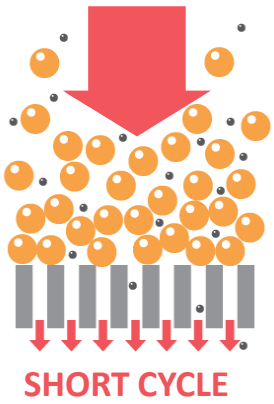
CROSSFLOW FILTER

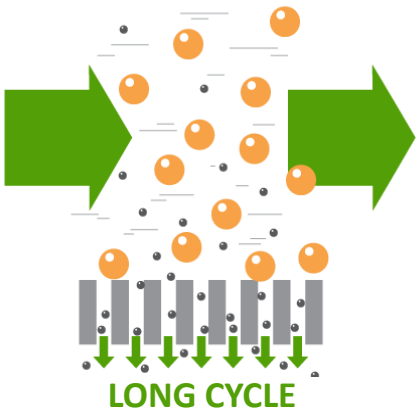
bared

Process

In a classic filtration the liquid goes through the filtering surface just in a perpendicular way. In a crossflow filtration, where the filtering surface is a selective membrane, the liquid goes through and parallel of the membrane and thus keeps the membrane clean of residues. According to the pore size of the membrane we speak of microfiltration, ultrafiltration, nanofiltration, reverse osmosis.
Bared systems are the result of over 30 years of experience in crossflow membrane filtration. Thanks to capillary membranes with a nominal pore size up to 0.2 micron it is possible to obtain a sterile filtration. Membranes are gentle on the product and do not increase its temperature. By filtering with a Bared crossflow system it is guaranteed a crystalline product just in a single step compared to other systems that require more filtration stages, and therefore greater stress of the product.



Classic filtration



Crossflow filtration

Applications

The filter is suitable for:

- Filtration of still and sparkling wine
- Filtration of juices
- Filtration of beer
- Prevention of anomalous fermentations
- Protein stability improvement
- Recovery of second or third pressing

System highlights

BACK WASH All models, except the B1 model, are equipped with this device. It makes a membrane's counter-current washing: it allows a non-stop filtration (24 hours or more) reducing the membranes' fouling.

AUTOMATION Bared crossflow filters have an easy management: operator is not required during the filtering cycle. Anyway, it is available a fully automatic option where all operations, C.I.P. included, are controlled by a dedicated software.

ISOBARIC DESIGN Every model can operate under isobaric atmosphere up to 6 Bar pressure.

CLEANING Membranes are washed with fresh tap water, unlike to other systems that require softened water, which therefore need the installation of an additional system.

MODULAR DESIGN Bared filters are designed to make doubling or extending possible. More, an option allows to work at 50% rates.

ERGONOMY Our membranes' patented connection allows a compact space–saving with a 250 mm height lower than the filters in the market. The styling and clear design compliances with health and hygiene regulations.

Benefits

Continuos running
24h filtering cycles

Reduced labour
Automatic system

Constant flow rate
Guarantee of processed volumes

Operational reliability
Operator mistakes are avoided

Saving of production costs
Filtering aids are not requested

No waiting for fining process step
Reduced tanks requirement

Complete product recovery
Lowest unfiltered volumes

Saving in energy
0,09 kW /100 L filtered product

Eco friendly
Just fresh water for cleaning

Economy
0,0035 €/L filtered product

Models

	B1
Filtrate rate	500-1000 L/h
Capacity	9000-14000 L/day
Power	1.2 kW
Dimensions	800x900x1600 mm
Weight	170 Kg

	B2
Filtrate rate	1000-2000 L/h
Capacity	18000 - 35000 L/day
Power	2.5 kW
Dimensions	1000x1000x1700 mm
Weight	280 Kg

Models

	B3
Filtrate rate	1500 - 3000 L/h
Capacity	27000 - 50000 L/day
Power	3.5 kW
Dimensions	1800x1000x1700 mm
Weight	380 Kg

	B2+2
Filtrate rate	2000 - 4000 L/h
Capacity	36000 – 70000 L/day
Power	4.5 kW
Dimension	1600x1400x1700 mm
Weight	500 Kg

