Controlling Volatile Dust

Safety
Safe collection of aluminum, titanium, and other potentially hazardous dust, as well as heavy sparking applications, meeting or exceeding OSHA and NFPA regulations for dust removal inside the building.*

High Capture Velocity
With a minimum of 300 FPM in the working zone, the optional Regain Air System increases the velocity up to 800 FPM.

Compact Booth Design
- Elongated collector shape with a depth of only 32 inches
- Front access for easy clean out.
- All service & controls on front, allowing booth to be placed against a wall to conserve floor space

Custom Sizing to Fit the Operation
Whether single- or multi-operation, the Hydrotron HPB is built to the width, depth, and height dimensions needed for the task as well as for the available plant space.

*NFPA guidelines for processing and finishing of aluminum, for example, prohibit the use of dry type dust collectors within the building. In addition, NFPA 65 specifies that collectors should be cleaned at least once a day. Explosion vents may be required and there are special requirements for ductwork. If the air is returned into the building it should have a HEPA type safety filter with an alarm function. Fabric and paper media filter units and electrostatic precipitators may not be used. The preferred collector is a liquid, wet type.

Current Technology

Water Filter: The Hydrotron Wet Dust Collector Systems purify air by a combination of centrifugal force and the violent mixing of water and contaminated air. As the air stream passes the fixed baffles, particulate is separated by a heavy, turbulent curtain of water created by high velocity air. The centrifugal force caused by the rapid changes in airflow direction forces the dust particles to penetrate the water droplets and become entrapped. Contaminated water is then removed from the airstream by centrifugal force and special mist filters. Dust, as sludge, settles to the bottom and the water is reused.

Automatic Fill System: Water make-up is controlled by a solid-state PLC pressure sensor system that is unaffected by debris in the water. The system also includes an electrical solenoid valve, isolation valve, and a manual fill/high-water sensor for reliable water control.
Hydrotron HPB Mark II Series

Wet Collector Environmental Control Booth

Applications
- Grinding, Sanding, Polishing on Aluminum, Titanium and Steel
- Aircraft Manufacture / Maintenance
- Manufacture of Electrical/Electronic Enclosures
- Milling / Refining
- Chemical, Rubber, or Plastics Production
- Ceramics
- Foundries
- Blasting

Selected User List
- General Electric
- WECO
- Clark Products
- American Airlines
- U.S. Army
- U.S. Air Force
- Dupont Corporation
- Lockheed Martin
- GKN Aerospace
- Bendix Corporation

Containing and Filtering Aluminum, Titanium, and Other Potentially Explosive Contaminants

Features
- Compact Collector Module -- Only 32" Deep
- Clean-out & controls on front allows booth to be placed against wall to conserve floor space
- Minimum 300 FPM Capture Velocity in the Working Zone
- TEFC Motors, Single and Three Phase
- Direct Drive/Non-overloading Fan w/ Outlet Damper
- Interior Baffle Section
- Mist Eliminator Filters
- Solid-State PLC Electronic Water Level Control With Pressure Sensor System
- Magnehelic Gauge
- 2" Drain
- Galvanized Steel Construction With Coal Tar Epoxy Coatings to Interior Wet Surfaces
- Industrial Blue Enamel Finish on Exterior
- Fluorescent Lighting With Dust-Tight Lens

Options
- "Push/Pull" Regain Air System with Adjustable Louvers to Increase Capture Velocity 400 to 800 FPM in the Working Zone
- Stainless Steel Construction
- Overflow/Low Water Alarm
- Overflow/Low Water Cut-Off
- Explosion Proof Motors
- Width, Depth, and Height of Enclosure
- Slotted Roofs for Crane Loading of Parts
- Enclosure Construction of 18 ga. Galvanized Carbon Steel
- Automatic Vent Fan
- Auxiliary Switches

Hydrotron HPB Mark II Series

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CFM</th>
<th>Blower</th>
<th>Dimensions*</th>
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<tbody>
<tr>
<td>MII HPB8-1-1x10</td>
<td>6,000</td>
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*Larger/Custom Sizing Available: Consult Factory

Filter 1 has a policy of continuous design improvement and reserves the right to update designs and specifications without notice.

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