

The WSO MM mist collector from Donaldson® Torit® is an effective and efficient mist filtration solution, providing a more productive work environment by reducing coolant and machining oil mists in a machine-mountable package. The WSO MM provides high performance technology and easy, predictable maintenance.

The versatile WSO MM mist collector provides four filter solutions for water-soluble coolant, straight oil, and the most challenging, oily smoke. The WSO MM uses two types of media:

- Proprietary Dryflo® Filter Media Technology
- Revolutionary Synteq XP™ Media Technology, engineered for superior draining, resulting in lower pressure drop and longer filter life.

The WSO MM can be modified with a simple filter change, leading to leaner operation, cost savings and cleaner plant air.

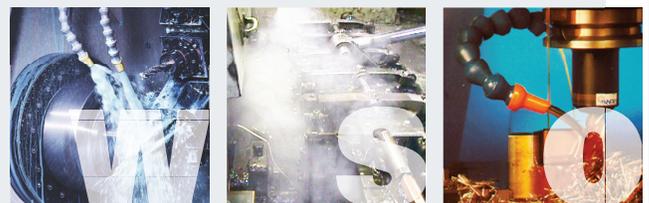
### FEATURES & BENEFITS

- 4 solutions for mist application
- Economical proprietary Dryflo® filter media
- Advanced Synteq XP™ high efficiency media
- Cross-flow design for better drainage
- Easy to change cartridge filters
- Energy savings
- Continuous-duty design
- Lower life cycle costs
- Configurations for machine mounting and floor stands

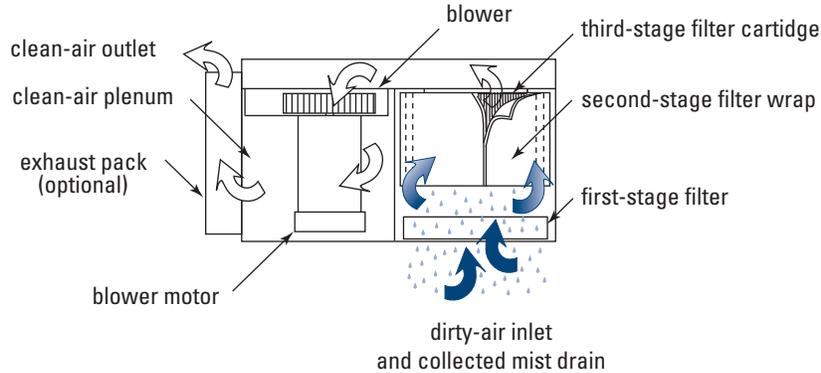


WSO MM

3 APPLICATIONS  
1 COLLECTOR  
4 SOLUTIONS

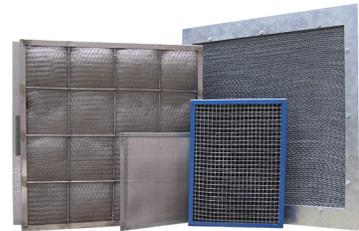


## VERSATILE IN APPLICATION. FLEXIBLE IN DESIGN



### 1ST STAGE: PREFILTER OPTIONS (SELECT ONE)

- **METAL SCREEN**  
For heavier dust/grit from wet grinding
- **METAL MESH**  
For most water-soluble mist
- **POLYPROPYLENE MESH**  
For most straight oil mist
- **HIGH EFFICIENCY 1ST STAGE**  
For oily smoke

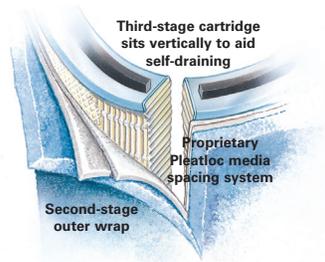


### 2ND STAGE: FILTER WRAP (ONLY AVAILABLE FOR DRYFLO STANDARD DELIVERED)



### 3RD STAGE: PRIMARY FILTER (SELECT ONE)

- **DRYFLO FILTER(STANDARD)**
  - For oil, water-soluble, semi-synthetic and synthetic coolant
  - Economical, for various applications
- **SYNTEQ XP-W**
  - For mist from water-soluble coolant
  - Fast draining for heavy water-based liquid load
- **SYNTEQ XP-S**
  - For smoke from machining
  - Highest efficiency for challenging applications
- **SYNTEQ XP-O**
  - For mist from straight oil machining
  - Efficiency designed for small oil aerosols



### 4TH STAGE: FINAL FILTER (OPTIONAL)

- **DOP**  
95% efficient on 0.3 micron mist and smoke
- **HEPA**  
99.97% efficient on 0.3 micron mist and smoke



# CHOOSE THE BEST FILTER FOR YOUR APPLICATION



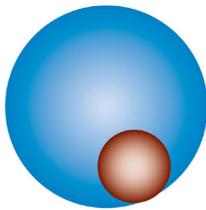
**WATER SOLUBLE**  
Typical particle size: 2-20 micron



