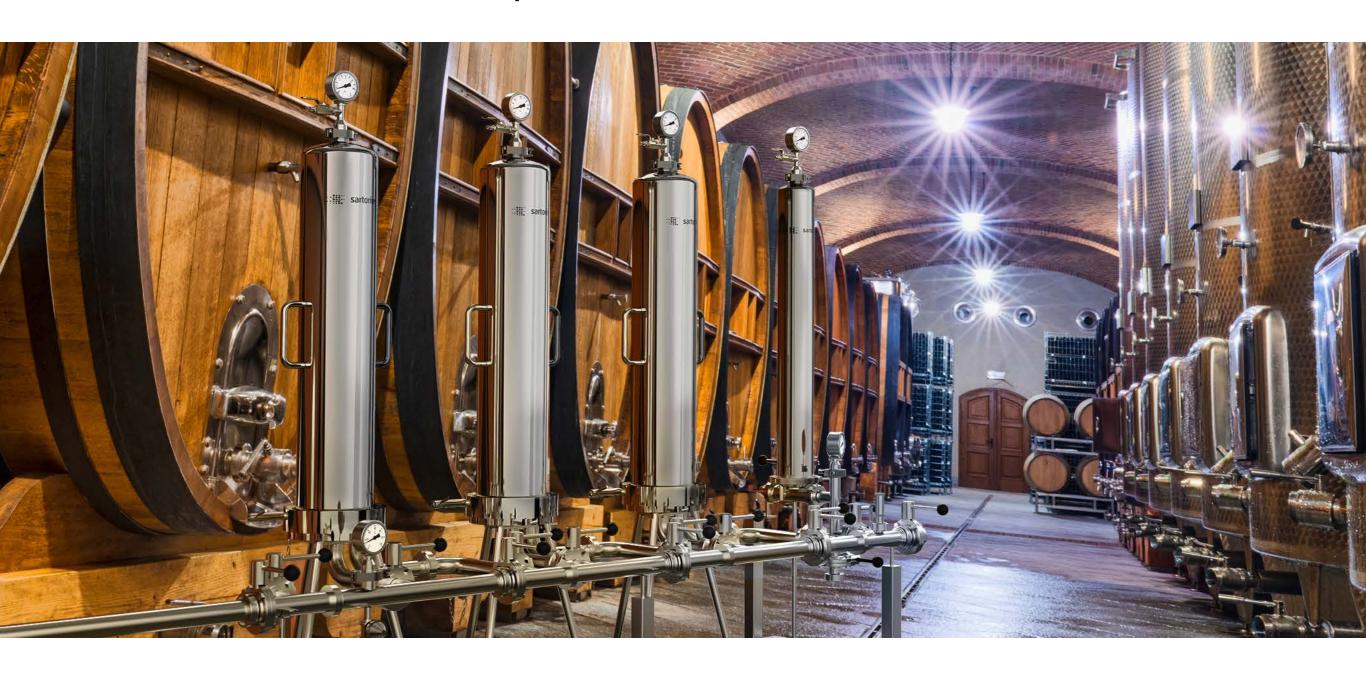


# Manual Filtration Skid – Essential Range & Clean In Place System



Filtration Skid up to 2000 Btls/hr

Filtration Skid up to 5000 Btls/hr

**CIP System** 

Filter Cartridges

Our Profile

## Description of the Manual Filtration Skid Range

The Essential range is designed for the clarification and or 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

### Wine Filtration

Segment: White, rosé or red wines,

sparkling wines, flavoured wines

Applications: Clarification, filtration,

microorganisms retention



Filter Cartridges

Our Profile

## Benefits of the Manual Filtration Skid Range



Process optimization No wine oxidation with

a completely closed filtration system.

Filtration for 1, 2 or 3 stages.

Repeatability Reliable bottling and optimization

of wine production with integrity checking of final membrane filters.

Savings Longer cartridge life time with

individual cleaning of each filtration

stage. Limited water loss during sterilization step through the option

of water recovery loop when connected to the CIP system.

Efficiency and safety Total process control with temperature

and pressure sensors. 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.

Description & Applications

Filtration Skid up to 2000 Btls/hr

Filtration Skid up to 5000 Btls/hr

CIP System

Filter Cartridges

Our Profile

## Around the Bottling Line



Filtration skid up to 2000 Btls/hr

Filtration skid up to 5000 Btls/hr

CIP System



Description
& Applications

Filtration Skid up to 2000 Btls/hr

Filtration Skid up to 5000 Btls/hr

**CIP System** 

Filter Cartridges

Our Profile

## Filtration Skids up to 2000 Btls/hr

### Up to 2000 Btls/hr: Essential 2 Range

- 1. Manual system without pump two stages of filtration: Essential 2.2
- 2. Manual system without pump three stages of filtration: Essential 2.3

### **Options:**

- Prefilter backwash
- High pressure equipment for sparkling wine
- Built on wheels (movable skid)
- Automated sterilization processes
- Integrity testing of final filter

3. Manual system without pump – two stages of filtration: Essential 2.2 S (Basic Model). The prefilter backwash is integrated in the basic model.

