



Global standard in filtration systems

Machine-Based Filtration Systems

The micrometer-sized solid particles generated during operations in CNC machining centres, lathes, and grinding machines can significantly increase contamination levels. This leads to a decrease in the tools' life, increased expenses, and an undesired surface quality in the final product. Furthermore, it accelerates the degradation of the coolant fluid, necessitating periodic cleaning of the machine's tank.

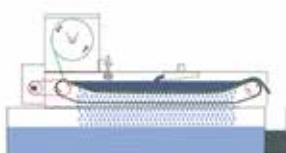
Machine-Based Filtration Systems, designed according to customer requests and requirements, provide the machine with the required coolant fluid in the healthiest manner. These systems have a compact design that occupies only as much space as a conveyor and can be quickly installed. Below are the technical components that can be included in these systems:

- 1) **Dirty Fluid Suction System:** This system facilitates the transfer of contaminated coolant fluid from the machine tank to the filtration unit by suction.
- 2) **Filtration Groups:** These are magnetic and paper filter units selected based on the flow rate of incoming coolant fluid and the desired level of filtration efficiency.

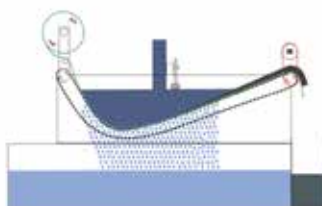
- 3) **Flow Channel / Tank:** Depending on customer requirements, the filtered fluid can be directed back to the machine tank through a flow channel or a dedicated coolant fluid reserve tank that also houses clean pumps.

- 4) **Clean Pump:** Pumps capable of delivering the desired flow rate and pressure can directly supply the operation point from the filtration unit.

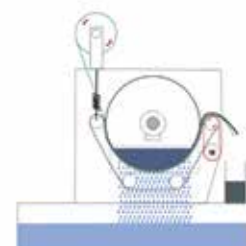
- 5) **Submersion Cooling System:** In critical operations, especially in environments where coolant oil requires additional cooling, the unit's built-in cooling system can control the input and output fluid temperatures.



GRAVITY



HDR



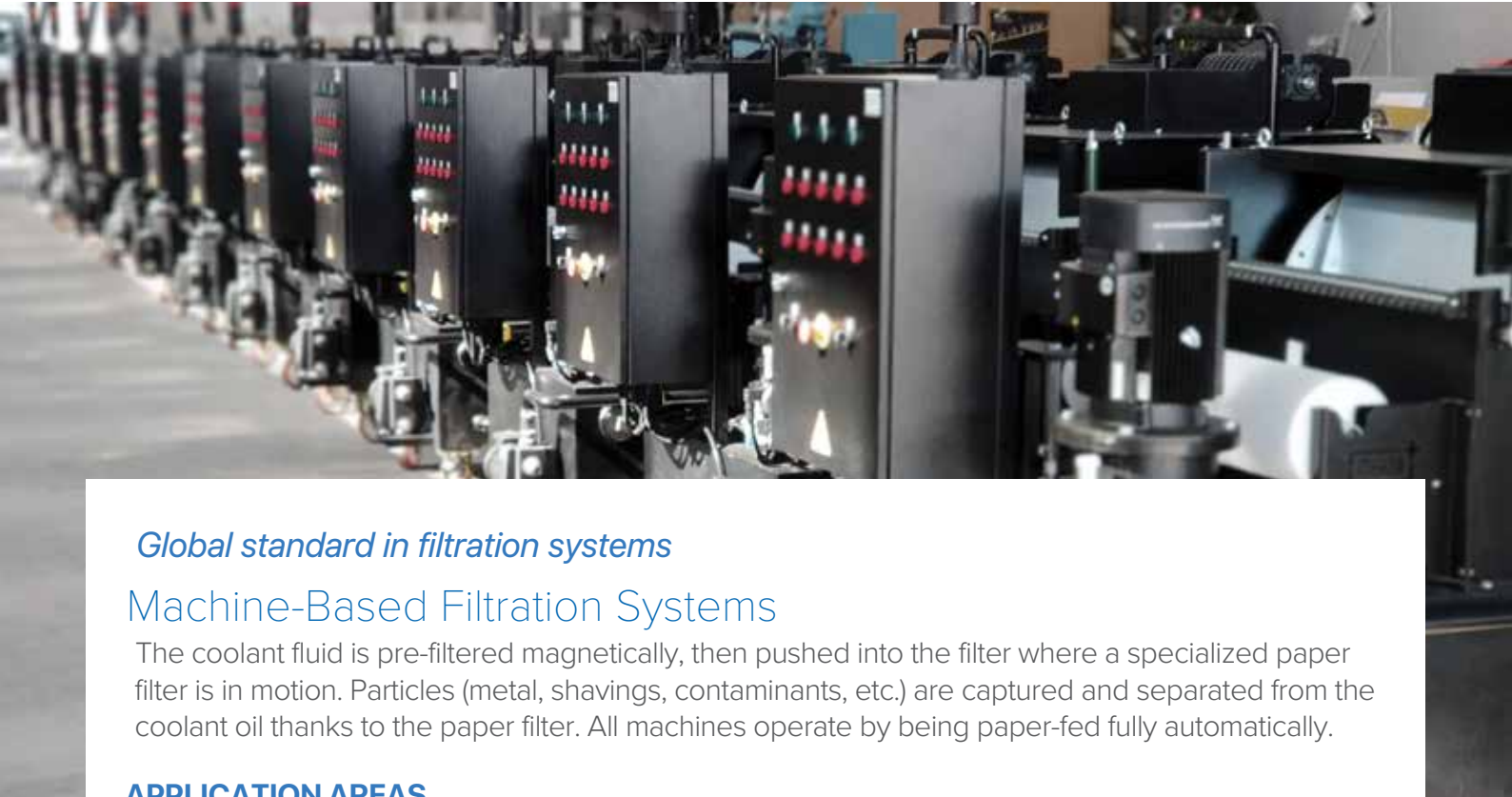
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The coolant fluid is pre-filtered magnetically, then pushed into the filter where a specialized paper filter is in motion. Particles (metal, shavings, contaminants, etc.) are captured and separated from the coolant oil thanks to the paper filter. All machines operate by being paper-fed fully automatically.

APPLICATION AREAS

Centerless Grinding

Grinding

Surface Grinding

Sliding Automatic Lathes

Vertical/Horizontal CNC

Machining Centers & Lathes



Application Example



Application Example



Application example

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