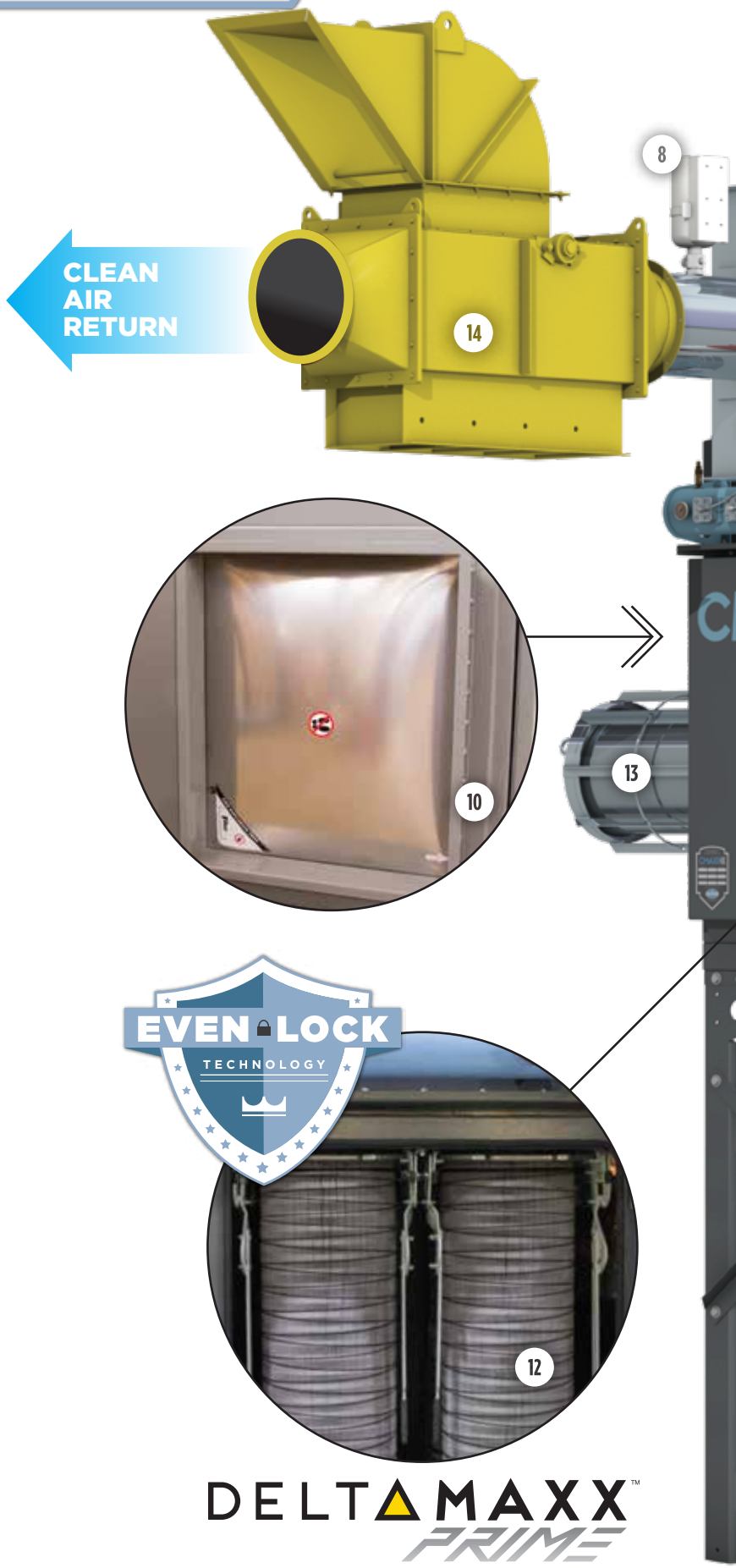
Passive, self-actuating fire suppression system.
Indirect and Direct release systems using polymer tubing.
Compatible with most fire suppression agents.
Suppresses fire at the source and in seconds.

7 SMOKE DETECTOR

It detects smoke and will automatically shut down the collector. It can also engage any action that can be directly wired to the smoke detector to further prevent a flame front or damage to the collector or facility.

