



Clean-in-Place (CIP)

HydroClean Vormek- PCP-500 Automated
and Intelligent Internal Washing

VORMEK

Innovation based company Machinery
Manufacturing Company by the Brand Name of Vormek

The most reliable designer and manufacturer in the field of various tray sealer packaging machines, vacuum chamber, as well as manufacturer of thermoforming packaging machines and various fillers with high quality and advanced technology level



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CIP Method

A highly suitable method for hygienic cleaning, fully compliant with food industry machinery standards.

This system uses a non foaming and neutral pH washing method for internal surfaces of equipment such as pipes, tanks, and processing machines that come into contact with the product. By controlling temperature and washing time, it completely removes product residues and dissolves deposits and sediments left inside the equipment.

This method provides uniform, stable and continuous washing, ensuring consistent health and cleanliness. The system significantly reduces the use of water and chemicals and operates with minimal supervision. The combination of a circulation tank, centrifugal pump, precise safety system, fully insulated body, and stainless steel piping ensures maximum washing efficiency and low energy loss. All connections are hygienic, smooth, and fully welded, making the system leak free and durable.

This system can be used both stationary and mobile. It is highly effective for factories producing dairy, beverages, sauces, jams, chocolate, cosmetics, and pharmaceuticals. It prevents cross contamination between different production batches and avoids microbial growth inside the equipment.

Thanks to its unique design and powerful performance, this washing system transforms into an essential component of CIP cleaning processes.

Main components of this machine

1. Hot Water Storage Tank

- Used for storing heated water

2. Chemical Solution Storage Tank

- Designed to hold various cleaning solutions, including:
- Alkaline detergents for removing fats and proteins
- Acidic solutions for eliminating mineral deposits
- Disinfectants such as peracetic acid

3. Pumps and Automatic Valves

- The specialized pump circulates cleaning solutions through the equipment at the correct pressure, while automatic valves precisely control cleaning routes

4. Heating Element and Thermostat

- Used for heating the tank water to the required temperature, typically between 70–85°C, ensuring effective cleaning

5. Programmable Logic Controller (PLC)

- Through industrial programming, all washing stages (including temperature, time, chemical dosing, and sequence of operations) are controlled and monitored

6. Sensors and Measuring Instruments

- Includes a thermometer, conductivity sensor, flow meter, and level sensor to monitor system status and performance



After sale services

Services **10** YEAR

Choosing Vormek means:

- Opting for the Leading Brand
- Embracing Technology
- Ensuring Quality
- Fostering Innovation
- Guaranteeing Success
- Implementing Smart Solutions

Items such as:

Maintaining freshness, extending product shelf life, preserving taste and nutritional value of the product, as well as hygiene and longevity, preventing spoilage and oxidation of products, are the most important goals of using these machines.

Advantages of Using a CIP System

- Maintains a high level of hygiene and food safety
- Eliminates microbial contamination, reduces the risk of unsafe products, and ensures compliance with standards such as ISO 22000, HACCP, and FDA regulations
- Saves time and labor
- No need to disassemble equipment for cleaning, reducing manual labor requirements
- Lowers water and chemical consumption
- Enables solution recovery and smart resource usage
- Provides high accuracy and controllability
- Ensures uniform, programmable, and traceable cleaning with PLC automation
- Reduces production downtime
- Allows rapid changeover between production shifts with precise cleaning cycles
- Extends equipment lifespan by preventing buildup of deposits and corrosion caused by contamination

The main benefits of CIP operations

It is a standardized cleaning cycle performed in the following order:

1. Pre-rinse with warm water:

To remove product residues and prepare for the main cleaning step.

2. Cleaning with alkaline solution:

To remove fats, proteins, and other organic residues.

3. Intermediate rinse:

To remove alkaline residues before entering the acidic stage.

4. Cleaning with acidic solution:

To remove mineral deposits.

5. Final rinse with clean water:

To ensure complete removal of chemical substances.

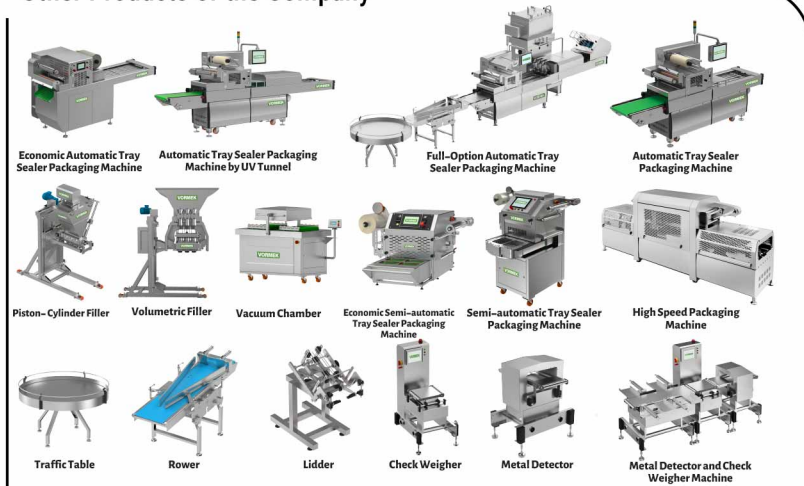
6. Disinfection step (if needed):

To eliminate microorganisms before starting production.

7. Air drying (optional):

To dry the pathways and ensure complete removal of residues.

Other Products of the Company



Technical Specifications of the Volumetric Filler

Electrical Parts

Use of high-Quality and premium brands (Delta, Phoenix, Autronics, Siemens, Moller)

Body Material

High-Quality 304 stainless steel

Machine Dimensions

Length: 150 cm – Width: 100 cm – Height: 160 cm

Electrical Power:

1/5 kW

Electric Current:

2/5 A



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