

Controlled Air Design - Raleigh, NC - 919 607 6765 - www.controlledairdesign.com



PBM Power Booth Module

Power Booth Modules. Efficient, cost effective control.



The AER Control Systems' (Power Booth Module) PBM-4 has four vertically oriented cartridge filters, PBM-6 has six cartridge filters, and they are designed to meet OSHA's requirements. Provide very efficient, cost effective control of dust and fumes that are generated from sanding, grinding, welding, and other processes. Typically utilized for control of moderate to heavy concentrations of dry contaminants. The PBM Series Collectors are provided with manual push-button pulse jet filter cleaning. This minimizes maintenance and reduces replacement filter cost. The PBM Series Unit can be provided with an open inlet to the filters, hinged side doors to help funnel the air inlet the collector, metal mesh or louvered air inlet if sparks are present. Options such as three different blowers for a variety of air flows, also several type of filter media depending on application or dust. Two types of cleaning controls, many sizes and types of booth enclosures are also available.

Features & Benefits

We manufacture AER Control Systems Power Booth Module (PBM) Dust Collectors with all the features that benefit not only the quality and appearance of your plant but it's morale and productivity.

Basic PBM units include either four or six pleated cartridge filters rated at 99% efficient, the standard filter media is an 80/20 flame retardant polyester blend, as requirements change NANO cartridge filter is available with efficiencies of 99.8% is achievable. Other medias available such as washable Spun Bond if abrasive dusts exist. The collected dust on outside of the filters is cleaned or removed by a compressed air purge or pulse cleaning system through high efficient diffusion nozzles/ silencers. The cleaning system is controlled by the operator pushing a button or optional automatic timer controls eliminating the need for an operator to think about cleaning the filters. Dust from the filters drops downward into three removable dust trays, one smaller easy to handle drawer per row of filters. The clean air is pulled through the filters by either a 7.5 or 10 horsepower highly efficient, reliable motor directly driving a non-overloading backward inclined airfoil high efficient blower producing airflows of either a nominal 5000 or 6500 CFM.

Reliable, efficient electric motor is controlled and protected by a manually operated adjustable fused disconnect switch mounted on the PBM for ease of control for the operator.

Servicing the PBM is easily possible with the filter or Magnehelic gauge (standard on all units) indicating to the operator when the filters would need to be cleaned or replaced.

Less maintenance on the PBM is due to the great amount of filter surface area, the more surface area on the filter media means longer filter life and less filter maintenance and service time. Manufactured using 11 and 14 gauge steel and painted with a heavy industrial powder coated textured finish for harsh environments.

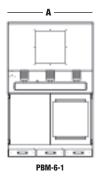
Flexible and multiple uses for the PBM is achieved by offering a variety of air inlet choices depending on applications for example hinged removable side inlet doors improves the overall efficiency of the PBM in capturing the ambient dust. If the dust is abrasive or has sparks, air inlet choices of either a louvered or metal mesh inlet are available. Sticky dusts are removed prior to the cartridge using inexpensive off the shelf pleated filters protecting the more efficient higher priced cartridge filter. As processes or operations change within your shop all of these inlet options are available by simply removing the inlet doors and selecting the inlet of your choice.

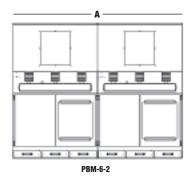
Quiet operation for the PBM is achieved by factory installed acoustical lining inside the blower housing, if further noise reduction is required a silencer is available.

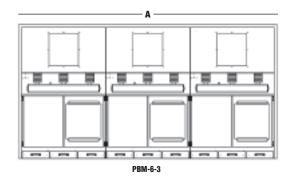
Energy savings provide a rapid return of initial investment. Cleaned air returns back to the plant environment eliminating the need to exhaust the air outside, the necessity for make-up air including associated heating and/or cooling costs. The achievement of the clean exhaust air is the option of a HEPA after-filter providing 99.97% guaranteed efficiency at 0.3 micron particle size.

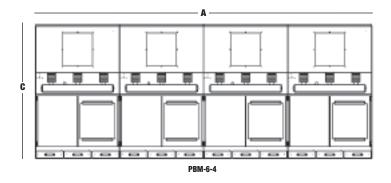
Meets or exceeds OSHA requirements so plants comply with the tough clean air standards. The end result, a clean, healthy plant environment with improved morale and productivity.

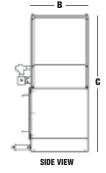
Specifications

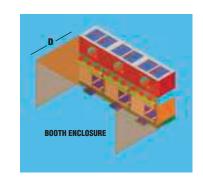












Aer Control Systems Power Booth Module Specifications

| MODEL # | AIRFLOW (CFM) | # OF FILTERS | SQ. FT. Media | # OF PBMS | DIMENSIONS AXBXCXD (IN.) |
|----------------|------------------|-----------------|------------------|--------------|-----------------------------|
| | (01 111) | 1 121 2110 | MEDIA | 1 51110 | ANDROND (III.) |
| PBM-4-1 (5) | 3,200 | 4 | 1096 | 1 | 37x38x86 |
| PBM-4-2 (10) | 6,400 | 8 | 2192 | 2 | 74x38x86x90 |
| PBM-4-3 (15) | 9,600 | 12 | 3288 | 3 | 111x38x86x90 |
| PBM-4-4 (20) | 12,800 | 16 | 4384 | 4 | 148x38x86x90 |
| | | | | | |
| PBM-4-1 (7.5) | 5,000 | 4 | 1096 | 1 | 37x38x86 |
| PBM-4-2 (15) | 10,000 | 8 | 2192 | 2 | 74x38x86x90 |
| PBM-4-3 (22.5) | 15,000 | 12 | 3288 | 3 | 111x38x86x90 |
| PBM-4-4 (30) | 20,000 | 16 | 4384 | 4 | 148x38x86x90 |
| | | | | | |
| PBM-6-1 (7.5) | 5,000 | 6 | 1644 | 1 | 54x38x86 |
| PBM-6-2 (15) | 10,000 | 12 | 3288 | 2 | 108x38x86x90 |
| PBM-6-3 (22.5) | 15,000 | 18 | 4932 | 3 | 162x38x86x90 |
| PBM-6-4 (30) | 20,000 | 24 | 6576 | 4 | 216x38x86x90 |
| | | | | | |
| PBM-6-1 (10) | 6,500 | 6 | 1644 | 1 | 54x38x86 |
| PBM-6-2 (20) | 13,000 | 12 | 3288 | 2 | 108x38x86x90 |
| PBM-6-3 (30) | 19,500 | 18 | 4932 | 3 | 162x38x86x90 |
| PBM-6-4 (40) | 26,000 | 24 | 6576 | 4 | 216x38x86x90 |
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