8 CHEMICAL EXPLOSION ISOLATION

Rapid discharge of a chemical explosion suppressant to prevent the flame from continuing through to other areas of your system.
Inlet and outlet application.
Used when venting is not an option.
For applications up to 400 Kst





9 HEAVY DUTY CONSTRUCTION

Industry leading 7 & 10 gauge construction.
All nickel plated hardware.
Heavy duty door latches.
Fully welded seams, no bolt holes.
Graphite Industrial Enamel: Corrosive resistant paint inside and out.

10 EXPLOSION VENT

Rupture style membrane vents
Stainless steel
All vents are sized based on material being classed at a ST1 with a 200 KST or lower value.
Includes Burst Indicator used to activate alarms, bells, remote annunciators or interfaced with process control systems

11 RHINO DRUM

Rugged construction. No Flex Vent.
No more need for expensive airlock.
NFPA-69 tested and certified.
No special tooling required to replace Drum.
Patent Pending

12 DELTAMAXX PRIME FILTERS

Up to twice the filter life.
MERV 15 Filtration efficiency.
Completly grounded filter.
400sq ft. of media, One of the largest in the industry.
Suppresses a flame front in the event of an explosion.
Patent Pending

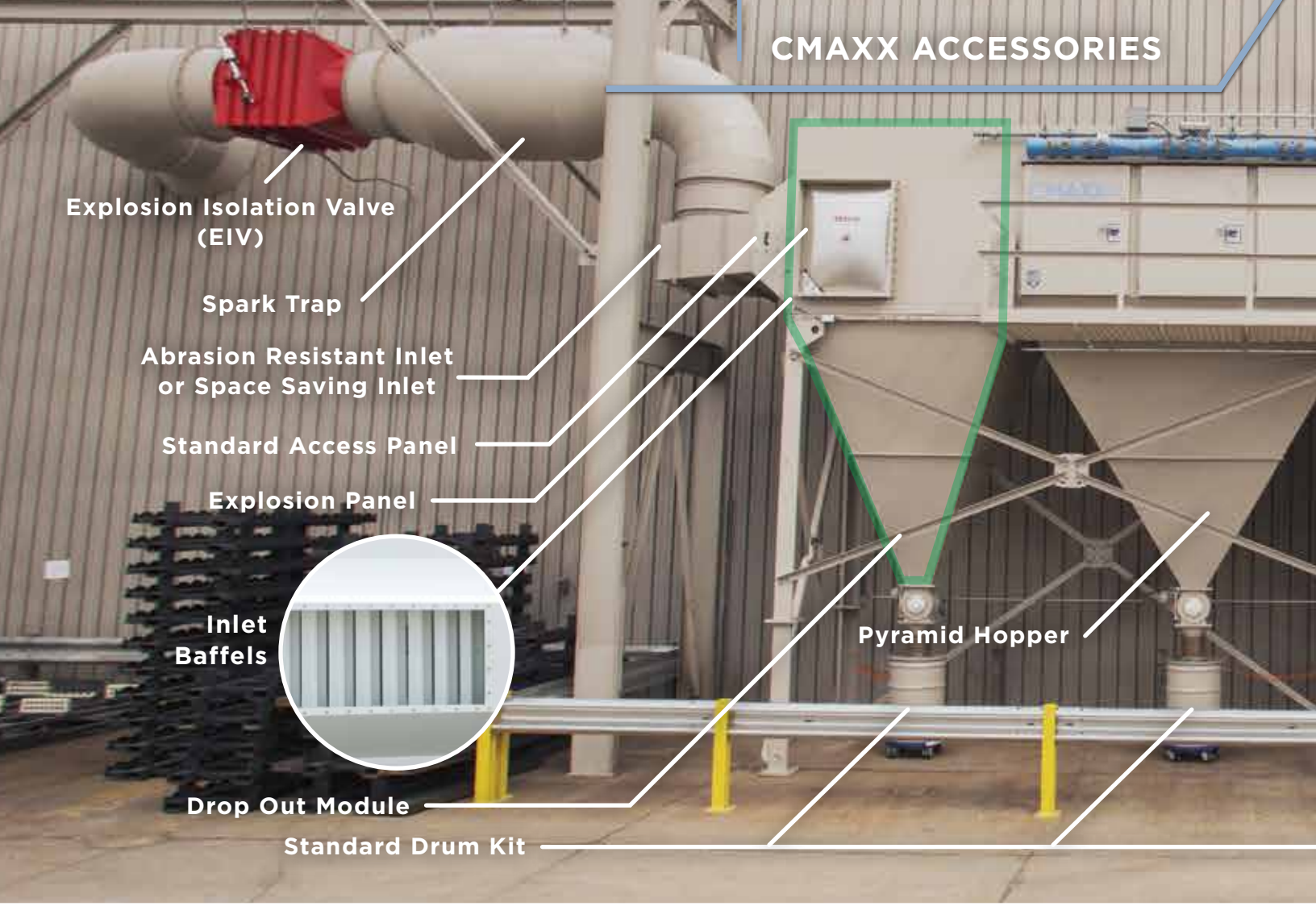
13 FLAMELESS EXPLOSION VENTING

Extinguishes the flame from an explosion, not allowing it to exit the device.
Best use with limitations on ducting or location.
Economical Installation compared to other expensive explosion protection systems.
ATEX certified / NFPA 68 and 61 compliant.

14 HEAVY DUTY ABORT GATE

Engineered to keep your employees and business safe. They are an important part of any explosion protection system.
Fail-safe electromagnets
Robust 3/16 inch plate and 10 gauge welded construction
Compatible with any fire protection system

