

MAXFLO™

Platinum Cartridge Dust Collectors



LEDGELESS VERTICAL CARTRIDGE DUST COLLECTOR



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DISCOVER THE POWER OF THE NEW GENERATION OF LEDGELESS VERTICAL CARTRIDGE DUST COLLECTORS

Modular Dust Collectors are different from other dust collectors. Their ability to filter highly-contaminated air volumes in an extremely compact format is what sets them apart from the rest. As part of an efficient compressed air self-cleaning system, the cartridges allow for the continuous filtration of sub-micron dust particles with a constant differential pressure loss.

Our Modular dust collector have doors and a manual cam system that require no tools and allow for an easy cartridges change out.

MAIN ADVANTAGES AT A GLANCE

Fast delivery

Our modular design reduces the lead time of your order.

Low initial cost

The optimization of our design and assembly technics allows us to offer highly competitive prices.

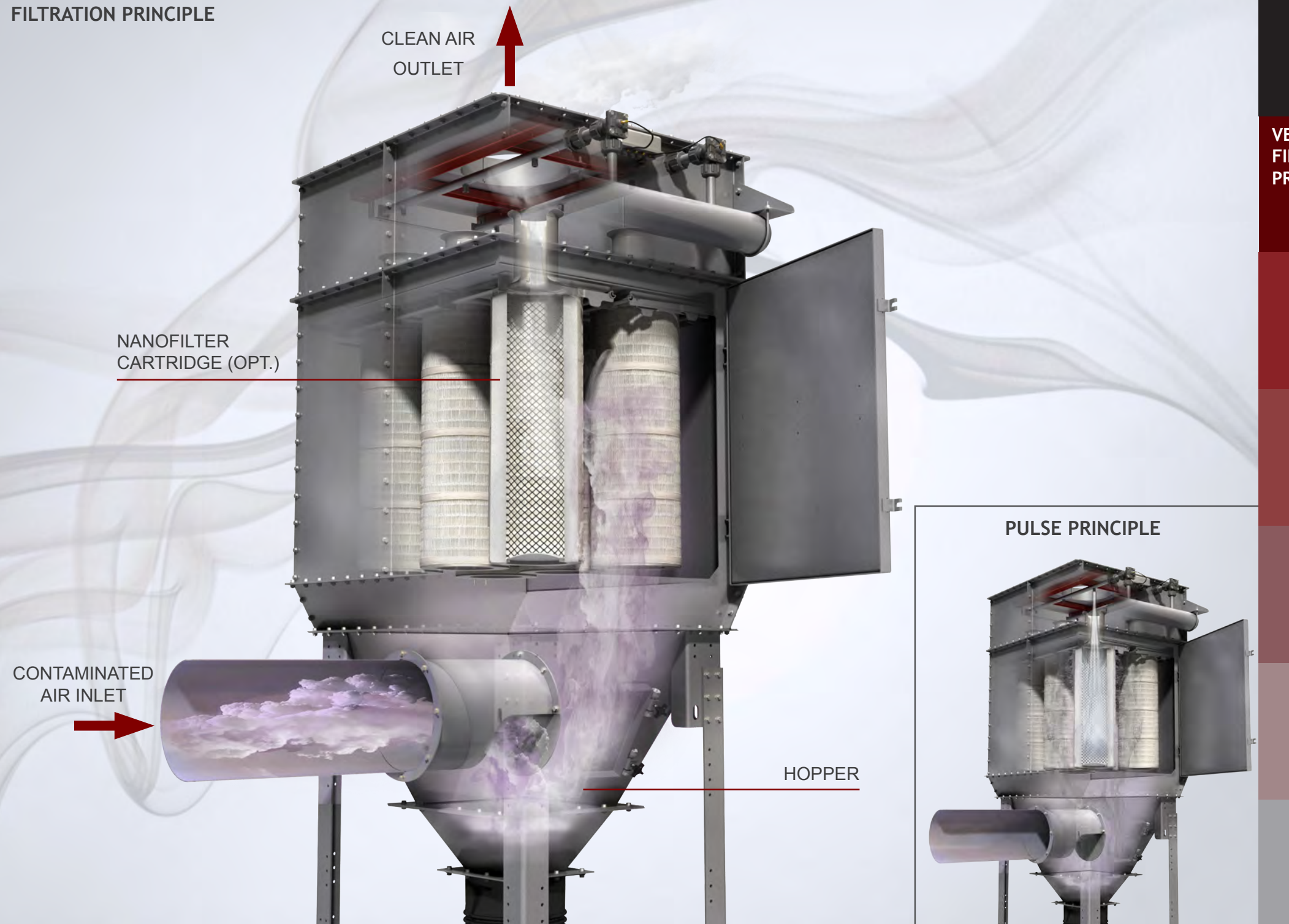
Ledgeless construction

Avoids particle accumulation in order to better comply with NFPA regulations.

Vertical cartridge design

Unlike horizontal cartridge designs that reduce filtering surface efficiency by up to 30%, Airex Industries' Platinum series dust collectors maintain a 100% filtration rate at all times.

FILTRATION PRINCIPLE



