

Automated Cleaning-in-Place Unit

CIP3101/ CIP351 Cleaning-in-Place Unit

Safe, effective & time-saving

The CIP3101 system is designed to automatically clean pilot plants without dismantling the system. CIP is an important component in guaranteeing food safety in food processing plants. This machine makes the cleaning process easier, more effective and safer, by minimizing the direct contact of the operator with the cleaning detergents (acid and lye solutions).

The facilities will also be more protected against unwanted damage e.g. spilling detergents on the floor.



This fully automated CIP system is available with two different heating methods: steam heat and electrical heat.

Depending on the size of the equipment and volume to be cleaned, you can select one or two vessels of 50L/ 100L to facilitate and maximize your operations. OMVE's CIP3101 unit is pre-programmed to automatically clean OMVE units such as fermenters, buffer tanks, blending vessels, UHTs, as well as other lab & pilot equipment.

Features & Benefits

- Effortless operation by automating the accurate mixing process of cleaning detergent
- Two dosing pumps for detergents (both acid and lye)
- User-friendly OMVE software with clear step-by-step instructions
- Independent, regulated on-board heating capability (electric or steam) for high-temperature CIP (i.e. caustic)
- Automated cleaning of the 50L/ 100L vessel(s)
- CIP pump with high-speed flow up to 3m³/hr
- Safe & secure design to protect the operator's health & safety and the environment (facilities) against splashes

Applications

Our CIP unit is suitable to automatically clean OMVE units including fermenters, buffer tanks, blending vessels, UHTs as well as other lab & pilot equipment.



Working Principle

Cleaning Cycle - Step-by-Step

Step 1. Start of the CIP unit

Step 2. +/- 10 min. cold/ hot water washing of product from the system/tank

Step 3. +/- 30 min. alkaline cleaning at +/- 70°C (depending on the type of detergent)

Step 4. +/- 10 min. cold/ hot water to remove detergents from the equipment

Step 5. +/- 30 min. acid cleaning at +/- 70°C (depending on the type of detergent)

Step 6. +/- 15 min. cold/ hot water to remove detergents from the equipment

Step 7. Emptying the tank and pipes

Optional Accessories

- Temperature transmitter in the product line
- Return CIP pump
- Optional secondary 50L or 100L tanks
- Couple board/ valve manifold
- Additional flow meter
- Conductivity measurement

Specifications

Product Code	CIP3101/1 & CIP351/1	CIP3101/2 & CIP351/2
Vessel size	1 x 100L, 1 x 50L	2 x 100L, 2 x 50L
Max. pressure	4bar [85psi]	4bar [85psi]
Flow rate	Up to 3000L/hr	Up to 3000L/hr
Cleaning temperature	Optimum 55-65°C [131-149 °F] Maximum 80°C [176°F]	Optimum 55-65°C [131-149 °F] Maximum 80°C [176°F]
Weights & Dimensions		
Weight	650kg [2205lbs] 700kg [1543lbs]	700kg [1543lbs]
Dimensions L x W X H	1950 x 1400 x 2100mm [77 x 55 x 83"]	1950 x 1400 x 2100mm [77 x 55 x 83"]
Required utilities		
Electrically-heated	440-460Vac/ 3ph + PE/ 60Hz, 32A or 370-400Vac/ 3ph + N + PE/ 50Hz, 32A	440-460Vac/ 3ph + PE/ 60Hz, 32A or 370-400Vac/ 3ph + N + PE/ 50Hz, 32A
Steam-heated	370-400Vac/ 3ph + N + PE/ 50Hz, 16A	370-400Vac/ 3ph + N + PE/ 50Hz, 16A
Soft water (max.)	1200L/hr, <25°C	1200L/hr, <25°C
Compressed air	1nm ³ /hr; 6-7bar(g)	1nm ³ /hr; 6-7bar(g)
Drains	Up to 100°C/ 3000L/hr	Up to 100°C/ 3000L/hr



CIP3101 operating in a full production line

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Lab & Pilot Equipment

