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Wet Dust Collectors

The wet dust collectors have been designed for the safe and efficient capture/collection of flammable or explosive metal dusts generated from aluminum, magnesium, titanium or similar metals.



*Wet dust collector shown with
after filter mist collectors exposed for easy cleaning*



Shown with air inlet open

This compact Wet Dust Collector is available in stainless steel or galvanized steel construction. The downdraft table has a solid top and side collared inlets. This simple cross over design allows for economy and proven efficiency and success in 8000 CFM and smaller wet dust collectors. The high efficiency impeller type wet collector in stainless steel represents a long lived, economical wet collector at a low cost. Automatic Electronic Water Level Control is provided with a 5 probe design and multiple alert features (required for magnesium dust collection along with the 24/7 vent design).

The unit shown is a 3,000 CFM collector with standard blower options providing up to 4" external static pressure capability. Automatic electronic water level control and motor controls/starters are standard unless otherwise directed by customer.

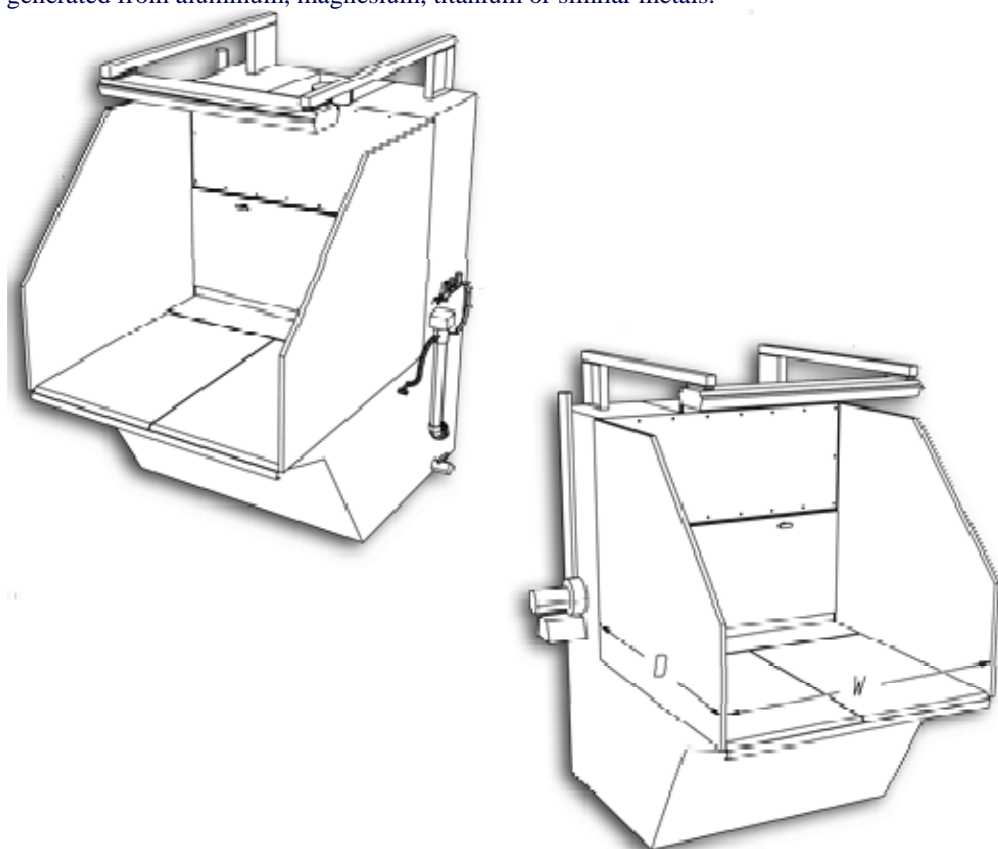
DIMENSIONS & SPECIFICATIONS				
Model Number	Dimensions (D x W x H)	CFM	Inlet Dia.	Motor
DBS-4	50" x 60" x 90"	3000	10"	7.5 HP
DBS-5	50" x 76" x 90"	4000	12"	7.5 HP
DBS-6	50" x 96" x 90"	5000	2 @ 10"	10 HP