VERTICAL
FILTRATION
PRINCIPLE

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HOW THE MODULAR CARTRIDGE DUST COLLECTOR WORKS

The dust-laden gases enter through the side intake of the dust collector's hopper, under vacuum or pressure (except for bin vents, where the air comes in from the bottom).

The gases are then filtered through the cartridges and exit through the venturis into the clean air plenum. The clean air can either be channeled outside or re-circulated depending on the application.

ADVANTAGES

Fast, simple and safe cartridge replacement

Cartridge replacement is performed outside the dust collector and requires no tools. This eliminates the need to work within a confined space and allows the worker to access the cartridge without getting dirty.

The cartridge comes with a rectangular top plate that simplifies manipulation and eliminates potential installation errors.

Continuous operation

Unlike other types of dust collectors such as the shaker, the cartridge dust collector does not have to be stopped in order to remove and clean dust particles from its filters.

Economical

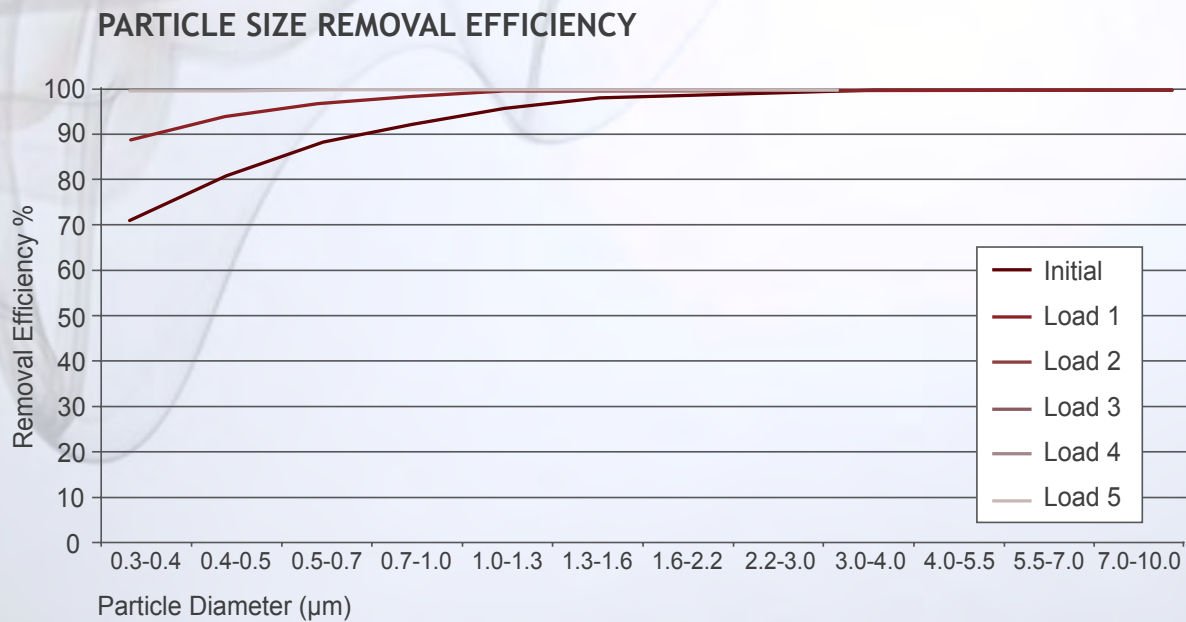
The cartridge dust collector is an economical choice because it requires minimal maintenance: only periodic cartridge replacement is necessary (depending on the application).

