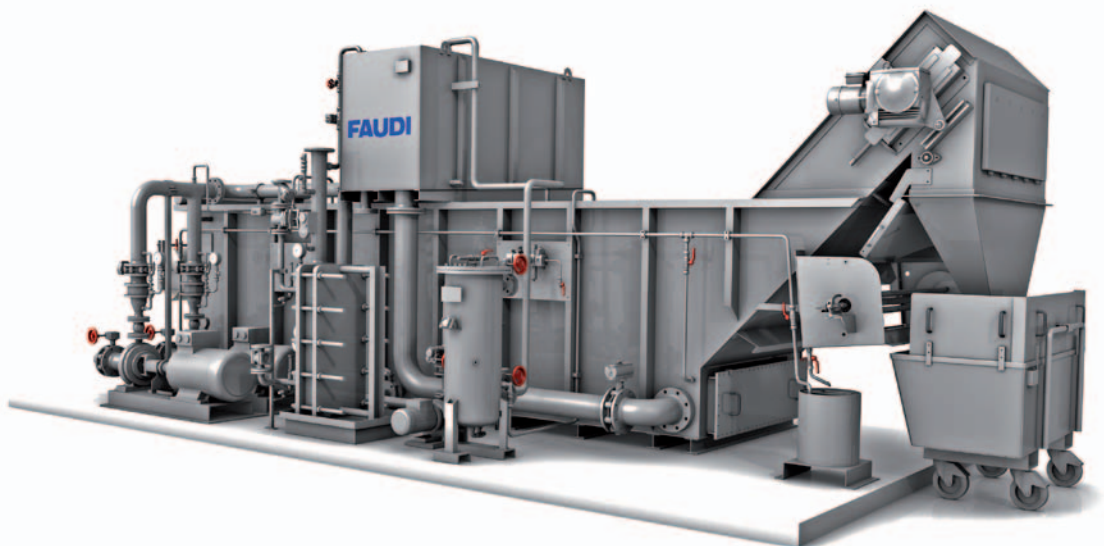


FILTRATION IN PERFECTION

**FAUDI**

**VACCUUM FILTER FUF NON-WOVEN  
FABRIC AND ENDLESS BELT**



**FUF  
FUF-E**

# COOLANT CLEANING WITH FAUDI VACUUM FILTERS

Cooling lubricants used in machining primarily serve to dissipate heat generated during processing, reduce friction between the tool and work piece, and transport chips away.

For turning, drilling, milling, honing, grinding, rolling or finishing, such lubricants only ensure optimum cooling and lubrication performance if they are thoroughly cleaned before they are returned to the application location.

A thorough cleaning extends the lifespan of cooling lubricants and improves the surface quality that can be achieved during processing.

Vacuum filters are used to clean dirty cooling lubricants in metal processing, preferably in the form of central cooling lubricant systems with a high flow rate. The main advantages of these systems are their practicability and the ability to adapt to various operating conditions.



