



IMPERIAL SYSTEMS INC.

DUST & FUME COLLECTION SYSTEMS

**PRODUCT
GUIDE**








IMPERIAL
SYSTEMS

INTRODUCTION

Imperial Systems Inc is a manufacturer of dust and fume collection equipment in Mercer, PA. With our network of representatives and dealers across the country, we can meet the needs of our customers wherever they're located.

With constant improvements and innovations, our products lead the industry in safety, performance, and value. Our line of products offer options for any industry and application. Looking at our products, you'll find features and benefits not offered anywhere else.

President and CEO Jeremiah Wann founded the company in 2001 and continues to lead it today. We pride ourselves on a culture of safety, both for our own team and for the people we protect with our products.

Our mission is to improve the health, safety, and quality of people's lives by building the best dust and fume collectors on earth.





CMAXX

CMAXX

CMAXX

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CMAXX

DUST & FUME COLLECTION SYSTEM

The CMAXX Dust and Fume Collector offers high efficiency, robust pulse cleaning, and the industry's only lifetime warranty. Designed to withstand harsh outdoor conditions, the CMAXX's modular design can be customized for each application. The CMAXX is the most durable and safest dust and fume collector available.

FEATURES AND BENEFITS

- Vertical cartridges for improved pulse cleaning efficiency
- No external bolt holes to prevent leaks, rust, or water damage
- Crown Tech domed roof resists weather damage
- Industry's only lifetime warranty for peace of mind and security
- Damage resistant powder coating for long term protection
- Military grade door handles and heavy-duty doors
- Specially designed filter rails for safe filter installation
- Includes features of the Safety Pentagon, see page 24



SHADOW///

COMPACT FUME EXTRACTOR

The Shadow Compact Fume Extractor is designed for laser cutting, light loading weld fumes, and robotic welding. The Shadow offers excellent air quality control at a lower price point. The Shadow is a cost-efficient fume control solution for indoor installation and noncombustible dust.

FEATURES AND BENEFITS

- Fast installation with no assembly required
- Pre-wired control panel for “plug and play” operation
- On demand pulse cleaning for efficient filter operation
- Multi-directional inlet means flexible installation
- Easy access and emptying of material collection bucket
- 15 year limited warranty for peace of mind and security
- Specially designed filter rails for safe filter installation
- Includes features of the Safety Pentagon, see page 24



DELTA MAXX™

PRIME

The DeltaMAXX Prime cartridge filter is designed for maximum performance in the CMAXX and Shadow systems. With 400 square feet of nanofiber filter media, it offers the best air to cloth ratio available. Unique design features improve safety during filter changes and handling. Other filter media are available for special applications. DeltaMAXX Prime is patent pending.

FEATURES AND BENEFITS

- Industry leading 400 square feet of filter surface area
- Double walled pan with handles for easy lifting
- Anti-ramping system keeps filters from sliding over each other
- Double gasket creates a strong seal with tube sheet
- Oval shape for improved pulse cleaning and efficiency
- Improved filter life and long-lasting performance
- Includes features of the Safety Pentagon, see page 24



BRF

BAGHOUSE DUST COLLECTOR

The BRF baghouse outperforms competitors with superior design and construction. BRF baghouses are available in reverse air or medium pressure filter cleaning. The reverse air BRF cleans the filters with a fan, requiring no compressed air. The medium pressure BRF uses a small compressor to generate compressed air to pulse clean even heavy dust loads.

FEATURES AND BENEFITS

- Two filter cleaning options for a variety of applications
- All bags stay online during cleaning, unlike other designs
- Powder coat finish for durability in tough conditions
- Tool-free filter bag changes and easy bag access
- High entry and tangential inlet options available
- Direct drive shaft requires minimal maintenance
- No plant compressed air hookup required




SPARK TRAP



The Spark Trap spark arrestor reduces the risk of sparks entering your dust collector and starting a fire. This simple, low-maintenance device creates turbulence in duct airflow, slowing and cooling a spark traveling through it. A spark arrestor is an NFPA recommended device for fire risk reduction.

FEATURES AND BENEFITS

- Heavy duty construction
- No moving parts for minimal maintenance
- Clean-out door to easily remove debris
- Installation in horizontal or vertical ductwork
- Customizable size and end type (flanged, raw, quick clamp)
- Suitable for most applications and types of dust
- Helps meet NFPA standards for fire prevention





The first and only patent pending third-party explosion tested drum kit, the Rhino Drum is a cost-efficient, time saving alternative to a traditional airlock. While an airlock requires electricity and replacement of moving parts, the Rhino Drum has no moving parts and no electricity. It isolates an explosion safely inside the drum. The Rhino Drum is designed for ST1 dusts only.