CMAXX ACCESSORIES





RHINO DRUM

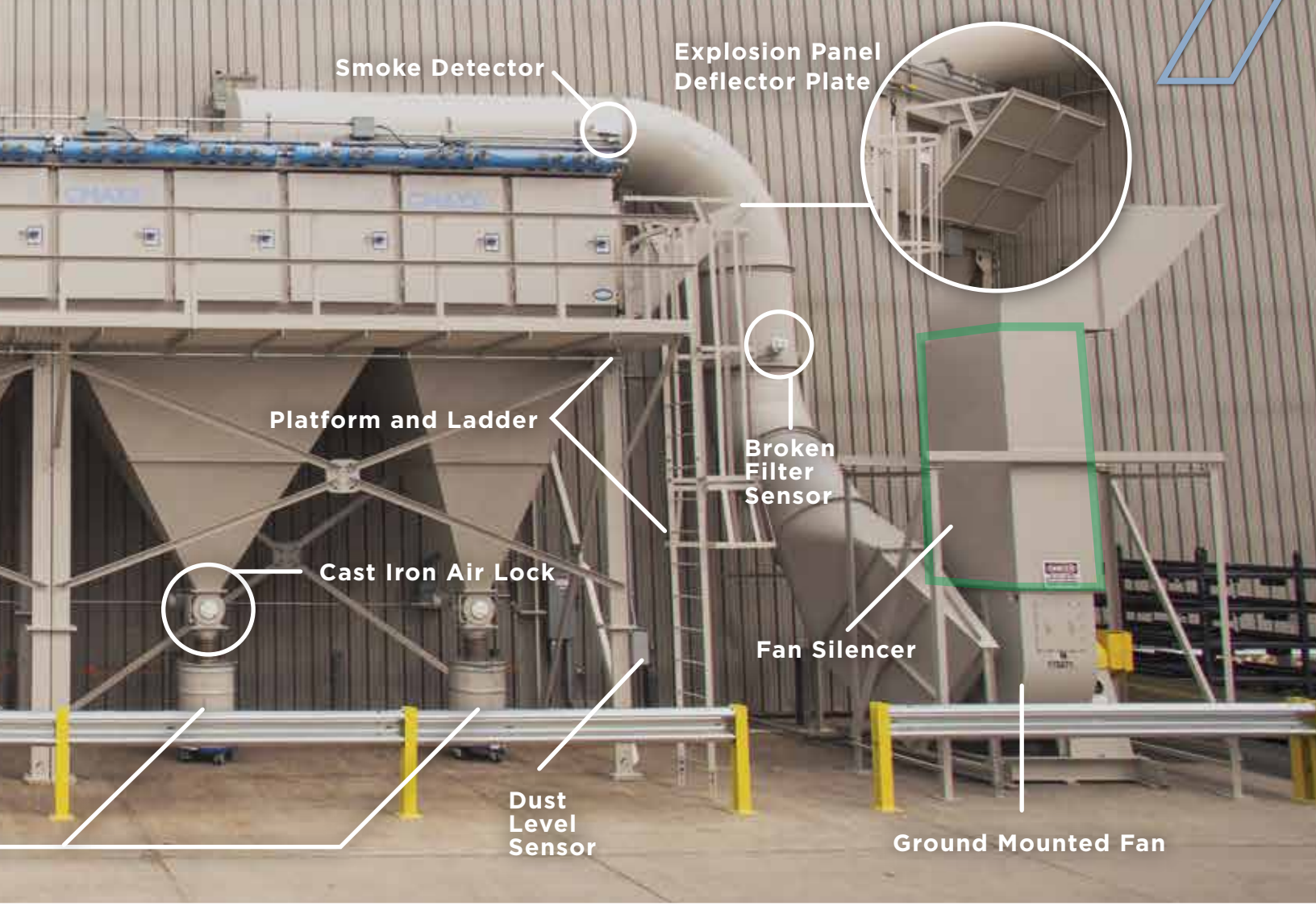
EXPLOSION TESTED DRUM KIT

PATENT PENDING

- Explosion Tested to 7psi
- Meets Standards for NFPA 69/654
- Bonded to a Grounded Collector
- No Moving Parts
- No Flex Hose
- Tool Free

Eliminates need for Airlock - Half the Cost

No need for wiring/ maintenance/ motor/ starter/ wipers/ chains



DUST LEVEL SENSOR

PATENT PENDING

- Easy install and setup
- Low voltage
- Ideal for hard to check containers
- Prevent container overflow
- Less need to open containers
- Eliminates risk of dust backing up
- Half the cost of competing sensors

The dust level sensor makes it safe and convenient to monitor dust collection containers. The sensor uses a signal to detect the level of dust inside the container.



IMPERIAL
SYSTEMS

SAFETY
PENTAGON



ANTI-RAMP RAILS

Rails guide filter in place and stops them from overlapping each other.



LIFT RAIL DOOR STOP

Stops the door from closing if the rails are not in the proper upright postition.



