



MOBILE CIP-STATION

In biotechnology industry, it is necessary to observe the highest standards of cleanliness and hygiene. A thorough cleaning of the equipment not only prevents cross-contamination but also acts as a first step towards reproducible fermentation processes.

Automatization of CIP (cleaning-in-place) process ensures reproducibility of cleaning processes, thus enabling its validation in accordance with cGMP, FDA (Food and Drug Administration), and EHEDG (European Hygienic Equipment Design Group) standards.

Engineering unit of GPC Company developed a fully automated Mobile CIP-station for reactors, vessels and piping, which is currently available in several versions for cleaning vessels from 20L to 3000L. Vessels larger than 3m³ will be cleaned with non-mobile CIP.

Constructive design and reliability of our Mobile CIP-station not only ensures the production of safe and quality products, increases their shelf life, but also reduces the costs of monitoring procedures for technological processes and products, increases the effectiveness of quality management systems, eliminating the need for operations to dismantle the removable parts and make connections in clean rooms.

Upon customer request we can provide customized solutions for Mobile CIP-stations according to your technical requirements. Our experts will help you choose a working volume of CIP tanks, automation equipment according to your needs and budget. We will test the system after assembly and carry out commissioning with training of your personnel as soon as possible.

Mobile CIP-station is fully automated and can wash your equipment in accordance with the program you have selected. It can process vessels with volumes ranging from 20L up to 3.000L (depends on working volume of CIP tanks and configuration of processed container).

The Mobile CIP-station consists of one or two tanks, a steam heat exchanger, two pumps (supply and return), control and measuring equipment (temperature, pressure and conductivity sensors) and control unit.

CONTROL CABINET

The control unit is installed on the frame.

External dimensions for a box controller: 760x760x300 mm.

Touch screen PC and keyboard/mouse is installed for comfortable operator work.

COMPONENTS

Power supply, switches, fuse and frequency converters for drives.

MEASUREMENT SYSTEMS

Optimized PID measurement system and transmitters to control the following functions:

- Temperature: measurement, control and recording
- Conductivity: measurement, control and recording
- Pump speed: measurement, control and recording
- Pressure: measurement, control and recording
- pH: measurement, control and recording

AUTOMATION

- Touchscreen 21", industrial computer with Siemens PLC for control process including specialized software
- Windows 11 Professional operating system

CIP-station is equipped with pumps, heat exchangers, valves, sensors from leading manufacturers.

The station is equipped with an automatic system for maintaining and changing the pH of cleaning solutions to optimize the washing process and configuration of technological processes.

MOBILE CIP-STATION TECHNICAL DESCRIPTIONS

Parameter	Value
Working pressure of water	Up to 3 bar
Working pressure of WFI	Up to 3 bar
Working air pressure for blowing	Up to 2.5 bar
Working pressure instrument air	5–7 bar
Steam working pressure	Up to 2.5 bar
Working pressure water drain	Without pressure
Max temperature	+85°C
Material in contact with the product	AISI 316L