

# Dryflo® Mist Collectors



# Dryflo®

## Nothing Compares To A Dryflo®

The Dryflo® line of mist collectors from Donaldson® Torit® is one of the most effective and efficient mist filtration solutions for any sized application—large or small. Available in three distinct models (Machine-Mountable, Standard and Advanced), Dryflo mist collectors provide a more productive work environment by reducing coolant and machining oil mists.

The first and only complete line of cartridge collectors *specifically* engineered for mist collection, Dryflo provides an unbeatable combination of high performance technology and easy, predictable maintenance in the most extensive range of configurations available.

### Dryflo Offers:

- **Higher collection efficiency**
- **Cleaner, more pleasant work environment**
- **Reduced risk of mist-related hazards**
- **Faster, easier collector maintenance**
- **Lower plant maintenance costs**
- **10-year warranty**

*Dryflo*  
*Leaves the*  
*Competition*  
*All Wet*



DMC-MMA

## The Dryflo Difference

Dryflo collectors capture mist like no other filtration system, providing the highest levels of performance, collection efficiency and fast, easy maintenance.

- **Innovative Technology** Provides high performance mist filtration when used individually or in combination with a wet machining operation.
- **High Performance** Proprietary filter cartridge technology significantly outperforms electrostatic precipitators as well as mist collectors that use standard HVAC envelope and cassette filters.
- **High Efficiency** Dryflo provides high filtration efficiency.
- **Broad Range** Available in Machine-Mountable, Standard and Advanced models to accommodate a wide range of applications, plant layouts and budget requirements.
- **Quick and Easy Maintenance** Pressure differential gauge shows when maintenance is required, and unique air-side filter retention system allows for quick filter changes while ensuring minimal worker contact with collected oil.



DMC-C



ADMC-AD8

## Filtration Performance & Operating Advantage

**Multi-Stage Filtration** The Dryflo filter media, specifically engineered for mist collection, provides high efficiency filtration. The prefilter and wrap allow the filter cartridge to drain and coalesce smaller coolant liquid mist droplets into larger drops. A HEPA or 95% DOP final filter is available for applications generating smoke or when additional efficiency of discharge air is required.



**Quick and Easy Filter Changes** Dryflo filters help ensure minimal worker contact with collected oil. Filters are changed from the clean-air side of the collector using Donaldson Torit's unique filter retention system.

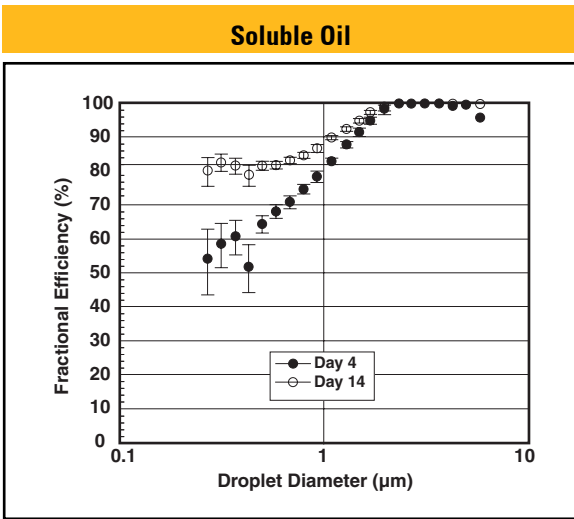
**Predictable Maintenance** There's no guesswork when it comes to maintaining a Dryflo mist collector. As the cartridge filter loads, the pressure drop increases predictably, and a pressure differential gauge tells the operator precisely when filters need to be changed.