### **Options:**

- High pressure equipment for sparkling wine
- Built on wheels (movable skid)
- Automated sterilization processes
- Integrity testing of final filter

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

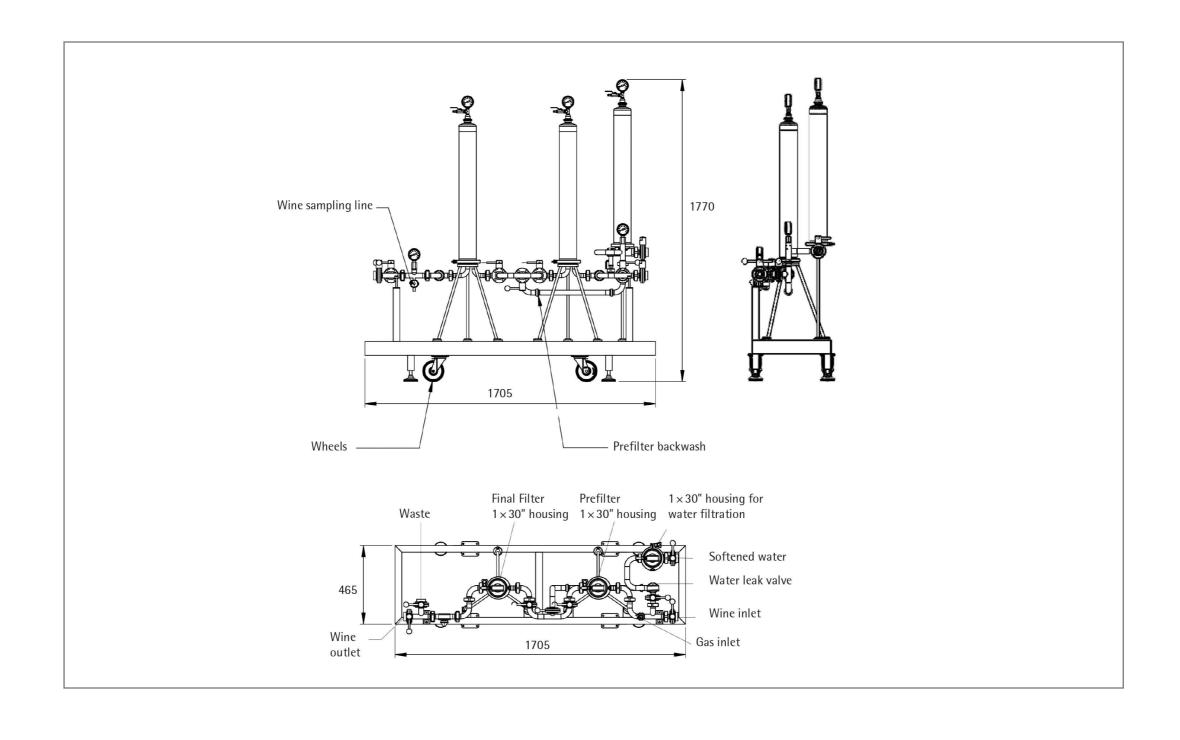
## Filtration Skid up to 2000 Btls/hr | 2 Stage Filtration

### 2 Stages of Filtration: Essential 2.2S and 2.2

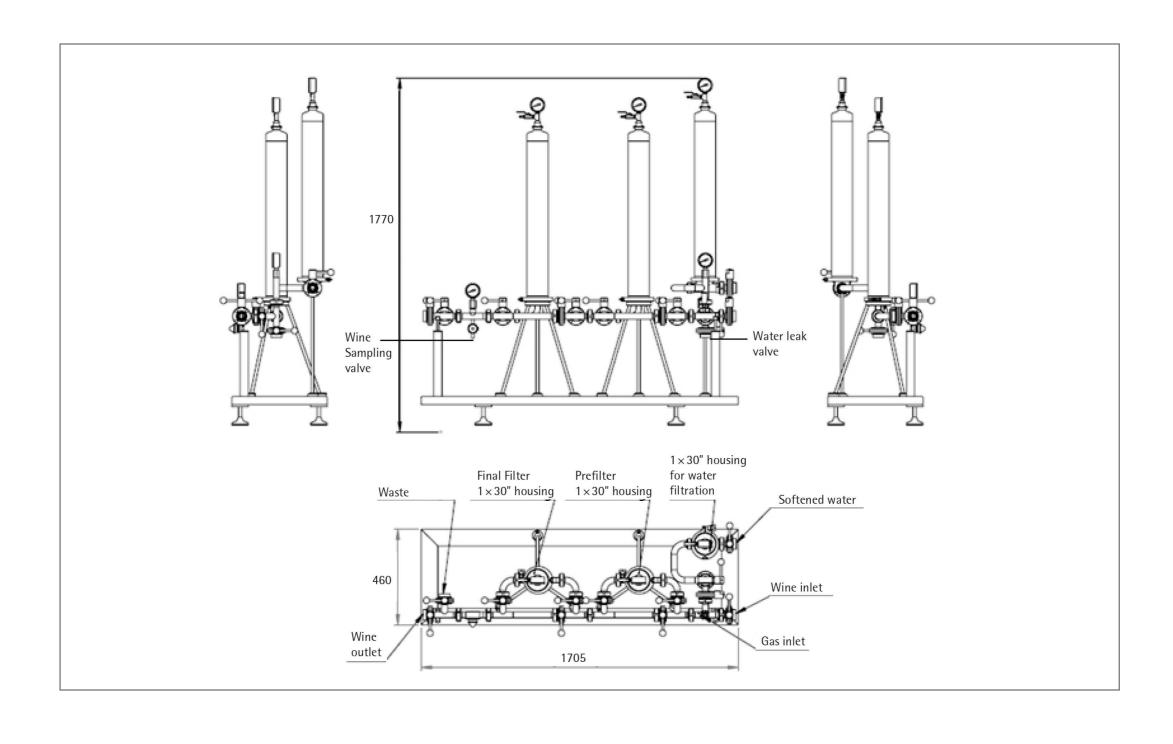
- Filtration on 1 or 2 stages
- Housings for 1×30" cartridge
- Wine sampling valve
- Water filtration included
- Security:
  - Temperature sensors
  - Manometers
  - Water leak valve to avoid water and wine mixing
- Can be connected to a CIP system



