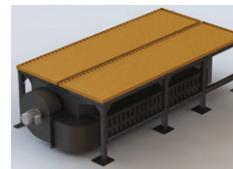




Precision

Dust Collection Systems



available in 1000 units

Precision Dust Collection Systems (PDCS) is a privately owned Canadian company located in Canada that has designed and produced some of the most unique filtration solutions for its North American customers using a broad range of products for air pollution control, material handling and liquid filtration projects.

On top of manufacturing our own line-up of custom made dust collection systems, PDCS is also the Ontario dealer for the worldwide known dust collector producer, Nederman dust collection products and also NordFab Ducting for a complete dust collection solution to meet your needs.

As Nedermans local distributor, we can help you design a working environment uniquely suited to your requirements - from single workplace installations to advanced system solutions. PDCS, in conjunction with Nederman, provides support that encompasses every step - from consultation and design, to installation and after sales service.



Precision

Dust Collection Systems

Over the years, PDCS has developed small compact and tightly integrated dust collection machines that are designed to remove dust and particulate from process lines, work areas and manufacturing equipment, to analyzing existing systems or a particular challenge in various areas of operations; customers look to Precision Dust Collection Systems for providing solutions.

Large scale projects that involve complete plant solutions are also in our capacity; when it seems that you have no one else to turn to for some simple advice, prices or a starting place, a PDCS representative is only a phone call away. A generator of ideas or solutions for many years, PDCS, has been able to offer some rather unique, sometimes plain and simple approaches to many Fortune 500, medium size and even small start-up companies.

From a simple service call, to a sales call, our dedicated team can offer clear ideas and informative answers in a comfortable and caring manner to you, either in person, over the internet or by phone. Your concerns are heard, listened to, sometimes visually sketched out or even photographed so a clear idea and understanding of the issue becomes clear and is the basis towards developing a solution. All our PDCS products are manufactured in Canada, others in the USA and Taiwan and can easily be shipped right to your facility. We can also arrange installing and maintaining the equipment by our group of certified technicians and service personal and channel partners. A phone call, email or voice mail, will easily initiate our PDCS group into action to begin working on your particular problem right away and bring a solution that you are looking for...TODAY!



We are here to help, inform and work with you!

Table of Contents

Dust Collectors

"A" Type.....	2
"B" Type.....	3
"DDT" Type	5
"ECT" Type.....	6
"PC" Type	7
"PF" TYPE.....	8
"S" TYPE.....	9
"WT" WET TYP	10
Operations Manual.....	11

- Using Your Collector
- Shutting Down Your Collector
- Routine Maintenance

Safety Measures.....	13
-----------------------------	-----------

- Workers/Staff
- Electrical Components
- Explosive Dusts
- Anchors
- Interior Installation
- Processes Creating Sparks
- Before entering the dust collector

Trouble Shooting Check List	14
--	-----------

- Visible Exhaust Dust Loss
- Insufficient Air Pressure
- Entire Row of Bag inadequately cleaned
- Random Bag Inadequately Cleaned
- High Differential Pressure
- Improper Pulsing
- Short Bag Life
- Timer Malfunction
- Unusual Differential Pressure Gauge Readings

Replacement Parts	16
--------------------------------	-----------

Wheels	Shaker Block Eccentrics
Bags	Industrial Exhauster Fans
Rotary Airlocks & Components	Ducting
Fume Capture Arms	Fire-Explosion Provision Options
In-line Duct Silencer	Additional Parts Available

Warranty	Inside Back Cover
-----------------------	--------------------------

“A” TYPE DUST COLLECTORS

- Very Quiet Operation
- Low Updraft Velocity
- High Efficiency
- Primary Separation
- Secondary Separation
- Return Air available
- Sizes from 15hp and up, all voltages (no single phase)

- Extractor fan with TEFC high efficiency motor and drives
- Electric filter shaker with TEFC motor and gear reducer(s)
- Polyester filter bags, 8" dia. (washable)
- Inlet back draft damper
- Structural steel frame, OSHA guards
- Sprinkler connection in filter cabinet
- Hinged access door for walk-in to filter section
- Safety platform, railings and ladder(s)
- Explosion door(s) available (not included)



TYPE “AA”

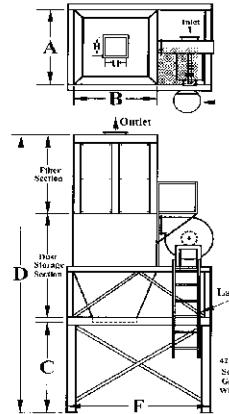
- Trough screw conveyor (gather type) on hopper discharge
- Rotary air lock for continuous waste removal
- 12" X 12" X 5/8" foot mounting plates will be supplied

TYPE “A”

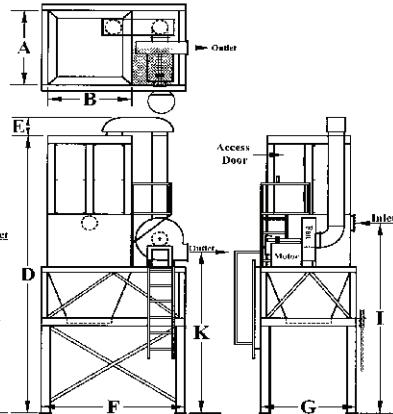
Standard & Arrangement 1

- Storage capacity in hopper & heavy duty slide gate, 42"X42"

Standard Arrangement



Arrangement 1



General Specifications

- Free standing
- Structural frame
- Weatherproof
- Heavy gauge steel construction
- Prime and finish painted
- Motors – TEFC, high efficiency
- Polyester filters with snap in rings (washable)
- Hinged access door to filter section
- Safety platform, railings and ladder(s)
- Sprinkler head(s)
- Motorized filter shaker assemblies

TYPE	CFM at 10" S.P.		FAN HP	SHAKER HP	INLET DIA.	FILTER AREA (8" Ø)	STORAGE (ft³)	WEIGHT APPROX. (lbs.)	A	B	C	D	E	F	G	H	I	J	K
	Material Handling	Air Handling																	
A 13	4232	5130	15	3/4	13"	540	200	4000	6'-0"	6'-0"	10'-0"	26'-0"	13	9'-4"	6'-9"	16	17'-10"	14'-10"	13'-10"
A 15	5612	6905	20	3/4	15"	700	300	5100	7'-0"	7'-0"	10'-0"	26'-0"	15	10'-8"	7'-9"	18	17'-10"	15'-2"	14'-0"
A 17	6908	8730	25	1	18"	880	500	6300	8'-0"	8'-0"	10'-0"	27'-3"	18	11'-10"	8'-9"	22	16'-5"	16'-5"	15'-0"
A 19	8580	10093	30	1	20"	1170	500	7400	9'-0"	9'-0"	10'-0"	28'-3"	20	12'-4"	9'-9"	24	19'-11"	17'-10"	16'-3"
A 21	10994	14028	40	1 1/2	22"	1400	700	8600	10'-0"	10'-0"	11'-0"	30'-5"	22	14'-8"	10'-9"	26	22'-0"	20'-0"	18'-3"
A 23	13680	16812	50	(2) 1	24"	1700	800	10500	10'-0"	12'-0"	11'-0"	32'-0"	24	17'-0"	10'-9"	28	23'-4"	21'-3"	19'-4"
A 26	16284	20054	60	(2) 1	26"	1990	1000	12000	10'-0"	14'-0"	11'-0"	33'-5"	26	19'-8"	10'-9"	30	24'-6"	22'-5"	20'-4"
A 29	20976	25446	75	(2) 1 1/2	30"	2340	1000	14100	10'-0"	15'-0"	12'-0"	33'-0"	30	21'-2"	10'-9"	(2) 24	23'-9"	21'-10"	19'-4"
A 33	27186	35000	100	(2) 1 1/2	34"	2780	1000	16000	10'-0"	16'-0"	12'-0"	33'-0"	34	16'-9"	10'-9"	(2) 28	23'-9"	FAN & MOTOR GROUND MOUNTED	
A 37	34086	44000	125	(2) 2	38"	3500	1200	18000	10'-0"	18'-0"	12'-0"	33'-0"	38	18'-9"	10'-9"	(2) 30	23'-9"		

