



PAXAA Pulse-Jet Baghouse, PX-BP

Product Catalog



PAXAA Pulse Jet Baghouse, PX-BP

Introduction

The PAXAA Pulse-Jet Baghouse (PX-BP), is an adaptable, high-performance dust collector that has been designed to meet the needs of most industrial applications. The PX-BP offers a flexible design that reduces freight and erection costs, fits tight quarters, and is easy to install and service. Available in two sizes, the self-cleaning modules can accommodate up to 144 fabric bags each, at bag lengths of 2.5, 3, 3.5, or 4 m. Due to its modular design, there is almost no limit to the size of the PX-BP.

Features:

- Heavy-duty ribbed housing construction
- Clean air bag access for easier bag service
- Integral fan option for reducing space requirements
- Tool-free installation of bag filters and cages
- Baffle for effective filtration and minimum bag and collector wear
- up to 50 mbar negative pressure tolerance
- 60 degrees pyramid hoppers
- Bolt-together assembly and modular construction for easy connecting, dismantling, or adding units

Options:

General Options

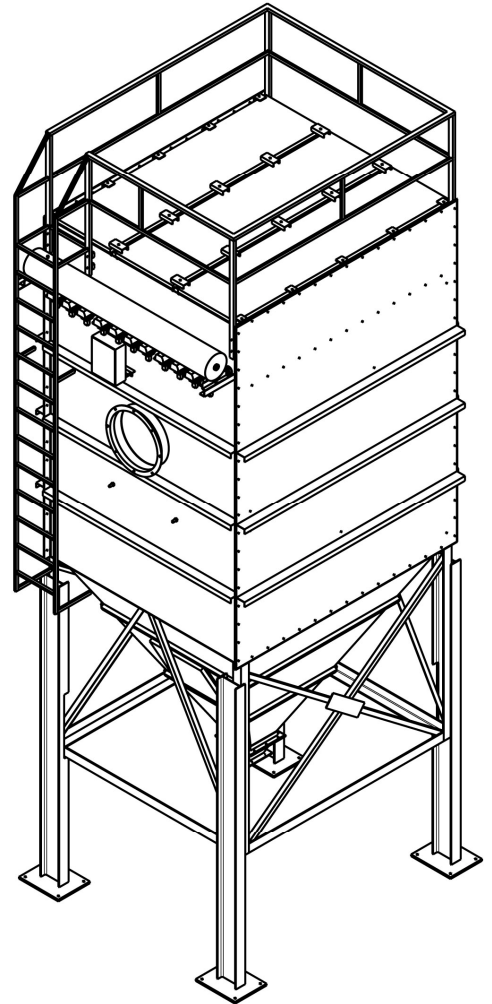
- Support legs for 2, 2.5, and 3 m hopper clearance
- High pressure design
- Walk-in clean air plenum
- Access platform
- Explosion vents

Bag and Cage Options

- Various bag and cage materials and styles

Supplementary Equipment

- Rotary locks
- Discharge conveyor
- Hopper vibrators





General Description

Modular Design: The standard PX-BP size variations are composed of combinations of either 96 bag or 144 bag modules, with one to five modules per unit. The PX-BP will use 130 mm diameter bags in a 180 x 180 mm spacing pattern. Bag lengths of 2.5, 3.0, 3.5, and 4.0 m are available.

Design Flexibility: There is no limit to the size of the collector that can be supplied. However, any arrangements exceeding the combinations listed above will require intermediate support legs and additional outlets in order to maintain acceptable airflow velocities.

Structure: The modular design will permit an existing PX-BP system to be expanded with no significant disruption to the operating unit(s). Housings, hoppers, plenums, and tube sheets are made of 4 mm thickness carbon steel. Modules are available for -50 mbar plenum pressure, and for temperatures of 80, 130, and 200 degrees Celsius.

Support Legs: Support legs are designed for 200 km/h wind or Universal Building Code seismic zone 4 loading, and are available for hopper clearances of 1.5, 2, 2.5, and 3 m. Up to five modules may be bolted together and supported by one set of 4 legs. Standard design is for 1.5 m hopper clearance.

Hopper: The standard PX-BP is supplied with a pyramid style hopper. A trough style hopper is available as an option. Pyramid hoppers have a minimum side slope of 60 degrees and a flanged outlet of 300 x 300 mm with a drilling that matches an optional Rotary Lock. The trough hoppers have a 250 mm wide opening with drilled flanges for conveyor mounting. Both types of hoppers have quick release lift-off access doors.