**SMOKE**  
Typical particle size: 0.07-1.2 micron



**OIL**  
Typical particle size: 0.8-5 micron



- Largest mist particles
- 99.8%\* removal efficiency



- Smallest aerosols from machining
- 99.97%\*\* removal efficiency



- Submicron oil mist
- 99.5%\* removal efficiency

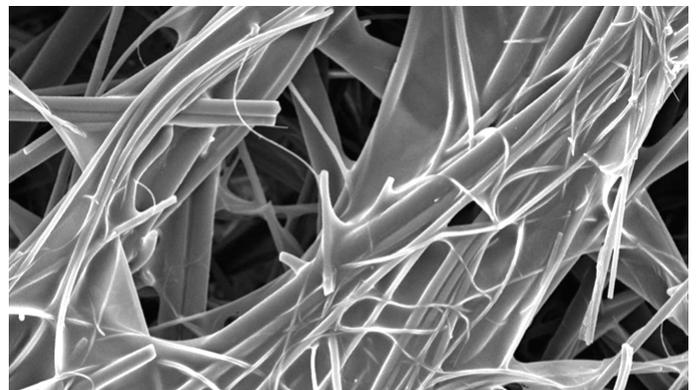
\* Stated efficiency typical for water-soluble and straight oil applications. The use of 95% DOP or HEPA filter may be required.  
 \*\* Stated efficiency typical for oily smoke application using a HEPA final filter

Average Efficiency of Dryflo® on Soluble Oil and Synthetic Fluid		
Droplet Size	Dryflo® Filter Media with HEPA	Dryflo® Filter Media 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.

## 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.



**Dryflo Filter Media**

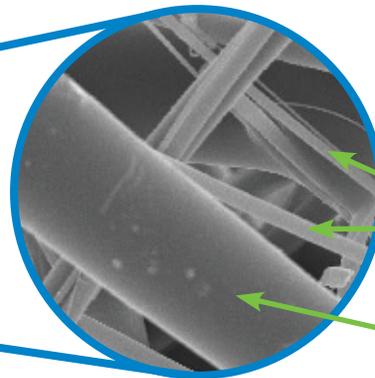
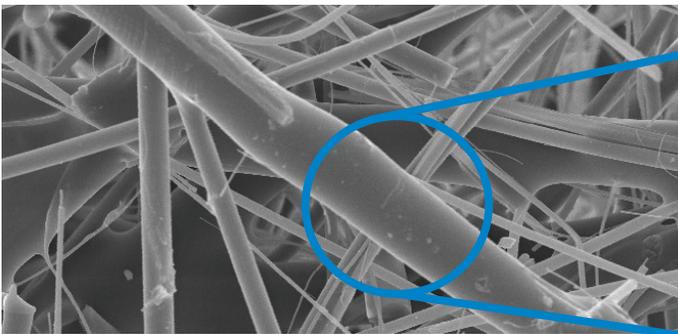
## ADVANCED FILTER MEDIA FOR MIST

Proprietary Synteq XP Media Technology is a revolutionary new media for mist collection that provides high efficiency, low operating pressure drop, and long filter life when compared to traditional media.

This photo from our Scanning Electron Microscope and the illustration show why Synteq XP Media Technology provides superior performance on mist collection applications.

### SYNTEQ XP MEDIA TECHNOLOGY WITH RESIN-FREE, BINDING FIBERS

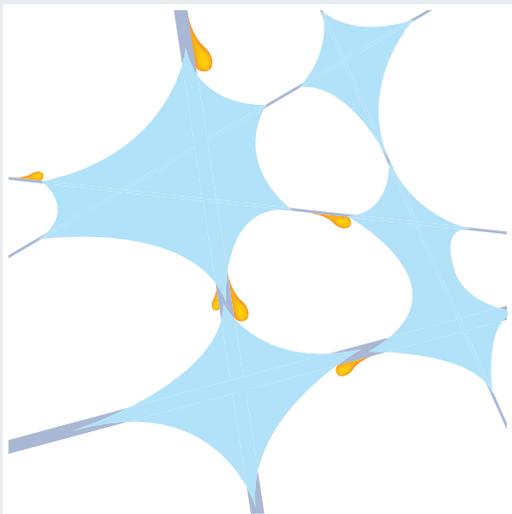
- Engineered blend of small and large fibers, with proprietary, resin-free bonding system
- Small fibers are scientifically proven to increase efficiency
- Large fibers provide structural support and clear drain channels
- Proprietary bonding system stabilizes pore structure for optimum performance



Micro-glass for filtration

Bi-component binding fiber

During the media manufacturing process, the surface of the binding fiber is heat fused to make it bond to the surrounding micro-glass – no resin webbing to block pores.



