

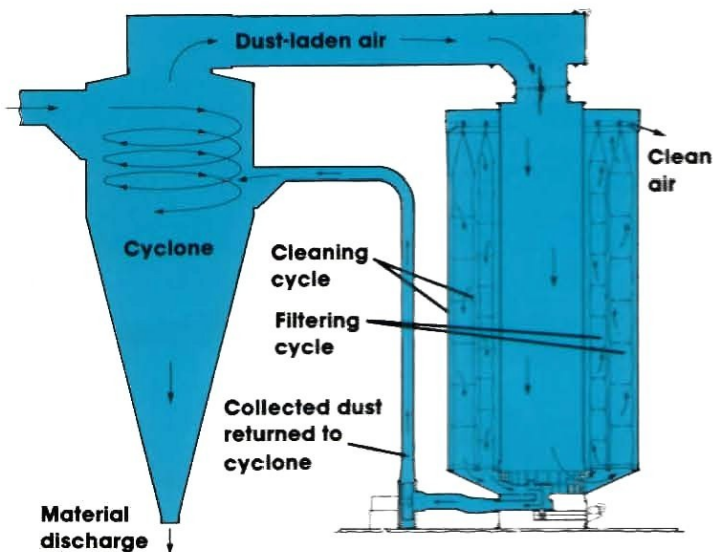

Clarke's

PNEU-AIRE[®] FILTER



How Pneu-Aire® Filters Work

Dust laden air from the cyclone enters the top of the **Pneu-Aire**. It continues down the center tube and out into the Pneu-Aire's radial compartments and then up into the Clar-Tex® bags. As the air passes through the fabric, the dust is collected on the inside of the bags. The filtered air exhausts to atmosphere or back into the plant.



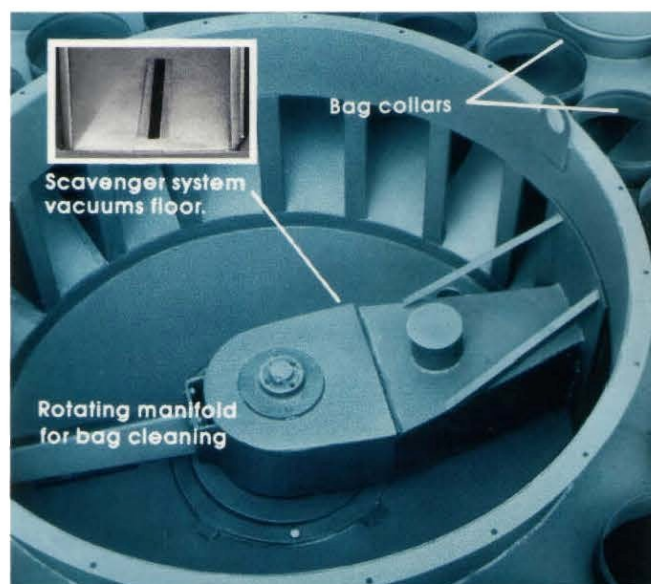
Collected particles are then removed from the bags by low pressure, reverse air flow; a continuous operation utilizing a rotating manifold at floor level of the central chamber. The manifold completes a revolution of the chamber every three minutes, so that only 5% of the filter bags are being cleaned at any one time. A scavenger system on the bottom side of the rotating manifold continuously vacuums the floor of the chamber to prevent heavy particle accumulation.

The **Pneu-Aire** is designed for low maintenance and easy servicing. A single moving part, the rotating manifold, is powered by a ¼ HP gearhead motor and roller chain drive. Access doors provide for easy inspection and maintenance.

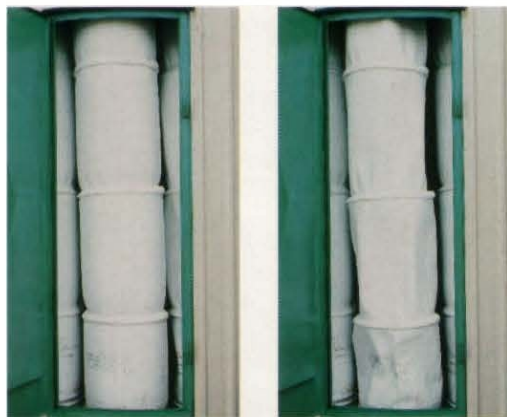
Used in conjunction with your present equipment, **Pneu-Aire** is the simplest, most economical solution to dust collection and control problems.

