

# CIPOne™ CLEANING IN PLACE (CIP) SYSTEM

The General Purpose Robust  
Sanitary Total Loss Cleaning In  
Place System for all sectors



## Overview

These skid mounted systems provide a robust and repeatable method of cleaning process equipment with temperature controlled solutions and added chemicals.

Skids comprise all the necessary heaters, pumps, valves, pipework, optional water storage tanks, and related components and instrumentation to deliver the required CIP cycle. Type, quantity and physical sizes of components are determined during the design phase of each project to suit the required application.

System construction and components are suitable for sanitary use in pharmaceutical, biotech, food, beverage and other hygienic applications.

Systems include a user-configurable recipe based control system to suit a wide range of applications and are pre-assembled and fully tested with operating utility supplies in our works to minimise risk and optimise installation and commissioning time on-site.

Systems comply with all applicable regulatory standards and are accompanied by a comprehensive suite of documentation covering all aspects of installation, operation and maintenance. Extended documentation packages can be supplied to meet specific needs.

## Applications

- ✓ Cleaning of Tanks
- ✓ Vessels
- ✓ Intermediate Bulk Containers (IBCs)
- ✓ Vats, Fermenters
- ✓ Mixers Processors
- ✓ Pipework Flexibles
- ✓ Transfer Line Valves
- ✓ Fluid Bed Dryers Mills
- ✓ Coaters Filters
- ✓ Pumps
- ✓ Dryers Tumblers
- ✓ Fillers
- ✓ and many more.

## Sanitary Construction

- ✓ Sanitary components with no threads and triclamp connections
- ✓ 316 Stainless Steel Sanitary Pipework, no dead legs, fully drainable, certificate of conformity.
- ✓ 304 Stainless steel framework
- ✓ Control and instrumentation to industry best practice
- ✓ Repeatable, reliable client configurable sequences

## Welcome

Since our foundation in 1961, Suncombe has pioneered the development of innovative solutions for cleaning in place, GMP Washers, skids, tanks and vessels and bio-waste decontamination. The business continues to be privately owned and managed day to day by Dave Adams and Steve Overton.

Supporting Dave and Steve is a close-knit, dedicated, highly motivated and long-standing team encompassing a wealth of technical experience and knowledge in all relevant disciplines, including design, manufacture, testing, installation, validation, documentation and after-sales support. All of our work is carried out across our own facilities north of London near Stansted Airport.

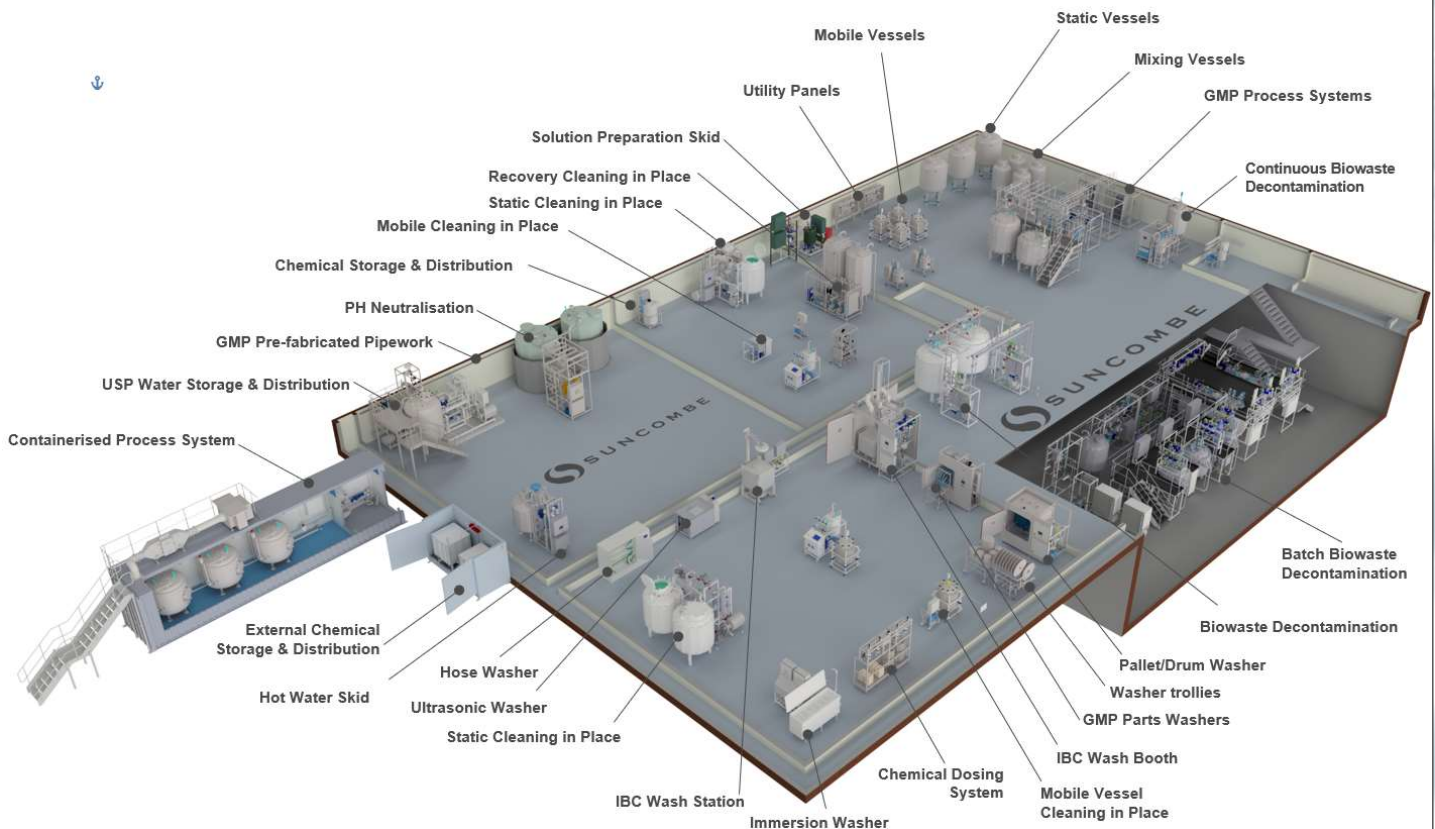
The team employ the very latest techniques, standards and best in class solutions. Having such a strong team allows us to offer the ability to carry out all of our work in-house, under our direct control