PULSE PRINCIPLE



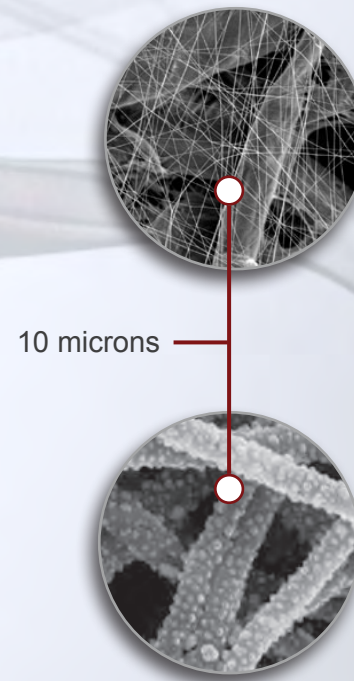
ASHRAE STANDARD

PARTICLE SIZE RANGE (µM)	GEOMETRIC MEAN DIAMETER (µM)	PARTICLE REMOVAL EFFICIENCY (%)							
		CME	INITIAL	LOAD 1	LOAD 2	LOAD 3	LOAD 4	LOAD 5	
0.30 - 0.40	0.35	71.0	71.0	88.9	99.9	99.9	99.9	100.0	
0.40 - 0.55	0.47	80.8	80.8	93.9	100.0	99.9	100.0	100.0	
0.55 - 0.70	0.62	88.0	88.0	96.9	100.0	100.0	100.0	100.0	
0.70 - 1.00	0.84	92.2	92.2	98.3	100.0	100.0	100.0	100.0	
1.00 - 1.30	1.14	95.8	95.8	99.3	100.0	100.0	100.0	100.0	
1.30 - 1.60	1.44	98.1	98.1	99.8	100.0	100.0	100.0	100.0	
1.60 - 2.20	1.88	98.6	98.6	99.8	100.0	100.0	100.0	100.0	
2.20 - 3.00	2.57	99.3	99.3	99.9	100.0	100.0	100.0	100.0	
3.00 - 4.00	3.46	99.8	99.8	100.0	100.0	100.0	100.0	100.0	
4.00 - 5.50	4.69	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
5.50 - 7.00	6.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
7.00 - 10.00	8.37	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
		CME	INITIAL	LOAD 1	LOAD 2	LOAD 3	LOAD 4	LOAD 5	
Resistance after Dust Load (in WG)			0.73	1.52	2.35	3.17	4.00		
Dust Load (gms)			17	237	407	554	668		



NANOFILTER MEDIA

This media is made of the industries smallest fibers (10 microns)



CONVENTIONAL MEDIA

Spacing is 6 times larger than that of the nanofiber allowing small particles to become deeply embedded within the media.