FAUDI vacuum filters are universal in application and suitable for cleaning

- Cutting, grinding and rolling oils
- Emulsions
- Watery solutions

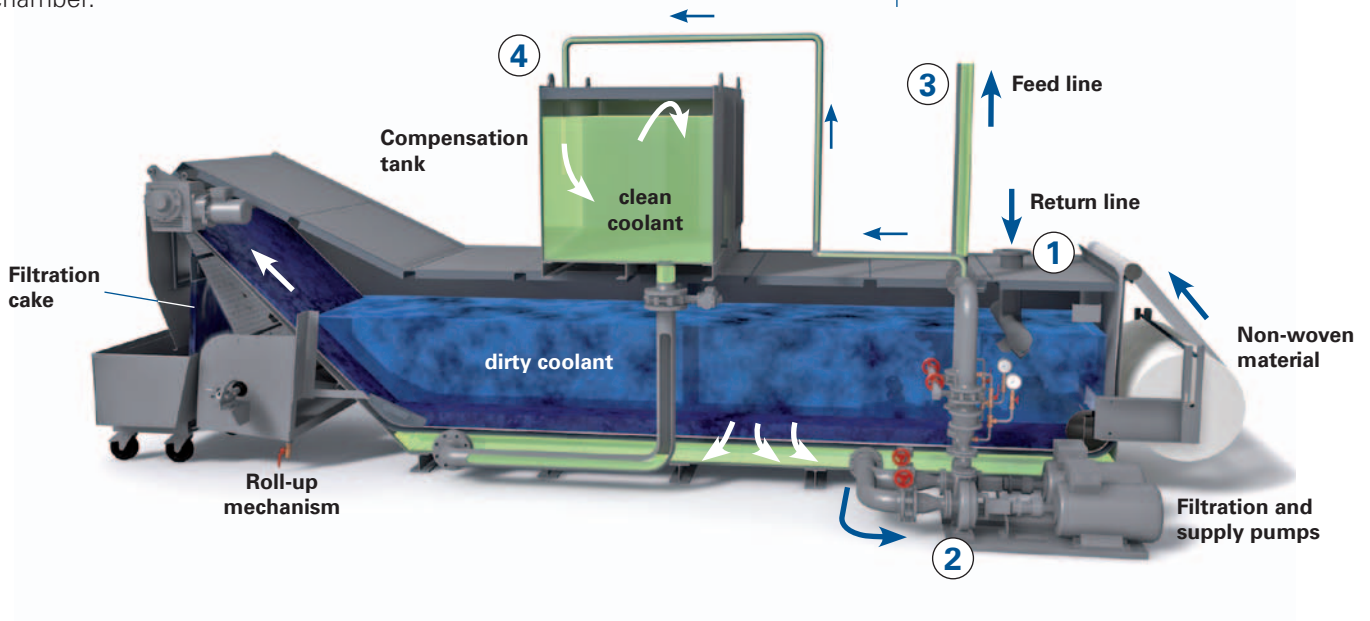
The range of separation is 20 to 100 µm depending on the material being processed, the machining process and the filter material used.



