

OptiFlo ECB

(Environmental Control Booth)

Models ECB1 through ECB6



OUICK AND FLEXIBLE

The AAF OptiFlo Environmental Control Booth (Model ECB) is the answer when a complete dust containment system is required quickly in the minimum amount of space and with the maximum amount of flexibility. The Model ECB incorporates all of the elements of the dust containment system in one complete package. This includes the enclosure, collection hoods, air cleaning system, and fan. The OptiFlo ECB is ideal for collecting dust produced by almost any dust generating application including thermal coating, dry powder coating, welding, cutting, grinding, sanding, de-burring, finishing, buffing, and polishing.

MODULAR ARRANGEMENT

The OptiFlo ECB is constructed using standard modular sections. A booth can be erected using a minimum of two modules with a width of 6'-3-1/2" up to a maximum of six modules with a width of 18'-10-1/2". The booth fits within a headroom of 11'-5". Airflow ratings vary from 4,700 cfm to 14,100 cfm. The OptiFlo ECB includes a 72" deep sound reducing intake enclosure with 2" of foam sound insulaton to channel the airflow and contain the generated dust. Enclosing the space in front of the ECB with a permanent or temporary enclosure such as moveable hanging plastic drapes can enhance the collection efficiency of the ECB.

EFFICIENCY

The OptiFlo ECB provides an overall filtering efficiency of 99.5% on a dust sample comprised of particles in the 0.2 to 2 microns range.

PROVIDING SAFETY & CLEANLINESS

By limiting and controlling the generation of dust and fume to a particular location within the facility the OptiFlo ECB provides safer working conditions for the user and plant personnel, reduced housekeeping, and a generally cleaner working environment. The OptiFlo ECB can positively impact worker morale and productivity.

TYPICAL APPLICATIONS

- Thermal coating
- Powder Coating
- Woodworking
- Metalworking
- Fiberglasss Finishing
- Carbon Reinforced Fiber Finishing
- Plastics
- Ceramics
- Stone
- Material Handling

CONSTRUCTION

The OptiFlo ECB ships knocked down for local assembly and installation. All sheet metal panels are formed from heavy 1-1/2 mm thick galvanized steel which provides a pleasing appearance and resists scuffing staining and corrosion. The assembly includes the 72" deep inlet enclosure, inlet baffle, cartridge enclosure, cartridge filters, clean air plenum, fan, and filter cleaning mechanism including compressed air reservoir, valves, and timer control. The OptiFlo Model DDB is manufactured to provide long and reliable service.

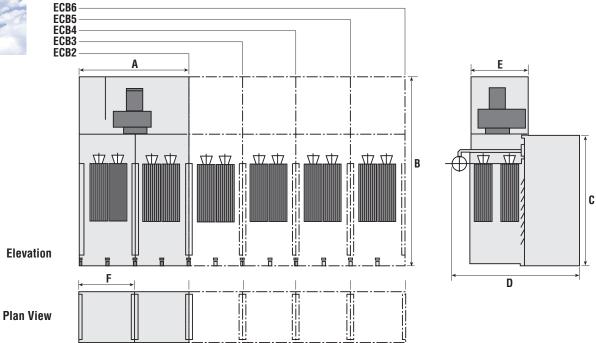
TYPICAL INSTALLATIONS

■ All types of manufacturing Facilities





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OPERATION

A vacuum, generated by the powerful internal fan, draws air from the 72" deep inlet enclosure. This airflow captures the dust and fumes generated within the enclosure and draws them through the inlet baffle where they are captured in high efficiency filter cartridges. The cleaned air is returned to the workspace. As the filter cartridges become loaded with dust they are cleaned by a pulse of compressed air that is injected into the clean side of the cartridge. The cleaning mechanism is activated by an adjustable timer control. The agglomerated dust that is ejected from the surface of the pleated cartridge filter falls into a collection tray in the base of the filter enclosure. The dust in the collection tray is then disposed of periodically. The self-regenerating filter cleaning feature results in long life for the filter cartridges and reduced maintenance costs. If desired the spunbond polyester cartridges can be removed and washed to increase the useable life even further. A compressed air supply with an available air pressure of 90 psig is required to operate the cleaning feature.

DIMENSIONS (Inches)										
MODEL	Α	В	С	D	E	F				
ECB2	6'-4"	11'-5"	7'-10-1/2"	10'-4"	3'-5-1/2"	3'-2"				
ECB3	9'-5-1/2"	11'-5"	7'-10-1/2"	10'-4"	3'-5-1/2"	3'-2"				
ECB4	12'-7-1/2"	11'-5"	7'-10-1/2"	10'-4"	3'-5-1/2"	3'-2"				
ECB5	15'-9"	11'-5"	7'-10-1/2"	10'-4"	3'-5-1/2"	3'-2"				
ECB6	18'-11"	11'-5"	7'-10-1/2"	10'-4"	3'-5-1/2"	3'-2"				

SPECIFICATIONS									
	ECB2	ECB3	ECB4	ECB5	ECB6				
Airflow (cfm)	4700	7050	9,400	11,750	14,100				
Available Static Pressure (in. w.g.)	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"				
Number of fans supplied	1	1	2	2	3				
Motor Electrical rating	ctrical rating 230 / 460 / 3 / 60								
Motor HP	7.5	10	(2) 7.5	(1) 7.5 and (1) 10	(3) 7.5				
Number of filter cartridges	8	12	16	20	24				
Area of filter media (Square feet)	1464	2196	2928	3660	4392				
Compressed air pressure (psig)			90 Max.						



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