NANOFILTER EFFICIENCY

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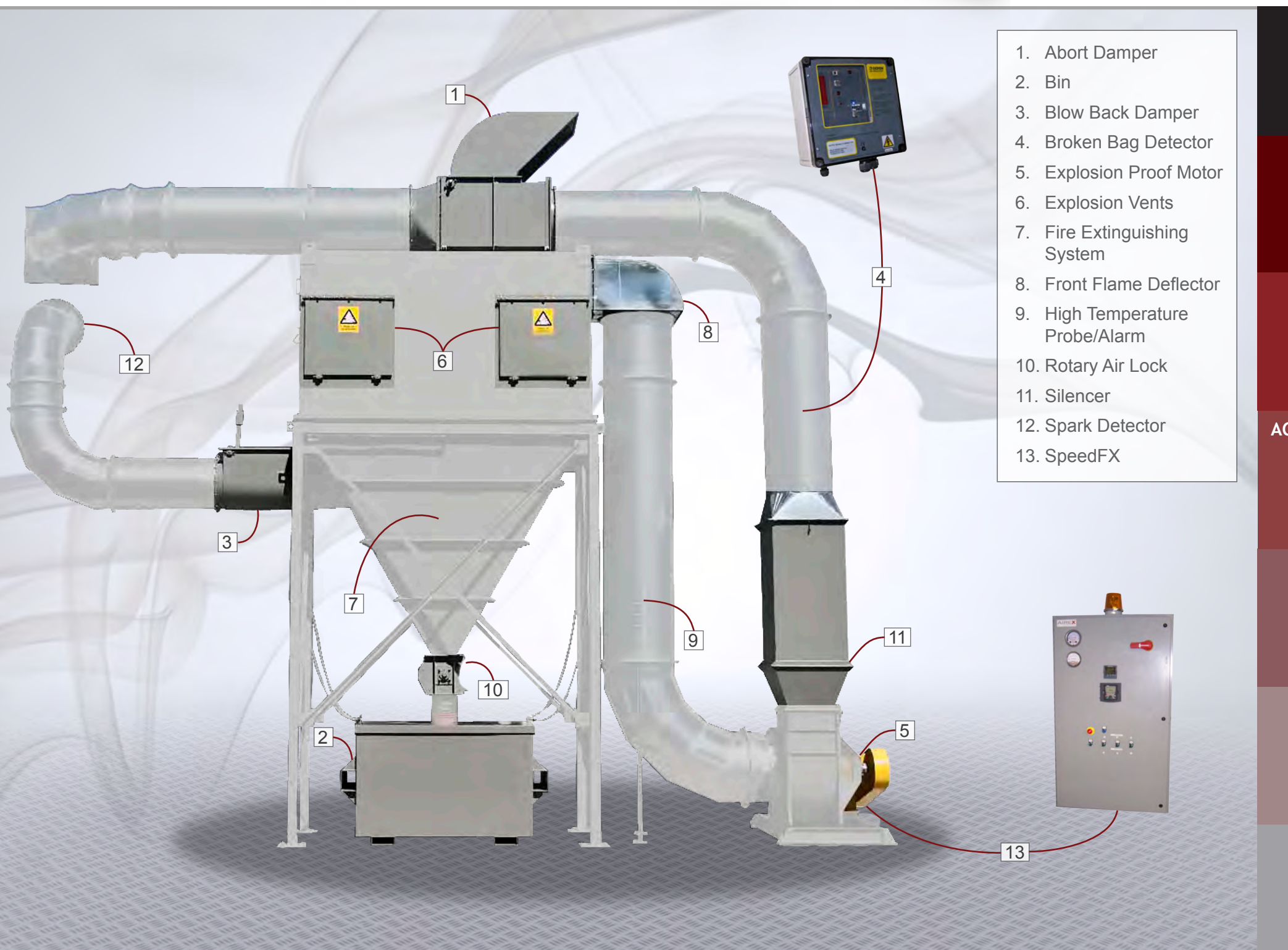
NANOFIBER FILTRATION TECHNOLOGY

Provides unequaled surface loading capabilities with nano sized interfiber pores. Dust particles easily pulse off the surface layer, keeping the media clean.