FEATURES AND BENEFITS

- Standard 55 gallon drum, other sizes available
- Twist and lock design for easy drum emptying
- Drum dolly for moving drums during changeout
- No Flex Hose, motors, wiring, or wipers
- Tool free sliding coupler for quick operation
- Optional bonding wire with quick attachment
- Significant cost savings over traditional airlock



DUST LEVEL SENSOR

IMPERIAL SYSTEMS

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A B C D

RED LIGHTS

WIRE CONNECTIONS

DUST LEVEL SENSOR

The Dust Level Sensor saves time and prevents dust backup that could cause damage to the dust collector. The sensor control panel can attach to various points on a dust collector. Sensors insert into the containers and send a signal when dust levels are high. An easily visible light on the control panel tells operators which container needs emptied. The Dust Level Sensor is patent pending.

FEATURES AND BENEFITS

- Easy to install and set up
- Half the cost of similar sensor systems
- Each panel can monitor up to four containers
- Ideal for containers that are hard to check often
- Easy to read, high visibility sensor panel
- Prevents dust overflow from damaging systems
- Can be used with almost any dust collector and container





ABORTGATE

The Abort Gate can be placed on the clean or dirty air side of a dust collector to redirect flames, sparks, or contaminated air. The Abort Gate can be activated in response to sensors or manually. Powerful electromagnets and a spring allow the gate to close in 500 milliseconds. The Abort Gate is compatible with all brands of fire and explosion suppression equipment.

FEATURES AND BENEFITS

- Can be used with spark detection or broken bag sensors
- On inlet side, prevents sparks or fire from entering the collector
- On return air side, can be used to redirect contaminated air
- Can be used as a diverter for changing air venting
- Fully factory tested prior to shipping
- Options include electric gate reset and weather hood

CYCLONE

DUST COLLECTION SYSTEM



The Cyclone causes incoming air to rotate, which lets larger particles and debris drop out for collection. Cyclones are used in many applications either alone or as part of a dust collection system.

FEATURES AND BENEFITS

- No filters or motors for minimal maintenance
- Removes large debris that could damage other equipment
- Wide variety of options for heat and abrasion resistance

EIV

EXPLOSION ISOLATION VALVE



NFPA standards require an explosion isolation valve for systems handling combustible dust. This valve closes automatically during an explosion, preventing damage to the facility and workers.

FEATURES AND BENEFITS

- ATEX certified, meets all standards
- Easy access door for inspection and maintenance
- Durable welded steel construction

AIRLOCK



Airlocks are available in heavy duty, low profile, and cast iron models. An airlock prevents material backup into the collector and meets NFPA standards as a flame isolation device.

FEATURES AND BENEFITS

- Prevents flames from spreading as required by NFPA standards
- Replacement parts installed easily with basic tools
- Three available models to meet any system's needs