PAXAA Pulse Jet Baghouse, PX-BP

General Description

Plenum: The outlet plenum can be either open to roof top access or walk-in style. The top access configuration is ideal for indoor or tight budget applications. The walk-in style offers a walk-in clean-air plenum, so bags can be replaced in any kind of outdoor weather. Outlets may be located at either end of the plenum, and have a 600 x 700 mm opening with a standard drilling.

Inlet Configurations: The PX-BP has two inlet configurations; the most common configuration allows the dirty air to enter through the hopper inlet located under the bag filters. The dirty air hits a deflector at the end of the inlet, which causes heavy particulate to fall directly into the hopper. This reduces the amount of dust that comes in contact with the bags resulting in

longer bag life and lower pressure drop. For applications with light and fibrous dust, a high body inlet is available that reduces upward air velocities allowing the dust to properly fall into the hopper after the bags have been pulsed.

Baffle: baffles in the high inlet style deflect and reduce dust particle velocities and then properly distribute them throughout the collector for effective filtration with minimum bag and collector wear.

Handrails and Ladders: Handrails and ladders are supplied with both plenum types. An optional air and solenoid valve service platform is available. The access ladder is selected to accommodate both bag length and hopper clearance. On a standard roof top access unit, using a 3.5 m bag with a 3 m hopper clearance, or a 4.0 m bag with either an 2.5 or 3.0 m hopper clearance, the access ladder is supplied in two sections with an intermediate platform, to comply with OSHA regulations.





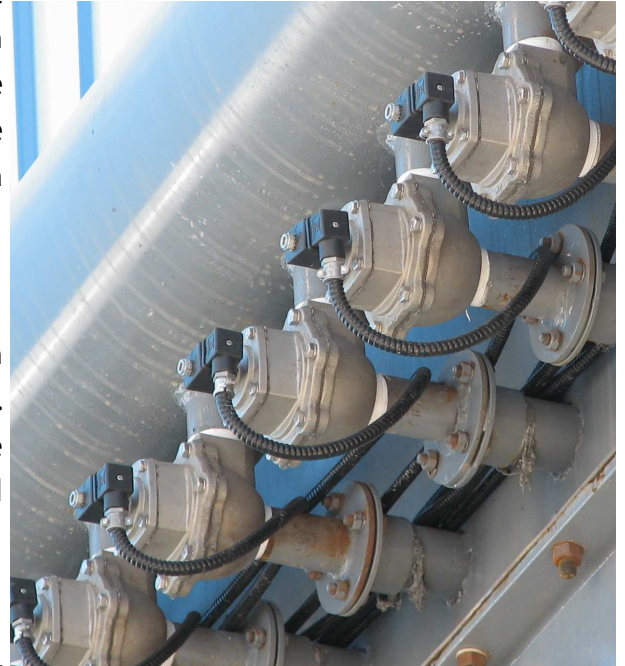
PAXAA Pulse Jet Baghouse, PX-BP

General Description

Pulse Jet System: All modules are constructed with a 150 mm diameter surge tank (compressed air manifold) which is fitted with 1.5" diaphragm pulse valves. Pulse valves are connected to solenoid pilot valves with plastic tubing on standard units, and with metal tubing on high temperature units. Each pulse valve serves twelve bags. Pulse pipes are 1.5", schedule 40 pipe and have a quick disconnect coupling and a pinned end.

Coating: Standard collectors are primed and finish painted on the exterior with high solids alkyd enamel. Interior surfaces have a prime coat. High temperature collectors have one coat of zinc rich primer. Special paint coatings are available as an option.

Optional Features: Some of the more common optional features available with the PX-BP include pressure demand cleaning, explosion vents, inlet adapter plates, an arrangement to permit installation of up to 100 mm thickness insulation at the destination job site, walk-in plenum, trough hopper, high temperature features, and various ancillary components.