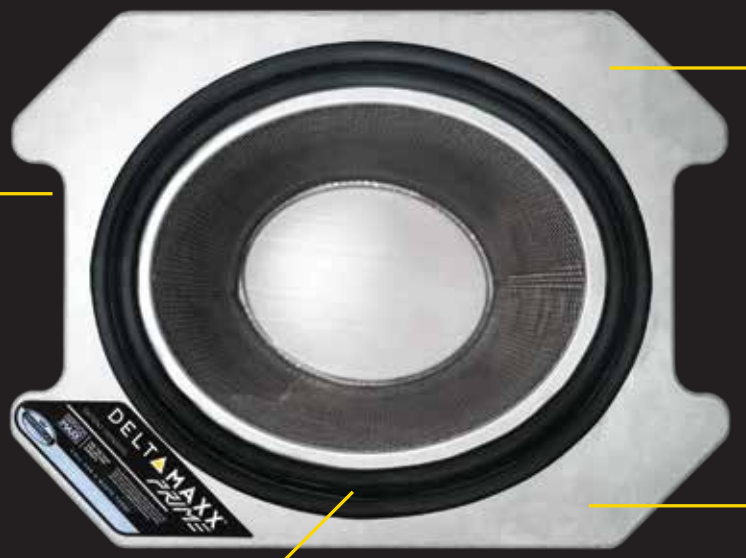
SURE STOP SYSTEM

Ensures the filters are installed properly or the door will not close, using pan indexing channel and door indexing bar.

PATENT PENDING

DELTAMAXX™ PRIME

MOST ADVANCED CARTRIDGE FILTER



SURE STOP SYSTEM
Ensures filters are installed properly

UNIQUE PAN SHAPE
Prevents filter ramping for safety

DOUBLE GASKET
Double layer of protection to ensure a good seal with a single piece design

COMPLETLY GROUNDED
Filters are grounded to the dust collector

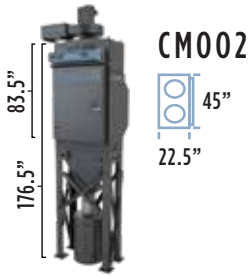
400sq. ft. OF MEDIA
More media than leading filter competitors

OVAL DESIGN
Oval design maximizes surface area

The DeltaMAXX Prime cartridge filter is available exclusively for Imperial Systems dust collection units. This patent pending design offers a new level of safety and performance. Our Nanofiber material already sets the standard for high efficiency filtration and long filter life.