“B” TYPE SHAKER DUST COLLECTORS



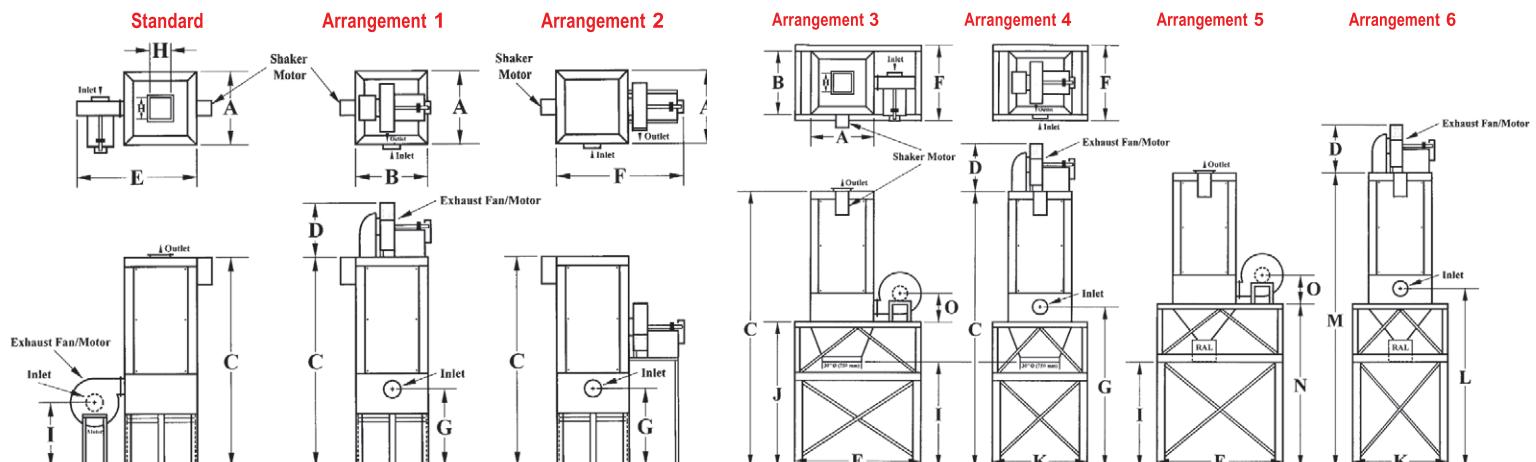
- Lowest updraft velocity
- Highest efficiency with the industries only: a) Primary cyclone separator b) Secondary filter separator
- Same unit used inside or outside on/off structural steel
- From 5 hp to 60 hp in all voltages
- 5" filters for fine dust
- 8" filters for larger mixed dust
- Lowest operating cost of all wood dust collectors by volume
- Paint coated inside and out for years of great looks to match its great operation.
- Internal cyclone spins dust out before it contacts the bags.
- Best value for the money!



Standard, Arrangement 1, Arrangement 2

- Extractor fan with TEFC high efficiency motor and drives
- Electric filter shaker with TEFC motor and gear reducer(s)
- Polyester filter bags, 5" or 8" dia. (washable)
- Inlet back draft damper
- Support legs
- Drums, connector sleeves and quick disconnect clamps

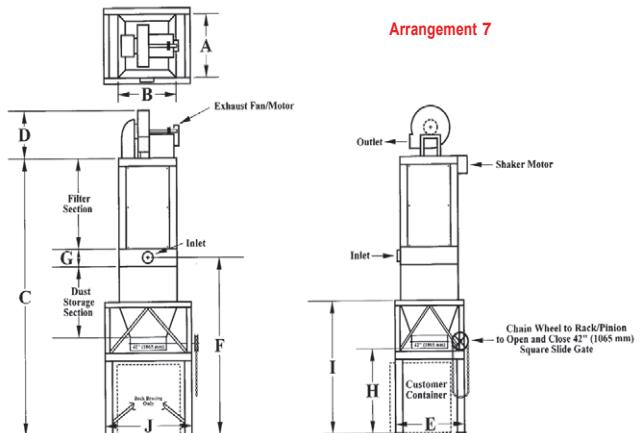
- Sprinkler connection in filter cabinet
- Easy access door to filter section
- Explosion door(s) available (not included)
- OSHA guards
- Summer/Winter damper for return air line available (not included)



Ask us for your complete shop solution.
 Our highly rated shaker dust collector with quick lock ducting designed
 for your shop with full installation and service.

Arrangements 3 - 7

- Extractor fan with TEFC high efficiency motor and drives
- Electric filter shaker with TEFC motor and gear reducer(s)
- Polyester filter bags, 5" or 8" dia.
- Inlet back draft damper
- Structural steel frame
- Rotary air lock for continuous waste removal
- Sprinkler connection in filter cabinet
- Easy access door to filter section
- Explosion door(s) available (not included)
- Safety platform, railings and ladder(s)
- Bin Collection
- OSHA guards
- Fire damper available (not included)
- Summer/Winter damper for return air line available (not included)



Standard, Arrangement 1, Arrangement 2

TYPE	CFM at 10" S.P.	FAN HP	SHAKER HP	FILTER AREA		INLET DIA.	WEIGHT APPROX. (lbs.)	NUMBER OF DRUMS	A	B	C	D	E	F	G	H	I
				8" Ø	5" Ø												
B 09	1684	5	1/2	170	210	9"	800	2	41	48	139	31	67	74	51	12	45
B 11	2600	7 1/2	1/2	245	330	11"	1200	4	48	48	139	38	79	86	51	14	40
B 13	3600	10	1/2	340	425	13"	1500	4	60	60	139	42	96	101	51	16	39
B 15	4900	15	1/2	405	550	15"	1700	4	60	60	147	48	101	106	56	18	44
B 17	6500	20	3/4	530	690	17"	2500	4	72	72	147	54	117	120	56	22	41
B 19	8152	25	3/4	685	855	19"	2600	6	84	84	147	59	135	139	56	24	38
B 21	9820	30	1	840	1010	21"	2800	6	96	96	147	69	153	158	56	26	35
B 23	12889	40	1	1406	1920	23"	3200	6	112	112	147	71	171	176	56	28	33

