

# Clean In Place System (CIP) – Essential Range

To be connected to a manual filtration skid – Essential range

### **Product Information**

All Manual filtration skids from the Essential range can be connected to a CIP system. It produces and maintains hot water up to 90 °C | 194 °F. It supplies filtered water for the filling line (filtration skid, piping and bottling machine) either for cleaning purposes at 50 °C | 122 °F or for sterilization at 90 °C | 194 °F.

Exists in 1000, 1500 and 2000 liters.



#### Applications

It supplies filtered water for the filling line (filtration skid, piping and bottling machine) either for cleaning purposes at 50 °C | 122 °F or for sterilization at 90 °C | 194 °F. The CIP System optimizes water consumption for the rinsing, cleaning and sterilization phases.

# CIP System configuration dependent on filling line specification

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

**Basic Configuration** 

- Cleaning flow control by manual valve and hot water pump
- Hot water unit (90 °C | 194 °F) by electric resistor
- Hot water unit (50 °C | 122 °F) by thermostatic mixing valve
- Prefiltration of incoming water
- Water temperature maintained
- Programmable tank filling and water heating to align with off-peak hours

#### Advanced configuration – available options

- Automated sterilization module with integrated data traceability
- Recirculation loop 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.

#### Equipment on the skid

	1000 L CIP System	1500 L CIP System	2000 L CIP System
Electrical pump: 10 m <sup>3</sup> /hour	х	х	х
Electrical frame	х	х	х
PLC option dependent	х	х	
Temperature sensors	х	х	х
Level sensors	х	х	х
Manual and automatic valves. Butterfly and sphere	х	х	Х
Tank capacity	1000 L	1500 L	2000 L
Electrical resistance	$2 \times 12  \text{KW}$	$2 \times 18  \text{KW}$	$2 \times 18  \text{KW}$
Water filter	1×30"	1×30"	1×30"

### Options

	1000 L CIP System	1500 L CIP System	2000 L CIP System
Automatic start hot water pump	х	х	х
Automatic sterilization	х	х	х
Recirculation	х	х	х
Dosing arabic gum	х	х	х
Integrity test	х	х	х
Recirculation loop	х	х	х

## Technical Data

Main construction material	304L stainless steel
Piping surface finish	<ul> <li>Inner surface Ra &lt; 0.8 μm / welded seam area Ra &lt; 1.6 μm</li> <li>Outer surface Ra &lt; 1.0 μm</li> </ul>
Insulation specification	50 mm (1.97 in) polyester + external PVC cover
Inlet & outlet connection	DN25
Power supply	Control cabinet: 400 V 3P+PE 40 Kw
Frame design	Square pipes structure
Frame feet	Anti-slip
Frame surface finish	Mechanical polishing

Dimensions and weight (approx.)

	$W \times D \times H$	Weight
1000 L	1250 × 1250 × 2217 mm (49 ³/16 × 49 ³/16 × 87 ¹/4 in)	630 kg (1,389 lbs)
1500 L	1500×1400×2221 mm (59 ¼6×55 ⅛ × 87 ൸ in)	810 kg (1,786 lbs)
2000 L	1500×1400×2755 mm (59 ¼16×55 ⅛×108 ൸in)	930 kg (2,050 lbs)

## Ordering Information

Product code	Designation
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 – List of options
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

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