DELTAMAXX™

BEST • FILTERS • PERIOD

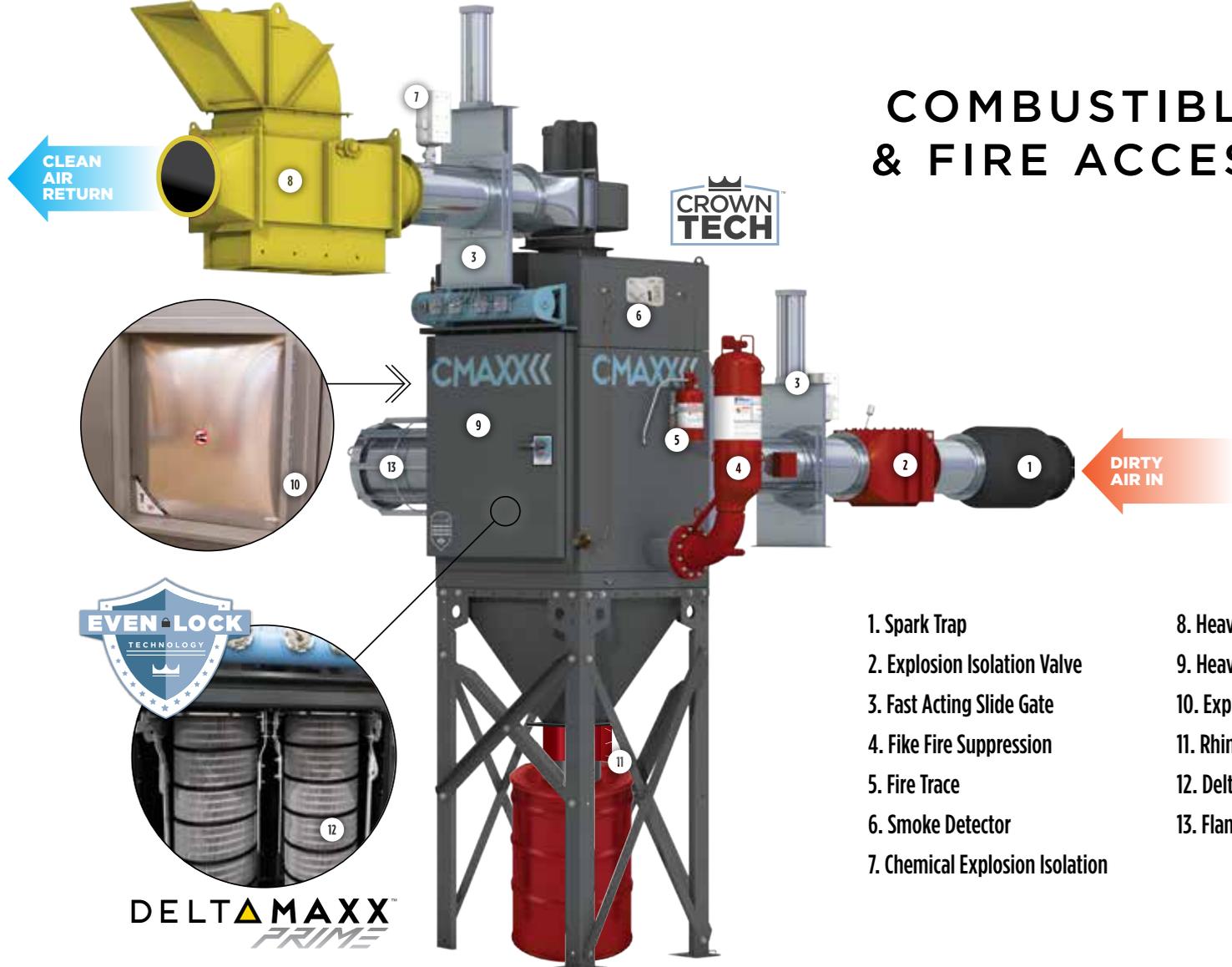


High efficiency replacement cartridge filters for almost any make or model of dust collector. MERV 15 nanofiber filters offer longer filter life, better performance, and cleaner air.

FEATURES AND BENEFITS

- Longer filter life means fewer changeouts and less downtime
- Options include fire retardant, oil and water resistant, and PTFE
- Best customer service and support in the industry

COMBUSTIBLE DUST & FIRE ACCESSORIES



- 1. Spark Trap
- 2. Explosion Isolation Valve
- 3. Fast Acting Slide Gate
- 4. Fike Fire Suppression
- 5. Fire Trace
- 6. Smoke Detector
- 7. Chemical Explosion Isolation
- 8. Heavy Duty Abort Gate
- 9. Heavy Duty Construction
- 10. Explosion Vent
- 11. Rhino Drum
- 12. DeltaMAXX Prime Filters
- 13. Flameless Explosion Venting

DELTA MAXX
PRIME

SAFETY PENTAGON



Five features make up the Safety Pentagon, an innovation in lift rail and filter installation safety. These features are standard on all CMAXX and Shadow systems. They include redundant safety designs to ensure that filters are always installed correctly and safely.

- **Anti-ramp lift rails** stop filters from overlapping each other during install
- **Double gasketed pans** provide two-layer protection for no filter leaks
- **Completely grounded filters** are fully grounded to the dust collector
- **Lift rail door stop** keeps door from closing if rails are not in upright position
- **Sure-Stop system** stops door from closing if indexing channel and door bar don't align





The ServiceMAXX program provides professional, thorough troubleshooting and maintenance for dust collection systems. Using a team of professionals minimizes downtime and results in fast, expert work. ServiceMAXX visits can be scheduled for our dust collectors or almost any competitor's system. Our technicians can do everything from replacing filters to repairing system problems.

FEATURES AND BENEFITS

- Scheduled maintenance reduces unexpected breakdowns
- Inspection can identify parts needing replacement
- Calibration and tune-ups of sensors and monitors
- Assistance with developing a consistent maintenance plan
- Preventing problems saves money over fixing them
- Experienced service team trained to spot and deal with issues
- Visits scheduled for minimum downtime and work interruption



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