Arrangement 3, 4, 5, 6

TYPE	CFM at 10" S.P.	FAN HP	SHAKER HP	FILTER AREA		INLET DIA.	WEIGHT APPROX. (lbs.)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
				8" Ø	5" Ø																	
B 09	1684	5	1/2	170	210	9"	1200	41	48	185	31	96	50	97	12	72	86	72	124	212	113	17
B 11	2600	7 1/2	1/2	245	330	11"	1500	48	48	191	38	96	57	103	14	72	92	72	131	219	120	20
B 13	3600	10	1/2	340	425	13"	1800	60	60	203	42	108	69	115	16	72	104	96	149	237	138	23
B 15	4900	15	1/2	405	550	15"	2200	60	60	211	48	108	69	119	18	72	104	96	153	245	138	26
B 17	6500	20	3/4	530	690	17"	3000	72	72	223	54	120	81	131	22	72	116	96	167	259	152	29
B 19	8152	25	3/4	685	855	19"	3200	84	84	235	59	144	93	143	24	72	128	96	179	271	164	34
B 21	9820	30	1	840	1010	21"	3500	96	96	247	69	162	105	155	26	72	140	105	189	281	174	36
B 23	12889	40	1	1406	1920	23"	4000	112	112	263	71	183	121	171	28	72	156	121	205	297	191	39

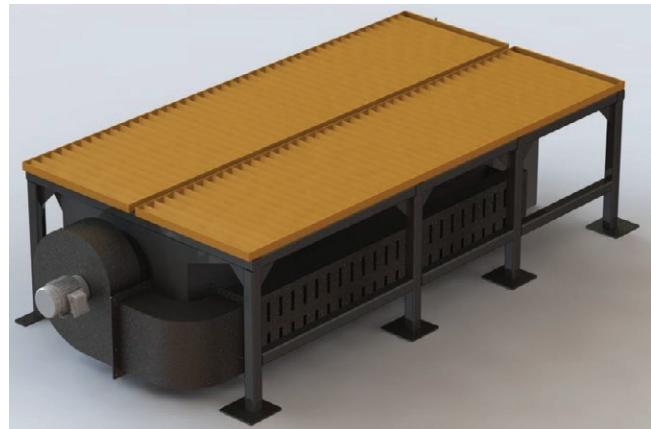
Arrangement 7

TYPE	CFM at 10" S.P.	FAN HP	SHAKER HP	FILTER AREA		INLET DIA.	WEIGHT APPROX. (lbs.)	A	B	C	D	E	F	G	H	I	J	STORAGE (ft³)			
				8" Ø	5" Ø																
B 09	1684	5	1/2	170	210	9"	1200	41	48	231	31	50	143	22	72	96	72	50			
B 11	2600	7 1/2	1/2	245	330	11"	1500	48	48	237	38	57	149	22	72	102	72	70			
B 13	3600	10	1/2	340	425	13"	1800	60	60	249	42	69	161	22	72	114	96	120			
B 15	4900	15	1/2	405	550	15"	2200	60	60	257	48	69	165	30	72	114	96	120			
B 17	6500	20	3/4	530	690	17"	3000	72	72	269	54	81	177	30	72	126	96	180			
B 19	8152	25	3/4	685	855	19"	3200	84	84	281	59	93	189	30	72	138	96	270			
B 21	9820	30	1	840	1010	21"	3500	96	96	293	69	105	201	30	72	150	105	370			
B 23	12889	40	1	1406	1920	23"	4000	112	112	309	71	121	217	30	72	166	121	480			

“DDT” TYPE DUST COLLECTORS

Both the Pulse 4000 and Pulse 6000 are ideally suited for sanding, polishing, grinding and non-explosive fumes and vapours. Used on Metal, wood, plastic, stone, glass, leather etc.

- Sturdy, heavy duty, high efficiency down draft tables
- Comes with 4 or 6 filter cartridges
- Filter media is spun bonded polyester or paper
- For inside use
- Cleaning is done with a compressed air blast, activated by a push button
- 3 side access to table
- Available in 3 phase and single phase
- Filter cartridges are 12 3/4" dia. by 22" long, no plate
- Starter is dust tight and magnetic, 3 phase, 60 cycles, Single phase available at an additional charge
- Table top slats are hardwood or baked enamel metal slats
- Slats are chevron shaped
- Total height of table is 33"



Specifications for the Pulse 4000:

3 hp, TEFC, 1750 rpm, H.E. motor

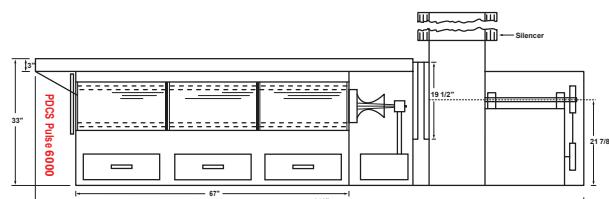
- Working area is 39" x 78" (1m x 2m)
- Table top slats are hardwood or baked enamel metal slats
- Slats are chevron shaped
- Total height of table is 33"
- Total length is 80"
- Filter area is 520 sq ft
- Blower capacity is 3500 cfm
- 2 Collection drawers
- 4 filter cartridges, 22" long, 2 pcs open-open, 2 pcs open-closed
- Quiet operation



Specifications for the Pulse 6000:

5 hp, TEFC, 1750 rpm, H.E. motor

- Working area is 48" x 96"
- Total length is 141"
- Filter area is 780 sq ft
- Blower capacity is 6000 cfm
- 3 Collection drawers
- 6 filters cartridges, 22" long, 4 pcs open-open, 2 pcs open-closed
- Quiet Operation



Optional features: Side panels, back draft deflectors, lift up lids with hand ports and viewing windows. Full canopy with working lights. Wood top or metal top, optional fume arms.

Polyester filter cartridges are Pulse cleaned right in the system... and are made to last a long time. Replacement is fast & economical too!

“ECT” TYPE DUST COLLECTORS

- Very Economical
- High Efficiency
- Silencer
- Spun Bonded Polyester Cartridges
- Sizes from 1 hp to 5 hp, all voltages



- Extractor fan with TEFC high efficiency motor
- All steel construction and structural steel frame
- Primary material deflector
- Secondary separator
- Removable dust storage tray
- Available drum and legs package
- Available explosion venting
- Silencer included for quiet operation
- Access door for filters
- Pulse valve and manifold
- Top mounted motor and blower
- Starter
- Compressed air supply of 95 psi needed
- Especially suited for fine dust

Polyester filter cartridges are Pulse cleaned right in the system... and are made to last a long time. Replacement is fast & economical too!