STANDARD FEATURES

- 12 gauge stainless steel construction for all metal surfaces that are in contact with water; non-wetted surface construction to be 14 gauge stainless steel
- motor and blower are of a direct drive plug fan design; TEFC motor with backward inclined impeller wheel design; non-sparking
- impeller to have at least a double water reversal design and have a minimum of 3" to 4" of pressure loss
- sludge collection tub to be angled and have clear access for removal of sludge
- automatic water level control (5 probe design) is supplied on all units unless otherwise requested by customer
- an after filter/mist eliminator combination is included to capture any fugitive mist; it is constructed of polyester or other equally water resistant material and is enclosed in a metal frame that provides rigid support for the filters
- the blower outlet chamber is lined with minimum of ½" closed cell poly foam

Wet Downdraft Tables

The wet downdraft tables have been designed for the safe and efficient capture/collection of flammable or explosive metal dusts generated from aluminum, magnesium, titanium or similar metals.



Wet downdraft table illustrated with optional hinged and removable side wing panels and optional lighting package

SPECIFICATIONS				
Model Number	Dimensions (D x W)	CFM	Face Velocity	Motor
DB-3	30" X 30"	2000	400 FPM	3 HP
DB-4	36" x 48"	4000	400 FPM	5 HP
DB-5	36" x 60"	5000	400 FPM	5 HP
DB-6	36" x 72"	6000	400 FPM	7.5 HP

STANDARD FEATURES

- 12 gauge stainless steel construction for all metal surfaces that are in contact with water; non-wetted surface construction to be 14 gauge stainless steel
- motor and blower are of a direct drive plug fan design; TEFC motor with backward inclined impeller wheel design; non-sparking
- impeller to have at least a double water reversal design and have a minimum of 3" to 4" of pressure loss
- sludge collection tub to be angled and have clear access for removal of sludge
- automatic water level control (5 probe design) supplied on all units unless otherwise requested by customer
- an after filter/mist eliminator combination is included to capture any fugitive mist; it is constructed of polyester or other equally water resistant material and is enclosed in a metal frame that provides rigid support for the filters
- the blower outlet chamber is lined with minimum of ½" closed cell poly foam
- heavy duty grating is provided with options for a variety of soft cover materials for part protection

Wet Down Draft Table/Booth Module

STANDARD CONSTRUCTION is 12 ga. (tub) and 14 ga. all welded.

Application: All Metal dust including Magnesium, especially the flammable metals.

Notes: Never should aluminum dust and steel dust (or other ferrous materials) be mixed together....even in a wet collector, unless water level alerts installed. These are included in the Auto Water Level Control Package.

FEATURES

- 1.) Small Foot Print size for the 3000-8000 cfm of air flow
- 2.) Cleanable Media Filter/Mist Eliminators to supply final filtration
- 3.) Direct Drive High Performance Blower
- 4.) Stainless Steel Construction standard (in 12/14 ga. Stainless 304)
- 5.) Economical Manual Clean Out and Water Level Control (by operator)
- 6.) Optional Electronic Water Level Control or Control Panel

REQUIREMENTS (ELECTRICAL)

The 3 phase starter (220 or 440 volt) is not included but quoted with water level control because both are required together (auto shut offs on water level malfunctions).

This Control Panel is a sophisticated (meets all US codes) control panel starter for the 5.0 hp. motor, NEMA 12 Hoffman housing, fused disconnect combination/magnetic starter complete with overloads, push button operation and indicator lights). Mostly Allen Bradley components.

WATER LEVEL CONTROL DESCRIPTION

The Water-level control is designed to automatically maintain a proper water-level in the scrubber. The unit will lose water due to normal evaporation, and must be refilled. The control consists of the following components: external probes, solenoid valve for automatic water-fill, and electrical panel. If the water-level falls below a set point (Low), or above (Hi), it will shut-off the blower, light a warning light on the panel, and sound a remote alarm, supplied by others. Otherwise, it will continually monitor and refill the unit.