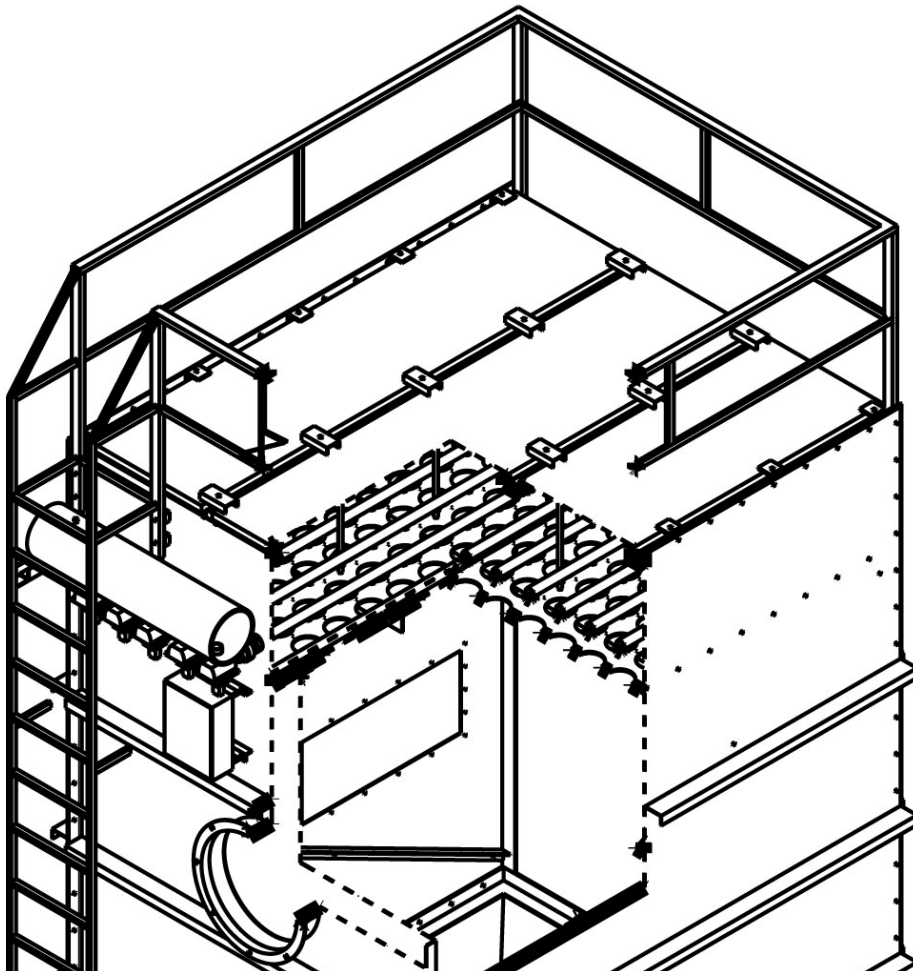


PAXAA Pulse Jet Baghouse, PX-BP

Principles of Operation

Principles of Operation

An understanding of the design and operating principle of the PX-BP is essential for effective operation and maintenance. Knowledge of the collector nomenclature is necessary so that parts may be easily identified and located. The PX-BP is a modular, continuous, automatic, self-cleaning, cloth pulse-jet dust collector. The dirty air enters the collector through one or more circular inlets. A baffle is located at the inlet to deflect the dust into the hopper, provide uniform air stream distribution, and to protect the bags from direct impingement. After the dust laden air leaves the baffle area, it passes through the filter media, depositing the dust on the outside surface of the individual filter bags. The cleaned air leaves the filter bags and discharges into the plenum at the top of the collector, where it is then exhausted through the outlet. The filter bags are periodically cleaned by bursts of compressed air that are directed down the inside of the bags. A venturi located in the top of the bag cage induces additional air to the inside of the bags being cleaned. This reverses the flow of air through the bags and dislodges the dust cake from the surface of the bag, allowing it to settle into the hopper. Since only a small percentage of the bags are cleaned at one time, the unit remains in continuous operation.





PAXAA Pulse Jet Baghouse, PX-BP

Standard and Optional Features

Standard and Optional Features

Collector Design	Standard	Optional
Clean Air Plenum with Top-Bag Removal	x	
Heavy-Duty Ribbed Housing Construction	x	
Bolted Assembly, Carbon Steel Design – 4 mm Min Thickness	x	
Heavy-Duty 8 mm Thickness Tubesheet	x	
Filter Cleaning System	x	
Bottom Bag Removal		x
High Temperature Construction		x
Stainless Steel Construction		x
Direct Drive Fans		x
Service Platform		x
Bags & Cages	Standard	Optional
Galvanized Bag Cages	x	
Variety of Bag Media Options		x
Paint System	Standard	Optional
Prime Coated Interior	x	
Textured Multi-Coat Paint Finish with 2,000-Hour Salt Spray Performance	x	
Premium Duty Paint		x
Custom Colors		x
Hopper Design	Standard	Optional
60 degrees Pyramid Hoppers	x	
Inlets with Deflector	x	
Trough Hopper with Multiple or Single Inlets	x	
Hopper Access Covers	x	
Inlet Transitions		x
Hopper Discharge	Standard	Optional
Slide Gate Pack		x
55-Gallon Drum Pack		x
Rotary Valves		x
Electrical Controls, Gauges and Enclosures	Standard	Optional
Solenoid Valves in NEMA 4 Enclosure	x	
Control Timer in NEMA 4 Enclosure	x	
Solenoid Enclosure in NEMA 7 or 9		x
Safety Features	Standard	Optional
Sprinkler Pack Assembly (wet or dry)		x
Explosion Vents		x