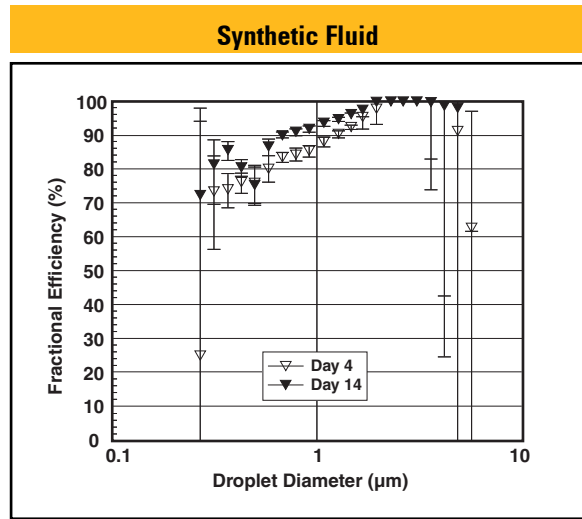
# Donaldson®

## Performance Data

**Long-Lasting Efficiency** The Dryflo cartridge is a proven, highly efficient mist filter that actually increases efficiency over time when collecting soluble oil or synthetic fluid. In tests conducted by the University of North Carolina (UNC), Dryflo was shown to be the only mist cartridge filter to offer increased efficiency over time, resulting in longer HEPA filter life and reduced HEPA filter replacement costs.



Efficiency vs. droplet diameter for Dryflo cartridge and wrap assembly on days 4 and 14 with soluble oil at an airflow of 1000 CFM. Error bars represent 95% confidence intervals.



Efficiency vs. droplet diameter for Dryflo cartridge and wrap assembly on days 4 and 14 with synthetic fluid at an airflow of 1000 CFM. Error bars represent 95% confidence intervals.

**Gauging Efficiency** Using UNC’s protocol for evaluating the cartridge efficiency, Dryflo mist collectors with HEPA final filter are a reliable, high performance filtration solution. To prolong HEPA filter life, the upstream filter stages must also be highly efficient. HEPA life depends on the cumulative loading it receives, which in turn, depends on the performance of the upstream collection stages.

Evaluating efficiency as a function of droplet diameter and pressure drop over 14 days, UNC protocol determines the size distribution of droplets generated during a variety of wet machining operations. Droplet sizes ranging from 1.8 micron to 3.2 micron were tested to determine the average efficiency of Dryflo collectors on soluble oil and synthetic fluid.

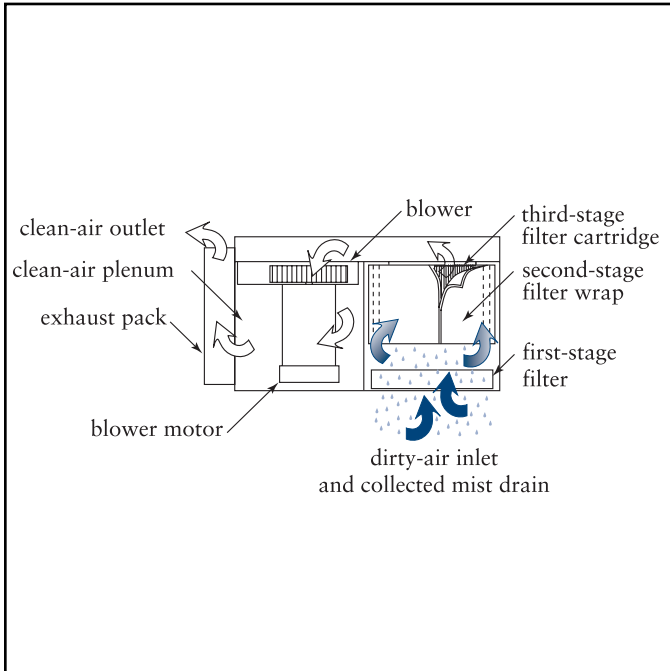
Average Efficiency of Dryflo on Soluble Oil and Synthetic Fluid		
Droplet Size	Dryflo Collector With HEPA	Dryflo Collector Without HEPA
1.8 micron	100%	98%
3.2 micron	100%	100%

Note: The data provided in this report is a result of tests performed using the UNC protocol. When comparing these results with other products, be sure the data being compared is derived by the same methodology.