If your requirements are for a new installation, the inclusion of Pneu-Aire will give you the most efficient energy saving filter system available today.

Pneu-Aire combines advantages of simple design, ease of installation, minimum maintenance and cost-saving operation to meet tight budgets.



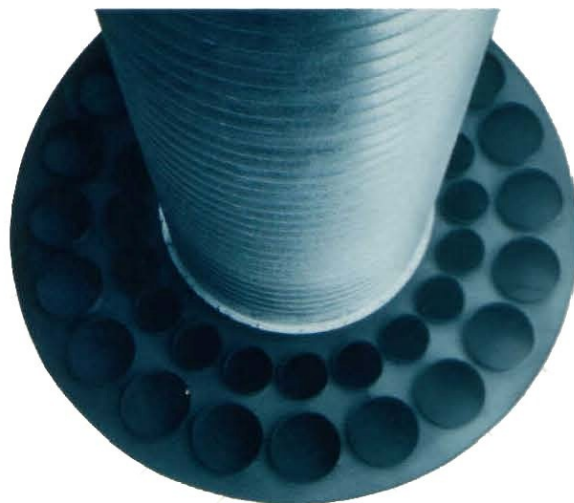
Rotating manifold fits closely to each radial compartment as it moves. It completes a revolution every 3 minutes, so that 5% of the filter bags are being cleaned at all times.



Filtering

Cleaning

Filter bags are made of high-tensile Clar-Tex fabric. Support rings prevent bag collapse as cleaning is accomplished by low-pressure reverse air flow (right). Bags are isolated from the system during the cleaning cycle.



Pneu-Aire core features rugged, lightweight center tube assembly with round mounting base.

Pneu-Aire® Features and Benefits

Minimum number of mechanical parts. The **Pneu-Aire** filter is designed with only one moving part, the rotating purge manifold. This manifold is driven by a 1/4 HP gearhead motor. A small pitch chain drive transmits power to the manifold. The results are less maintenance and less power to operate.

No dust build-up, bridging or plug-ups. Air and dust always move in the same direction, even during the cleaning cycle. Collected dust does not have to fall through a high velocity air stream. This **Pneu-Aire** feature means a trouble-free filter system.

Compact construction with high filtering capacity. The unique **Pneu-Aire** filter is designed for maximum filtering capacity and minimum size. For you this means easy installation, less space required and lower cost per CFM.

Low pressure drop. Because there is such a low resistance to air flow through the **Pneu-Aire**, static pressure requirements are lower. System static pressure requirements can be directly equated to horsepower requirements. The results are less connected horsepower and more savings.

Continuous low pressure reverse air purging action. **Pneu-Aire** filters require no complicated sequencing controls, compressed air piping, or special mechanical linkage; your assurance of longer bag life and low maintenance. And because the bags are cleaned by low pressure reverse air flow, bridging or material evacuation is no problem with **Pneu-Aire**.

Isolation damper and abort gate allow for continuous production. This optional **Pneu-Aire** feature also minimizes fire or explosion damage because the main air stream can be diverted to the atmosphere. (Below)

All drive components are standard industrial power transmission items. This means fast, easy, inexpensive parts availability.

Clar-Tex® cageless bags. No cages mean no bag abrasion and longer bag life.

Structurally superior but lightweight. The **Pneu-Aire** requires no special heavy support structure. On the ground it mounts on its own base. The excellent combination of design strength and light weight make the **Pneu-Aire** ideal for roof mounting.

Closed loop system. All material ends up at its original destination; the cyclone. Even the light dust collected in the bags is gently air washed from bag surfaces and returned to the cyclone.

