



BUF  
**Vacuum belt filters**

for filtration of aqueous cooling lubricants,  
oils and other liquids

with fabric or endless band  
filter surface: 0.2-30 m<sup>2</sup>

**Liqui**  
FILTER

pure. clean.

## The benefits

- Longer tool service life due to comprehensive preparation of cooling lubricant.
- Saving of waste disposal costs due to chip and sludge drying.
- High throughput with minimal space requirements.
- Optimum utilisation of filter aid.
- High degree of purity due to selection of filter aid or carrier band and build-up of sludge cake.
- Economical filtration of aqueous cooling lubricants, oils and other liquids

## System specification

The system comprises a sheet-steel tank divided by a filter floor into upper and lower chambers. The filter floor comprises a perforated plate with surface-mounted filter aid or an optional slotted screen. The filter aid with filter cake is transported by a built-in scraper conveyor. The used filter aid is coiled up outside the filter.

## Function

The lower chamber is connected to the suction side of the pump. The liquid to be filtered is fed to the upper chamber and sucked through the filter floor by the pump. The solid materials are thus removed from the liquid and then deposited on the filter floor (fabric or endless band). Thus only filtered liquid flows through the pump. The vacuum in the lower chamber increases with increasing sludge deposit (filter cake) on the filter floor. Regeneration follows. The pump is switched off briefly or switched to the clean tank. The vacuum in the lower chamber is cut. The scraper conveyor transports the filter aid with the filter cake into the outside container and a new filter aid is fed simultaneously to the filter area.

The sludge cake is blown out with compressed air and removed by a screw conveyor when using endless band. The band is back-flushed.

A dryer, which automatically dries the sludge cake, can be fitted to the discharge ramp.

## Filter efficiency

The filtration parameters are the viscosity of the filter medium and the quality of the filter band. Purification levels of up to 99% with a limit grain size of 10 µm can be achieved.

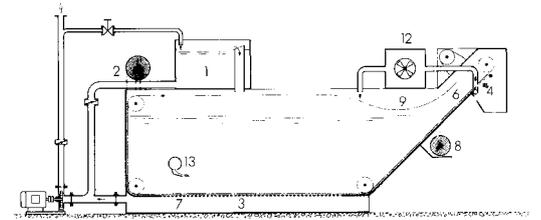
## Optional accessories

- Chip pre-separator
- Chip or sludge drying
- Vapour extraction
- Oil separation

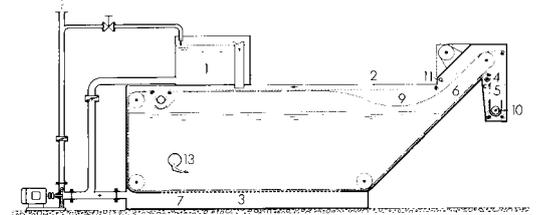


Pumpset

## Vacuum filter with fabric



## Vacuum filter with endless band



- |  |                    |
|--|--------------------|
| 1 Regeneration vessel on or next to the filter | 4 Tapping device   |
| 2 Filter medium, fabric or endless band        | 6 Drying area      |
| 3 Perforated plate or slotted screen           | 8 Winder           |
| 5 Compressed-air blowpipe                      | 10 Screw conveyor  |
| 7 Vacuum chamber                               | 12 Extraction unit |
| 9 Scraper conveyor                             |                    |
| 11 Flushing pipe                               |                    |
| 13 Return flow                                 |                    |



Vacuum band filter BUF

# Liqui FILTER

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