Other types of cartridge filters enable particulate to become embedded deep within the media substrate. These depth-loading filters require intensive cleaning and are subject to continual abrasion and wear. Although cellulose filters use a melt blown surface treatment to capture particles on the surface, they also form a layer approximately 100 times thicker than nanofiber filters do. This creates very deep and wide pores that allow particles to penetrate deep within the media substrate, similar to other depth-loading cartridge filters.

FILTERS FEATURES

- Best in class MERV 15 efficiency on sub micron particulate.
- Lower initial & operating pressure drop.
- Reduction in cleaning cycles, prolongs filter life.
- Compressed air and energy savings.
- Reduced outlet emissions.
- Reduced downtime.



1. Abort Damper
2. Bin
3. Blow Back Damper
4. Broken Bag Detector
5. Explosion Proof Motor
6. Explosion Vents
7. Fire Extinguishing System
8. Front Flame Deflector
9. High Temperature Probe/Alarm
10. Rotary Air Lock
11. Silencer
12. Spark Detector
13. SpeedFX

ACCESSORIES

ENHANCE YOUR PERFORMANCE AND SECURITY

Some options like the SpeedFX™ can vary motor speed and energy consumption thus improving efficiency.

A number of Airex accessories aim to meet NFPA regulations, preventing against fire and explosions while better protecting workers and facilities.

FIRE PROTECTION ACCESSORIES

Abort Damper

Connected with a proper spark or fire detection system, the abort damper redirects exhaust air into the atmosphere as soon as a spark is detected.

Blow Back Damper

Ensure there is a seal, if a fire or explosion occurs in the dust collector, preventing return of smoke and fire to the shop by the intake ductwork.

Explosion Vents

The explosion vents redirect a propagating flame or explosion to atmosphere via pressure rated washers.

Rotary Air Lock

Designed to control the flow of discharge material from a dust collector or other type of process while maintaining an air seal.

Spark Detection & Fire Extinguishing System

Counters the spread of fire with a temperature probe and sprinkler. : Spraying the collector and stops the blower (eliminating oxygen intake).