General Specifications

- Free standing
- 14 Gauge steel construction
- Prime and finish painted
- Motors – TEFC, 3450 rpm, high efficiency
- 1 open/open & 1 open/closed filter cartridges included
- Filter media is polyester
- Silencer included

Note:

- Listed dimensions are for reference only
- Certified correct drawing will be issued before construction
- Motors, Impellers and filters are excluded.
- We reserve the right to make technical improvements without prior notice

MODEL	FAN HP	INLET DIA.	CFM AT		STORAGE (ft ³)	FILTER AREA (ft ²)	APPROX. WEIGHT (lbs.)	DIM "A"
			1" S.P.	4" S.P.				
ECT 12	1	6"	800	600	1.9	184	300	13 1/2"
ECT 22	2	7"	1200	1000	1.9	184	320	14 1/2"
ECT 32	3	7"	1600	1350	1.9	184	350	16 3/4"
ECT 52	5	8"	2100	1850	1.9	184	400	18 3/4"

MODEL	FAN HP	INLET DIA.	CFM AT		STORAGE (ft ³)	FILTER AREA (ft ²)	APPROX. WEIGHT (lbs.)	DIM "A"
			1" S.P.	4" S.P.				
ECT 14	1	6"	800	600	2.8	368	350	13 1/2"
ECT 24	2	7"	1200	1000	2.8	368	380	14 1/2"
ECT 34	3	7"	1600	1350	2.8	368	400	16 3/4"
ECT 54	5	8"	2100	1850	2.8	368	460	18 3/4"

“PC” TYPE DUST COLLECTORS

- Very Quiet Operation
- Compact design
- High Efficiency
- Primary Separation
- Secondary Separation
- Return Air available (not included)
- Use Inside or Outside
- Sizes from 2 hp to 100 hp in all voltages
- Silencer available (not included)
- Summer/Winter damper for return air line available (not included)



All Models include

- Extractor fan with TEFC high efficiency motor and drives
- Cartridge filters and venturis
- Side inlet and material deflector, OSHA guards
- Inlet back draft damper
- Front access doors for easy filter removal
- Easy to use filter clamping system
- Pulse valves, manifold and automatic pulse controller
- Explosion door(s) available (not included)

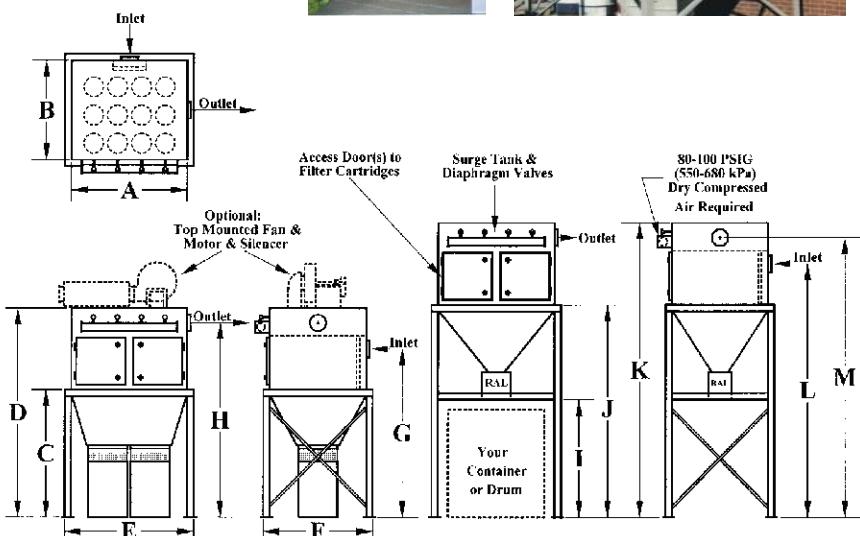


Arrangement 1

- Support legs
- Drums, connector sleeves, quick disc. clamps

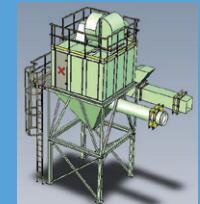
Arrangement 2

- Structural stand pre-assembled
- Rotary air lock for continuous waste removal
- Fan on clean air side
- Safety platform, railings and ladder(s)



TYPE	CFM	FAN HP	FILTER AREA (ft ²)				MIN IN/OUT DIA.	WEIGHT APPROX. (lbs.)	A	B	C	D	E	F	G	H	I	J	K	L	M	NO. OF DRUMS	ROTARY AIR LOCK SIZE
			1	2	3	4																	
PC 02	600	2	308	450	70	100	6	800	36	24	66	119	43	31	90	109	72	107	157	130	147	1	10X10
PC 04	1100	3	616	900	140	200	7	1000	36	42	66	119	43	49	90	109	72	107	157	130	147	1	10X10
PC 06	1600	5	924	1350	210	300	9	1500	60	48	66	119	67	55	88	109	72	130	180	152	170	2	10X10
PC 09	2400	7 1/2	1386	2025	315	450	11	2000	60	60	78	131	67	67	100	121	72	130	180	152	170	2	10X10
PC 12	3000	10	1848	2700	420	600	12	2800	72	60	78	131	79	67	100	121	72	130	180	152	170	2	10X10
PC 15	3800	10	2310	3375	525	750	13	3200	87	66	78	131	94	73	98	121	72	143	193	164	183	2	10X10
PC 20	5000	15	3080	4500	700	1000	14	4000	92	84	78	131	91	91	98	121	72	143	193	164	183	4	10X10
PC 25	6400	20	3850	5625	875	1250	16	4600	96	84	90	143	105	93	108	133	72	164	214	184	204	4	14X14
PC 30	8000	25	4620	6750	1050	1500	18	5400	104	96	90	143	113	105	108	133	72	164	214	184	204	4	14X14
PC 35	10000	30	5390	7875	1225	1750	20	6200	122	96	90	143	131	105	106	133	72	188	238	204	228	4	14X14
PC 40	13000	40	6160	9000	1400	2000	22	7000	142	96	90	143	151	105	106	133	72	188	238	204	228	6	14X14
PC 45	15000	50	6930	10125	1575	2250	24	7800	160	96	90	143	169	105	104	133	72	200	250	202	240	6	14X14

“PF” TYPE DUST COLLECTORS



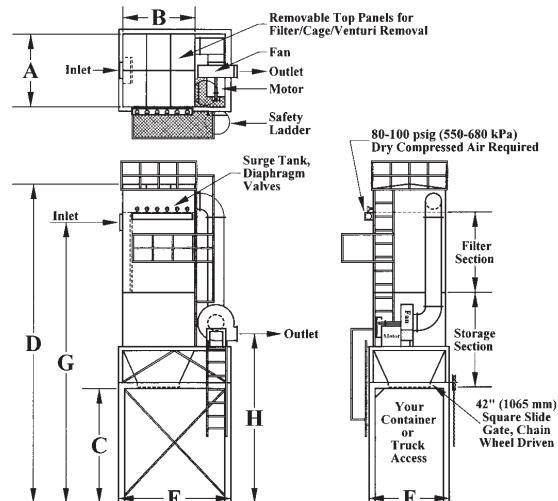
- A new dust collector with pulse cleaning 5" dia. polyester filter bags
- Filters are cleaned in sequence a row at a time continuously
- Sequencing timer is adjustable
- Demand cleaning with Goyen controller available.
- Pull through or push in design



- Extractor fan with TEFC high efficiency motor and drives
- Polyester filters, cages and venturis
- Side inlet and material deflector
- Inlet back draft damper
- Sprinkler head in filter cabinet
- Top access panels to filter section
- Pulse valves, manifold and automatic pulse controller
- Explosion doors on top
- OSHA guards
- Drums, connector sleeves and quick release clamps (PF 20-PF 42)
- Storage capacity in hopper on some models
- Heavy duty slide gate, 42" x 42"
- Safety platform, railings and ladder(s)

