

# CMAXX

## SPOT FILTER SYSTEM







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The CMAXX™ Spot Filter is designed to work in small spaces. It is a true work horse that handles high air flow and bulk solids.

## BRF

### BAGHOUSE MEDIUM PRESSURE & REVERSE AIR

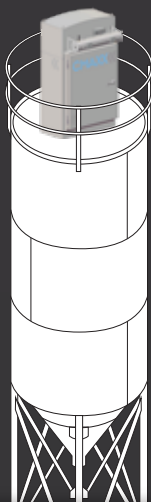
BRF's (Big Round Filter) are specially designed grain dust collection systems built to handle the heavy loading from grain applications involving drying, conveyor transfer points, dump pits, roller milling, bin venting, grain cleaners, bucket elevators, hammer mills and more.



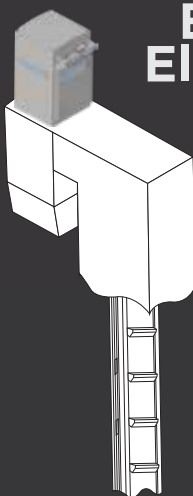


## INDUSTRY APPLICATION

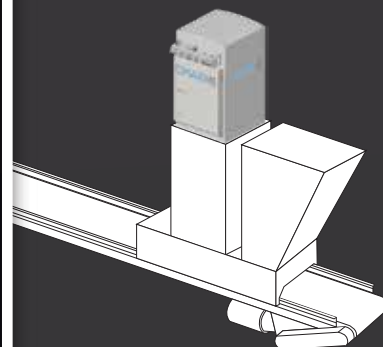
**Silos**



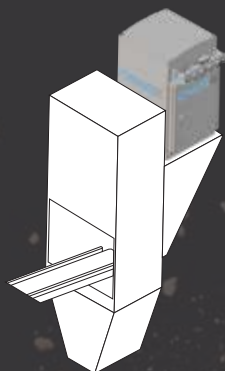
**Bucket Elevator**



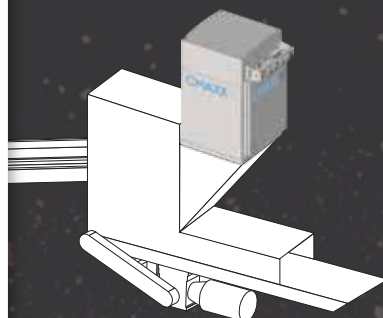
**Chute to Belt**



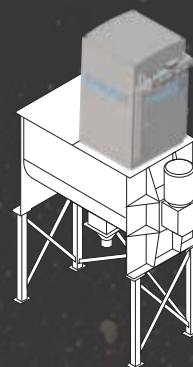
**Conveyor Discharge**



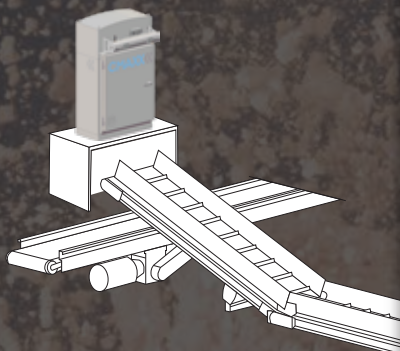
**Conveyor Transfer**



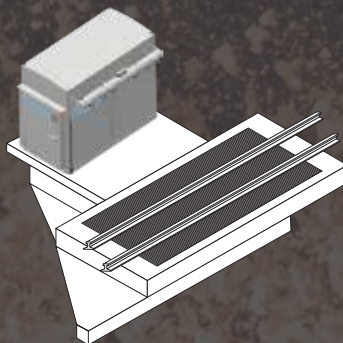
**Ribbon Blender**



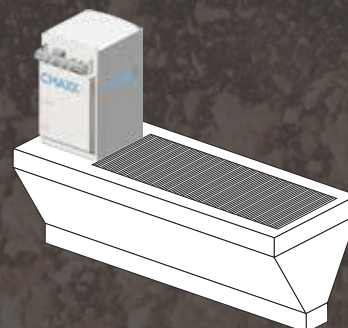
**Tripper Conveyor**



**Rail Receiver**



**Truck Pit**



# A TRUE WORK HORSE

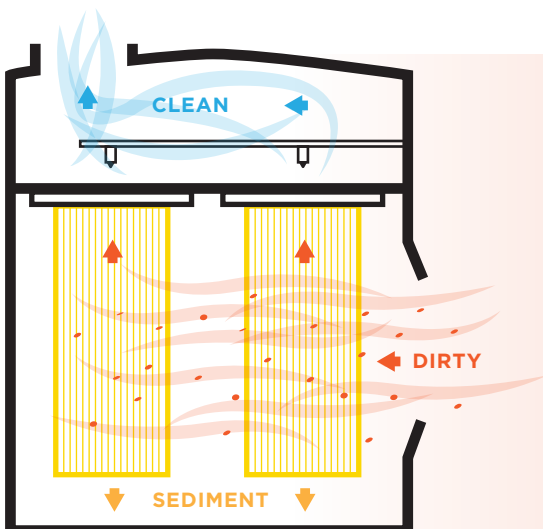


The CMAXX Spot Filter is designed to work in small spaces. It handles high air flow and bulk solids along with effectively filtering the most challenging particulates.

Whether you need a compact CMAXX with legs and a hopper or bin vent style, the space saving construction allows for easier placement at the source of the dust.

