

For clarification of soluble oil solutions, low -viscosity oils and alkaline liquids





FULLY AUTOMATIC VACUUM FILTER

0.2 - 30M2

For clarification of soluble oil solutions, low-viscosity oils and alkaline liquids

- Longer life of cutting tools due to thorough filtration of the cutting medium.
- Savings on waste-removal costs as waste mate- is dried.
- High efficiency and low space requirement.
- Efficient usage of filter-fabric.
- High degree of filtration through choice of filter fabric and build up of filter cake.
- Economic clarification of water like liquids and low viscosity oils.

FILTER DESCRIPTION:

The unit consists of a sheet metal tank which is divided into an upper and a lower chamber by a filter wall, which

consists of a perforated steel plate or a steel grid (steel - grid filter type BUF special unit).

The filter fabric with the filter cake is transported on a built - in scraper band conveyor. The used filter fabric can be used rolled up outside the filter if required.

FUNCTION:

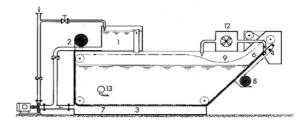
The lower chamber is connected up to the suction side of the impeller pump. The liquid which is to be filtered is fed into the upper chamber and is then sucked by the pump into the lower chamber via the separating wall. Solid particles are separated from the liquid in the process which then settle on the filter fabric. Only filtered liquid passes through the pump. As the amount of waste deposits on the fabric increases, the vacuum in the lower chamber rises (max 0.7bar) this in turn, causes the variable process of regeneration to commence. During the process of regeneration, the suction of the pump is interrupted for a short period to maintain the level in the clean liquid tank, and allow the fabric with sludge to move on. The scraper band conveyor transports the filter fabric together with the filter cake into the sludge bin and new filter fabric is drawn into the filter zone.

When employing an endless nylon filter band, the filter cake is blown off by pressurised air and removed via an Archimedes type screw conveyor.

DEGREE OF CLARIFICATION:

The utilization of different grades of filter fabric makes variable degrees of clarification possible, in accordance to requirements. The flow rate and the degree of clarification depend upon the grade of filter fabric used and the viscosity of the liquid to be filtered. Clarification op up to 99% with a particle size limit of 10um can be reached.

VACUUM FILTER WITH FILTER FABRIC



OPTIONAL EQUIPMENT

- Drying of filter cake
- Shutter type cover on filter
- Fume extractor
- Oil separator
- Air bleeding of vacuum chamber
- Flushing of vacuum chamber



