# VacuFilter® E-Series

Vacuum media coolant filtration technology

Engineered for metalworking fluids





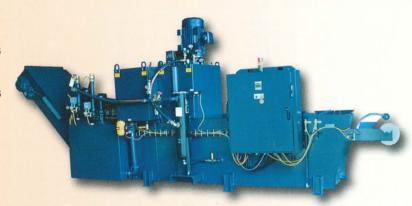


#### VacuFilter E-Series Benefits...

Proven reliable technology, Mayfran's VacuFilter® E-Series Coolant Filter is a highly efficient high flow coolant filtration system that is custom engineered and fully automatic.

The E-Series can be used for various processes and with various materials, removing fine particulates from metalworking fluids. With proper media selection, expect up to a 99% efficiency rating for applications including machining, grinding, drilling, honing, polishing, and washing.

Plus, with a custom engineered VacuFilter
E-Series unit, customers can choose from
different types of media for particulate removal
and from single or multiple pump systems.
Customers are also able to define a central point
of service that best fits their manufacturing floor
footprint. One of the most important E-Series
benefits, customers can expect reliable service
with simple operation.



VacuFilter E-Series with High Pressure Pump and Secondary Bag Filter, supplied to an Aerospace manufacturer for grinding on turbine blades

## **Design Feature Advantages**

Mayfran application design specialists custom engineer each VacuFilter E-Series Filter to the customer's exact specifications and requirements. The E-Series can be adapted and applied to almost any machining and finishing application. Plus, it is well suited to filter the latest metalworking fluids used on many of today's modern alloys.

VacuFilter E-Series design reduces complexity of operation and makes it extremely reliable. Customers can choose between using disposable media, permanent media, an endless filter belt, or both simultaneously. Design feature advantages include:

- Accommodates various coolant types water soluble, synthetic or straight oils
- Accommodates flow rates from 100 gpm up to 2500 gpm per filter
- Delivers filtration levels down to 10 microns



Discharge End of a VacuFilter E-Series Central Coolant System, supplied to a steering component manufacturer



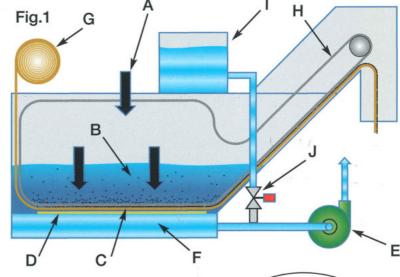
Stainless Steel VacuFilter E-Series using Disposable Media



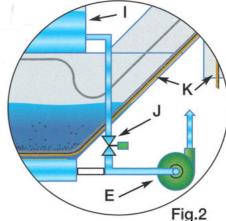
### How VacuFilter E-Series Works...

The VacuFilter E-Series captures and removes fine particulate from coolant, providing clean coolant to the machining process. VacuFilter E-Series filtration works as follows:

- A. Dirty coolant enters the filter tank via a dirty coolant inlet connection.
- B. Filter tank holds a volume of dirty coolant to assure continuous, uninterrupted operation.
- C. Media covers the bottom of the filter tank and the septum plate.
- D. The septum plate supports the media.
- E. A pump creates a vacuum, drawing coolant through the filter media, and sending clean coolant to the machining process.
- F. Fine particulates are captured and removed as dirty coolant passes through the filter media.
- G. Disposable filter media is used to meet the specific requirements of filtration.
- H. An automatic conveyor indexes the dirty media through the filter tank (when required).
- I. Clean tank holds clean coolant to be used during the filter index.



- J. The Index Valve opens during a filter index to feed clean coolant from the clean tank to the pump.
- K. Disposable Filter Media or is advanced, positioning the clean Media Section over the Septum.



# **Available Options**

Along with many built-in design features, Mayfran custom engineers the VacuFilter E-Series with your choice of options. Options include:

- Stainless Steel Construction
- Primary Separator for bulk solids separation
- · Endless Media Belt
- Media Rewinder
- Automatic Water / Concentrate Make-Up and Liquid Level Detection
- Temperature Control (Chiller or Heat Exchanger Skids)
- Secondary / Sentinel Filtration (Bag Filters, Cartridge Filters, or Back Washing Strainers)
- High Pressure Coolant Supply







Plate and Frame Heat Exchanger used to control temperature of coolant



VacuFilter E-Series with Endless Belt



#### Worldwide At Your Side...

Headquartered in Cleveland, Ohio, USA, Mayfran International is a global leader in providing engineered solutions for scrap and coolant management and material handling in metalworking, recycling, solid waste processing, as well as other applications.

With operations around the world, you'll find that Mayfran is strategically located to support your chip, coolant and scrap management projects.



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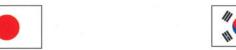
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