## Filtration Skid up to 2000 Btls/hr 2 Stage Filtration Drawings | Essential 2.2S



## Filtration Skid up to 2000 Btls/hr 2 Stage Filtration Drawings | Essential 2.2



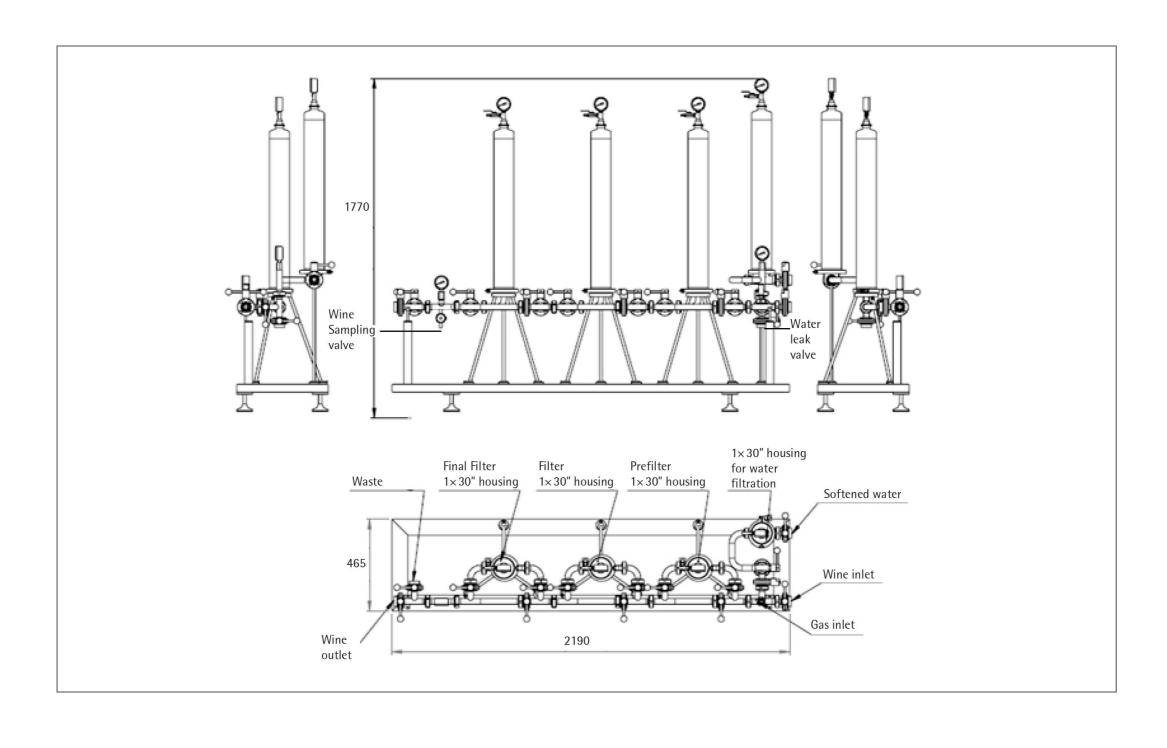
## Filtration Skid up to 2000 Btls/hr | 3 Stage Filtration

### 3 Stages of Filtration: Essentielle 2.3

- Filtration on 1, 2 or 3 stages
- Housings for 1×30" cartridge
- Wine sampling valve
- Water filtration included
- Security:
  - Temperature sensors
  - Manometers
  - Water leak valve to avoid water and wine mixing
- Can be connected to a CIP system



## Filtration skid up to 2000 Btls/hr 3 Stage Filtration Drawings | Essential 2.3



Description
& Applications

Filtration Skid up to 2000 Btls/hr

Filtration Skid up to 5000 Btls/hr

**CIP System** 

Filter Cartridges

Our Profile

## Filtration Skid up to 5000 Btls/hr

### Up to 5000 Btls/hr: Essential 5 Range

- 1. Manual system without pump two stages of filtration: Essential 5.2
- 2. Manual system without pump three stages of filtration: Essential 5.3

### **Options:**

- Prefilter backwash
- High pressure equipment for sparkling wine
- Built on wheels (movable skid)
- Automated sterilization processes
- Integrity testing of final filter

3. Manual system without pump – two stages of filtration: Essential 5.2 S (Basic Model). The prefilter backwash is integrated in the basic model.

### **Options:**

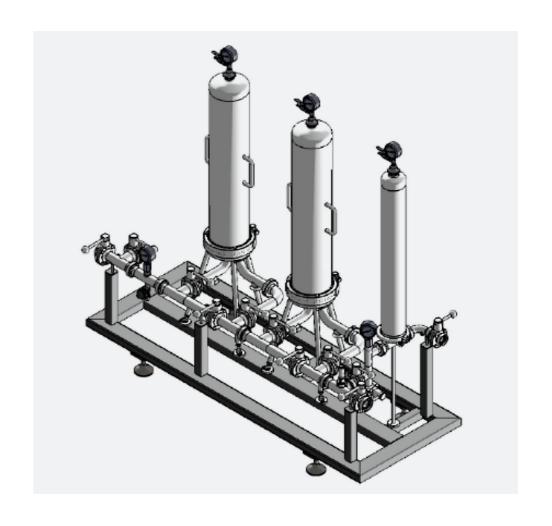
- High pressure equipment for sparkling wine
- Built on wheels (movable skid)
- Automated sterilization processes
- Integrity testing of final filter