Design options include standard tall filter or half filter models depending on your application needs. With a modular 10 gauge steel construction, no exterior bolt holes and domed roof, the CMAXX has a long lifespan that stands up to the elements.

**40% SMALLER THAN A TRADITIONAL BAGHOUSE DUST COLLECTOR.**



## HOW IT WORKS

Dirty air is pulled in from duct work or from beneath the collector and particulates are captured by the DeltaMAXX™ filters or filter bags. 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.



## IN-LINE DEFLAGRATION ARRESTER

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).

**CARTRIDGE**



**TYPICAL PLEATS**



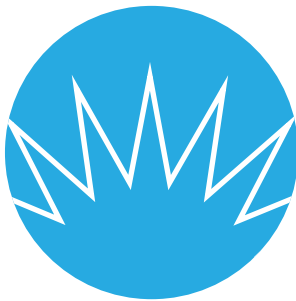
**BEST APPLICATION:**

Fumes  
Powder  
Dust  
Silica  
Grain  
Seed  
Sawdust

Very Fine Dust



**HYBRID**



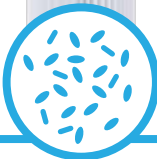
**OPEN PLEATS**



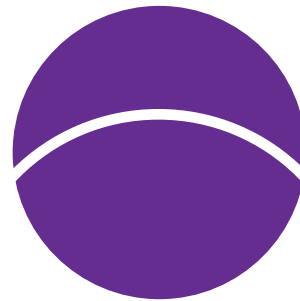
**BEST APPLICATION:**

Grain  
Seed  
Sawdust  
Food

Medium Dust



**FILTER BAG**



**NO PLEATS**



**BEST APPLICATION:**

Food  
Feed  
Coarse  
Heat  
Fiber  
Sticky

Large or  
Sticky Dust



**DELTA MAXX™**  
BEST • FILTERS • PERIOD



Up to Twice the Filter Life • MERV 15 Filtration Efficiency • Reduced Operational Costs • Lower Operational Mass Emissions



# BOTTOM LOADING FILTER BAG GAME CHANGER

Removable Filter Plenum  
PATENT PENDING



## Now the CMAXX™ can tackle anything you throw at it.

Allows you to change out filters without space concern. Now you can pick and choose any media and filter type you need. Go from a cartridge to a bag depending on the application and your needs at anytime in your process.



