# HYDROTRON HPB SERIES

# West Dust Collector/Control Booth



**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 300fpm in the working zone, the optional Regain Air System increases the velocity up to 800 FPM.

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.

#### **Noise Control & Visibility**

Every Hydrotron HPB is equipped with sound-attenuating insulation and dust-tight fluorescent lights.

\*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 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 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.



800-738-0911

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## Wet Collector Environmental Control Booth



### **Typical Applications**

- Aircraft manufacture/maintenance
- Manufacture of electrical/electronic enclosures
- Milling, refining
- Chemical, rubber, or plastics
- Ceramics
- Foundries

#### **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

Model	CFM	Blower HP	Dimensions* HxWxL
HPB6-1-1x10	5,500	10	7.5' x 6' x 154"
HPB8-2-2x10	11,000	2x10	7.5' x 8' x 154"
HPB10-2-2x10	11,000	2x10	7.5' x 10' x 154"
HPB12-2-2x10	11,000	2x10	7.5' x 12' x 154"
HPB16-3-3x10	16,500	3x10	7.5' x 16' x 154"
HPB20-4-3x10	16,500	3x10	7.5' x 20' x 154"
HPB24-5-4x10	22,000	4x10	7.5' x 24' x 154"
HPB28-5-5x10	23,500	5x10	7.5' x 28' x 154"
HPB30-6-5x10	27,500	5x10	7.5' x 30' x 154"
HPB36-7-6x10	33,000	6x10	7.5' x 36' x 154"

<sup>\*</sup>Larger/Custom sizing available: Consult Factory

# Filtering Aluminum, Titanium, and Other Potentially Explosive Contaminants

## **Standard Features**

- 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
- 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 / Customization**

- "Push/Pull" Regain Air System with Adjustable Louvers to Increase Capture Velocity 400 to 8000 FPM in the Working Zone
- Stainless Steel Construction
- Overflow/Low Water Cut-off Alarms
- Explosion proof motors
- HEPA safety Filters with Visible and or audible alarms
- Width Depth and Height of Enclosure
- Slotted Roofs for Crane Loading of Parts
- Enclosure Construction of 1 8ga Galvanized Carbon Steel

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