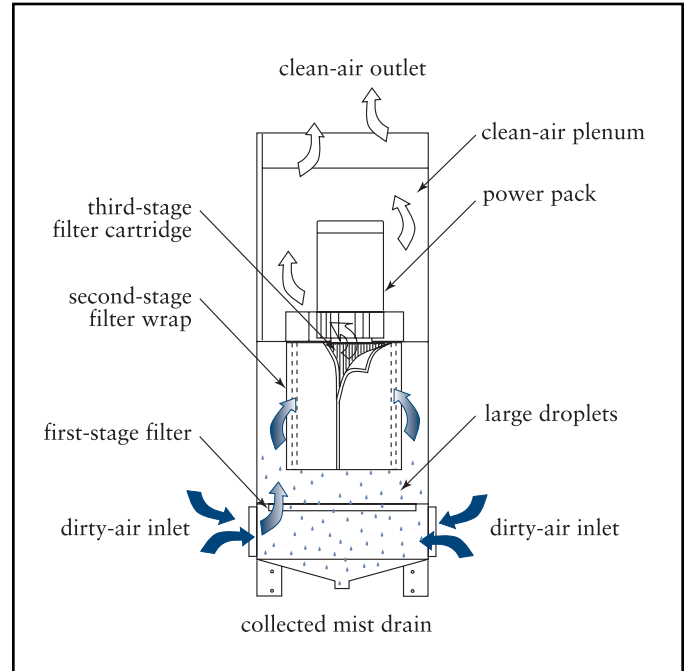


## Sizes & Operations

### Normal Operations for Models DMC-MMA, -MMB



### Normal Operations for Models DMC-C, D1-D10



### DMC-MMA, MMB

- Mounts directly onto a machining center to collect oil, water-soluble, semi-synthetic and synthetic coolant
- Offers three stages of filtration plus optional HEPA filter
- Airflow capacities up to 800 cfm
- Quiet operation
- Cartridge efficiency increases as unit operates



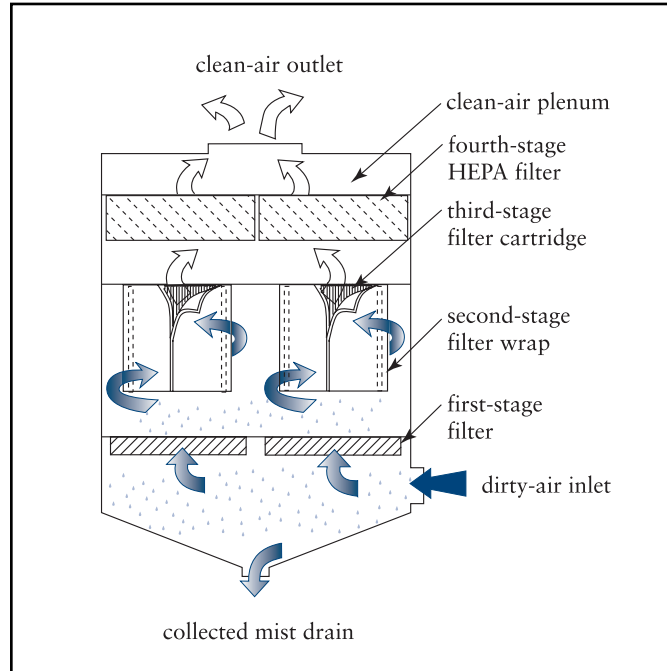
### DMC-C, D1, D2, D4, D6, D8, D10

- Collects mist as well as some dust
- Airflow capacities up to 22,000 cfm
- Dryflo filter cartridge provides high filtration efficiency
- Drain collection containers and hopper screen keep hopper clean and prevent drain clogs
- High performance filter media accommodates liquid-load to heavy particulate mist-laden applications
- Exhaust air can be recirculated to the manufacturing floor