and quality management system. It also ensures that we own and preserve all the knowledge and experience gained with every project and allows us to offer continued support for all our installed systems throughout their lifetime.

## Our Clientele

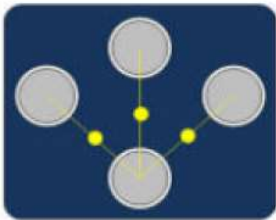


## Our Equipment



### Suncombe Ltd

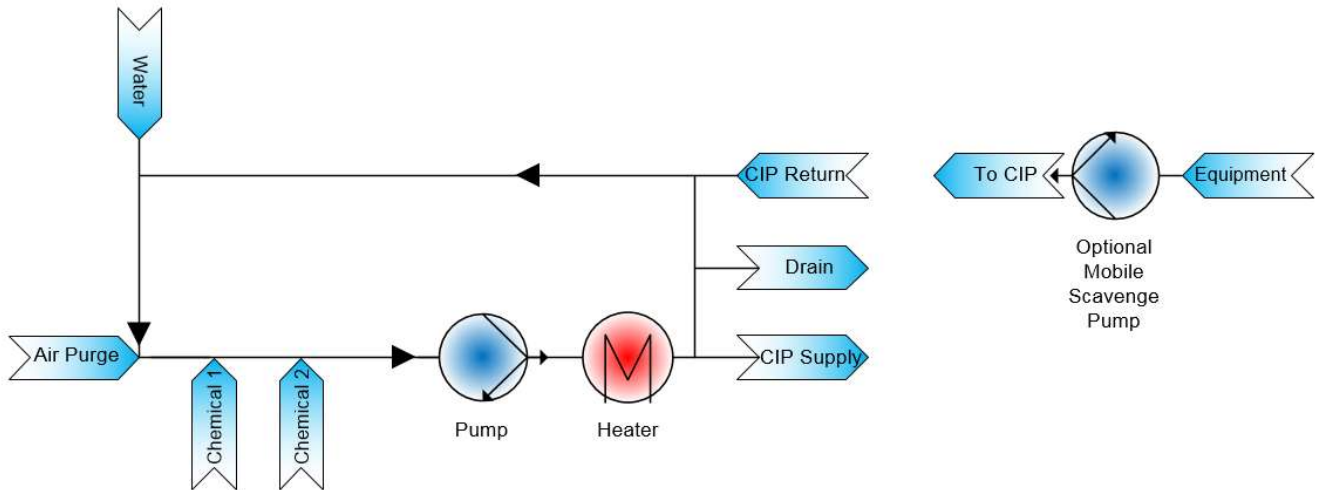
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| Key Features  | Benefits   |
|---|--|
| Sanitary 316L stainless steel construction and components       | CIP fluids are maintained at a sanitary standards with butterfly valves and 2.2 material certification.  |
| Variable Duty Delivery Pump                                     | 316L Stainless Steel Heavy Duty Sanitary Delivery Pump with Variable Speed Drive to allow speed control to vary the delivery flowrate and pressure from the recipe, complete with PID loop and automatic impellor casing drain valve   |
| Siemens PLC and 12" colour HMI with options for additional HMIs | Control hardware is industry standard and supported worldwide by Siemens. Ethernet interface included for transfer of critical operating variables to other systems. Designed to enable integration to third party equipment or higher level control system. Versions also available with remote I/O for control by clients control system.  |
| Suncombe SmartCIP™ software                                     | Control software specification has been developed and proven over many years for CIP applications and includes a wide range of user or administrator configurable parameters to enable customised cleaning recipes, including water flow, pressure, time, temperature, chemical concentration and many more. Electronic CIP batch reports for local or network storage are possible. User interface screens and process visualisation is simple, intuitive, clear and comprehensive. Remote access options are possible if required. |
| Optional CIP Tank   | 316L Stainless Steel Atmospheric tank, sanitary construction with riboflavin tests. Water storage or chemical make-up vessels.   |
| Single-pass or Recirculation options                            | CIP fluids can be immediately discarded to waste after use ("Single Pass") or may be recirculated to reduce overall water and energy consumption.  |
| Steam, hot water/oil or electric water heating options          | Heating energy may be derived from most convenient and cost-effective source available.  |
| Heated Solution Preparation                                     | Heated solutions can be batch made up in tank/s or using In-Line Heating method or clients pre-heated utilities can be used.   |