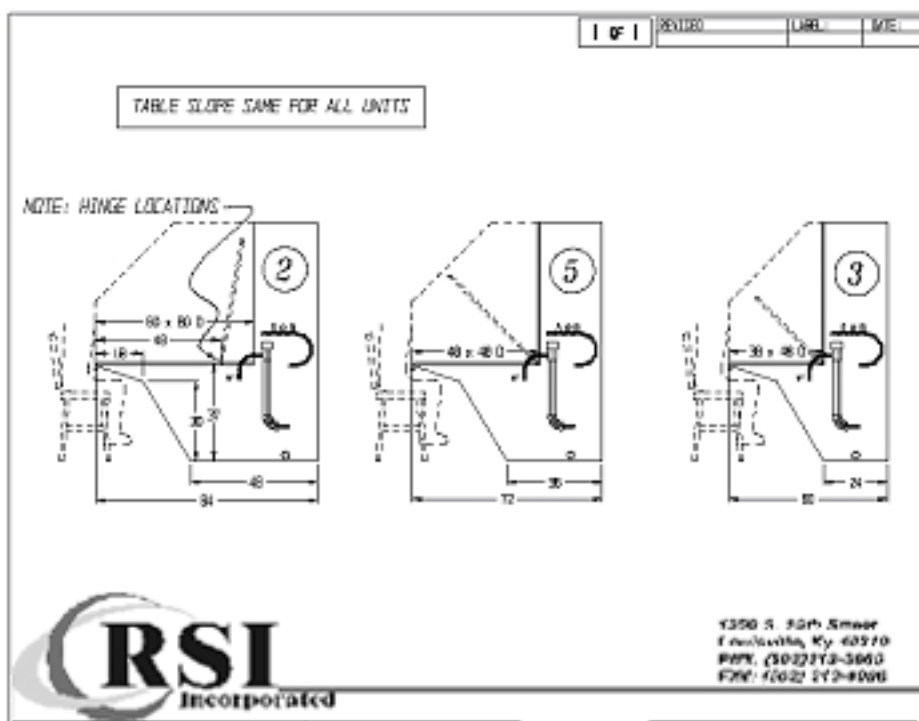
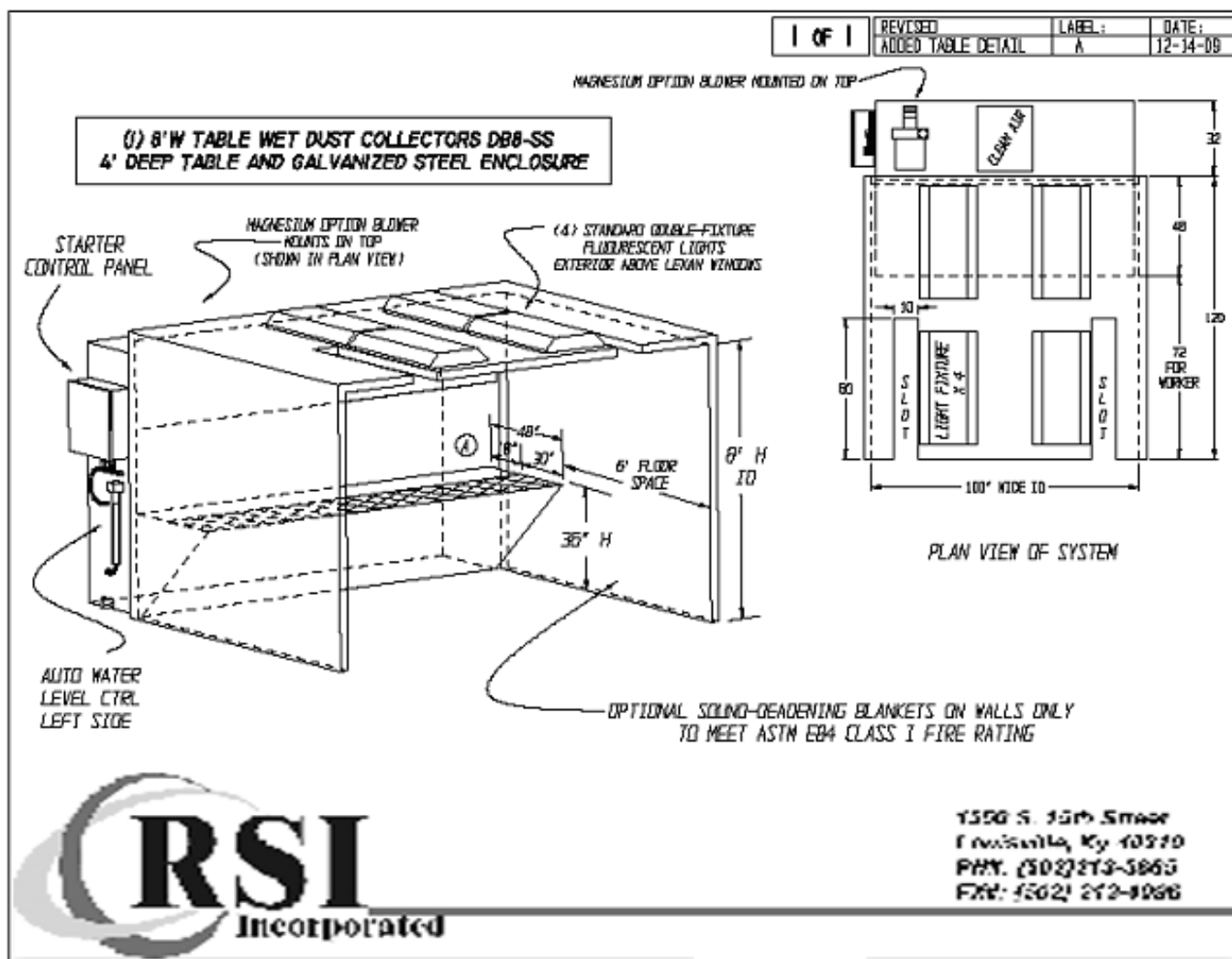
PROBES: There are (4) probes mounted in a clear PVC pipe on the side of the unit. The 304SS probes correspond to: Operating level, Hi level, Low level, and ground. They are field wired to the panel. These are easily checked, and should be cleaned if they become dirty. **NOTE: the level in the pipe normally drops when the blower is ON, so the probes are cut for the 'blower ON level'.**

