

Vibro Filtration

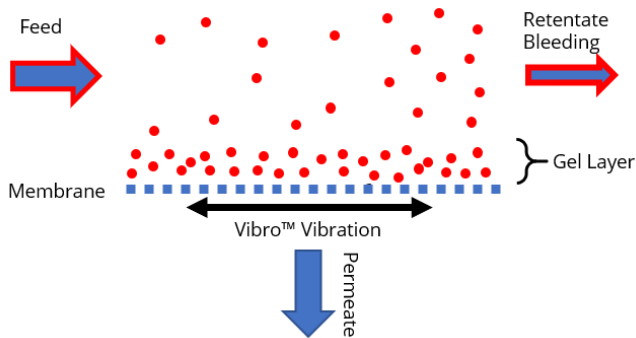


Advancing Membrane Separation

SANI 
Membranes

MORE FILTRATION, LESS ENERGY

Vibro Technology



How does the Vibro technology work?

The patented Vibro technology generates turbulence where it is needed by vibrating the membrane surface relative to the media. The vibration induced shear turns into turbulence at the membrane surface, which keeps the fouling low.

The Vibro technology eliminates the need for a cross flow pump and results in a uniform Trans Membrane Pressure (TMP) throughout the system, with exceptional low energy consumption as the pressure loss from the cross flow is eliminated.

Vibro Technology Benefits

Ideal Separation - Vibro technology delivers an improved separation with a sharper cut-off due to the uniform TMP on the entire membrane surface.

Unique Microfiltration with High Yield - Vibro technology ensures efficient microfiltration in the entire system as the process can run at very low TMP (e.g. 0.1bar). The low TMP reduces fouling and its compaction and generates an exceptionally high transmission of your target molecule.

Less Energy - Vibro technology reduces the energy consumption by up to 90%. A cross flow system creates turbulence in the entire system whereas the Vibro technology only creates turbulence on the membrane surface where it is needed to reduce fouling.

High Concentration, Viscosity and Solid Loads

The patented Free Flow Plate modules with fully open free flow channel design is basis for the efficiency of Vibro technology. The open channels are ideal for handling viscous media.

Better Product Quality - Gentle product handling due to the elimination of shear from the cross flow pump.

No Product Loss - The membrane modules are fully drainable which means that all product can be recovered.

Vibro-Lab series from 35cm² to 3500cm²



SANI Membranes

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Fast and Scalable process development

The Vibro-Lab units are the perfect benchtop filtration solution for process development. With a membrane area of 35 to 3500 cm² you can mimic a large-scale continuous filtration unit by using down to 20 ml media.

You can easily optimize separation parameters and screen membranes simultaneously due to the simple membrane replacement system.

As the technology for the laboratory units and the industrial units is the same, you are ensured that your results will be the same when scaling up your production.

Ideal separation at extremely low pressure

The Vibro-I is an industrial MF and UF membrane filtration solution where low energy consumption, high flux, sanitary function, low capital investment and gentle product handling are key words. The cleansing turbulence on the membrane surface is achieved through vertical vibration. This allows for truly uniform TMP and secures optimal separation at the extremely low pressures needed for true continuous microfiltration

Vibro-I series from 2.5m² to 80m²



Vibro Filtration



Vibro-I Feed System for MF and UF

Flexible feed systems with several modes of operation can be supplied with standard control options

Vibro Technology Benefits

- **Ideal Separation with sharper cut-off**
100% uniform TMP in the entire system leading to new MF and UF opportunities
- **High concentrations, viscosity and solids**
Free Flow channels between membranes
- **Reduces energy consumption by 50-90%**
No pressure loss and turbulence only where needed
- **Gentle product handling**
No cross flow pump required
- **Higher yield**
The modules are fully drainable both on permeate and retentate side
- **Sanitary**
Open and clean design with no dead legs

Novozymes about the Vibro-I:

"The Vibro-I filter is a robust solution, simple to use with no technical issues and with good flux. Power consumption under all operations (MF/UF) are much lower than in any known filter technology."