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**Dryflo<sup>®</sup>**

*The cartridge collector  
engineered for oil mist*

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*Donaldson Dust Collection Group*



# Dryflo®

Uncollected coolant and machining oil mist can be hazardous to health. It can cause slippery floors and collect on machines, walls and ceilings, creating an unpleasant, high-maintenance working environment.

That's why Torit DCE developed the Dryflo® range of oil mist collectors. As the first – and only – complete range of cartridge collectors engineered specifically for oil mist collection, the Torit DCE Dryflo® solves the problems associated with uncollected coolant and oil mist.

Three Torit DCE Dryflo® configurations ensure that there is a Dryflo® oil mist collector designed to meet your specific application, plant layout, and budget requirements.



Overall, the Dryflo® range of oil mist collectors provides a superior alternative to other oil mist collectors with a whole new level of performance, higher collection efficiency and safer, easier maintenance... all of which translate into higher productivity and a healthier working environment for you and your workforce.

## DRYFLO® APPLICATIONS

- Turning Centres
- Lathes
- Mills
- Wet Grinding
- Screw Machines
- Cold Heading & Forming
- Hobbing
- Drilling
- Boring
- Transfer Lines
- High Speed Presses
- Stamping Operations

## OIL MIST TYPES

- Straight Oil
- Mineral Oil
- Water-Soluble Oil
- Semi-Synthetic Coolants
- Synthetic Coolants

## THE ALTERNATIVES

### Electrostatic Precipitators (ESPs)

ESPs use electrically charged plates to attract oil mist. They work well for a while, and then efficiency drops off dramatically.

ESPs require constant cleaning to maintain efficiency as the collected oil insulates the charge. Problems also exist with disposal of the collected waste along with a high risk of fires and electrical short circuits.

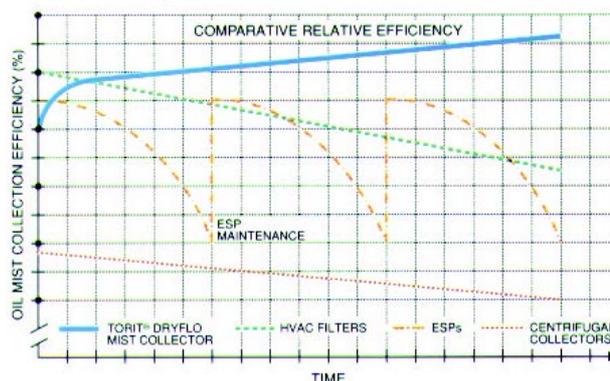
### HVAC filter collectors

These filter collectors use standard HVAC envelope or cassette filters which are not designed for oil mist and have no mechanism for drainage. The filter media soon becomes saturated, and loses efficiency over time.

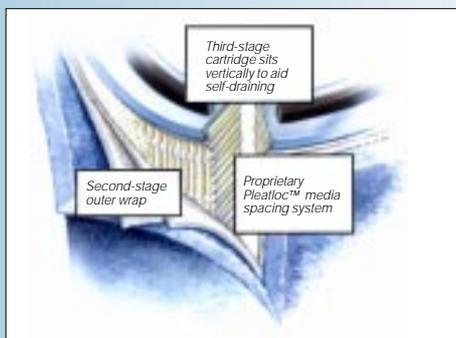
### Centrifugal Collectors

Centrifugal collectors work by spinning dirty air and collecting oil mist on the walls of a cyclone. The high velocities cause the oil mist to fragment into finer mist and vapour which exits within the clean air stream.

Centrifugal collectors are not recommended for applications that generate solid particles as the oily sludge collects on the fan impeller causing vibration related bearing problems.



# Features & Benefits



## Unique filter cartridge

The Torit DCE Dryflo® filter cartridge is made from a proprietary filter media developed exclusively for collecting oil mist. This media, combined with a special outer wrap, allows the filter cartridge to drain and prevents the collected liquid from entering the clean air stream. In addition, Dryflo® filter cartridges sit vertically inside the collector, allowing gravity to aid the drainage process.

FILTRATIONEFFICIENCY  
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>99.8%\*

FILTRATIONEFFICIENCY  
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FILTRATIONEFFICIENCY

## High filtration efficiency

Effective oil mist collection is essential to the safety and productivity of your working environment. And no other oil mist collector can come close to the effectiveness of the Dryflo®.

Studies have shown that while other collectors' efficiency drops off almost immediately, the efficiency of the Dryflo® actually increases over time and stays high throughout the lifetime of the filter cartridge.