Pneumatic scavenging orifice. The effluent air from the cyclone slows as it enters the large center tube of the filter. As this happens the heavier abrasive particles fall from the air stream and do not enter the bags. Negative air flow through the scavenging orifice returns these particles to the cyclone.

Optional Gemini® Filter bag system The Gemini Bag is a bag within a bag, designed to increase cloth area, raising the single unit filter capacity. This higher capacity means lower cost per CFM.

Exclusive Pocket Ring Cover® Because filter bag life can be extended by periodic laundering, Clarke's developed the exclusive Pocket Ring Cover (Patent Pending). By removing the bag support rings, the bags clean better and the rings are not subjected to machine damage. (Below)



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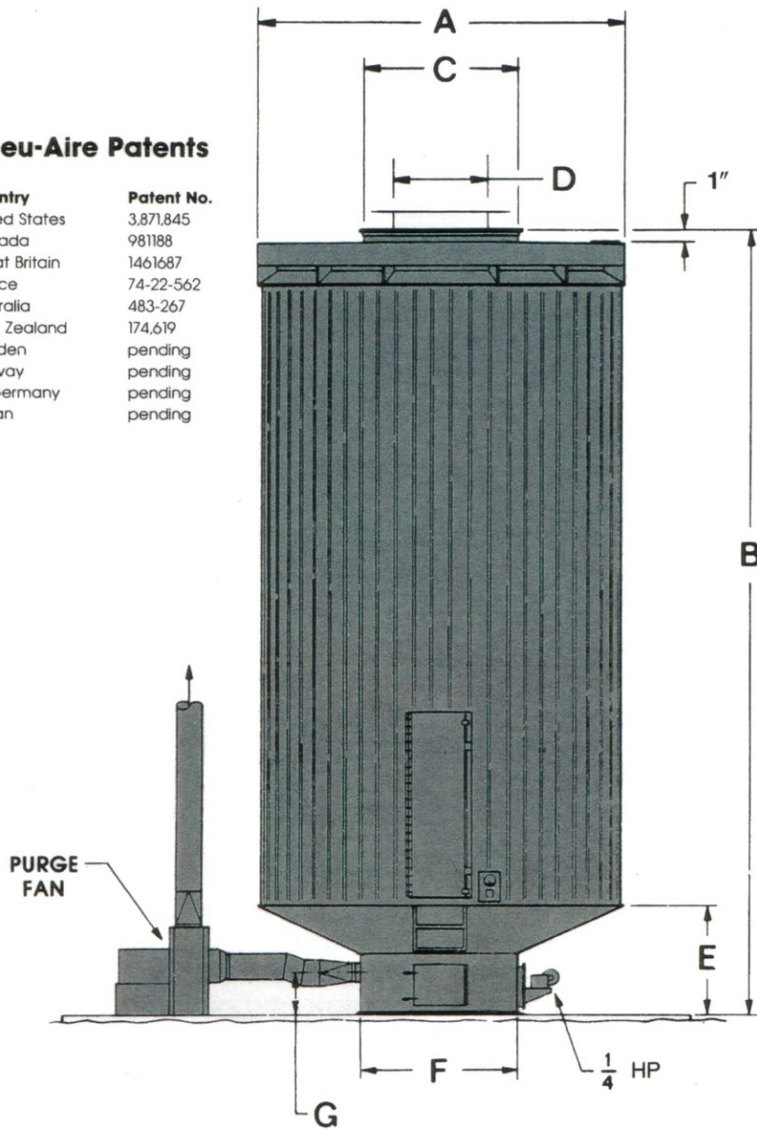


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Pneu-Aire® Filter Specifications

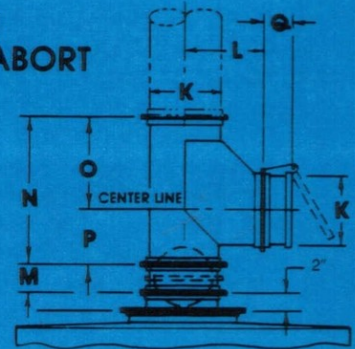
Pneu-Aire Patents

Country	Patent No.
United States	3,871,845
Canada	981188
Great Britain	1461687
France	74-22-562
Australia	483-267
New Zealand	174,619
Sweden	pending
Norway	pending
W. Germany	pending
Japan	pending