**TRADITIONAL MIST CARTRIDGE MEDIA (WITH RESINS)**

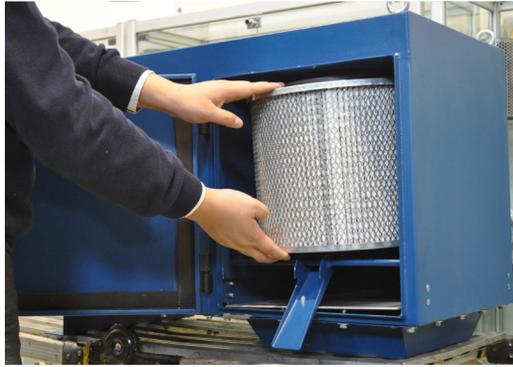
- Made with resins to bond fibers
- Resins reduce air pathways and block drainage



**TRADITIONAL MIST PANEL FILTER MEDIA (LOOSE FIBERS)**

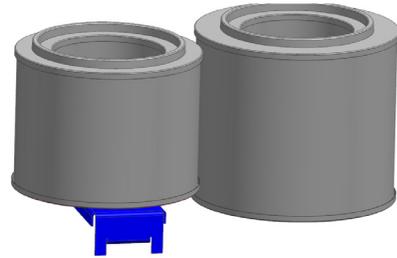
- Four-layer media structure without fiber bonding
- Fibers sag under weight of oil
- Fiber movement creates larger holes that pass oil

## FILTER INSTALLATION

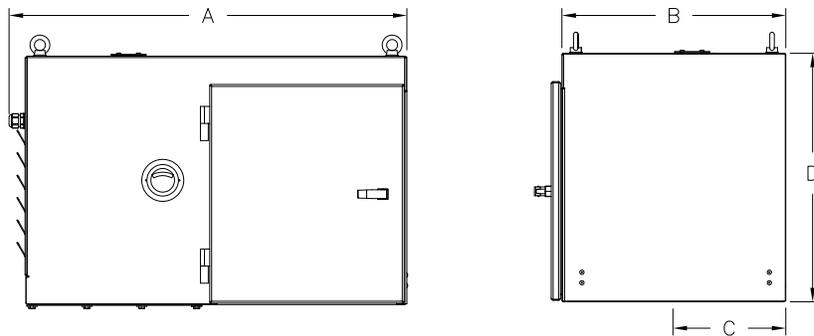


Servicing WSO MM – Easy filter changeout

The WSO and Dryflo element have different heights. When you order the Dryflo option, a spacer will be provided by default.



## DIMENSIONS & SPECIFICATIONS



Models	Nominal Airflow* (cmh)		No. of Filters	Filter Area (m <sup>2</sup> )				Motor (Kw)	Shipping Weight (Kg)	Dimensions				Sound Level db(A)**	
	50 Hz	60 Hz		Dryflo filter	Water Soluble	Straight Oil	Smoke			A	B	C	D		
										mm	mm	mm	mm		
WSO MM	520	660	1	3.80	3.94	3.43	2.70	0.75	46.5	721	406	203	452	75	69***

\* Based on clean filter element.

\*\* Published dB(A) sound pressure levels were made in a hemi-anechoic chamber. Units were run with clean filters and maximum airflow through a pproximately 10 feet of ducting connected to an inlet plenum. Measurements were made 1.5 meters off the ground, 1 meter away from the collector, on the filter door side of the mist collector. Actual installed equipment sound pressure levels will vary depending upon the measurement location, the operation conditions, the installation, and the surrounding environment.

\*\*\* With exhaust pack option

## STANDARD FEATURES & AVAILABLE OPTIONS

COLLECTOR DESIGN		Std	Opt	Pressure Gauge		X	
Mild Steel Construction		X		<b>CARTRIDGE FILTERS</b>		Std	Opt
Inlet Gasket			X	First-Stage Wire Mesh		X	
Inlet Collar			X	First-Stage Polypropylene Mesh			X
Inlet Hopper with Legs			X	First-Stage Thin Screen			X
Inlet Hopper with Vibration Isolators			X	High Efficiency First-Stage			X
Inlet Hopper with Flex-Duct			X	Dryflo® Cartridge Filter with Wrap		X	
Inlet Hopper with Impact Separator			X	Synteq XP for Water Soluble			X
Side Inlet			X	Synteq XP for Straight Oil			X
Machine Mount		X		Synteq XP for Smoke			X
Ceiling Mount			X	Fourth-Stage HEPA Filter			X
Collector Stand or Cart			X	Fourth-Stage 95% DOP Filter			X
Cable Glade		X		<b>PAINT SYSTEM</b>			
Exhaust Panel		X		Prime Coated Interior		X	
Exhaust Pack			X	Textured Multi-Coat Paint Finish with 2,000-Hour Salt Spray Performance		X	
Drain Collection Container			X	Custom Colors, Materials, and Finishes			X
<b>ELECTRICAL CONTROLS, GAUGES AND ENCLOSURES</b>							

## Global Support

- Facilities in 37 countries
- 40 manufacturing plants and 14 distribution centers

## Leading Technology

- Over 1,000 engineers and scientists worldwide
- Broad range of innovative collectors and filters
- 100s of filter media formulations

## Experience and Service

- Technical expertise and support
- Ready-to-ship filters and parts within 24 hours
- 1,000,000+ dust, fume and mist collectors installed



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### **EXACTLY WHAT YOU NEED.™**

WSO MM Mist Collectors (01/19)  
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