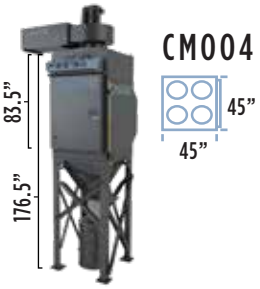
PATENTED 11,857,905

CM002



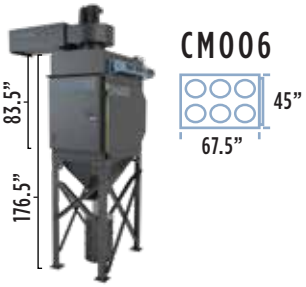
Filter Area (sq. ft.) - **800**
Nominal CFM Range - **350-3600**
Weight (lbs.) - **1800**

CM004



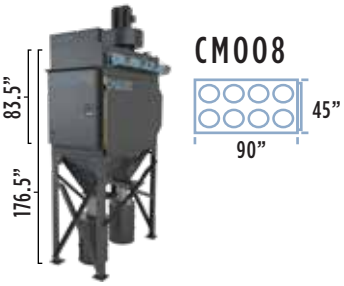
Filter Area (sq. ft.) - **1600**
Nominal CFM Range - **700-7200**
Weight (lbs.) - **2200**

CM006



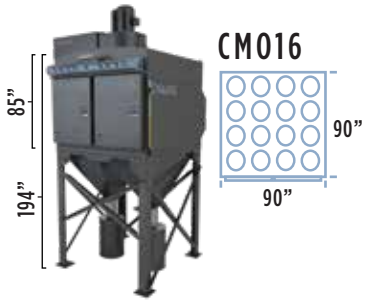
Filter Area (sq. ft.) - **2400**
Nominal CFM Range - **1050-10800**
Weight (lbs.) - **2700**

CM008



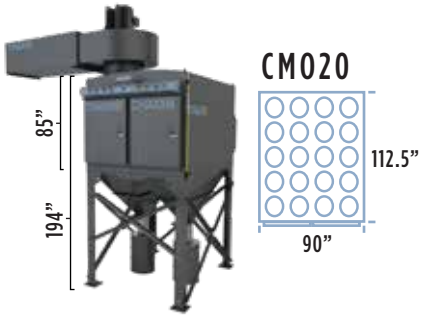
Filter Area (sq. ft.) - **3200**
Nominal CFM Range - **1400-14400**
Weight (lbs.) - **3350**

CM016



Filter Area (sq. ft.) - **6400**
Nominal CFM Range - **2800-28800**
Weight (lbs.) - **5600**

CM020



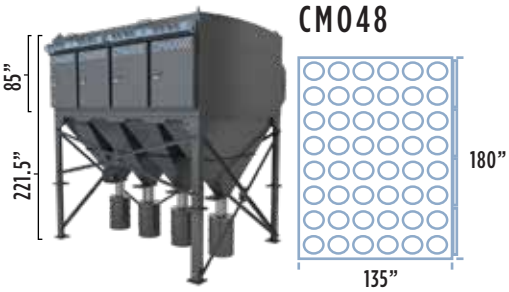
Filter Area (sq. ft.) - **8000**
Nominal CFM Range - **3500-36000**
Weight (lbs.) - **6650**

CM024



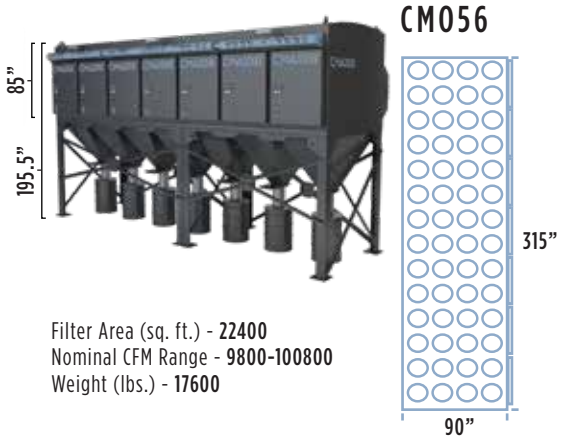
Filter Area (sq. ft.) - **9600**
Nominal CFM Range - **4200-43200**
Weight (lbs.) - **7500**