Options

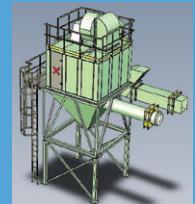
- Rotary air lock in place of slide gate for continuous discharge
- Bindicator for storage section if applicable
- Various filter materials: polyester or polyester mix
- Choice of orientation for the following: Inlet, Outlet and Truck access
- Return air available (not included)
- Compressed air supply of 95-100 psi needed
- Screw conveyer assembly to air lock available (not included)
- OSHA guards



TYPE	NOMINAL CFM	FAN HP	FILTER AREA	INLET DIA.	STORAGE (ft³)	WEIGHT APPROX. (lbs.)	A	B	C	D	E	F	G	H
PF 20	2300	7 1/2	209	10	2 drums	1400	3'-6"	3'-0"	3'-6"	13'-0"	5'-6"	4'-0"	11'-0"	4'-4"
PF 30	3300	10	314	12	2 drums	2000	4'-0"	4'-0"	3'-6"	13'-0"	7'-0"	4'-6"	10'-10"	4'-6"
PF 42	4700	15	440	14	2 drums	2600	5'-6"	5'-0"	3'-6"	13'-0"	8'-0"	6'-0"	10'-8"	4'-4"
PF 63	6400	20	660	16	200	6200	6'-0"	6'-0"	10'-0"	26'-6"	9'-4"	6'-9"	24'-0"	14'-0"
PF 80	8000	25	837	18	300	8000	7'-0"	7'-0"	10'-0"	27'-0"	10'-8"	7'-9"	24'-0"	14'-0"
PF 96	10000	30	1005	20	500	9000	8'-0"	8'-0"	10'-0"	28'-0"	11'-10"	8'-9"	25'-0"	15'-3"
PF 126	13000	40	1319	22	500	10000	9'-0"	9'-0"	10'-0"	29'-6"	12'-4"	9'-9"	25'-0"	16'-3"
PF 160	16000	50	1675	24	700	12000	10'-0"	10'-0"	11'-0"	31'-6"	14'-8"	10'-9"	27'-0"	18'-4"
PF 192	19000	60	2010	26	800	14000	10'-0"	12'-0"	11'-0"	32'-6"	17'-0"	10'-9"	28'-0"	19'-3"
PF 224	23000	75	2345	30	1000	17000	10'-0"	14'-0"	11'-0"	33'-6"	19'-8"	10'-9"	29'-0"	20'-5"
PF 288	29000	100	3015	34	1000	19000	10'-0"	15'-0"	12'-0"	33'-0"	15'-9"	10'-9"	28'-0"	*
PF 352	35000	125	3685	38	1000	21000	10'-0"	16'-0"	12'-0"	33'-0"	16'-9"	10'-9"	27'-6"	*
PF 416	42000	150	4355	42	1200	25000	10'-0"	18'-0"	12'-0"	33'-0"	18'-9"	10'-9"	27'-0"	*

Drum Storage and No Ladders or Platforms for PF 20, PF 30 and PF 42 * Fan and Motor Ground Mounted

“S” TYPE (PDCS) PORTABLE DUST COLLECTORS



PDCS with 1 or 2 stations: Ideal for Wood, Plastics, Paper, Chemicals, Foodstuff, Metals, Leather and more.

PDCS's come in many different filter arrangements, 1, 2 or 4 bags, 6 or 12 top bags with 1 or 2 bottom bags.

All units come complete with filter bags & clamps.
Switches, Silencers, multi-port inlet boxes are available as extra.



PDCS S 1



PDCS S 2-L



Cart "L"
Gas powered

Cart "D" (shown)



Twin 1hp electric
Cart "S" single mtr

- Filter bags are made from Polyester Beane or Felt. They have 99.97% efficiency and are washable
- Dust Collectors are for inside use only
- All Portable Collectors come with heavy duty casters, for easy movement
- Dust-tight, magnetic switches in 3 phase electrics are available.
- Standard colour is machine gray, custom colours are available
- Sheet metal components are 14 ga, 16 ga, 18 ga and 20 ga CRS
- All 3-phase motors are high efficiency, TEFC only



PDCS S 2, S 3, S 5 For Coarse Dust



PDCS S 2-6, S 3-6, S 5-6 For Mixed Dust

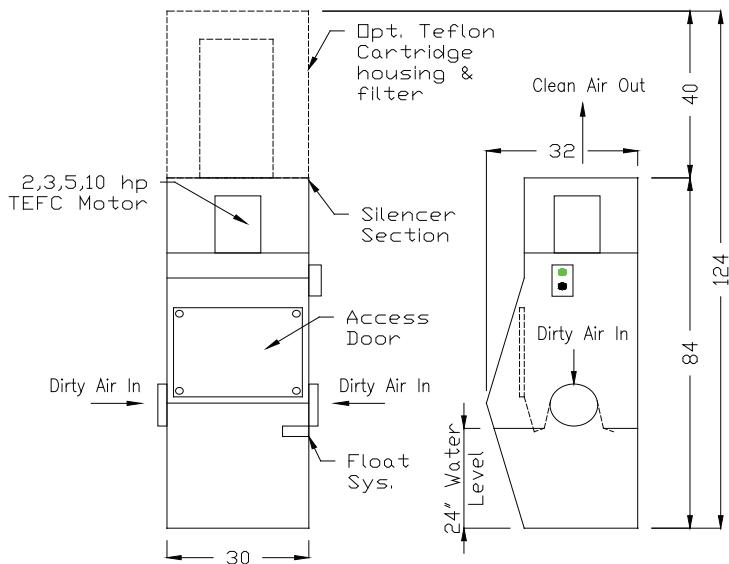
“WT” WET TYPE DUST COLLECTORS

- No internal moving parts, continuous cleaning
- Collector moves 2137 cfm at 1" sp. with a 5 hp high efficiency motor, 3450 rpm, TEFC
- All Steel construction, very sturdy, epoxy coated, (stainless available)
- Larger airflows and designs to 25,000 CFM available with pulse clean filters
- Fume arms, slotted backdrafts, downdraft tables and benches available
- Slotted duct for overhead capture and workspace freedom
- Small footprint – very quiet operation
- Automatic water level control
- Replace filters much less than conventional dry cartridge systems

- For Hot sparks, fine fume dust, metal particles
- Compact foot print design
- Use with available fume arms, hoods, tables.
- Very high efficiency with Teflon after filter(Optional)
- For inside use only
- Very Quiet operation-76 dBA
- Silencer on dry side
- Comes in 3 phase voltages
- Dust-tight switch included for simple on/off operation
- Collector uses water as the primary filter, and Opt Teflon coated final filters.
- Pulse clean also available for heavy duty use.
- For grinding, cutting, welding, plasma, laser, torch acetylene applications, steel sanding, scoring.
- Water is re-circulated using optional liquid filter housing and pump. Level control ensures water stays at right level for effective removal of particulate.