Less time  
to change  
filters



Cleaner  
filter  
exchange






No confined  
space



Easier  
filter  
access



Most efficient  
with sticky  
dust

		Filter Quantity	Filter Area (sq. ft.)	Nominal CFM Range	Width	Depth	Height	Height with Fan (ft)	Weight (lbs.)	Weight With Fan (lbs.)	
	CMAXX BAG HYBRID	CMBag002	12	78	39-351	45	22.5	88.375	112.375	1651	1901
		CMBag004	24	156	78-702	45	45	88.375	121.875	2042	2482
		CMBag006	36	234	117-1053	45	67.5	88.375	123.375	2533	3023
		CMBag008	48	312	156-1404	45	90	88.375	127.375	2919	3499
		CMBag010	60	390	195-1755	45	112.5	88.375	131.875	3300	4090
		CMBag012S	72	468	234-2106	90	67.5	88.375	138.875	4001	5021
		CMBag012L	72	468	234-2106	45	135	88.375	136.375	3706	4726
		CMBag016S	96	624	312-2808	90	90	88.375	142.375	4748	6118
		CMBag016L	96	624	312-2808	45	180	88.375	142.375	4588	5958
	CMAXX	CMSpot002	2	700	350-3150	45	22.5	77.25	101	1670	1920
		CMSpot004	4	1400	700-6300	45	45	77.25	110.5	2080	2520
		CMSpot006	6	2100	1050-9450	45	67.5	77.25	112	2590	3080
		CMSpot008	8	2800	1400-12600	45	90	77.25	116	2995	3575
		CMSpot010	10	3500	1750-15750	45	112.5	77.25	120.5	3395	4185
		CMSpot012S	12	4200	2100-18900	90	67.5	77.25	127.5	4115	5135
		CMSpot012L	12	4200	2100-18900	45	135	77.25	125	3820	4840
		CMSpot016S	16	5600	2800-25200	90	90	77.25	131	4900	6270
		CMSpot016L	16	5600	2800-25200	45	180	77.25	131	4740	6110
	CMAXX HALF	CMSpot002H	2	350	175-1575	45	22.5	57.75	81	1435	1635
		CMSpot004H	4	700	350-3150	45	45	57.75	86.5	1805	2165
		CMSpot006H	6	1050	525-4725	45	67.5	57.75	88	2275	2690
		CMSpot008H	8	1400	700-6300	45	90	57.75	91	2640	3080
		CMSpot010H	10	1750	875-7875	45	112.5	57.75	92.5	3000	3490
		CMSpot012SH	12	2100	1050-9450	90	67.5	57.75	95	3595	4085
		CMSpot012LH	12	2100	1050-9450	45	135	57.75	92.5	3380	3870
		CMSpot016SH	16	2800	1400-12600	90	90	57.75	99	4340	4920
		CMSpot016LH	16	2800	1400-12600	45	180	57.75	99	4100	4680



# IMPERIAL SYSTEMS INC.

Located just north of Pittsburgh, Pennsylvania in the small town of Jackson Center, Imperial Systems is among the top dust collection equipment manufacturing businesses in North America. Our values are built on designing and installing custom industrial dust collection systems with the strongest, most durable fabrication to meet our customer's needs.

We also manufacture industry leading products, engineered for outstanding quality, safety and value. We maintain a large inventory of Imperial Systems manufactured dust collection equipment. As a customer-driven solutions provider, we've earned credibility and have established strong relationships by exceeding expectations with professional service and attitude.

Our product line includes: CMAXX Dust and Fume Cartridge Collectors, DeltaMAXX Cartridge and Bag Filters, BRF Baghouse Dust Collectors, Pulse Jet Baghouses, Cyclone Dust Collectors, Airlocks, Slide Gates, Diverter Valves, Abort Gates, Backdraft Dampers, Flex Hose and all duct and components.

Our network of Imperial Systems Inc. representatives are all highly trained problem solvers with specialized training in supporting our clients. Contact us about your operation and one of our local representatives will give you a call.

## MARKETS SERVED

Nearly every manufacturing process generates dust. We design innovative but practical and useful dust collection solutions for just about every industry, including, but not limited to: recycling, seed, grain, carpentry, welding, CNC plasma/laser cutting, thermal spray, grinding, mining, aggregate, sand blasting, aluminum, powder coating, biofuels, food processing, pet food, fiberglass, agricultural, chemical processing, paper scrap, fiberglass and many more.

## INSTALLATION & SERVICE

Imperial Systems, Inc. field crews are fully trained to install and service a wide variety of dust collection systems all over the United States and Canada. Our field crews are committed to safe working practices and following customer facility regulations.





# 15 YEAR LIMITED

# INDUSTRY LEADING WARRANTY

Imperial Systems, Inc. warrants to the original purchaser that the major structural components of the dust collector will be free from defects in materials and workmanship for Fifteen (15) years from the date of shipment, if properly installed, maintained and operated under normal conditions. Imperial Systems, Inc. warrants all other Imperial Systems, Inc. - built components and accessories including Imperial Systems, Inc. airlocks, fans, cyclones, dampers and valves housings for Twelve (12) months. Imperial Systems, Inc. warrants filters 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 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 merchantability and fitness for a particular purpose, whether express or implied, are hereby expressly excluded and disclaimed.



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





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