CM048



Filter Area (sq. ft.) - **19200**
Nominal CFM Range - **8400-86400**
Weight (lbs.) - **13500**

CM056

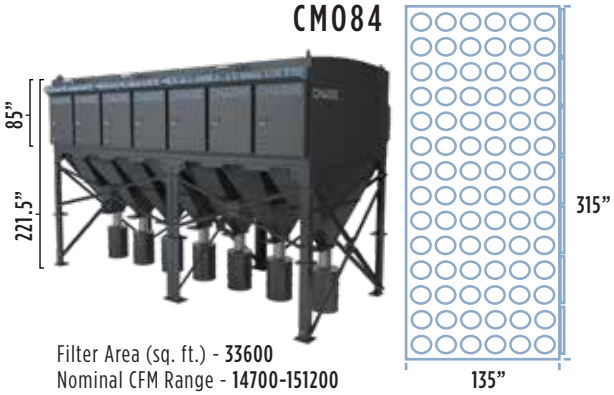


Filter Area (sq. ft.) - **22400**
Nominal CFM Range - **9800-100800**
Weight (lbs.) - **17600**



Filter Area (sq. ft.) - **24000**
Nominal CFM Range - **10500-108000**
Weight (lbs.) - **18700**

CM084



Filter Area (sq. ft.) - **33600**
Nominal CFM Range - **14700-151200**
Weight (lbs.) - **26000**

CM096



Filter Area (sq. ft.) - **38400**
Nominal CFM Range - **16800-172800**
Weight (lbs.) - **29900**

CM010



Filter Area (sq. ft.) - **4000**
Nominal CFM Range - **1750-18000**
Weight (lbs.) - **3850**

CM012L



Filter Area (sq. ft.) - **4800**
Nominal CFM Range - **2100-21600**
Weight (lbs.) - **4900**

CM012S



Filter Area (sq. ft.) - **4800**
Nominal CFM Range - **2100-21600**
Weight (lbs.) - **4300**

CM032



Filter Area (sq. ft.) - **12800**
Nominal CFM Range - **5600-57600**
Weight (lbs.) - **10600**

CM036



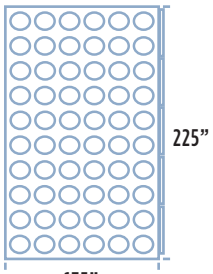
Filter Area (sq. ft.) - **14400**
Nominal CFM Range - **6300-64800**
Weight (lbs.) - **11200**

CM040

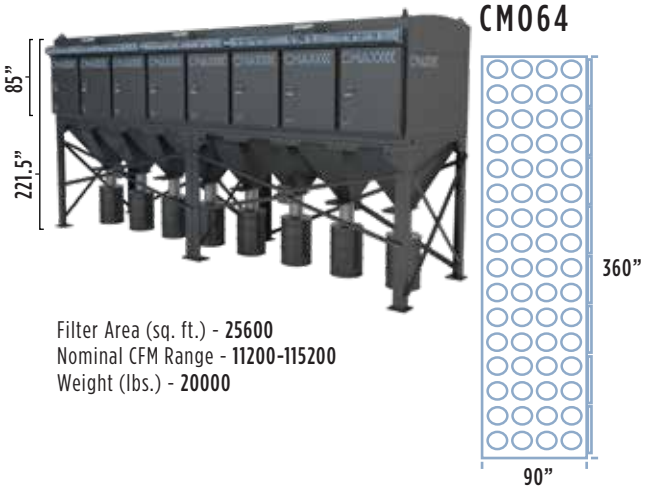


Filter Area (sq. ft.) - **16000**
Nominal CFM Range - **7000-72000**
Weight (lbs.) - **12500**