| Continuous monitoring of key parameters                         | CIP process is highly repeatable and validatable.  |
| Variable chemical dosing  | Delivery of 1, 2, 3 or 4 chemicals into CIP fluids is controlled.  |
| In-line or batch chemical dosing                                | Chemical solutions are made up using In-Line Dilution method or can be batch made up in optional CIP tank/s. Option for conductivity concentration verification.   |
| Scavenge/Return   | Skid prepared to accept return of fluids from optional scavenge pump/s, gravity drains or other site method of equipment liquid return   |
| Plug 'n' Play   | Fully integrated with comprehensive in-house testing to ensure fast start up on site   |
| CIP Distribution  | A single CIP outlet is included. Options available for up to 10 separate CIP outlets for feeding to different items to be CIP'ed. Each outlet can be a single or double valve for CIP isolation. Distribution can also be via flowplate/splitter panel.  |
|   |    |
|   | Typical flowplate/splitter panel   |
| CIP Solution Cooling  | Coolers can be added for colder CIP rinses or drain cooling.   |
| Air Purge   | Includes air purge facility to evacuate all water from the CIP pipework  |
| Fully Drainable   | Automatic valves to fully drain entire skid including pump casing  |
| Instruments   | Sanitary instruments of Endress and Hauser/Mettler Toledo or equivalent with full material and calibration certification.  |
| Final Rinse Confirmation  | Final Rinse Conductivity to confirm completion of Cycle  |

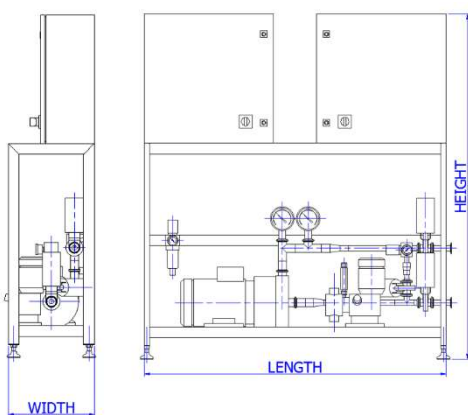
# CIPOne™ DATASHEET

VERSION 3.9

## Diagram



## Layout Drawing



## Dimensions

These are typical only and should be confirmed.

| Part #     | Nominal Pipesize Inches (mm) | Flowrate Litres per minute | Length mm | Width mm | Height mm |
|------------|------------------------------|----------------------------|-----------|----------|-----------|
| CIPOne™ 12 | ½" (12)                      | <20                        | 1,400     | 400      | 1,600     |
| CIPOne™ 25 | 1" (25)                      | <60                        | 1,400     | 400      | 1,600     |
| CIPOne™ 40 | 1½" (40)                     | <90                        | 1,400     | 400      | 1,600     |
| CIPOne™ 50 | 2" (50)                      | <162                       | 1,400     | 400      | 1,600     |
| CIPOne™ 80 | 3" (80)                      | <386                       | 1,400     | 400      | 1,600     |

Most common versions shown above. Other sizes are available.  
 All Systems also available with 0, 1, 2, 3, 4 or more vessels.  
 All Systems also available with Shell and Tube Heat Exchanger with depth increase of 400mm.