## Sizes & Operations

### Normal Operations for Models ADMC-AD6, AD8, AD10

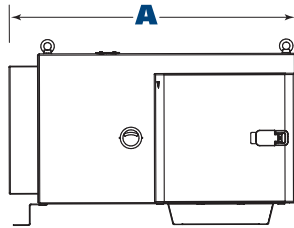


### ADMC-AD6, AD8, AD10

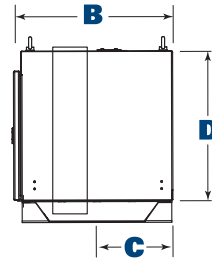
- Collects airborne mists, coolant mists and smaller amounts of dust
- With integral HEPA filter, smoke from machining operations can also be collected
- Dryflo filter cartridge provides high filtration efficiency
- Exhaust air can be recirculated to the manufacturing floor

## Dimensions & Specifications

### DMC-MMA, -MMB

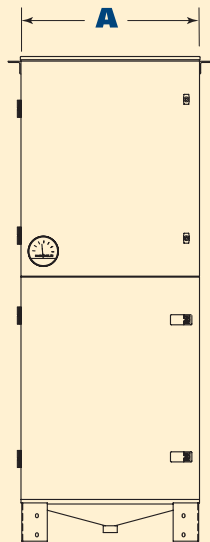


Front View  
DMC-MMA

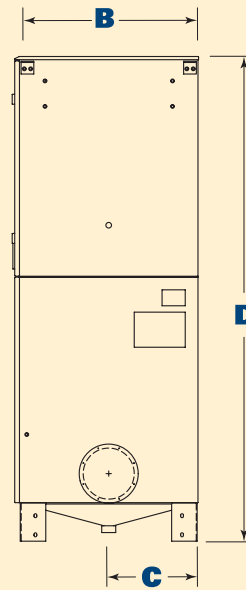


Side View  
DMC-MMA

### DMC-C through DMC-D1 – D10

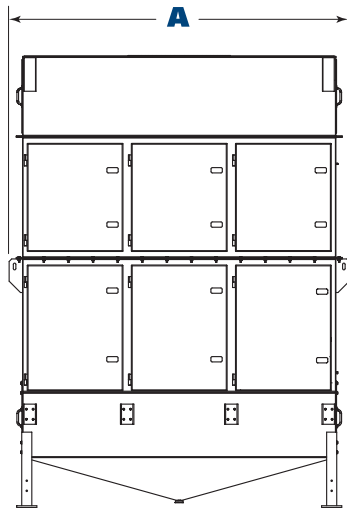


Front View  
DMC-C

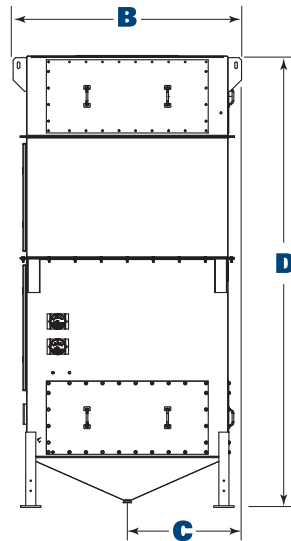


Side View  
DMC-C

### ADMC



Front View  
ADMC-AD6



Side View  
ADMC-AD6



## Dimensions & Specifications

Models	Nominal Airflow* (cfm)	No. of Filters	Filter Area (ft <sup>2</sup> )	Motor (hp)	Shipping Weight (lbs)	Dimensions (inches)				Sound Level** dB(A)
						A	B	C	D	
DMC-MMA	390	1	41	0.75	85	30.3	16.0	8.0	15.8	65
DMC-MMB	800	1	82	1.5	165	39.1	20.7	10.4	20.8	69
DMC-C	1,070	1	140	3.0	540	28.2	28.9	14.0	76.0	68
DMC-D1	2,000	1	220	7.5	740	28.2	28.9	14.0	86.6	77
DMC-D2	4,400	2	440	†	635	31.3	61.3	30.0	67.7	†
DMC-D4	8,800	4	880	†	1,725	65.3	61.3	30.0	81.5	†
DMC-D6	13,200	6	1,320	†	2,125	93.0	63.7	31.9	98.2	†
DMC-D8	17,600	8	1,760	†	2,900	124.3	63.7	31.9	109.0	†
DMC-D10	22,000	10	2,200	†	3,550	155.3	63.7	31.9	123.8	†
ADMC-AD6	13,200	6	1,320	†	4,420	101.3	68.0	31.9	134.5	†
ADMC-AD8	17,600	8	1,760	†	5,600	132.3	68.0	31.9	145.2	†
ADMC-AD10	22,000	10	2,200	†	7,300	163.3	68.0	31.9	160.0	†