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

## Filtration Skid up to 5000 Btls/hr | 2 Stage Filtration

### 2 Stages of Filtration: Essential 5.2S and 5.2

- Filtration on 1 or 2 stages
- 30" housing for 3 cartridges
- Wine sampling valve
- Water filtration included
- Security:
  - Temperature sensors
  - Manometers
  - Water leak valve to avoid water and wine mixing.
- Can be connected to a CIP system



Description & Applications

Filtration Skid up to 2000 Btls/hr

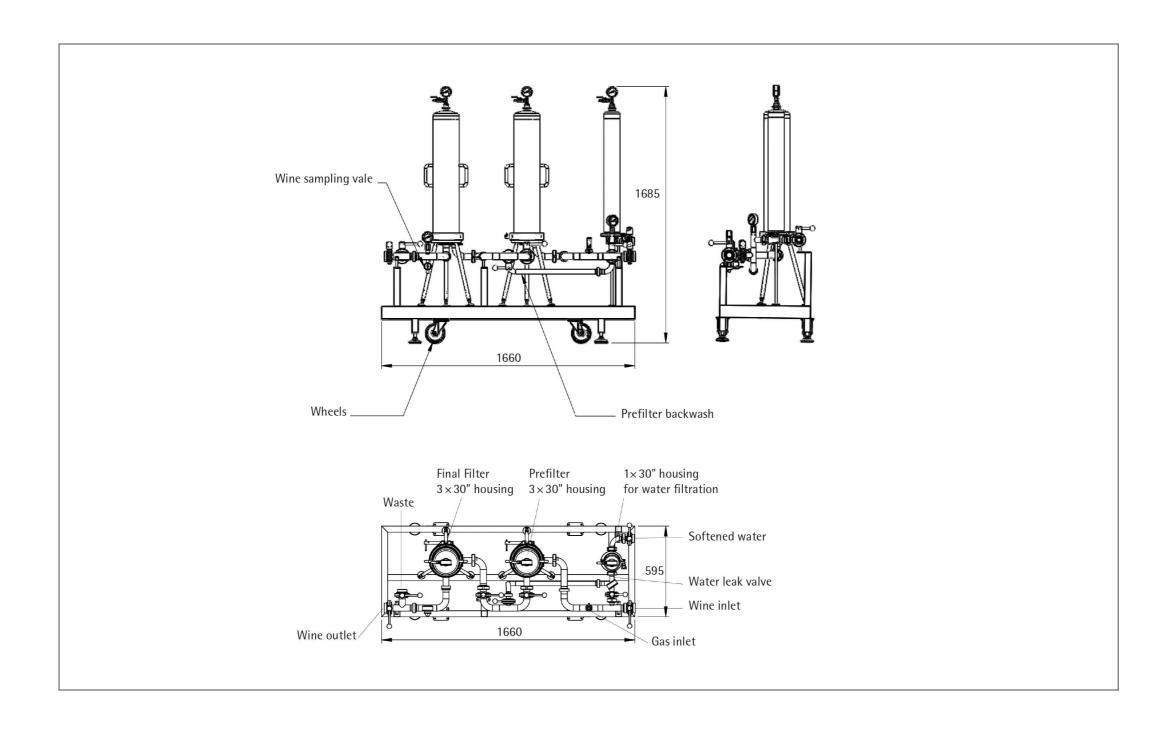
Filtration Skid up to 5000 Btls/hr

**CIP System** 

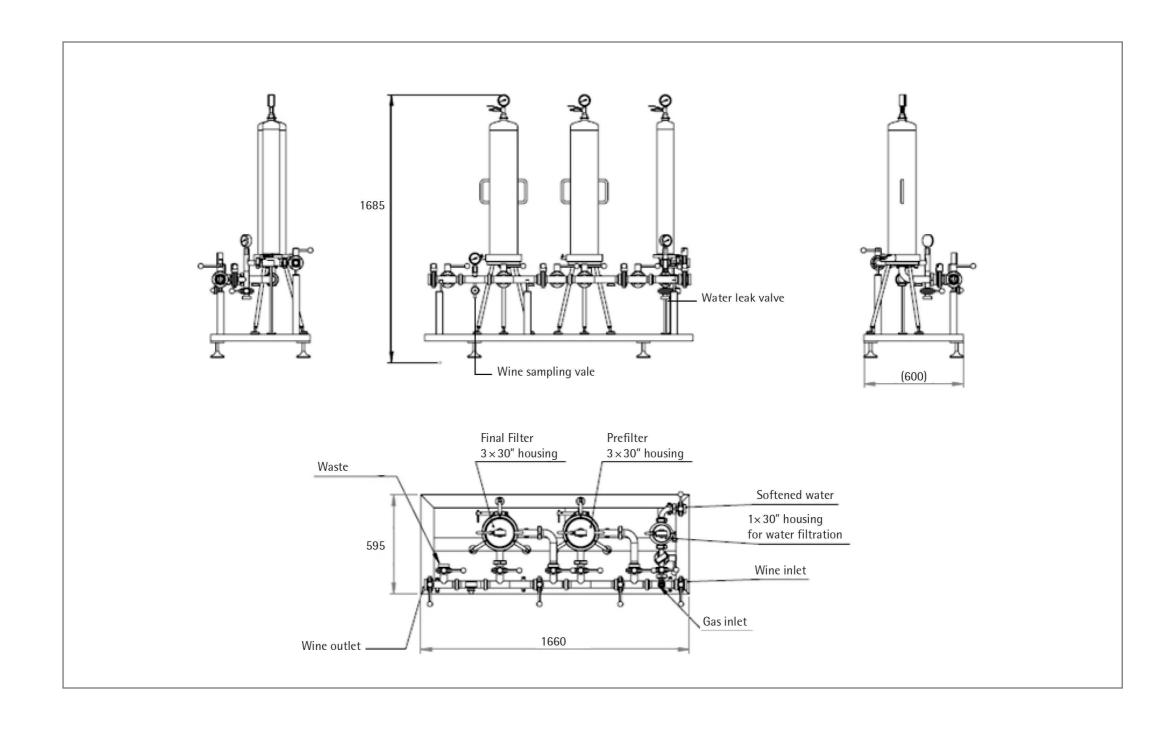
Filter Cartridges

Our Profile

# Filtration Skid up to 5000 Btls/hr 2 Stage Filtration | Essential 5.2S



## Filtration Skid up to 5000 Btls/hr 2 Stage Filtration Drawings | Essential 5.2



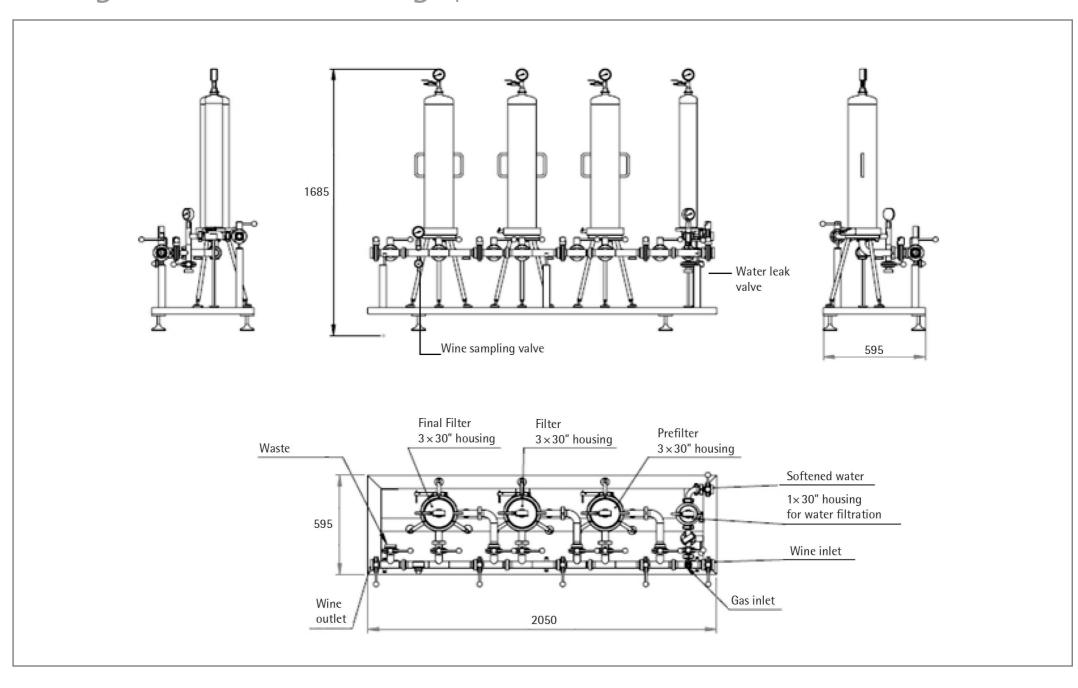
## Filtration Skid up to 5000 Btls/hr | 3 Stage Filtration

### 3 Stages of Filtration: Essential 5.3

- Filtration on 1, 2 or 3 stages
- 30" housing for 3 cartridges
- Wine sampling valve
- Water filtration included
- Security:
  - Temperature sensors
  - Manometers
  - Water leak valve to avoid water and wine mixing.
- Can be connected to a CIP system



