

# DELTA MAXX<sup>TM</sup> *PRIME*

PATENT PENDING





**To improve the health,  
safety, and quality of  
peoples live by building  
the best dust and fume  
collectors on Earth**

**IMPERIAL SYSTEMS, INC.**

**B R E A T H E   B E T T E R ,   W O R K   S A F E R**



# DELTA<sup>△</sup>MAXX<sup>TM</sup>

## 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

### COMPLETELY 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.

PATENT PENDING

# FIRE RETARDANT FILTERS

## WHAT MAKES A FILTER FIRE RETARDANT?

To make our FR filters, the filter media runs through a bath of a special coating. After its dipped in this solution, the media dries and then gets pleated and made into filters. This process makes sure that the fire retardant coating completely covers all of the filter media.

As you can see in our test photos below, our FR filters resist fire even when a flame is applied directly to it. If they can stand up to this treatment, you can be confident that they will resist sparks and fire in your application.

## FIRE-RETARDANT OR REGULAR NANOFIBER?

Not all applications require an FR filter.

Some applications where FR is recommended:

- Any type of metal dust or fume
- Any process that generates sparks
- Any dust that is highly combustible

As you can see below, a filter without the FR coating won't hold up very well when exposed to flame:



**FR VS NON-FR**



## DUST COLLECTOR FIRES

Dust collector fires happen all the time. Our service team has been on-site in the aftermath of these fires, and what they pull out of the collector is this: burned-up filters that fueled the fire instead of controlling it. Burning filters inside your collector doesn't just waste a set of filters; you can have serious (and expensive) damage to your collector. As you can see in our test, a spark or flame that gets into a collector has less of a chance with FR filters getting them to burn. FR filters help stop a collector fire instead of acting as fuel.



# UP TO TWICE THE FILTER LIFE

## Most Advanced Nanofiber Technology

The Nanofiber surface stops sub-micron particles from entering and becoming embedded into the media beneath the Nanofiber

## Reduced Dust Collector Operational Costs

## Lower Operational Mass Emissions

## Less Pulse Cleaning

Dust is easily pulsed off of the Nanofiber media because it remains on the surface

## Industry's Best Surface Loading Technology

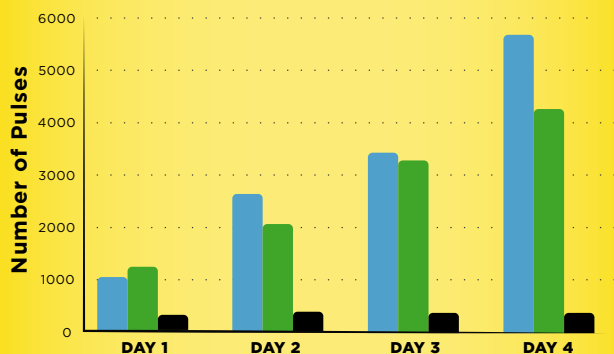
Enhances dust cake release, leading to longer filter life

Nanofiber  
2000x  
Zoom

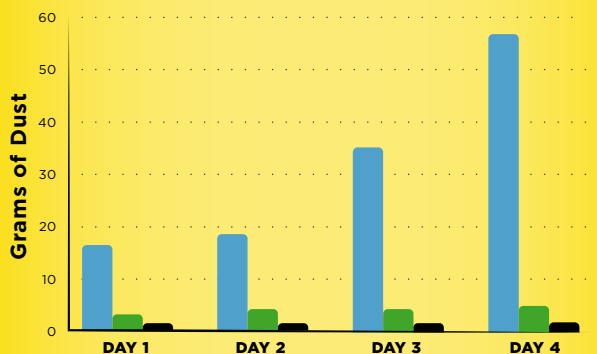


# FILTER EFFICIENCY

THE LESS PLUSES THE BETTER



THE LESS EMISSIONS THE BETTER



Cellulose Blend



Meltblown



DeltaMAXX Nanofiber

## SUMMARY OF RESULTS

	CELLULOSE BLEND	MELT BLOWN	DELTAMAXX NANOFIBER	
<strong>EMISSIONS</strong>				
Total Emissions	126,735	11,825	2,560	mg
Average Emissions/Hour	1,320	123	27	mg/hour
Emissions Before 1st Pulse	185	10	10	mg
Average Emission/Pulse	9.84	1.09	1.65	mg/pulse
<strong>PULSE CLEANING</strong>				
Time to First Pulse	1:40	1:07	1:01	hours
Total Number of Pulses	12,861	10,874	1,545	pulses
Average Pulses/Hour	134	113	16	pulses



