

Manual Filtration Skid – Essential Range

Filtration Systems for Wines,
Flavoured Wines, Sparkling
Wines



Applications

The manual filtration skid Essential is designed for the clarification, filtration and microorganisms retention of wines, flavoured wines or sparkling wines.

Process Optimization

No wine oxidation with a completely closed filtration system.
Filtration for 1, 2 or 3 stages.

Product Information

The manual filtration skid of the Essential range is designed for the clarification and microorganisms retention before bottling. It uses disposable filter cartridges and can also be connected to a Clean In Place (CIP) system. Two sizes are available:

- up to 2000 Bottles/hour (Btls/hr)
- up to 5000 Btls/hr

Repeatability

Reliable bottling and optimization of wine production with integrity checking of final membrane filter

Savings

Longer cartridge life time with individual cleaning of each filtration stage. Limited water loss during sterilization step with recovery circuit.

Efficiency and Safety

- Total process control with sensors such as manometers and thermometers.
- Water leak valve and fully drainable skids by gas ensure no water comes into contact with wine bottling processes.
- Wine sampling valve to check the wine quality & filtration performances before bottling.

Filtration Skids Description

An essential filtration range consists of two or three housings dedicated to wine filtration and one housing dedicated to the filtration of cleaning water. Each housing is connected to the others by a ramp and can either be used or isolated by the manual inlet and outlet valves. The system is equipped with temperature and pressure sensors, drain and sampling valves.

Manual Filtration Skid Essential Range

	Essential 2.2S	Essential 2.2	Essential 2.3	Essential 5.2S	Essential 5.2	Essential 5.3
Filtration	1 – 2 stages	1 – 2 stages	1, 2 or 3 stages	1 – 2 stages	1 – 2 stages	1, 2 or 3 stages
Flow rate	2 000 btls/h	2 000 btls/h	2 000 btls/h	5 000 btls/h	5 000 btls/h	5 000 btls/h
Housing Cartridge	2 housings 1 × 30" cartridge per housing	2 housings 1 × 30" cartridge per housing	3 housings 1 × 30" cartridge per housing	2 housings 3 × 30" cartridges per housing	2 housings 3 × 30" cartridges per housing	3 housings 3 × 30" cartridges per housing
Pre-filters backwash	Included	Option	Option	Included	Option	Option
High pressure equipment for sparkling wine	Option	Option	Option	Option	Option	Option
Built on wheels	Option	Option	Option	Option	Option	Option
Automated sterilization processes	Option	Option	Option	Option	Option	Option
Integrity testing of final filter	Option	Option	Option	Option	Option	Option

Options

Additional options such as automated dosing of oenological adjuvants can be added when the skid is connected to a Sartorius CIP system.

CIP System

All Manual filtration skid of the Essential range can be connected to a CIP system. The CIP System produces and maintains hot water up to 90°C. It supplies filtered water for the filling line (filtration skid, piping and bottling machine) either for cleaning purposes at 50°C or for sterilization at 90°C.

Technical Data

- Main construction materials: 304L Stainless Steel
- Housings material: 316L Stainless Steel
- Manual valves gasket material: EPDM
- Surface finish: electropolished
- Inlet and outlet connection: DIN standard
- Mobility (option): four swivelling wheels
- Food and CE compliant
- Dimensions and weight (approx.)

	W×D×H	Weight
Essential 2.2S	1705×465×1770 mm (67 7/8 × 18 5/16 × 69 11/16 in)	90 kg (198 lb)
Essential 2.2	1705×465×1770 mm (67 7/8 × 18 5/16 × 69 11/16 in)	90 kg (198 lb)
Essential 2.3	2190×465×1770 mm (86 3/4 × 18 5/16 × 69 11/16 in)	101 kg (222 lb)
Essential 5.2S	1660×595×1685 mm (65 3/8 × 18 5/16 × 69 11/16 in)	132 kg (291 lb)
Essential 5.2	1660×595×1685 mm (65 3/8 × 23 7/16 × 66 5/16 in)	132 kg (291 lb)
Essential 5.3	2050×595×1685 mm (80 11/16 × 23 7/16 × 66 5/16 in)	167 kg (368 lb)

Filter Cartridges

- Prefiltration step with Sartopure® IND: 0.45 µm; 0.65 µm; 1.2 µm; 3 µm; 5 µm; 8 µm; 20 µm and 50 µm
- Final filtration for yeast and bacterial retention with either 1 µm Sartobev®; 0.65 µm, 0.45 µm Sartocool® or 0.65 µm, 0.45 µm Vinosart® PS.

Ordering Information

Product code	Designation
Manual Filtration skid Essential range	
FSKID-ESS-2.2S	Manual filtration skid essential up to 2000 btl/h 2 stages of filtration – Basic version
FSKID-ESS-2.2	Manual filtration skid essential up to 2000 btl/h 2 stages of filtration
FSKID-ESS-2.3	Manual filtration skid essential up to 2000 btl/h 3 stages of filtration
FSKID-ESS-5.2S	Manual filtration skid essential up to 5000 btl/h 2 stages of filtration – Basic version
FSKID-ESS-5.2	Manual filtration skid essential up to 5000 btl/h 2 stages of filtration
FSKID-ESS-5.3	Manual filtration skid up to 5000 btl/h 3 stages of filtration

Manual Filtration skid Essential range for sparkling wine	
FSKID-ESS-2.2SSW	Manual filtration skid essential up to 2000 btl/h 2 stages of filtration for sparkling wine - Basic version
FSKID-ESS-2.2-SW	Manual filtration skid essential up to 2000 btl/h 2 stages of filtration for sparkling wine
FSKID-ESS-2.3-SW	Manual filtration skid essential up to 2000 btl/h 3 stages of filtration for sparkling wine
FSKID-ESS-5.2S-SW	Manual filtration skid essential up to 5000 btl/h 2 stages of filtration for sparkling wine - Basic version
FSKID-ESS-5.2-SW	Manual filtration skid essential up to 5000 btl/h 2 stages of filtration for sparkling wine
FSKID-ESS-5.3-SW	Manual filtration skid essential up to 5000 btl/h 3 stages of filtration for sparkling wine

Manual Filtration skid Essential range - options list

FSKID-ESS-OPT1	Pre-filters backwash
FSKID-ESS-OPT2	Built on wheels
FSKID-ESS-OPT3	Automated sterilization program
FSKID-ESS-OPT4	Automated sterilization program + automated integrity test

Clean In Place system Essential range

CIP-ESS-1000	Manual clean in place system 1000L
CIP-ESS-1500	Manual clean in place system 1500L
CIP-ESS-2000	Manual clean in place system 2000L

Clean In Place system Essential range - options list

FSKID-ESS-CIP-OPT1	Automated pump start
FSKID-ESS-CIP-OPT2	Automated sterilization program
FSKID-ESS-CIP-OPT3	Automated sterilization program + water recovery
FSKID-ESS-CIP-OPT4	Automated sterilization program + automated integrity test
FSKID-ESS-CIP-OPT5	Automated sterilization program+ oenologic product dosage

Germany

Sartorius Stedim Biotech GmbH
August-Spindler-Strasse 11
37079 Goettingen
Phone +49 551 308 0

USA

Sartorius Stedim North America Inc.
565 Johnson Avenue
Bohemia, NY 11716
Toll-Free +1 800 368 7178

 For further contacts, visit
[sartorius.com](https://www.sartorius.com)