SOLENOID VALVE: The water-fill piping is mounted on the same side of the unit, and consists of a ½" N.P.T. manual valve, regulator, gauge, and 110VAC field-wired solenoid valve. During normal operation, the solenoid valve is powered by the panel regulated by the probes. One can manually fill a little (not initial fill, however), by using the push button on the panel.

ELECTRICAL PANEL DESCRIPTION

The panel includes the motor starter in its operation. When power supplied to the panel, with the blower off, may use the manual water-fill push button only.





Ergonomic "Sit Under" Table Design



Pair of 6' wide SS Wet Collectors with Louvered Inlets

This is a 12' wide x 10' deep x 8' tall I.D. Booth (made for Aerospace MFG.)



Ease of Installation - Booth Walls come in complete pieces ready to mount on unit and add Roof which is also in very few pieces.

This Booth is very quick to assemble, everything is pre-assembled.



Finished Booth with Slots for OH Crane



This is the Outside of the Booth. Small blower on top is the NFPA “Magnesium” option that requires 24-7 ventilation.

Wet Downdraft Water Tables

FLAMMABLE DUST COLLECTION

For SAFE capture and collection of flammable or explosive dusts from working of aluminum, magnesium, titanium or similar metals/materials

Specifications: (Stainless or Galv.)

- 1) Construction to be of 12 gauge for all metal surfaces that are in contact with water, other construction to be 14 gauge.
- 2) Motor and Blower to be of Plug Fan design, direct drive, TEFC motor, backward inclined wheel design of steel or aluminum construction. Non sparking.
- 3) Impeller to have at least a double (twice) water reversal design and have a minimum of 3" to 4" of pressure loss (w.g.)
- 4) Sludge Collection Tub to be angled and have clear access for removal of sludge.
- 5) Manual water level to be clearly marked by white plastic plate (unit blower off).
- 6) Following Impeller (in direction of air flow) shall be an after-filter/ mist eliminator combination constructed of polyester or other equal water resistant material. This shall be enclosed in a metal frame that provides rigid support for the filters.
- 7) Blower outlet chamber shall be lined with minimum of ½" closed cell poly foam.
- 8) Heavy Duty Grating with options for different soft cover material part protection
- 9) Hinged side panels and awnings with plastic strips