LEDGELESS
CONSTRUCTION

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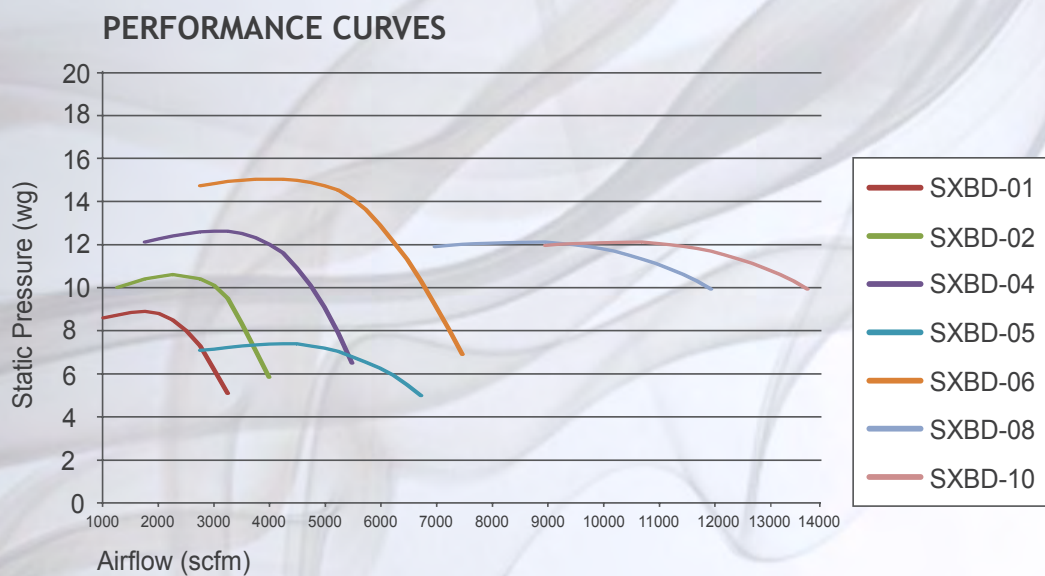
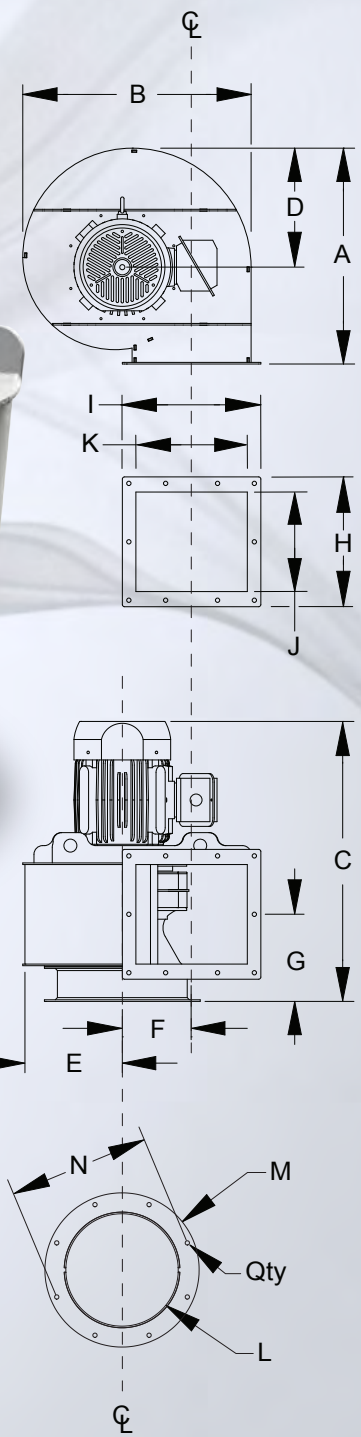
TRUE LEDGELESS INTERIOR TO BETTER MEET NFPA STANDARDS:

1. All reinforcements, flanges and bolted connections are outside the collector. This results in a completely ledgeless interior leaving no free surfaces left for the accumulation of dust.
2. True hopper with minimal angles of 60 degrees on the interior slope eliminates the possibility of dust accumulation.
3. Includes new and improved cams and cam handles that make for an easier cartridge change out and efficient seal.
4. Improved flat interior door design eliminates edges.
5. Its robust body is entirely built of fully welded 7 and 10 gauge steel panels.

THE MODULAR LEDGELESS CONCEPTION WILL PROTECT YOU FROM THE FOLLOWING ACCUMULATION ISSUES

- A**
Bridging between horizontal cartridges due to top loading and overlapping.
- B**
Door ledges allow material to accumulate during normal operation, thus creating a hazardous situation.
- C**
Hopper bridging due to inadequate slope angle.

BLOWER MODEL	CFM	H2O	RPM	DBA AT 5FT FROM FIELD	MOTOR			SHIPPING WEIGHT (LBS)
					HP	FRAME	Ø SHAFT	
SXBD-01	3000	6	3450	79.6	5	184T	1.125	690
SXBD-02	2500	10	3450	81.4	7.5	213T	1.375	771
SXBD-04	4000	12	3450	82	15	254T	1.625	942
SXBD-05	6000	6	1750	78.9	15	254T	1.625	1032
SXBD-06	6000	12	3450	85	20	256TS	1.625	1168
SXBD-08	8000	12	1750	82	30	286T	1.875	1187
SXBD-10	10000	12	1750	82	30	286T	1.875	1193