General Specifications

- Freestanding
- All Steel construction (14ga)
- Epoxy coated inside/outside
- Std Fan/Blower with 2,3,5,10hp motor
- Larger airflows to 25,000 CFM available
- Two slot back hoods for dual polishing, grinding
- Sludge filter & pump for waste removal (Optional)
- Convenient on/off switch and starter
- Dual left/right inlets – top outlet
- Teflon Filter option for fines removal
- Autoclean system (Optional) for larger airflows.





Precision

Dust Collection Systems

Operations Manual



Operations Manual

Using Your Collector

Standard Start-Ups should begin with all systems off. Exception: after new bags are installed, follow initial system Start-Up procedure. Turn on in the following sequence:

1. Filter bags & cages installed, all ports, access doors and rotating equipment closed with safety equipment (belt guards, etc.) in place.
2. Turn on compressed air
3. After pressure reaches 85-100 PSI (g), turn on the timer.
4. Turn on all dust discharge equipment.
5. Turn on the fan. Preheat the system if necessary.
6. If the collector discharge is visible, refer to the Trouble Shooting check list.

Shutting Down Your Collector

Shut down power to the collector and close all inlet and outlet dampers so that dust does not flow back into the unit. You may now access the collector for inspection, drum change or drum empty out and/or filter envelope replacement.

Dust control and pneumatic conveying systems Reverse start-up procedure. First, turn off the fan, wait five to ten minutes and turn off the timer and discharge (auxiliary) equipment.

Process Systems, Dryers and the system to the collector discharge should be run until empty and heat maintained at a reduced rate until the collector metal surfaces and filter bags are dry. Then proceed as above.

Routine Maintenance

Inspections Frequency will vary as widely as there are operating conditions. Your experience will be the best guide. In general, proceed as follows:

1. Daily adjust the timer "OFF-TIME" to achieve a differential pressure of 4" W.C.
2. Weekly check timer, solenoid valves and diaphragm valves for proper operation. Usually listening to determine that there is a uniform time interval between diaphragm valve air discharge blasts will suffice.
3. Monthly lubricate fan, rotary valve and screw conveyor. Inspect the seals on the airlock and screw conveyor for dust leakage. Refer to the respective IOM manual for instructions.
4. Quarterly inspect filter bags for condition.
5. Inspect, clean and replace air supply and differential pressure gauge filters as operating conditions require.

Safety Measures

Workers/Staff

Any maintenance on the collector should be accomplished by a minimum of two (2) workers. When finished, retrieve all tools inside the collector.

WARNING!

Never do maintenance tasks by an unaccompanied worker. All personnel must be accounted for before restarting the collector.

All maintenance staff should wear protective clothing or apparatus such as goggles, gloves, breathing equipment or such devices before working inside the collector.

Electrical Components

To avoid injuries, all electrical components must be shut off prior to inspection or servicing the unit. This procedure includes getting access to the filter section.

Explosive Dusts

If stored dusts have an explosion or flammable risk once stored in dust storage compartment, an explosion relief venting system or a fire extinguishing device is necessary. Should you have any doubt concerning filtered dusts, contact Precision or its representative.

Anchors

All sections of the collector should be firmly anchored to the ground in order to prevent tipping of the unit should an explosion occur or due to extreme winds.

Interior Installation

When a dust collector is installed inside of a building, the collector should be installed within 10 feet of an exterior wall and be connected to a vent duct connected to the exterior of the building. This vent duct system should possess the same procedure capabilities of the collector.

If the filtered air coming from the collector is recycled back into the building, certain precautions should be taken in order to exhaust air outside of the building in

the event a filter envelope inside the collector should fail in its performance or other performance deficiency. A secondary filtration system should be considered to protect staff or personnel within the building.

Bursts of air exhausted out of the collector or of the explosion vent should be directed out of the way of pedestrian walkways, parking lots, offices or any other area where people could have access.

Processes Creating Sparks

If dusts or collected matter in present in the collector or in the equipment connected to the collector, no activity that could create sparks such as welding should take place until the system has been shut down and thoroughly cleaned. If similar operations should be performed in the area of the filter envelope, such filter should be removed and stored in a dry area.

A scheduled preventative maintenance program will reduce downtime situations and increase lifetime of the unit.

Before entering the dust collector

1. Run cleaning system for 20 minutes with the fan turned off to clean off the filter bags.
2. Run collected solids out of the hopper.
3. Lock out electrical power on all rotating equipment.
4. If toxic gasses and/or solids are present, purge collector housing with fresh air and block off inlet duct. Refer to plant safety confined space entry procedures.
5. Install catwalks and safety cables.
6. Secure access doors in open position or remove doors by lifting from the hinge pins.
7. Use the buddy system.
8. Wear a respirator as required.
9. Use common sense.

Trouble Shooting Check List

First, be sure that you have followed the complete Standard Start-Up procedure.

Visible Exhaust Dust Loss

1. Missing bag. Dust loss will be constant and not in synchronization with diaphragm valve blasts. Locate and replace the missing bag.
2. Improperly installed bags. Side removal bags with loose clamps or top removal bags with loosely seated snap bands in the tube sheet hole. Reinstall the filter bags and cages properly.
3. Holes in bags. Caused from mechanical damage during installation, abrasion, thermal or corrosive attack or wear. Replace worn or damaged bags with bags made from filter media suitable for the application.
4. Dust in the clean air plenum after bags fail. Always clean the plenum before installing new filter bags.
5. Filter bags are not efficient for the application and the dust passes through the filter media. Contact Precision Dust Collection Systems for alternate bag selection.

Insufficient Air Pressure

6. Compressed air piping leaks. Tighten all fittings.
7. Additional usage from plant compressed air system. Revise system to furnish adequate air supply.

Entire Row of Bags inadequately cleaned

8. Debris in diaphragm valve. Disassemble valve and gently clean the inside of the valve as well as the plastic seat on the underside of the diaphragm.
9. Dirt in the solenoid valve plunger. Remove the solenoid cover and clean the plunger. Note: Be careful not to lose the spring which may pop out as you remove the plunger.
10. Solenoid valve inoperative. Electric, solenoid or timer fault. Establish power to the solenoid and proper wiring to the timer. Check solenoid and if alright, change wiring at the timer to the next unused terminal and move the program wire to the highest numbered terminal used. If this is not desired or no other terminals are available, replace the timer. If the solenoid is defective, replace.

Random Bag Inadequately Cleaned

11. Debris in air distribution pipe hole. Remove debris by inserting a small rod into the hole by removing the air pipe and flushing it out.

High Differential Pressure

12. Excessive air flow. Adjust fan damper until differential pressure gauge indicates the proper pressure.
13. Compressed air pressure is below 75 PSI (g). See paragraphs 5 & 6.
14. Solenoid skipping, see paragraph 9.
15. Leakage through rotary valve. Check rotary valve for wear or damage and correct.
16. Dust on inside of bags after previous bag failure. Clean the plenum and the inside of the filter bags. See paragraph 4.
17. Blinding (Plugging) of the bags due to condensation. Change operations upstream so that liquids remain vaporized through the dust collector. It may be necessary to insulate the collector. Usually operating the collector with no solids flowing through will permit recovery.
18. Re-entrainment of dust due to hopper overloading, bridging or plugging. Run out dust from discharge system with the fan off. Consider increasing the capacity of the discharge system or reducing the load. Install hopper vibrators and/or fluidizers.
19. Improper timer sequence. Inspect the timer for proper solenoid wiring and program wire position.
20. Defective timer. Return timer to be repaired or replaced.
21. Bags too tight. If bags were cleaned, they may have shrunk and are too tight to permit proper flexing. Replace with new filter bags.