## Filtration Skid up to 5000 Btls/hr 3 Stage Filtration Drawings | Essential 5.3



## Description of the Clean In Place (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.

The CIP System optimizes water consumption for the rinsing, cleaning and sterilization phases.

It can be connected to a filtration skid and to a bottling machine for flow rates up to 5000 Btls/hr. Exists in 1000, 1500 and 2000 liters.

## **CIP System Configuration Dependent** on Filling Line Specification

CIP	Up to 2000 Btls/hr		Up to 5000 Btls/hr	
System	2 stage	3 stage	2 stage	3 stage
	filtration	filtration	filtration	filtration
1000 L	•	•		
1500 L			•	
2000 L			•	•

Description & Applications

Filtration Skid up to 2000 Btls/hr

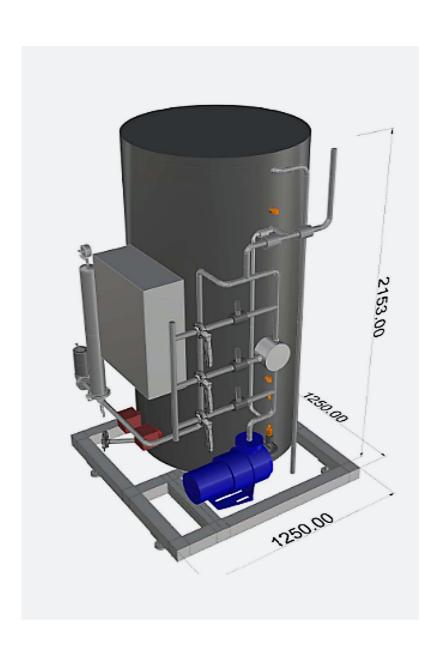
Filtration Skid up to 5000 Btls/hr

**CIP System** 

Filter Cartridges

Our Profile

## CIP System: 1000, 1500 and 2000 Liters



### **Basic Configuration**

- Stainless steel tank 316L
- Can be connected to
  - filtration skid
  - bottling line
- Cleaning flow control by manual valve and hot water pump
- Hot water unit (90°C) by electric resistor
- Hot water unit (50°C) by thermostatic mixing valve
- Prefiltration of incoming water
- Water temperature maintained
- Programmable tank filling and water heating to align with off-peak hours