*\*Tested by the independent lab CETIAT-France, according to NF X44-606.*



## Easy maintenance

Dryflo® oil mist collectors take the guesswork out of maintenance. As the cartridge filter loads, the pressure drop increases predictably, and a pressure differential gauge tells you exactly when to change filter cartridges.

When the filter cartridges do need to be changed, maintenance is safe, easy and quick. Cartridges are changed from the clean air side using our unique filter retention system, ensuring minimal worker contact with the collected oil.



## Magnahelic Gauge

With the Torit Dryflo®, there's no guessing. A special gauge tells you exactly when to change filters (when the needle is in the red it's time to change). You are assured of the highest efficiency, every shift... every day.



# Application Examples

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## Lawn-mower manufacturer

A leading manufacturer of lawn-mowers uses several different wet grinding operations to sharpen its blades. The coolant caused foggy air, slippery floors and worker irritation. To solve these problems, the manufacturer installed Torit DCE Dryflo® oil mist collectors on its wet grinding operations.

The Dryflo® effectively collects the mist generated by the water soluble coolant, as well as a small amount of grinding dust. A drain screen prevents clogging and the collected coolant is returned for re-use. In addition, the cleaned air is then recirculated back to the plant, saving heating and cooling costs.



## Custom machine shop

A machine shop using 3 CNC turning centres typically operates 3 shifts per day, 6 or 7 days a week. Due to their busy schedule, they needed an oil mist collector that was reliable and easy to maintain. Collection efficiency was also important because workers complained of sore throats.

A Torit DCE Dryflo® was installed and ducted to collect the oil mist generated by the turning centres. The result is a cleaner, safer work place and no more worker complaints. The collected oil is safely drained for disposal and the cleaned air is recirculated back to the building.

# Dryflo<sup>®</sup> Range



Torit DCE Dryflo<sup>®</sup> collectors can be used individually or in combination to meet the exact needs of your wet machining operation.

## Machine-mountable Dryflo<sup>®</sup>

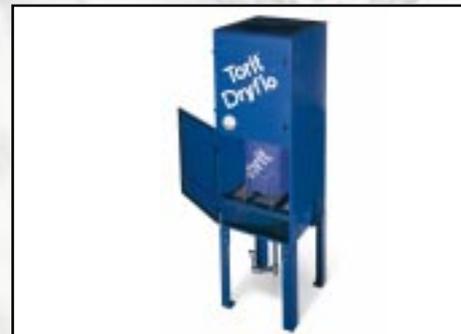
Engineered to handle airflow from 400m<sup>3</sup>/h to 1,400m<sup>3</sup>/h, these compact units mount directly onto the machining centre without any ductwork, allowing you to easily change plant layout.

The fan and the motor mount on the clean air side for quiet operation and reduced collector maintenance. An optional bolt-on HEPA assembly is available for the most arduous of applications requiring the highest levels of efficiency.



## Packaged Dryflo<sup>®</sup> system

These complete systems handle wet-machining operations from 1,000m<sup>3</sup>/h to 3,200m<sup>3</sup>/h in a pre-engineered, pre-packaged configuration. An optional integral HEPA assembly is available for the most arduous of applications requiring the highest levels of efficiency.



## Central Dryflo<sup>®</sup> system

Designed to handle multiple machining centres with airflow requirements from 5,000m<sup>3</sup>/h to 37,500m<sup>3</sup>/h. The central system is customised to handle your specific application requirements. An optional remote HEPA assembly is available for the most arduous of applications requiring the highest levels of efficiency.



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# Company Profile

*Torit DCE is world-renowned for the quality of its products and application expertise. It also offers the widest choice of dust, fume and oil mist control products, solutions and services available. These are supported worldwide with a dedicated network of wholly owned distributors and authorised agents.*

With 80 years' experience, Torit DCE provides the strength to deliver proven solutions to numerous environmental control problems.

Torit DCE designs, manufactures and installs a complete range of collection equipment. These products use a wide variety of media including: cartridge technology, spun-bonded polyester modules, fabric bags and rigid sintered elements. Torit DCE also designs and installs complete systems based on its leading range of products.

## After Market Service

Torit DCE products are supported by a fully inclusive after sales and technical support service package covering:

- Technical support group*
- Complete turnkey installations*
- Installation*
- Commissioning*
- COSHH testing & inspection scheme*
- Service and maintenance scheme*
- Spare parts*

## Whether your problem's...

Dust...



Fume...

or Oil Mist...



**Torit DCE is the answer**



Donaldson Dust Collection Group

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