# FILTRATION AND REGENERATION PRINCIPLE

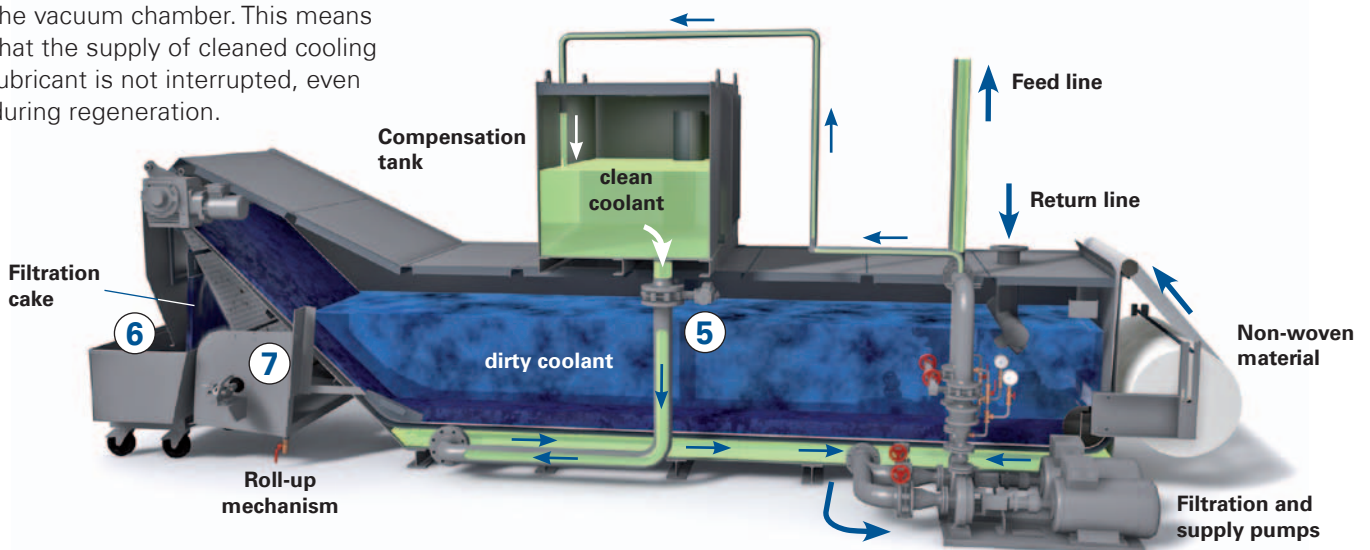
## Filtration

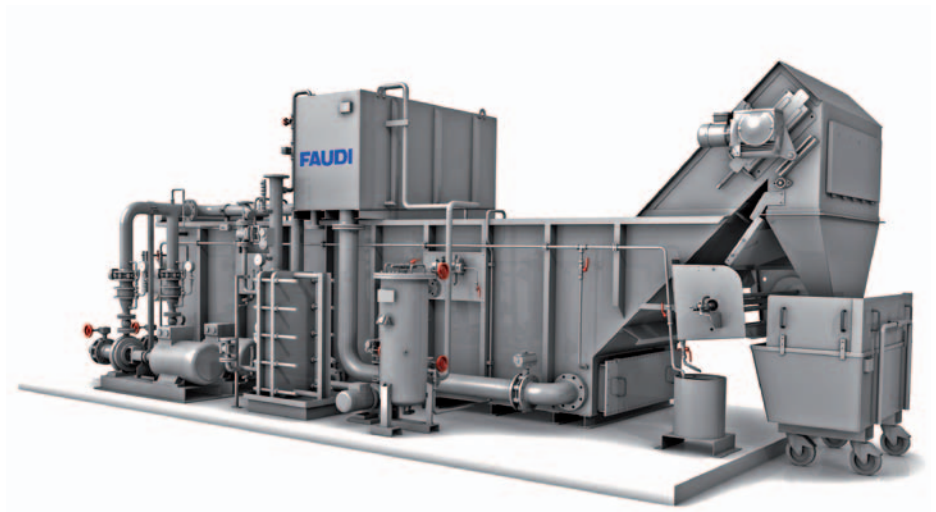
- ① Dirty coolant is conveyed from the machine tool to the dirt tank of the vacuum filter.
- ② A filtration and supply pump suctions the cooling lubricant through the filter medium into the vacuum chamber.
- ③ At the same time, the pump conveys the previously cleaned cooling lubricant out of the vacuum chamber back to the machine tool.
- ④ Part of the flow fills the compensation tank.



## Regeneration

- ⑤ Once the specified vacuum or a preconfigured filtration time is reached, regeneration of the filter is initiated. For this purpose, the shut-off valve is opened and clean cooling lubricant from the balancing chamber is conveyed into the vacuum chamber. This means that the supply of cleaned cooling lubricant is not interrupted, even during regeneration.
- ⑥ The dirty non-woven material is ejected from the filter by rotary scrapers in the filter.
- ⑦ After scraping off the dirt, the used non-woven material is rolled up by a winder.





## MODEL SERIES AND VERSIONS

### Model series

The lightweight model series has a width of 1,000 mm and is available in sizes from 0.7 to 4.9 m<sup>2</sup> filter area.



The heavy models series is offered in widths from 1,500 to 2,000 mm and can be delivered with a filter area of 4.5 to 40 m<sup>2</sup>.



### Versions

In addition to standard operation with non-woven material, the vacuum filters can also be carried out for operation with an endless belt made of plastic.

All model series can be delivered in steel or stainless steel, depending on the field of application and customer preference.