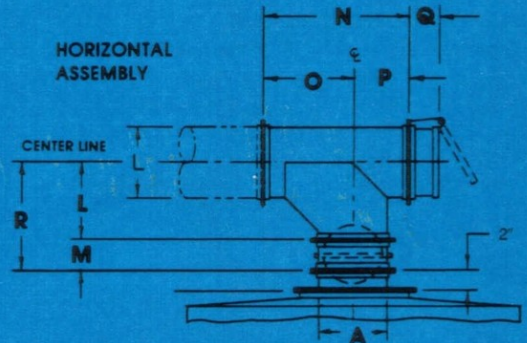


ISOLATION DAMPER/ABORT GATE

VERTICAL ASSEMBLY



HORIZONTAL ASSEMBLY



K	L	M	N	O	P	Q	R
24"0	26"	10"	48"	30"	18"	10"	36"
36"0	31½"	10"	60"	36"	24"	10"	41½"
48"0	50"	10"	84"	54"	30"	12"	60"

*Also available in 60" diameter. (Consult factory)

MODEL	Effect. Cloth. Area Sq. Ft.	Shipping Weight	No. of Bags	Length of Bags	DIMENSIONS						
					A	B	C	D	E	F	G
10-10	358	4,000 lbs.	10	10'	7'-4"	14'-2¼"	36" ID	24" OD	32½"	36" ID	12"
10-15	528	4,200 lbs.	10	15'	7'-4"	18'-8¼"	36" ID	24" OD	32½"	36" ID	12"
15-15	822	4,600 lbs.	15	15'	9'-4½"	19'-5¾"	60" ID	24" OD	42"	60" ID	13"
15-20	1144	5,000 lbs.	20'	20'	9'-4½"	24'-11¾"	60" ID	24" OD	42"	60" ID	13"
15-20G1	1658	5,300 lbs.	15	20'	9'-4½"	24'-11¾"	60" ID	36" OD	42"	60" ID	13"
40-15	1915	6,300 lbs.	40	15'	11'-8"	19'-5¾"	60" ID	36" OD	42"	60" ID	13"
40-20	2668	7,000 lbs.	40	20'	11'-8"	24'-11¾"	60" ID	36" OD	42"	60" ID	13"
40-20G1	3374	7,500 lbs.	40	20'	11'-8"	24'-11¾"	60" ID	48" OD	42"	60" ID	13"
40-20G2	3815	7,650 lbs.	40	20'	11'-8"	24'-11¾"	60" ID	48" OD	42"	60" ID	13"
60-15	3447	8,700 lbs.	60	15'	15'-9"	21'-1¾"	60" ID	48" OD	56"	60" ID	14¾"
60-20	4801	10,000 lbs.	60	20'	15'-9"	26'-7¾"	60" ID	48" OD	56"	60" ID	14¾"
60-20G1	6040	10,200 lbs.	60	20'	15'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
60-20G2	6750	10,350 lbs.	60	20'	15'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
60-20G3	7187	10,600 lbs.	60	20'	15'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
100-15	4630	9,600 lbs.	100	15'	16'-9"	21'-1¾"	60" ID	60" OD	56"	60" ID	14¾"
100-20	6451	11,000 lbs.	100	20'	16'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
100-20G1	7157	11,200 lbs.	100	20'	16'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
100-20G2	7864	11,300 lbs.	100	20'	16'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
100-20G3	8304	11,500 lbs.	100	20'	16'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
100-20G4	8745	11,700 lbs.	100	20'	16'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"
100-20G5	9187	11,900 lbs.	100	20'	16'-9"	26'-7¾"	60" ID	60" OD	56"	60" ID	14¾"

Note: G * indicates "Gemini" series filter SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE