Mistaway Frequently Asked Questions

What are the benefits of the Mistaway design?

The Mistaway has both a lower initial cost and lower overall operating costs than the competition. The Mistaway design uses a very efficient fan (only 210 watts for the MA700) and low restriction filters, thus making it very cost effective and economical to use. The electricity savings alone (over using most other mist collectors) will usually offset the cost of the replacement filters. The filters are low cost and quick and easy to change or service.

How is The Mistaway different from other mist collectors?

There are basically three types of mist collectors: media, centrifugal, and electrostatic.

The Mistaway is a new patented design media type of mist collector that uses panel filters. Mist is drawn into the Mistaway from the bottom, the mist coalesces on the filters and then drips off returning through the bottom intake. The filters in the Mistaway are inexpensive and are quickly and easily accessed for service or replacement.

Centrifugal mist collectors have filters mounted on a rotating wheel that usually also works as a fan. This type tends to go out of balance and vibrate excessively as the filters become loaded and/or the wheel needs cleaning. Maintenance requires disassembly of the unit to access the rotating wheel and new filters are installed on the wheel.

Electrostatic types use the principles of static electricity and use a high voltage power supply to electrify metal plates in the filter to attract mist to the plates. Cleaning the filter is troublesome because particulates can become well adhered to the delicate metal plates and small wires inside the filter. When the filter gets dirty the plates continually arc and a repeated snapping noise is heard. At this point the filter becomes ineffective and mist bypasses the filter and mist is emitted along with ozone gas. Ozone gas is a known health hazard and is regarded as toxic. Due to the dangers of ozone gas many companies have decided to remove electrostatic mist collectors from service.

How do I know what size Mist Collector is needed for my application?

Roughly measure the inside of the enclosure and determine the approximate internal cubic feet.
For best results change the air in the enclosure approximately 3 to 5 times per minute.
For example: Enclosure = 4ft x 5ft x 8ft = 160 cu.ft. The MA700=700 CFM. 700 CFM/160 Cu.ft. = 4.3 air changes per minute. The MA700 would change the air 4.3 times per minute and would be a good fit for this application.
See instruction manual for more info on Mist Collector sizing. There are two Mistaway models: MA700 (700 CFM) and MA1200 (1200 CFM). For very large machine applications two or more MA1200's can be installed, and for small machines the MA700 with a speed control unit would provide best results.

How do I install the Mistaway?

The Mistaway can be installed using several methods, please refer to the instruction manual for more info.

1) The Mistaway can be direct mounted (Cut an opening in the enclosure top to match the Mistaway intake and bolt the Mistaway unit directly to the top of the machine).
2) The Mistaway can be directly installed to a round enclosure top opening using a Mounting Plate (see Inlet Options).
3) The Mistaway can be mounted on a Floor or Machine Stand, or hung from the Ceiling or Wall Mounted, and a duct can be run from the machine to a Plenum mounted on the bottom of the Mistaway (see Mounting Options).
4) The Mistaway can be installed on a Portable Cart with Extraction Arm and moved from one machine to another as needed, or the Extraction Arm can be permanently mounted to evacuate mist at the source.

How will I know when to service the filters?

The large gauge on the front of the Mistaway is a differential pressure gauge and indicates the filter restriction. When the needle climbs into the yellow area air flow is reducing and filter maintenance is needed soon.

What is involved in the filter maintenance and how long do the filters last?

The first 3 filter stages are washable and reusable. The Final Filter is not washable and should be changed as needed. The Carbon filter has a limited life and should be replaced to maintain the odor removal capability. Typical filter life is approximately 1 year but can vary dependent on the application and conditions.

What is the cost of the filters?

You can check filter pricing on the Replacement Filters Tab in our web-store.

Do I need the After Filter Option?

If you are producing smoke or “liquid smoke” in your machining process the After Filter is designed to capture this smoke. The Final Filter in the Mistaway will capture larger smoke particles but smaller smoke particles will get through. In some cases, this small amount of smoke may be acceptable and other cases this may not. This would be up to the customer and they should consider the overall shop ventilation and the level of filtration desired. For example: a shop with machines in a confined area with poor ventilation should most likely opt for the After Filter.

The type of oil mist to be filtered should also be taken into account. In water soluble oil applications, the mist particles are larger than straight oil mist particles. Therefor in straight oil applications the After Filter option should be considered. The After Filter requires a Mounting Kit that is a simple bolt-on to the Mistaway unit by the user.

Should I use a manual on/off switch or use the Mist Manager control to turn it on/off as needed?

There is no on/off switch on the Mistaway because the mist collector is usually mounted on top of the machine and out of easy reach. We recommend using the Mist Manager to control the Mist Collector on/off cycles because It automatically turns the mist collector on and off as needed. This will avoid the possibility of operators neglecting to turn the mist collector on when it is needed or forgetting to turn it off when it is not needed. The Mist Manager includes an internal timer that will run the mist collector for 5 minutes after the coolant shuts off to evacuate the mist from the machine enclosure.

In the past users have modified their machines to operate the mist collector using m-codes and installing a timer relay. The Mist Manager will do the same job without the m-codes or any machine modifications.

Do I need the On/Off Speed Control Unit?

You do not necessarily need a Speed Control, but you will need a method to turn on and off the mist collector. You can use the speed control to manually turn the Mistaway on & off or the Mist Manager to turn it on & off automatically, or both if speed control and auto on/off is desired. The speed control does have certain benefits. If you reduce the fan speed and can still evacuate enough mist from the enclosure your mist collector maintenance will be reduced, and filter life will be extended. Example: For the MA700 unit, applications with enclosure sizes below 140 cu feet would benefit from the speed control.

What is the efficiency rating of the Mistaway?

The Final Filter in the Mistaway is a high efficiency rated at Merv 14, and will catch 90 – 95% of particles in the 1.0 to 3.0 micron particle size range. The optional After Filter will catch 95% of particles down to .3 microns. If required, we also supply the After Filter in a True Hepa option that will catch 99.97% of particles down to .3 microns.
Here are test results of the efficiency of the Mistaway with and without the optional After Filter installed and how it compares to current OSHA requirements.

What is the Warranty on the Mistaway and where Is It made?

The Mistaway Collector has a (3) year warranty and a 60-day 100% money back unconditional guarantee that it will perform to your satisfaction. The Mistaway Collector is Made in USA by Mistaway Filtration Systems, Troy, NY.