## ALL BENEFITS OF FAUDI VACUUM FILTERS – OVERVIEW

- ➔ Various model series
- ➔ Straight forward and modular structure
- ➔ Easy to use
- ➔ Fully automatic operation
- ➔ Maintenance-friendly
- ➔ High throughput
- ➔ High dirt loads possible
- ➔ Adaptable by using various types of non-woven material

# VACUUM FILTER EXTENSIONS FROM THE FAUDI PRODUCT PORTFOLIO

## Do you want to improve the filtration quality?

By integrating a FAUDI precoat filter in the bypass to the vacuum filter system, the filtration quality can be improved significantly.



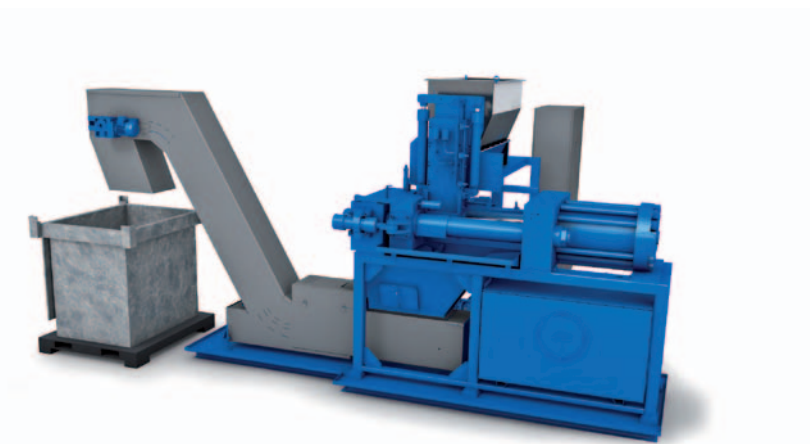
## Do you want to reduce the residual moisture content of the filtration cake?

With a FAUDI swarf extrusion press as an extension of the vacuum filter system, the residual moisture of the filtration cake can be reduced to approximately 30 %. This cuts the disposal volume almost in half.



## Do you want to convert valuable production residuals into recyclable secondary raw materials?

With a FAUDI briquetting press as an extension of the vacuum filter system, sludge and chips can be formed into solid briquettes with a mere 2 % of residual moisture.



**We are happy to advise you about other filter systems in our product portfolio.**

### **Cartridge Filter Systems**

PreCoat Filter	<b>AS</b>
PreCoat Filter with dry discharge	<b>AST</b>
PreCoat Filter Electroplating	<b>ASG</b>
Regenerable Microfilter	<b>RMF</b>
Backflush Filter	<b>RSF</b>

### **Belt Filter Systems**

Gravity Belt Filter	<b>AFB</b>
Inclined Belt Filter with endless belt	<b>SBE</b>
Inclined Belt Filter with fleece	<b>SBV</b>
Vacuum Filter with endless belt	<b>FUF-E</b>
Vacuum Filter with fleece	<b>FUF</b>
Pressure Belt Filter	<b>DBF</b>

### **Pressure Filter Systems**

High-efficiency Filter	<b>HF</b>
Cartridge Filter	<b>MF</b>
Magnetic Cartridge Filter	<b>MKD</b>

### **Specials**

Magnetic Separator	<b>MA</b>
Magnetic Rod Separator	<b>MSA</b>
Dynamic Skimming Device	<b>SK</b>
Hydrocyclone Unit	<b>HZA</b>
Filter Aid Dosage Unit	<b>FD</b>
Briquetting Press	<b>WSP</b>
Swarf Extrusion Press	<b>FSP</b>



**FAUDI** GmbH  
 Faudi-Straße 1 · 35260 Stadtallendorf  
 Tel. +49 6428 702-0 · Fax +49 6428 702-188  
 E-Mail [info@faudi.de](mailto:info@faudi.de) · [www.faudi.de](http://www.faudi.de)