CM060

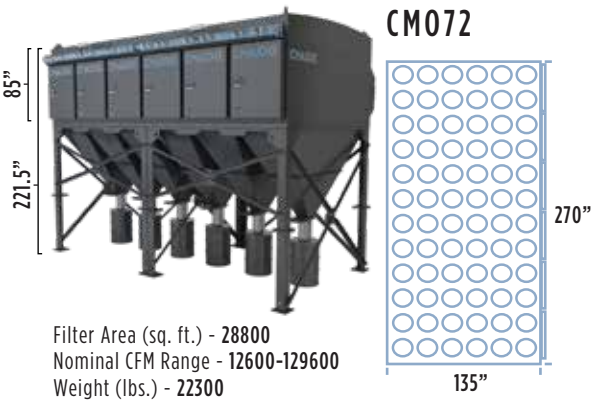


CM064



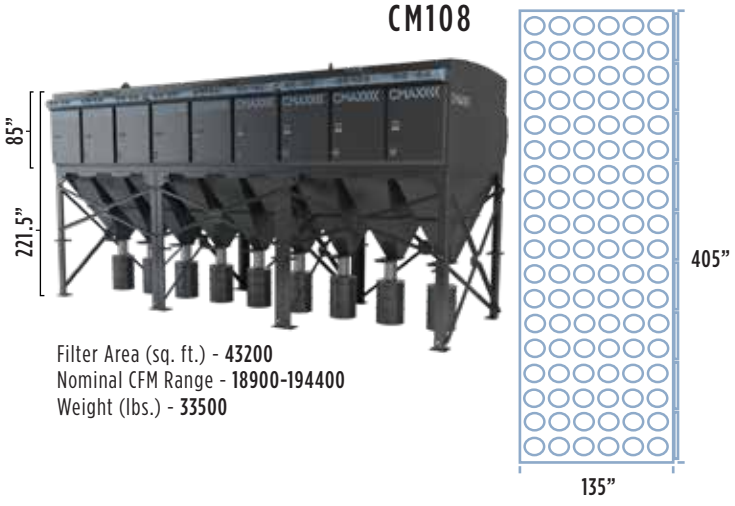
Filter Area (sq. ft.) - **25600**
Nominal CFM Range - **11200-115200**
Weight (lbs.) - **20000**

CM072



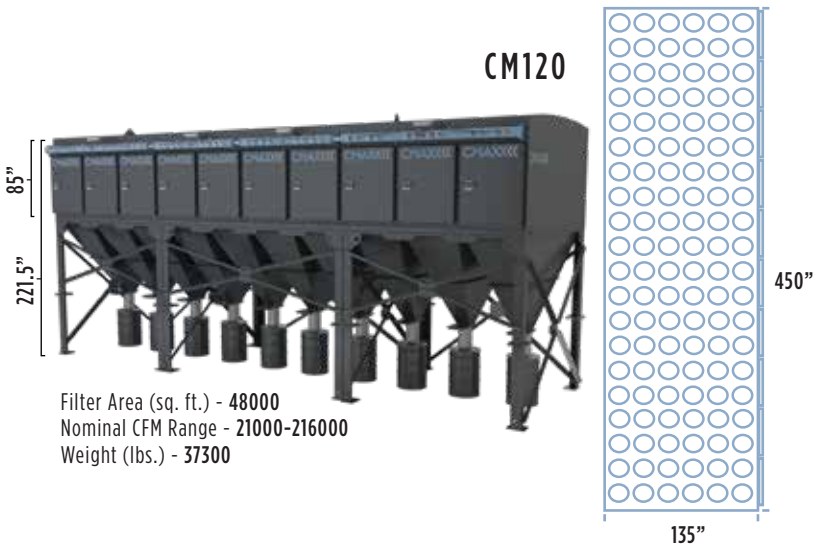
Filter Area (sq. ft.) - **28800**
Nominal CFM Range - **12600-129600**
Weight (lbs.) - **22300**

CM108



Filter Area (sq. ft.) - **43200**
Nominal CFM Range - **18900-194400**
Weight (lbs.) - **33500**

CM120



Filter Area (sq. ft.) - **48000**
Nominal CFM Range - **21000-216000**
Weight (lbs.) - **37300**





Breathe Better, Work Safer

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IMPERIALSYSTEMSINC.com

AMERICAN MADE + AMERICAN OWNED