Improper Pulsing

22. Solenoid valves not working. See paragraph 9
23. Continuous air flow through diaphragm valve. See paragraphs 7 & 8. Leak in tubing between solenoid and diaphragm valve. Tighten connections and replace tubing if necessary.
24. Insufficient Dust Collection (System Volume too low)
 - 25. Fan running backwards. Correct fan rotation.
 - 26. High differential pressure. See paragraphs 5 through 9 and 16 through 19.
 - 27. Fan belt slippage. Tighten or replace belts.
 - 28. Air leakage between collection pick-ups and fan. Seal any leaks and tighten all flanged connections in duct work.
 - 29. Additions to dust collection system. Increase system capacity.

Short Bag Life

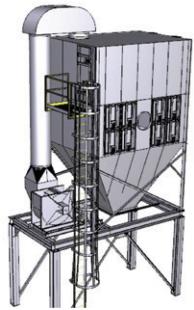
30. High Temperature. Bleed in ambient air and/or replace filter bags with higher temperature resistant filter media.
31. Chemical attack. Contact Precision Dust Collection Systems for recommendations.
32. Localized wear from rubbing. Straighten cages so that bags do not rub against each other or against the collector housing. Replace worn bags & cages. Wear near the material inlet may require an inlet baffle.

Timer Malfunction

33. "Power-On" indicator light not on. Ascertain that timer "ON/OFF" switch is on, that timer wiring is connected and that indicator bulb is good. Inspect for blown fuse. Replace with 3 Amp, 3 AG fuse. Do not use slow blow type.
34. Solenoids skipping. See paragraph 9.

Unusual Differential Pressure Gauge Readings

35. Unusual readings. Inspect gauge filter and replace if plugged. Blocked gauge tubing. Disconnect and remove blockage. If blockage occurs frequently, install filter and replace it routinely.



Precision

Dust Collection Systems

Replacement Parts



Replacement Parts

Your Precision Dust Collector uses the finest components available. To ensure continued trouble free operation of your collector, we recommend that only factory engineered components be used.

The following components are suggested to be kept on hand to maintain trouble free service:

- A spare set of filter bags and bag clamps
- Extra solenoid valves and diaphragm valves
- A spare timer board for multi-collector installations
- Rotary Air Lock Wipes
- Filter Cartridges
- Fan Belts
- Pulse Valve Kits
- Shaker Blocks
- Fan wheels

Our collector components can be used to maintain peak performance of collectors manufactured by other leading manufacturers.

1. Wheels

1HPALWHEEL5/8	1 HP ALUMINUM FAN WHEEL 5/8 BORE
2HPALWHEEL5/8	2 HP ALUMINUM FAN WHEEL 5/8 BORE
2HPALWHEEL7/8	2 HP ALUMINUM FAN WHEEL 7/8 BORE
3HPALWHEEL7/8	3 HP ALUMINUM FAN WHEEL 7/8 BORE
5HPALWHEEL7/8	5 HP ALUMINUM FAN WHEEL 1-1/8 BORE

2. Bags

A881PBFB	A TYPE 8 X 81" FILTERBAG POLYESTER BEANE
B572PBFB	B TYPE 5 X 72" FILTER BAG POLYESTER BEANE
B572AFB	B TYPE 5 X 72" FILTER BAG ACRYLIC COATED
B572TFB	B TYPE 5 X 72" FILTER BAG TEFLON
B872PBFB	B TYPE 8 X 72" FILTERBAG POLYESTER BEANE
B 894PBFB	B TYPE 8 X 94" FILTERBAG POLYESTER BEANE
PF596PFB	PF TYPE 5 X 96" FILTER BAG 14 OZ POLYESTER
CB 9" X 120"	CB 9" X 120 WOVEN BAGS KRT
E TYPE FILTER BAG PE	E TYPE FILTER BAG POLYESTER BEANE
E TYPE FILTER BAG AR	E TYPE FILTER BAG ACRYLIC COATED
E TYPE FILTER BAG PTFE	E TYPE FILTER BAG PTFE
JN175FB	JNI 75 FILTER BAG
JN150FB	JNI 50 FILTER BAG
JNI100FB	JNI 100 FILTER BAG
JNI300FB	JNI 300 FILTER BAG
NS-CYN 2-3HP	NYLON SLEEVE FOR 2-3HP CYN STYLE 10 X 20 1/2
NS-CYN 5HP	NYLON SLEEVE FOR 5HP CYN STYLE 12 X 20 1/2
B TYPE BARREL SLEEVE	B TYPE BARREL SLEEVE 23.5 DIA X 12" HIGH
S-2651	36 X 60" 4 MIL INDUSTRIAL POLY BAGS
S1 FB	S 1 FILTER BAG, 14" SPOUT
S2LFB	S 2-L FILTER BAG, 8" SPOUT
S-SMTFB	S TYPE POLYESTER SMALL TOP FILTER BAG 6" X 52" LONG

Bags - Continued

S-SMTFB-ACRYLIC	S TYPE ACRYLIC SMALL TOP FILTER BAG 6" X 52" LONG
S-SMTFB-Teflon	S Type Small Top Filter Bag 6" x 52" Ig teflon material
S-LBFB	S Type Large Top or Bottom Filter Bag 20" 52" long - Polyester beane material
S-LBFB-Acrylic	S Type Large Top or Bottom Filter Bag 20 " 52" long - Acrylic material
S-LBFB-Teflon	S Type Large Top or Bottom Filter Bag 20 " 52" long - Teflon material

3. Rotary Airlocks & Components

Airlocks

#10	Size # 10 Rotary Air Lock
#14	Size # 14 Rotary Air Lock
#18	Size # 18 Rotary Air Lock
#24	Size # 24 Rotary Air Lock
#6	Size # 6 Rotary Air Lock

Gear Reducers

PDGS 40 L 15	Gear reducer
PDGS 50 L 15	Gear reducer
PDGS 60 L 15	Gear reducer

Replacement Blades

#6 Replacement Blade Std	Size 6 1/4 x 4 11/16x 1/4"
#10 Replacement Blade Std	Size 7 7/16 x 10 1/4 x 1/4
#14 Replacement Blade Std	Size 8 5/16 x 14 1/4 x 1/4"
#18 Replacement Blade Std	Size 11 1/4 x 18 1/4x 1/4"
#24 Replacement Blade Std	Size 14 1/4 x 24 1/4x 1/4"

Standard for rotary airlock

Note blades are without mounting holes and must be drilled to match.