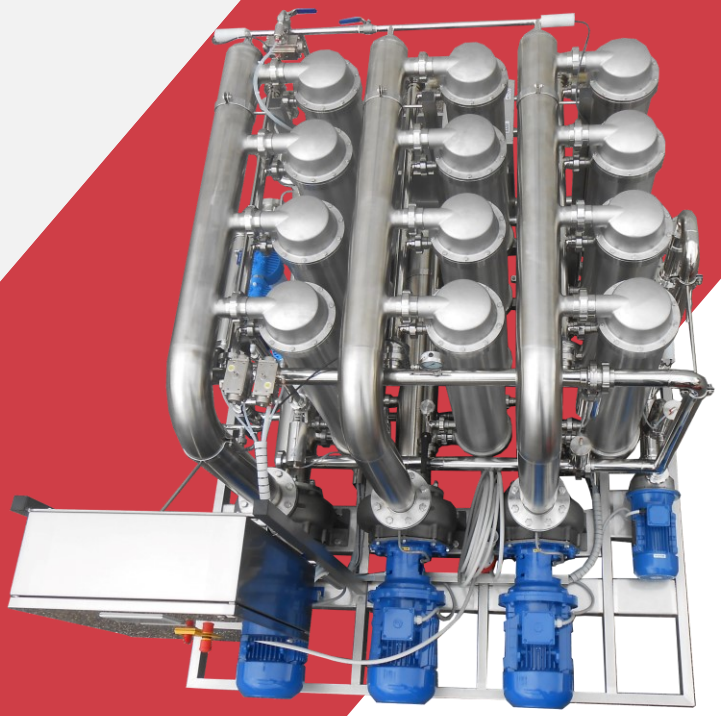
Models

	B4
Filtrate rate	2000 - 4000 L/h
Capacity	36000 - 70000 L/day
Power	4.5 kW
Dimensions	2500x1000x1700 mm
Weight	500 Kg

	B6
Filtrate rate	3000 - 6000 L/h
Capacity	54000 - 100000 L/day
Power	6.0 kW
Dimension	2000x1500x1700 mm
Weight	700 Kg

Models

	B8
Filtrate rate	4000 - 8000 L/h
Capacity	72000 - 140000 L/day
Power	9.0 kW
Dimensions	2500x1500x1700 mm
Weight	820 Kg



	B12
Filtrate rate	6000- 12000 L/h
Capacity	110000 - 200000 L/day
Power	13.0 kW
Dimensions	2500x2000x1750 mm
Weight	1200 Kg

Models

	B16
Filtrate rate	8000 - 16000 L/h
Capacity	145000 - 260000 L/day
Power	18.0 kW
Dimensions	2500x2500x1750 mm
Weight	1600 Kg

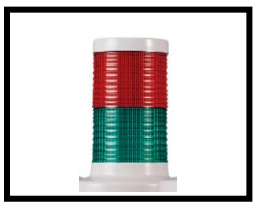
Optional

STAINLEES STEEL PREFILTER
A stainless steel container replaces the plastic one of the second prefilter. It grants greater solidity and make easier the cartridge replacement during cleaning operation.

NO RETENTATE KIT
Using this device the filtration is carried out just with the feeding hose and the permeate hose. The retentate product stays inside the system.

SMART AUTOMATION
A plc with 7'' coloured touch screen manages the main work phases, the control of operating parameters and process alarms.
The software control the automatic filling/ filtration/ rinsing/ emptying of the system with nitrogen (or other gas) and it allows the membranes's integrity check.
A digital flow-meter allow the control of the flow rate and memorize the processed volume. The plc has an OPC-UA protocol and has got integrated remote assistance.

FULL AUTOMATION
All the operational programs: Filling / Filtration / Draining / Rinsing / Cleaning are controlled by a 7'' PLC.
The filter runs all the different steps automatically and the software allow to do the membranes's integrity check.
A digital flow-meter allow the control of the flow rate and memorize the processed volume. The plc has an OPC-UA protocol and has got integrated remote assistance.



ACOUSTIC-VISUAL ALARM
Light tower that signals the status of the system to the operator.