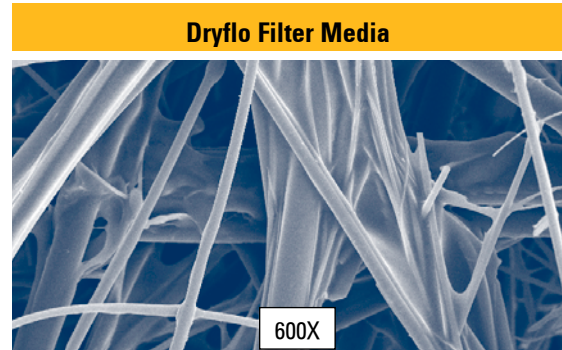
† Optional fans available. See optional fan specifications for sound level data.

\* Based on clean filters.

\* Published dB(A) sound levels are for units without HEPA filter and are an overall average. This average is determined for one operating condition: clean filter, at maximum airflow, three (3) feet from the unit in a controlled laboratory environment. Actual installed equipment sound levels will vary depending on the measurement location, the operating condition, the installation and the environment.

## Cartridge Filter Technology

**Dryflo Filter Media** Dryflo filter media is made from proprietary synthetic media incorporating both small and large fibers for optimum filtration. The smaller fibers provide increased filtration efficiency; after mist is captured and coalesced, the larger fibers allow the oil to drain from the filter. The media also incorporates a proprietary corrugation method which maintains uniform airflow and lower pressure while the media is saturated with oil.



### *High Performance Three-Stage Filtration Improves Collection Efficiency at Every Stage*

#### **First-Stage**

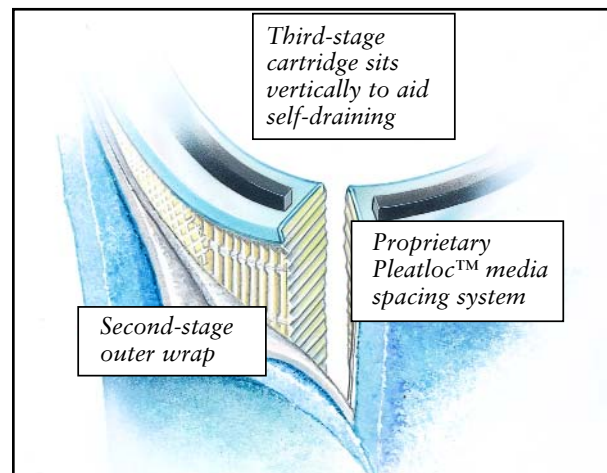
A prefilter that removes larger mist droplets, metal dust and swarf captured by the collector. A variety of first-stage filters are available: wire mesh thin screen, polypropylene mesh, or a high efficiency first-stage for Advanced Dryflo models only.

#### **Second-Stage**

A three-layer wrap of synthetic high-loft material captures small mist particles into larger oil mist droplets, which drain out of the mist collector.