4. Fume Capture Arms

KTM-710

PDCS 710 Fume Arm
Hanging/Ceiling Fume Arm Powder coated steel tube 23 -24 gauge steel Swivel base rotates 360 Hood comes with air diverter External joints Aluminum hood No internal adjustments Low static pressure Circular hood handle Tube grab handle Cast aluminum joints Friction disks Telescoping

5. Inline Duct Silencer

PDCS Inline Duct Silencer provides noise cancelation/reduction to upstream/downstream process fans by absorbing and splitting the sound wave transmitted through an exhaust duct network resulting in a lower measured air noise and transferred vibration. Values achieved are depending on the noise type generated and the wave pattern/frequency formed.

Call for Sizes & Performance Options

6. Shaker Block Eccentrics

Shaker Block Assy. Eccentric Blocks for shaker movement from circular to linear stroke. Machined aluminum and bronze insert. Bored and keyed for gear box mounting. Diameter to fit gear box shaft diameter.

100 SB	1" Shaker Block Assy
304 SB	3/4" Shaker Block Assy
508 SB	5/8" Shaker Block Assy

7. Industrial Exhauster (FANS)

TEFC 575/440/220VAC 3 Phase direct drive motor all Aluminum wheel inside cast aluminum housing.

IE 01hp 3Ph CB	Industrial Exhauster 1 hp	Steel motor base 6" inlet
IE 02hp 3Ph CB	Industrial Exhauster 2 hp	Steel motor base 7" inlet
IE 03hp 3Ph CB	Industrial Exhauster 3 hp	Steel motor base 7" inlet
IE 05hp 3Ph CB	Industrial Exhauster 5 hp	Steel motor base 8" inlet

9. Ducting

Flexible Ducting - Steel	Tees
Flexible Ducting - Polyurethane	Wyes
Spiral Pipe	Clamps
Floor Sweeps	Ball Joints
Blast Gates - Full (Half Gates also available)	Reducers
Elbows	Clean Outs
Coupling	

Call for sizes and pricing.

10. Fire - Explosion Provision Options

Spark Detection Systems

AN104 AN104 Spark Detection system

The AN104 is a single zone, low cost, full featured Spark Detection and Extinguishment control panel. It is ideally suited to single dust collector facilities. Standard features include sophisticated detector testing, waterflow monitoring and a baghouse heat detection and water deluge system. Air system shutdown and abort damper control are also included as standard features.

Also Available:

Flameless Vents
Fire Suppression

Brixon Latches
Spark Control Devices

Abort Dampers
Inlet Dampers

11. Additional Parts Available:

- Ambient Air Units
- Air Blowers
- Asco Valves
- Goyen Valves
- Emission Monitoring Devices

Frequently Ordered Parts

Limited Warranty.

This PDCS limited warranty covers defects in materials and workmanship in this PDCS product, subject to the limitations set out below. Only the original purchaser of this PDCS air filtration system is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or subsequent owners of this air filtration system, or any part thereof.

Coverage and Term of Limited Warranty.

This limited warranty covers:

1. parts and labour with respect to the major structural components of the PDCS air filtration system, namely, platform, ladders and support legs supplied by PDCS, for a period of one (1) year from the date of shipment by PDCS to customer; and
2. housing, including clean air plenum, dirty air plenum, tube sheet and hopper, for a period of five (5) years from the date of shipment by PDCS to customer.

What is not covered.

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable installation, use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by PDCS to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover cartons, equipment enclosures, cables or accessories used in conjunction with this product.

Without limiting any other exclusion herein, PDCS does not warrant that the PDCS product covered by this warranty, including without limitation, the technology and/or integrated circuit(s) included in the PDCS product, will not become obsolete or that such PDCS product is or will remain compatible with any other product or technology with which the PDCS product may be used.

Warranty Claims.

PDCS, in its absolute discretion, will provide one of the following three remedies to whatever extent it shall deem necessary to satisfy an eligible claim under this Limited Warranty:

1. elect to repair or facilitate the repair of any defective parts within a reasonable period of time, without charge to the customer for the necessary parts and labour to complete the repair and to restore this product to its proper operating condition. PDCS also will pay the shipping costs necessary to return this product to the customer once the repair is complete; or
2. replace this product with a direct replacement or with a similar product deemed by PDCS to perform substantially the same function as the product being replaced; or
3. issue a refund of the original purchase price of the PDCS product, less depreciation to be determined by PDCS based on the age of the product at the time a remedy is sought under this limited warranty.

What PDCS will not do under this Limited Warranty.

If the PDCS product is returned to PDCS or to any other party authorized to repair PDCS products for a warranty claim, the product must be insured during shipment, with the insurance and shipping charges prepaid by the customer. If the PDCS product is returned uninsured, customer assumes all risks of loss or damage during shipment. PDCS will not be responsible for any costs related to the removal or re-installation of the PDCS product from or into any installation. PDCS will not be responsible for any costs related to any setting up of the PDCS product, any adjustment of user controls or any programming required for a specific installation of the PDCS product.

Limitation on Liability.

THE MAXIMUM LIABILITY OF PDCS UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PDCS PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, PDCS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, PROPERTY CLAIMS, OR CLAIMS FOR PERSONAL INJURY OR DEATH, RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. Some jurisdictions do not allow the exclusion or limitation of relief, special, incidental,

consequential or indirect damages, or the limitation of liability to specified amounts, in which case the above limitations or exclusions may not apply.

Exclusive Remedy.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN EXPRESS OR IMPLIED. TO THE MAXIMUM EXTENT PERMITTED BY LAW, PDCS SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF PDCS CANNOT LAWFULLY DISCLAIM OR EXCLUDE IMPLIED WARRANTIES UNDER APPLICABLE LAW, THEN ALL IMPLIED WARRANTIES COVERING THIS PRODUCT, MAY APPLY TO THIS PDCS PRODUCT AS PROVIDED UNDER APPLICABLE LAW.

IF ANY PRODUCT TO WHICH THIS LIMITED WARRANTY APPLIES IS A "CONSUMER PRODUCT" UNDER THE MAGNUSON-MOSS WARRANTY ACT (15 U.S.C.A. §2301, ET SEQ.) OR OTHER APPLICABLE LAW, THE FOREGOING DISCLAIMER OF IMPLIED WARRANTIES SHALL NOT APPLY TO YOU, AND ALL IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING WARRANTIES FOR MERCHANTABILITY AND FITNESS FOR THE PARTICULAR PURPOSE, SHALL APPLY AS PROVIDED UNDER APPLICABLE LAW.

Other conditions

This limited warranty gives you specific legal rights, and you may have other rights which vary from country to country or state to state.

This limited warranty is void if (i) the label bearing the serial number of this product has been removed or defaced, (ii) the product is not distributed by PDCS or (iii) this product is not purchased from an authorized PDCS reseller. If you are unsure whether a reseller is an authorized PDCS reseller, please visit our website at <http://precisiondustcollectionsystems.com/> or contact a PDCS office from the list at the end of this document.

Your rights under this limited warranty are not diminished if you do not complete and return the product registration form or complete and submit the online product registration form. PDCS thanks you for purchasing a PDCS product. We hope it will give you years of satisfaction.



Precision Dust Collection Systems

pdcs.ca

Location:
1100 South Service
Road
Stoney Creek, Ontario
L8E 0C5

Phone: 1-844-643-6363
Fax: 1-905-643-7177

Email: sales@pdcs.ca