



Dust/Mist/Smoke Collector

AERPRO Model ClearAER 1MV

The **AERPRO Model ClearAER 1MV** is designed to give you clean air from:

- **Dust (All) • Fume (Laser, Plasma, Weld) • Oil Mist**
- **Overspray (Paint, Metalizing) • Smoke (Dry/Oily)**

The AerPro Model 1MV is designed for safe and efficient ambient collection of process dusts, mist, and smoke. The efficient 3/4 HP blower moves up to 2500 CFM (cubic feet per minute). Filter efficiencies are rated by MERV 14 which replaces ASHRAE 52-76.

The air cleaning begins with the air entering through the 4" disposable prefilter and continuing through a 95% efficiency rated micro glass filter. The inline discharge allows for various effective air patterns. Air change rates

vary from 5 to 10 minutes depending upon the application.



Specifications:

- **2500 CFM maximum air flow**
- **(1) 30-40% multivene prefilters**
- **(1) 95% Micro Glass Vee Bag Main Filter**
- **24" H x 24" W x 59" L (for PreFilter L = 77")**
- **Hanging weight 160 pounds (MVPF = 200 lbs.)**
- **3/4 HP Blower, 115/1/60**
- **Two Speed with 10' power cord**
- **16 Gauge construction**
- **Painted dark blue chemical resistant paint**
- **62 – 76 dBA**

FEATURE & BENEFITS

- **COMPACT SIZE**
 - **HIGH EFFICIENCY**
 - **LOW OPERATING COSTS**
 - **LOW MAINTENANCE**
 - **TOOL-LESS ACCESS**
 - **MADE IN USA**
 - **2 YEAR WARRANTY**
- OPTIONS**
- **Mounting eye bolts**
 - **Silencer reduces noise by 6 dBA**
 - **Right angle discharge**

Gulftech Enterprises also manufactures the following products: Oil mist collectors from 50 – 12,000 CFM, WetAER wet dust collectors from hazardous materials such as aluminum or titanium, WetAER environmental

Concept of Ambient of Free-Hanging Air Cleaners

The purpose of an ambient or free-hanging is to collect dust or mist from an area which does not lend itself to source capture or to enhance large machines that might have some form of source capture but does not complete the desired results.

A free hanging system allows for various air patterns to be generated within an area. The two basic patterns are defined as the "racetrack" or "T" cross flow. The racetrack pattern is established from collector(s) mounted along the outside wall and blowing down the edge of the longest wall. On a small room this would place the unit along one-third of the longest wall with the discharge being toward the remaining two-thirds. (Remember suction is 1/30th of the throw zone of the discharge of the blower. Stated another way, a blower can throw 30 time further than it can suck.)

The "T" cross flow allows for the unit(s) to blow across the room with the airflow coming into the unit from each end. This type of air pattern is very useful for wide room or area such as welding bays. Therefore, it is a common misconception that the dirty air is sucked into the unit, where in fact, the dirty air is blown into the suction zone. The inlet area acts like a catcher's mitt, One question that is always asked, is how does the dirty air in the center of the room get to the unit? When the unit(s) are on, the air stream coming from the blower produces a high pressure zone. The inside air is a low-pressure zone. The low-pressure zone rotates to the direction of the high pressure and slowly feeds into the high-pressure air stream.

There is always a portion of the dirty air rising into the airstream in addition to the amount of suspended dirty air particles trying to get captured in the airstream. Because of this limitation a free hanging system can never achieve 100% efficiency. However, efficiencies that range from 60% to 90% can be achieved. While this may not produce crystal blue skies in your plant, it will definitely reduce the maintenance required to clean lighting, inventory, address residual employee health benefits and morale.

An example of an air change: Wood Shop 30 x 40 x 20H

Always figure cubic feet first. Therefore, $30 \times 40 \times 20 = 24,000$ cubic feet

Divide total cubic feet by # of minutes of air change required.

Since the above is a light wood dust application $24,000/10$ minute air change = 2,400 CFM If the area had very heavy dust $24,000/5$ minute air change = 4,800 CFM.

In large areas always consult with your local AERPRO distributor .

Potential Return of Investment Benefits from Clean Air

- **Help comply with OSHA.**
- **Improve health resulting in lower insurance costs.**
- **Improve corporate image as a "clean place to work".**
- **Reduce energy costs from eliminating heated or cooled air.**
- **Improve manufacturing quality by preventing contaminates from paint areas to sensitive electronics.**
- **Lower maintenance such as tracking dirt into the offices and less painting.**

Distributed by:

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