Description & Applications

Filtration Skid up to 2000 Btls/hr

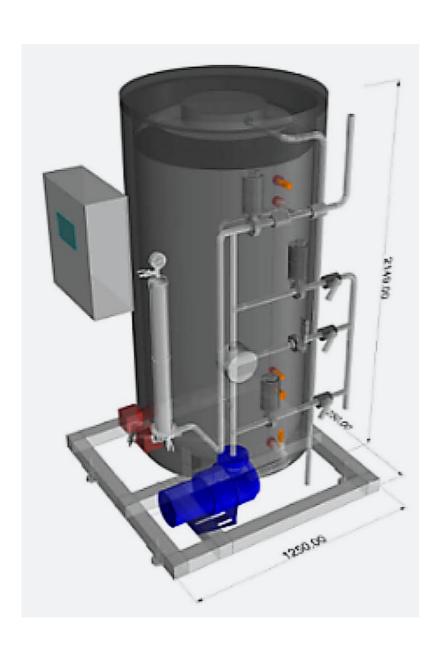
Filtration Skid up to 5000 Btls/hr

**CIP System** 

Filter Cartridges

Our Profile

## CIP Systems | PLC System

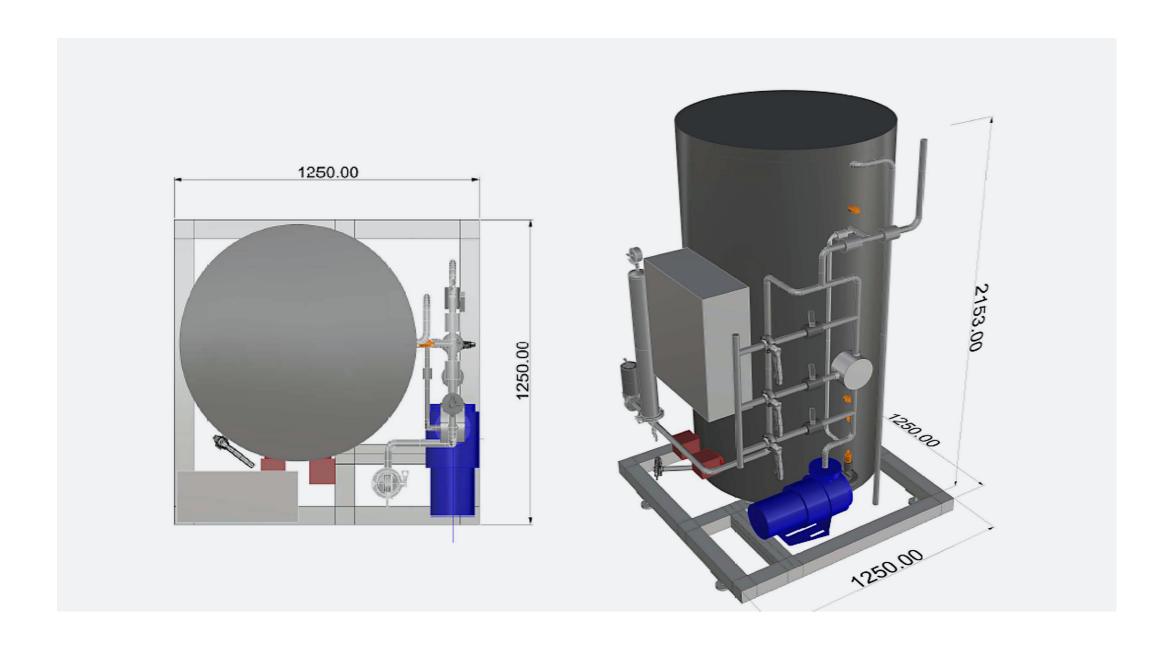


### **Advanced Configuration**

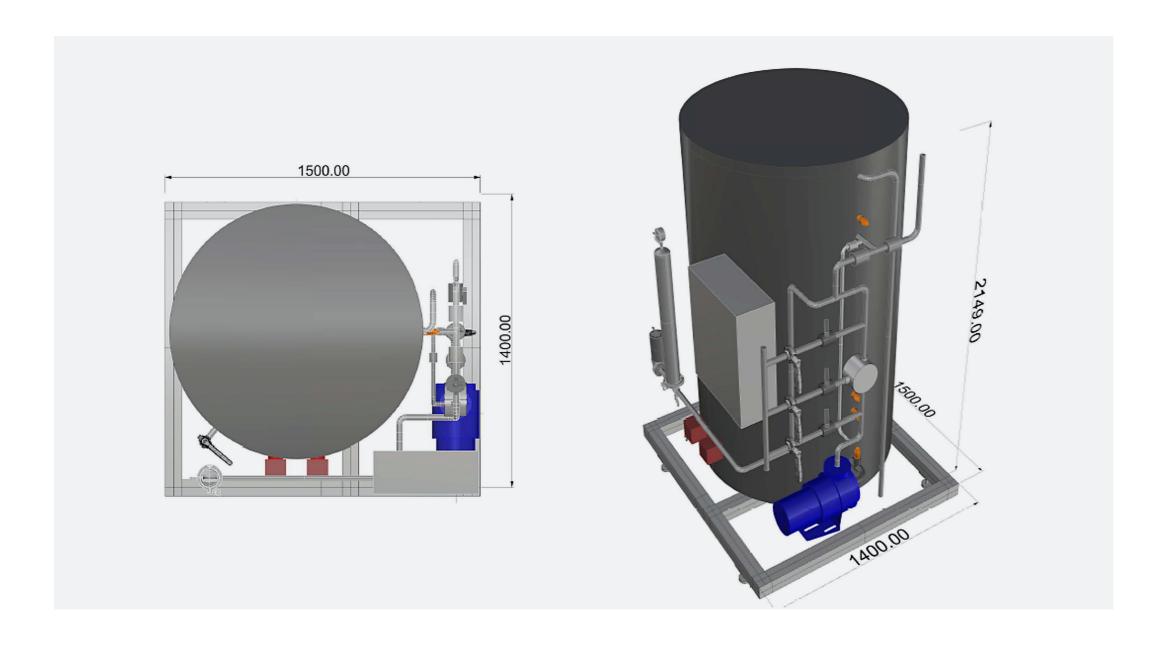
### **Available Options:**

- Automated sterilization module with integrated data traceability
- Recirculation accessory for filtration skids & bottling lines, limiting water loss from sterilization cycles (up to 80% of recovery)
- Integrity testing automation module for wine final filter on the filtration skid with data traceability
- Automated dosing kit for oenological adjuvants on the filtration skid
- All modules are controlled through PLC (Programmable Logic Controller) System.

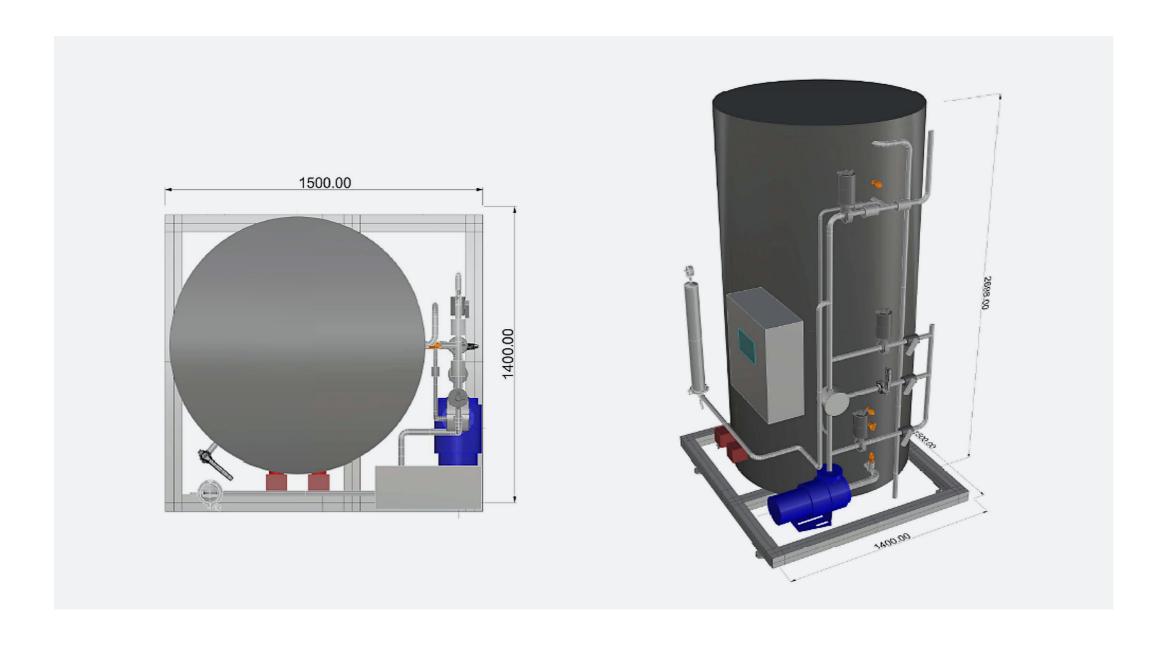
## 1000 L CIP System (2×12Kw)



## 1500 L CIP System (2×18Kw)



## 2000 L CIP System (2×18Kw)

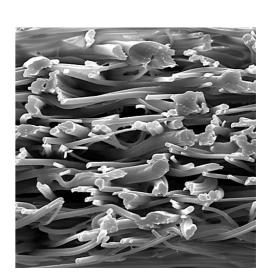


## Filter Cartridges

## **Prefiltration Step with Sartopure® IND**

 $0.45~\mu m;\, 0.65~\mu m;\, 1.2~\mu m;\, 3~\mu m;\, 5~\mu m;\, 8~\mu m;\, 20~\mu m$  and  $50~\mu m$ 





## **Final Filtration for Yeast and Bacterial Retention** with either:

- 1 μm and 0.65 μm Sartobev<sup>®</sup>,
- 0.65 μm and 0.45 μm Sartocool® or
- 0.65 µm and 0.45 µm Vinosart® PS



1 standard 30" cartridge for 15HI/hr





See attached files

Data\_SartobevPS\_SGK2011-e Data\_SartocoolPS\_SGK2001-e Data\_SartopureIND\_SGK2006-e Data\_VinosartPS\_SGK2005-e Description & Applications

Filtration Skid up to 2000 Btls/hr

Filtration Skid up to 5000 Btls/hr

**CIP System** 

Filter Cartridges

**Our Profile** 

## Global Presence

Sartorius Stedim Biotech has a worldwide presence, with manufacturing, sales and R&D sites in more than 20 countries in Europe, North America and Asia. More than 8,125 employees across the globe focus on single-use technologies and added-value services to meet the rapidly changing technology requirements of the industry it serves.

Sartorius Stedim Biotech has several decades of experience on the wine market, for which we have developed a range of specific products, adapted to the clarification, filtration and microbiological control steps. Our manufacturing sites of filter cartridges are certified ISO 90001:2015.

Benefit from Sartorius' expertise and experience to obtain the best quality and throughput rates in your production and filling processes.