BLOWER MODEL	GENERAL DIMENSIONS							SQUARE FLANGE DIM.				CIRCULAR FLANGE DIM.			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Qty
SXBD-01	22 3/4"	25 7/8"	27 5/8"	12 1/2"	10 1/2"	7 7/8"	9 1/2"	14"	15"	10 1/4"	11 5/8"	13"	18"	16 1/2"	8
SXBD-02	25"	27 1/2"	32 3/8"	13 3/4"	11 1/2"	8"	10 1/8"	15"	16"	11 1/2"	12 7/8"	14 1/2"	18"	16 1/2"	8
SXBD-04	27 1/2"	31 1/4"	40 5/8"	14 3/4"	12 1/2"	9 3/4"	10 5/8"	16"	18"	12 3/4"	14 5/8"	16"	19 1/2"	18"	8
SXBD-05	39 1/4"	44 1/4"	46"	22"	17 1/2"	14 1/4"	13 3/8"	22"	25"	18 1/8"	21 5/8"	24 5/8"	28"	26 1/2"	16
SXBD-06	30"	34 3/8"	41 1/2"	17 3/4"	14"	10 3/8"	11 1/8"	17"	20"	13 5/8"	16 1/8"	18 1/8"	21 1/2"	20"	8
SXBD-08	47 3/4"	52 1/2"	47 7/8"	28"	21 1/2"	18"	14 1/4"	23"	30"	19 3/4"	26 1/8"	33 1/2"	30 1/8"	33 1/2"	16
SXBD-10	47 3/4"	54 1/2"	49 3/8"	28"	21 1/2"	18"	30 1/2"	25"	30"	21 3/8"	26 1/8"	33 1/2"	30 1/8"	33 1/2"	16

THE BLOWER

THE BACKWARD INCLINED DIRECT DRIVE INDUSTRIAL BLOWER

The SXBD™ Series blower have a backward inclined wheel mounted directly on to the motor shaft. The motor is mounted outside the airflow and the design meets AMCA 'C' standards.

Our blower design maximizes efficiency while reducing power loss, maintenance and troublesome adjustments.

A range of motors/blowers are available to cover airflows up to 10 000 cfm at 12" H2O.

HEADLIGHT ADVANTAGES

Reduced initial cost

With the absence of pulleys, fan bearings and belts, The high efficiency blower design offer competitive manufacturing costs and lower power consumption.

Low maintenance cost

The optional quick access door and the absence of pulleys, fan bearings and belts reduces maintenance time and costs.

Compact design

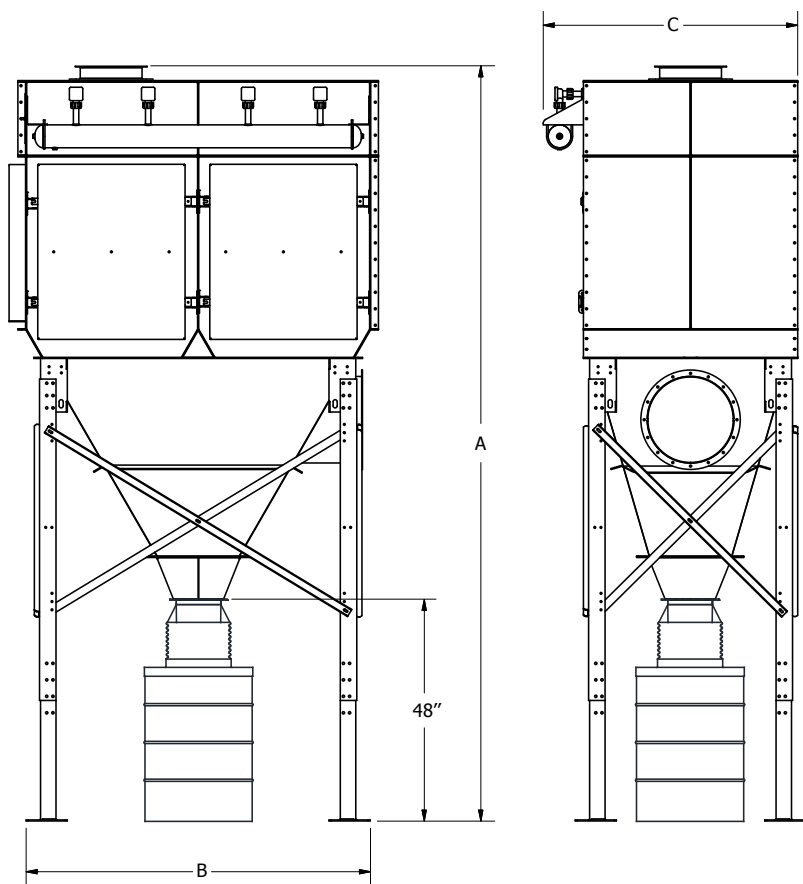
Mounts directly to the dust collector's clean-air plenum, eliminating costly transitions.