#### **Third-Stage**

Collects, coalesces and drains the finer mist droplets generated by metalworking applications. Along with vertically oriented pleats, the third-stage filter cartridge incorporates the Pleatlock™ media spacing system, which enhances drainage and provides a lower pressure drop, higher filtration efficiency and less re-entrainment of collected mist.





## Standard Features & Equipment Options

	Models							
	MMA/MMB		C-D1		D2-D10		ADMC	
	Standard	Optional	Standard	Optional	Standard	Optional	Standard	Optional
<b>Collector Design</b>								
Mild Steel Construction	X		X		X		X	
Inlet Gasket		X						
Inlet Collar		X	X		X		X	
Inlet Hopper			X		X		X	
Inlet Hopper with Legs		X		X		X		X
Inlet Hopper with Vibration Isolators		X						
Inlet Hopper with Flex-Duct		X						
Inlet Hopper with Impact Separator		X						
Machine Mount	X							
Ceiling Mount		X						
Floor Mount		X	X		X		X	
Collector Stand or Cart		X						
P-Trap Assembly				X		X		X
Junction Box		X		X		X		X
Drain Collection Container		X		X				
<b>Cartridge Filters</b>								
First-Stage Wire Mesh	X		X		X			
Variety of Other Prefilters		X		X		X		
High Efficiency First-Stage		X		X		X	X	
Dryflo Cartridge Filter with Wrap	X		X		X		X	
Fourth-Stage HEPA Filter		X		X		X	X	
Fourth-Stage 95% DOP Filter		X		X		X		
<b>Paint System</b>								
Prime Coated Interior	X		X		X		X	
Blue Exterior Finish Coating Meets 250-hr. Salt Spray Corrosion Protection Test	X		X		X		X	
Custom Paint Colors		X		X		X		X
Hostile Environment Coating		X		X		X		X
<b>Electrical Controls, Gauges and Enclosures</b>								
Minihelic®* Pressure Gauge	X							
Magnehelic®* Pressure Gauge			X		X		X	
IEC Motor Starter		X		X		X		X
Type 12 (NEMA & UL) Motor Starter		X		X		X		X
Remote Start/Stop		X		X		X		X
Machine Tool Interlock		X		X		X		X
Mounted and Prewired Motor Starters		X		X				
<b>Warranty</b>								
10-Year Warranty	X		X		X		X	

U.S. Patents 5,415,676; 5,871,557; 5,611,922; 6,007,608  
 \*Minihelic and Magnehelic are registered trademarks of  
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**Donaldson® Torit®** Look to Donaldson Torit for all of your air filtration needs. Although you may not always see our products, you can breathe easier knowing we're there.

**Customer Support** For nearly 90 years, Donaldson Torit has been the leading innovator of air filtration solutions that improve manufacturing plant environments for employees the world over. Driven by an unwavering commitment to customer support, Donaldson Torit is the name more manufacturers around the globe trust to deliver the most efficient and productive dust, mist and fume collectors and filter media.

**Unparalleled Innovation** Whether our customers need a single collector or a multi-faceted collection system, Donaldson Torit has the solution. The breadth of Donaldson Torit's innovative product line is unmatched, offering unparalleled filtration systems, ancillary parts and replacement filters. From central, source and ambient systems to baghouse, envelope and cartridge technologies, Donaldson Torit has the expertise to provide filtration solutions for virtually any application.

**Global Reach** Donaldson Torit manufactures and markets its filtration products throughout the world. As more manufacturers continue to expand and grow their operations globally, Donaldson Torit will be there to serve and support our customers' needs.

**Built for Performance** Genuine Donaldson Torit replacement filters and parts can significantly improve the performance of your collectors. With hundreds of varieties to choose from and all in-stock orders shipped within 48 hours, Donaldson Torit is your best, most reliable source for premium performance replacement parts. Visit us at [www.donaldsondynamic.com](http://www.donaldsondynamic.com).

**Rely on the Industry Leader** When it comes to air filtration, you need a partner you can trust. Rely on the world leader in air filtration—Donaldson Torit.



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