For more information, please visit our website: www.sartorius.com/food-and-beverage



## Thank You for Your Attention



### **Sales and Service Contacts**

For further contacts, visit www.sartorius-stedim.com

### Europe

### Germany

Sartorius Stedim Biotech GmbH August-Spindler-Strasse 11 37079 Goettingen

Phone +49.551.308.0

Sartorius Stedim Systems GmbH Robert-Bosch-Strasse 5 – 7 34302 Guxhagen

Phone +49.5665.407.0

#### France

Sartorius Stedim FMT S.A.S. ZI des Paluds Avenue de Jouques – CS 91051 13781 Aubagne Cedex

Phone +33.442.845600

Sartorius Stedim France SAS ZI des Paluds Avenue de Jouques – CS 71058 13781 Aubagne Cedex

Phone +33.442.845600

#### Austria

Sartorius Stedim Austria GmbH Modecenterstrasse 22 1030 Vienna

Phone +43.1.7965763.18

### Belgium

Sartorius Stedim Belgium N.V. Rue Colonel Bourg 105 1030 Bruxelles

Phone +32.2.756.06.80

#### Hungary

Sartorius Stedim Hungária Kft. Kagyló u. 5 2092 Budakeszi

Phone +36.23.457.227

#### Italy

Sartorius Stedim Italy S.r.l. Via dell'Antella, 76/A 50012 Antella-Bagno a Ripoli (FI)

Phone +39.055.63.40.41

#### **Netherlands**

Sartorius Stedim Netherlands B.V.

Phone +31.30.60.25.080

filtratie.nederland@sartorius-stedim.com

#### **Poland**

Sartorius Stedim Poland Sp. z o.o. ul. Wrzesinska 70 62-025 Kostrzyn

Phone +48.61.647.38.40

#### **Russian Federation**

LLC "Sartorius Stedim RUS" Vasilyevsky Island 5<sup>th</sup> line 70, Lit. A 199178 St. Petersburg

Phone +7.812.327.53.27

#### Spain

Sartorius Stedim Spain, S.A.U. Avda. de la Industria, 32 Edificio PAYMA 28108 Alcobendas (Madrid)

Phone +34.913.586.098

#### Switzerland

Sartorius Stedim Switzerland AG Ringstrasse 24 a 8317 Tagelswangen

Phone +41.52.354.36.36

#### U.K.

Sartorius Stedim UK Ltd. Longmead Business Centre Blenheim Road, Epsom Surrey KT19 9 QQ

Phone +44.1372.737159

### Ukraine

LLC "Sartorius Stedim RUS" Post Box 440 "B" 01001 Kiev, Ukraine

Phone +380.44.411.4918

### **Americas**

### USA

Sartorius Stedim North America Inc. 5 Orville Drive, Suite 200 Bohemia, NY 11716

Toll-Free +1.800.368.7178

#### Argentina

Sartorius Argentina S.A. Int. A. Ávalos 4251 B1605ECS Munro Buenos Aires

Phone +54.11.4721.0505

#### Brazil

Sartorius do Brasil Ltda Avenida Senador Vergueiro 2962 São Bernardo do Campo CEP 09600-000 - SP- Brasil

Phone +55.11.4362.8900

#### Mexico

Sartorius de México, S.A. de C.V. Libramiento Norte de Tepotzotlan s/n, Colonia Barrio Tlacateco, Municipio de Tepotzotlan, Estado de México, C.P. 54605

Phone +52.55.5562.1102

leadsmex@sartorius.com

### Asia | Pacific

### Australia

Sartorius Stedim Australia Pty. Ltd. Unit 5, 7-11 Rodeo Drive Dandenong South Vic 3175

Phone +61.3.8762.1800

#### China

Sartorius Stedim (Shanghai) Trading Co., Ltd. 3rd Floor, North Wing, Tower 1 No. 4560 Jinke Road Zhangjiang Hi-Tech Park Pudong District Shanghai 201210, P.R. China

Phone +86.21.6878.2300

Sartorius Stedim (Shanghai) Trading Co., Ltd. Beijing Branch Office No. 33 Yu'an Road Airport Industrial Park Zone B Shunyi District, Beijing 101300

Phone +86.10.8042.6501

Sartorius Stedim (Shanghai) Trading Co., Ltd. Guangzhou Branch Office Room 1105 Xing Guang Ying Jing Building No. 119, Shui Yin Road Yue Xiu District, Guangzhou 510075

Phone +86.20.3836.4193

#### India

Sartorius Stedim India Pvt. Ltd. #69/2-69/3, NH 48, Jakkasandra Nelamangala Tq 562 123 Bangalore, India

Phone +91.80.4350.5250

#### Japa

Sartorius Stedim Japan K.K. 4th Fl., Daiwa Shinagawa North Bldg. 8-11, Kita-Shinagawa 1-chome Shinagawa-ku, Tokyo, 140-0001 Japan

Phone +81.3.4331.4300

#### Malaysia

Sartorius Stedim Malaysia Sdn. Bhd. Lot L3-E-3B, Enterprise 4 Technology Park Malaysia Bukit Jalil 57000 Kuala Lumpur, Malaysia

Phone +60.3.8996.0622

#### Singapore

Sartorius Stedim Singapore Pte. Ltd. 10 Science Park Rd The Alpha #02-13/14 Singapore Science Park II Singapore 117684

Phone +65.6872.3966

#### South Korea

Sartorius Korea Biotech Co., Ltd. 8th Floor, Solid Space B/D, PanGyoYeok-Ro 220, BunDang-Gu SeongNam-Si, GyeongGi-Do, 463-400

Phone +82.31.622.5700