PAXAA Pulse Jet Baghouse, PX-BP

Equipment Characteristics

Equipment Characteristics, Operating Weights

PX-BH-PJ Operating Weight (kg)

Standard Plenum with 1.5 m hopper
clearance with standard handrails & ladder

No.of Bags	Bag Length (m)				Hopper Ca- pacity (m ³)
	2.5	3.0	3.5	4.0	
96	3285	3524	3796	4070	3
144	3960	4250	4588	4923	4
192	5272	5657	6102	6527	5
240	6032	6471	6980	7468	6
288	6710	7202	7772	7110	8
336	8100	8690	9369	10010	9
384	8775	9416	10159	10865	10
432	9452	10148	10951	11723	12
480	10838	11630	12546	13403	13
528	11466	12310	13289	14211	14
576	12193	13091	14128	15118	15
624	13581	14576	15728	16801	17
672	14256	15302	16515	17656	18
720	14931	16031	17307	18511	19

NOTES:

1. Operating weights and shipping weights do not include options such as walk in plenums or ancillary equipment.
2. Operating weights do not account for dust load, wind load or snow load.



PAXAA Pulse Jet Baghouse, PX-BP

Equipment Characteristics

PAXAA Pulse-Jet Baghouse Dimensions

PX-BP Dimensions

Basic Model Number	Width (m)	Length (m)	Height (m)
14-96	3	2	8
14-144	3	3	8
14-192	3	4	8
14-240	3	4	8
14-288	3	5	8
14-336	3	6	8
14-384	3	7	8
14-432	3	8	8
14-480	3	9	8
14-528	3	9	8
14-576	3	10	8
14-624	3	11	8
14-672	3	12	8
14-720	3	13	8
Add to height for guard rail			1
Add to height for walk-in plenum			1.5
Deduct from height for 3.5 m. long bags			0.6
Deduct from height for 3 m long bags			1.2
Deduct from height for 2.5 m long bags			1.8

NOTES :

2. Width shown does not include compressed air reservoir.
3. Length shown does not include access ladder.
4. Width shown does not include compressed air manifold access platform.
5. Height shown does not include guard rails.



PAXAA Pulse Jet Baghouse, PX-BP

Equipment Characteristics

PAXAA Pulse-Jet Baghouse Media Area

PX-BP Media Area (m²)

No. Of Bags	Number Of modules		Standard Bags			
	Module Size		Bag Length (m)			
	96	144	2.5	3.0	3.5	4.0
96	1	0	94	119	143	167
144	0	1	141	178	215	251
192	2	0	189	237	286	335
240	1	1	236	297	357	418
288	0	2	283	356	429	502
336	0	1	330	415	500	586
384	1	2	377	475	572	669
432	0	3	424	534	644	753
480	2	2	472	593	715	837
528	1	3	519	653	786	920
576	0	4	566	712	858	1004
624	2	3	613	771	929	1088
672	1	4	666	831	1001	1171
720	0	5	707	890	1073	1255



PAXAA Pulse Jet Baghouse, PX-BP

Typical Applications

Typical Applications

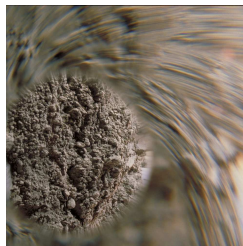
Foundries

- Shake Outs • Sand Handling
- Transfer Points
- Furnace Fume
- Reclaim
- Pour Floor Fume



Cement

- Rotary Kiln
- Bagging
- Cement Block



Metal Working

- Abrasive Blasting
- Cutting, Grinding & Polishing
- Metalizing
- Weld Fume
- Arc Gouging
- Battery Manufacturing



Chemical & Pharmaceutical

- Material Handling
- Bulk Mixing
- Packaging
- Paper Dust



Woodworking

- Furniture Manufacturing
- Cabinetry



Industrial Processes

- Plastic & Rubber
- Rock & Related Products
- Coal Dust
- Powder Paint
- Pesticides & Fertilizer
- Tobacco
- Carbon Black
- Fumed Silica
- Aluminum Casting
- Ceramics
- Printing
- Power Plants



Food Processing

- Cereals
- Dog & Cat Food
- Sugar
- Milk Solids
- Candy
- Nut Shells
- Chocolate
- Starch
- Flour & Mixes



PAXAA

General Machinery Design & Manufacturing

Address: UNIT 2 , NO 20, Arooji ST,
North Kargar ST, Tehran, IRAN
Tel: +98 21 6696 0783, Fax: +98 21 6696 0784

www.paxaa.com

paxaa@paxaa.com



PAXAA
پکصا