# CARTRIDGE MEDIA MATERIAL

## DELTA MAXX™ 80/20 CELLULOSE/ POLYESTER

**MERV 10**  
3 - 1 Microns

## DELTA MAXX™ 8 oz SPUNBOND POLYESTER

**MERV 11**  
3 - 1 Microns

## DELTA MAXX™ NANOFIBER

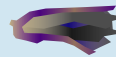
**MERV 15**  
1 - 0.3 Microns



**Human Hair Thickness**  
= 80-100 Microns



**Pollen**  
= 30 Microns



**Household Dust**  
= 10 Microns



**Pet Dander**  
= 5 Microns



**Weld Fume Particle**  
= 1 Micron

40 Microns

Invisible to the human eye

0.3 Microns

## FILTER SERVICE & TROUBLESHOOTING

- System Inspection
- Cartridge Filter Change-out
- Baghouse Filter Change-out
- Preventative Maintenance
- System Balance
- Dye Testing

### INSPECTION

There's a major advantage to having professionals do your filter changes for you. Our ServiceMAXX team doesn't just change filters. They also inspect them, check for leaks or other problems, conduct dye testing, and make sure your system is working properly. Having the ServiceMAXX team change your filters means that if there is a problem, you've already got exactly the right people there to identify it and fix it.



# SERVICE MAXX

USE THE DUST COLLECTION EXPERTS

# **DeltaMAXX**

## **Replacement Filters**

DeltaMAXX Dust Collector Cartridge Filters are manufactured for all makes and models of cartridge dust collectors.

Regardless of the nature of your dust collection and air pollution control application, Imperial Systems Inc. has the answer for all of your cartridge filtration needs.

### **Imperial Systems CMAXX**

**Donaldson Torit**

**Farr APC**

**Robovent**

**Lincoln Electric**

**Messer**

**AAF**

**UAS**

**Airflow Systems**

**Flex-Kleen**

**MAC**

**Micro Air**

**Pneumafil**

**Sly**

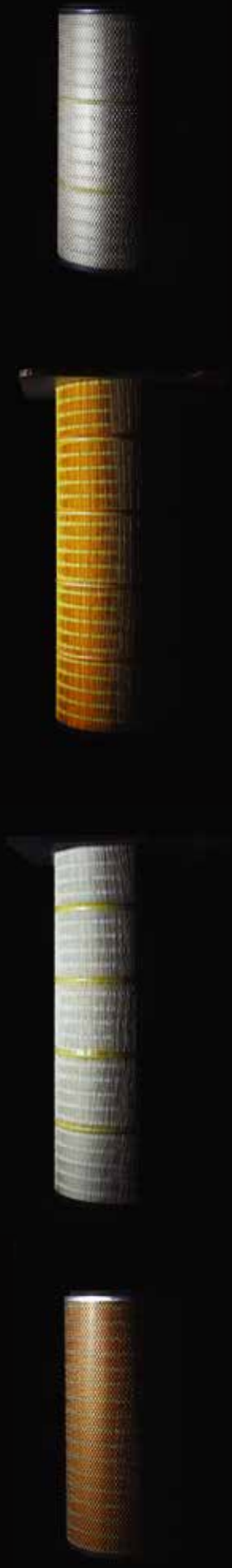
**Steelcraft**

**Trion**

**Avani**

**Plymovent**

**& more...**





**BREATHE BETTER, WORK SAFER**

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