Explosion-proof motor (optional)

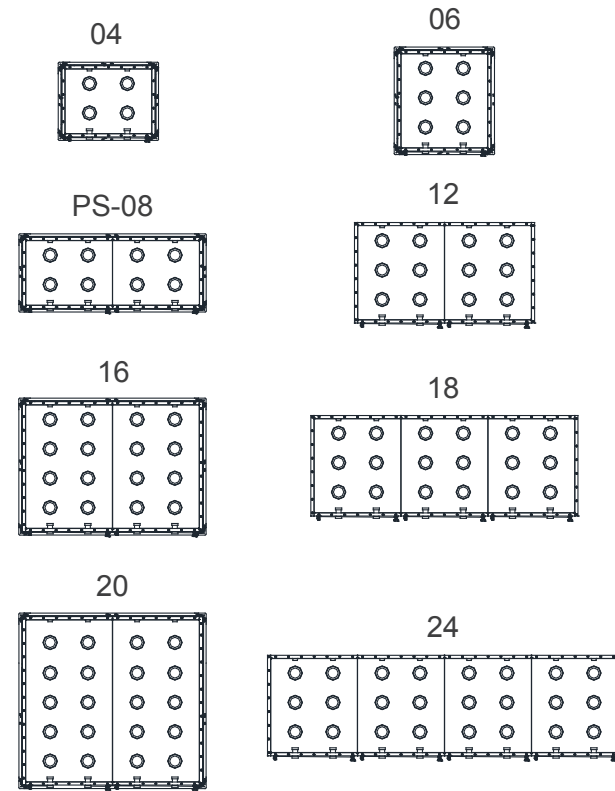
This class of motor is rated for use in explosive areas (outside the dirty air stream).

Pressures available up to 15" H2O

Static pressure capabilities help maintain CFM and air flow through heavy ductwork arrangement.



Modular Cartridges Layout



Modular Model Comparison:

MODEL	CARTRIDGES		VALVE QTY	HOPPER QTY	DIMENSIONS			WEIGHT (LBS/KG)	FILTRATION SURFACE (SQRT FT/SQRT M)	MAX AIR FLOW (CFM)**
	LAYOUT	QTY			A (IN/MM)	B (IN/MM)	C (IN/MM)			
04	2x2	4	2	1	141"	46.75"	47"	1546	1260	3000
					3582	1188	1194	701	117	
06	2x3	6	2	1	153"	46.75"	63"	1797	1890	5000
					3886	1188	1600	815	176	
08	4x2	8	4	1 or 2	177"	88.5"	47"	2237	2520	6000
					4496	2248	1194	1014	234	
12	4x3	12	4	1 or 2	177"	88.5"	63"	2919	3780	9000
					4496	2248	1600	1324	351	
16	4x4	16	4	1	177"	88.5"	79"	3179	5040	12000
					4496	2248	2007	1442	468	
18	6x3	18	6	1 or 3	213"	130.25"	63"	3392	5670	15000
					5410	3308	1600	1538	527	
20	4x5	20	4	1	177"	88.5"	95"	3800	6300	16000
					4496	2248	2413	1700	585	
24	8x3	24	8	2 or 4	177"	172"	63"	4259	7560	18000
					4496	4369	1600	1932	702	



PS-24



PS-04



PS-12



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