# Donaldson.

#### **WSO M COLLECTOR**

The WSO M 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 M provides high performance technology and easy, predictable maintenance.

The versatile WSO M mist collector provides three filter solutions for water-soluble coolant, straight oil, and the most challenging, oily smoke. The WSO M uses revolutionary Synteq XP™ Media Technology engineered for superior draining, resulting in lower pressure drop and longer filter life. The WSO M can be modified with a simple filter change, leading to leaner operation, cost savings and cleaner plant air.

#### **FEATURES & BENEFITS**

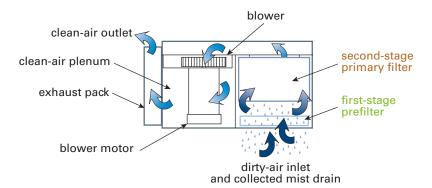
- 3 in 1 solutions for mist applications
- Advanced Synteq XP<sup>™</sup> high efficiency media
- Cross-flow design for better drainage
- Easy to change cartridge filters
- Energy savings
- Continuous-duty design
- Lower life cycle costs
- Quiet operation
- Configurations for machine mounting and floor stands





Servicing WSO M - Easy filter changeout

#### **VERSATILE IN APPLICATION. FLEXIBLE IN DESIGN.**



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



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: PRIMARY FILTER (SELECT ONE)**

- SYNTEQ XP W
  - For mist from water-soluble coolant
    - · Economical, 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

#### **3RD 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



- Largest mist particles
- 99.8%\* removal efficiency



### Typical particle size 0.07–1.2 micron

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

  Typical particle size
  0.8-5 micron
- · 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



Synteg XP.

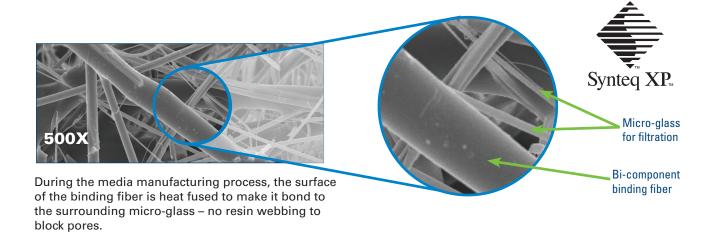
#### **ADVANCED FILTER MEDIA FOR MIST**

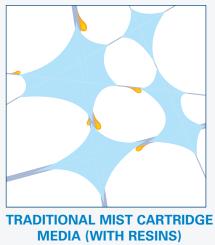
Proprietary Synteq XP Media Technology is a revolutionary new media for mist collection that provides high efficiency, low operating pressure drop, and long filter life when compared to traditional media.

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

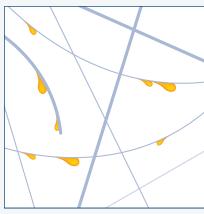
## SYNTEQ XP MEDIA TECHNOLOGY WITH RESIN-FREE, BINDING FIBERS

- 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





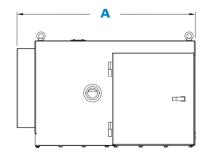
- Made with resins to bond fibers
- · Resins reduce air pathways and block drainage

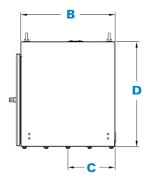


## TRADITIONAL MIST PANEL FILTER MEDIA (LOOSE FIBERS)

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

#### **DIMENSIONS & SPECIFICATIONS**





	Model	MAX Airflow*		No. of	Filter Area (m²)			Motor	Shipping	Dimensions (mm)				Sound
		50 Hz	mh) 60 Hz	Filters	Water Soluble	Straight Oil	Smoke	(Kw)	Weight (kg)	Α	В	С	D	Level** dB(A)
	WS0 M	520	660	1	3.94	3.43	2.70	0.75	46.5	770	406	203	452	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 approximately 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.

#### STANDARD FEATURES & AVAILABLE OPTIONS

COLLECTOR DESIGN	Std	Opt			
Mild Steel Construction	X				
Inlet Gasket		X			
Inlet Collar		X			
Inlet Hopper with Legs		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			
Collector Stand		X			
Junction Box		X			
Drain Collection Container		X			
ELECTRICAL CONTROLS, GAUGES AND ENCLOSURES					
Minihelic®* Pressure Gauge	X				

CARTRIDGE FILTERS	Std	Opt
First-Stage Wire Mesh	X	
First-Stage Polypropylene Mesh		X
First-Stage Thin Screen		X
High Efficiency First-Stage		X
Synteq XP for Water Soluble	X	
Synteq XP for Straight Oil		X
Synteq XP for Smoke		X
Third-Stage HEPA Filter		X
Third-Stage 95% DOP Filter		X
PAINT SYSTEM		
Prime Coated Interior	X	
Textured Multi-Coat Paint Finish with 2,000-Hour Salt Spray Performance	X	
Custom Colors, Materials, and Finishes		X

<sup>\*</sup>Minihelic is a registered trademark of Dwyer Instruments, Inc.



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#### **EXACTLY WHAT YOU NEED.™**

#### WSO M Collector (01/19)

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