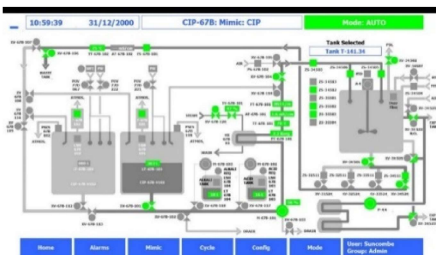
Typical CIPOne™



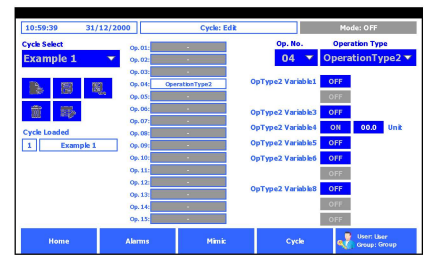
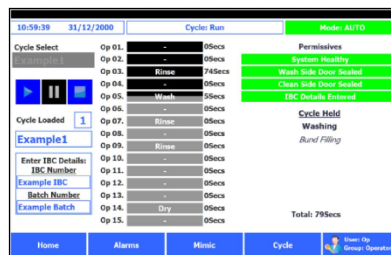
Typical CIPOne™ with Optional Tank



Typical CIPOne™  
Operator Interface HMI



Typical CIPOne™ Operator Interface  
HMI Recipe Configuration



Utilities

|  |  |
|--|--|
| Water (Soft, USP, PW, WFI - 1, 2 or 3 waters)  | 20 – 386 litres/min @ 1 bar (as per system flowrate)                             |
| Compressed Air (internal regulator)            | Minimal use @ 7bar   |
| Air Purge (internal regulator and HEPA filter) | 700 Slpm   |
| Electricity                                    | >12 kW 400Vac 3ph+n 50hz. Other voltages available to order                      |
| Steam and Condense                             | To be confirmed dependant on system duty @ 3 bar for double plate heat exchanger |
| Drain  | 20 - 386 litres/min @ 1 bar (as per system flowrate)                             |

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PFD of Typical CIPOne™ with a CIP Tank

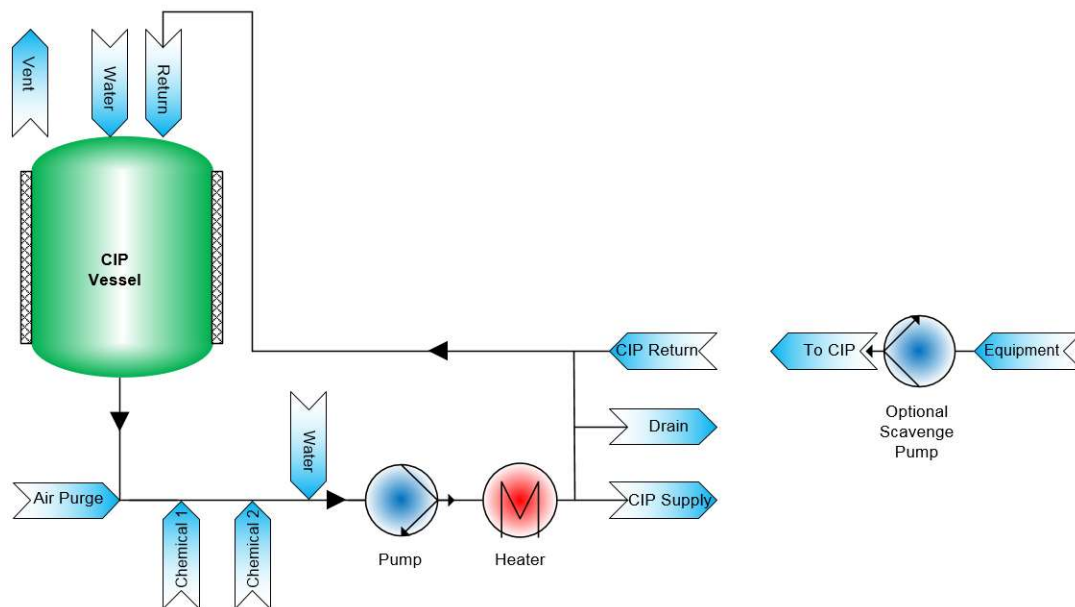


Image of MobileCIPOne™



Image of CIPOne™ used for IBC Washing