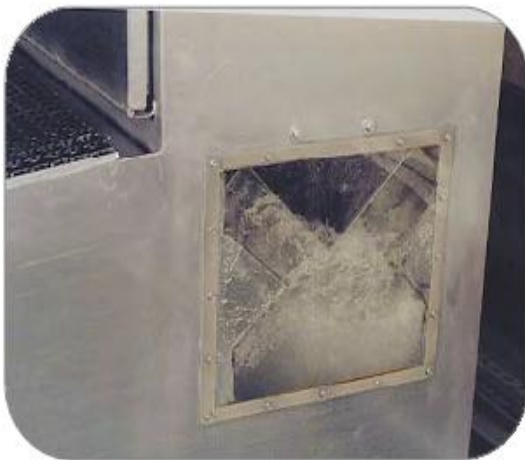


Shown with new "Sit Under Design" and the optional pin hinged removable sides and light

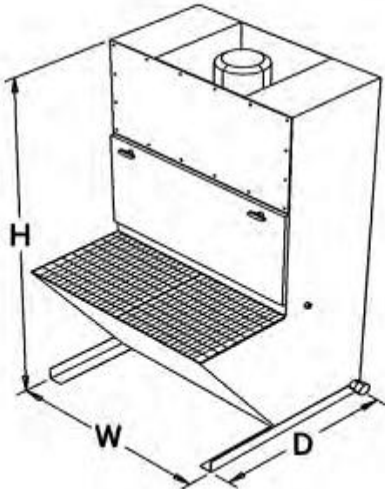
"Simple, Safe, Efficient, Economical"
(meets NFPA requirements)

OTHER OPTIONS:

- 1) **Electronic Water Level Control** assures optimum water level range for best performance. Also shuts down blower operation if water level exceeds upper or lower level safety set points
- 2) **Magnesium constant ventilation fan** design to allow for exhausting of tub 24/7 once magnesium dust is present. Electrical controls to control this design are to be part of the equipment. To meet NFPA 651.

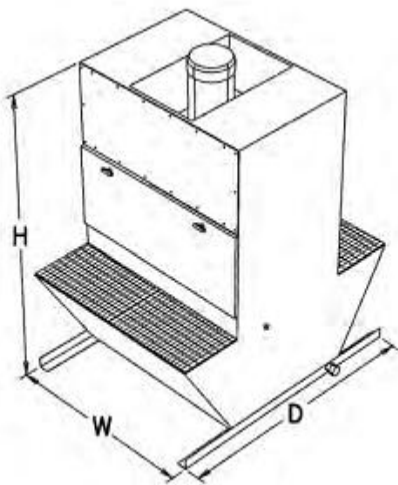


Custom Designed Finishing and Material Handling Systems



<u>Model</u>	<u>Work Surface Measurements</u>	<u>(overall w/AutoWLC)</u>		
		H	W	D
DB-4	48"W X 36"D	106"	60"	68"
DB-5	60"W X 36"D	106"	72"	68"
DB-6	72"W X 36"D	106"	84"	68"

VERIFY FINAL DIMENSIONS AT PURCHASE



<u>Model</u>	<u>Work Surface Measurements</u>	<u>(overall w/AutoWLC)</u>		
		H	W	D
DB2-4	(2) 48"W X 36"D	110"	60"	120"
DB2-5	(2) 60"W X 36"D	110"	72"	120"
DB2-6	(2) 72"W X 36"D	110"	84"	120"



Photo above showing bank of tables in full production on deburring of aluminum transmission housings. Shown with optional Canopy/strip sides.



Unit showing a Double Table with Electronic Auto Water Level Control & Control Panel (unmounted). This Unit equipped with Regain Air Overhead Canopy and Plastic Strip Sides.

Illustrated to right are the Unique final Mist Eliminator Filter Media That provides the final Mist Control and Filtration. Other designs Use flat media holders



Custom Designed Finishing and Material Handling Systems



**5' double Wet Table on right and 5' double unit Wet Dust Collector on left.
Both with full autowater level controls. Table with all options including awning
And adjustable push air with plastic strips on sides.**



Four tables with full Magnesium Package...

Note: Blowers on side of each unit, providing the 24-7 powered ventilation required by NFPA.



Latest Design Table with Pin Hinged Sides.