



SUNCOMBE
CIP, BIOWASTE & PROCESS SOLUTIONS

CIP Trolley™



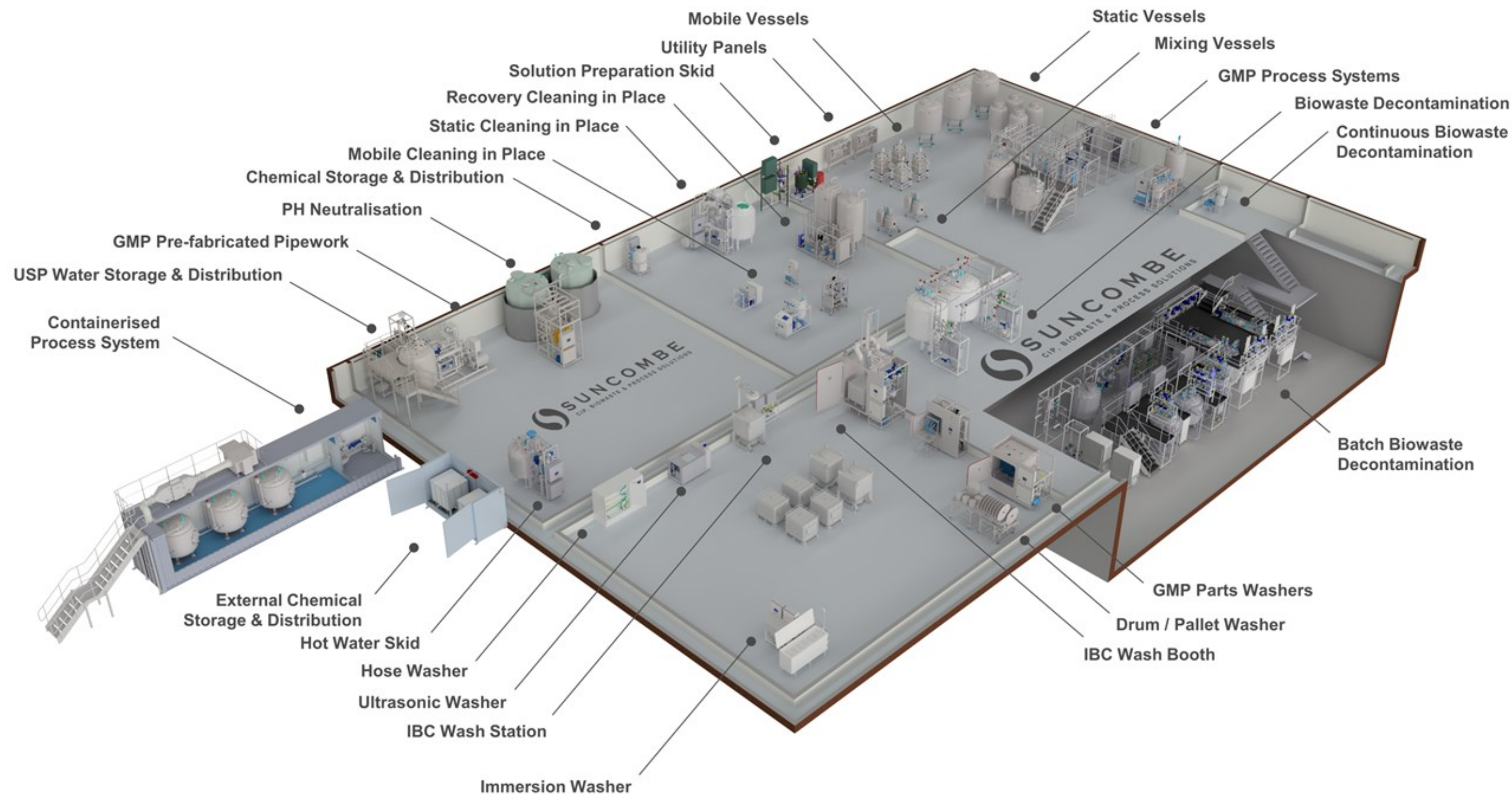
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Introduction

Utilising standard pre-approved modules, the **CIPtrolley™** is an entry level Cleaning In Place or Washing/Wetting In Place system that offers an economic solution to CIP whilst maintaining the quality of build and operation that Suncombe clients expect. The system is built from a selection of modules, allowing configuration of the system that you require whilst also affording full future proofing by either exchanging or adding modules at any time.

Development

This range, developed using our 55 years of company experience, incorporates new technology, environmental and water saving features. Primarily mobile although also available in static versions, the **CIPtrolley™** is built from certified stainless steels using ASME BPE sanitary components and is available in manual, semi-automatic and automatic.

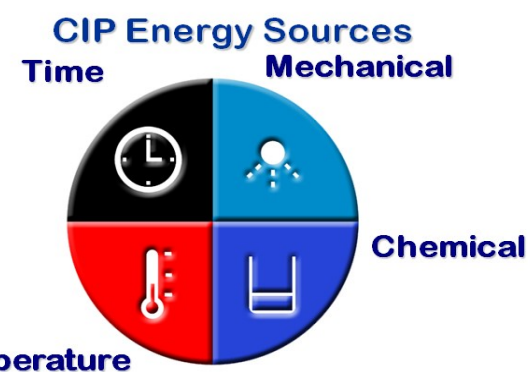
Customised as Standard

The **CIPtrolley™** can be supplied with one, two or three stainless steel sanitary tanks up to 200 litre capacity to store chemical solution, cold or hot water and drainage. These solutions would be delivered in a controlled manner to the equipment to be cleaned at the required flowrate and pressure, to provide a Clean In Place of your equipment.

CIPtrolley™ with Two 75 litre Capacity Buffer Tanks



Batch of customised CIPtrolley™s with 50 litre Capacity Buffer Tanks



Typical Applications

Static and Mobile Tanks and Vessels, Processors and Fermenters, Isolators, Mixers and Blenders, Labscale and Pilot scale plant, Dryers, Granulators, Coaters, Filters, Presses and Mills. Isolators, IBC's, Pasteurisers, Homogenisers, Conveyors, Ovens, Ducting, Filters, Pumps, Dryers, Fillers Fillers and Whippers, Other Processing Equipment.

Available Rinses

Cold Water Rinse, Cold Detergent Rinse, Hot Water Rinse, Hot Detergent Rinse, Cold Sanitiser Rinse, Air Purge, Drying

Automation System*

- Speed controlled Sanitary Pump
- Manual, Semi-automatic or Automatic Versions
- Calibrated Instruments

*See Automation Datasheet for full details

Typical Manufacturing Standards*

- Sanitary Construction, fully drainable, crevice free.
- 316 stainless steel contact parts, 304 non-contact parts, T.I.G. Welding

*See Equipment Standards Datasheet for full details

Typical Equipment*

- 316 Stainless Steel pipework
- Sanitary Centrifugal Pump
- Sanitary Valves, manual and air operated
- Steam heating
- Calibrated Instruments

*See Equipment Standards Datasheet for full details

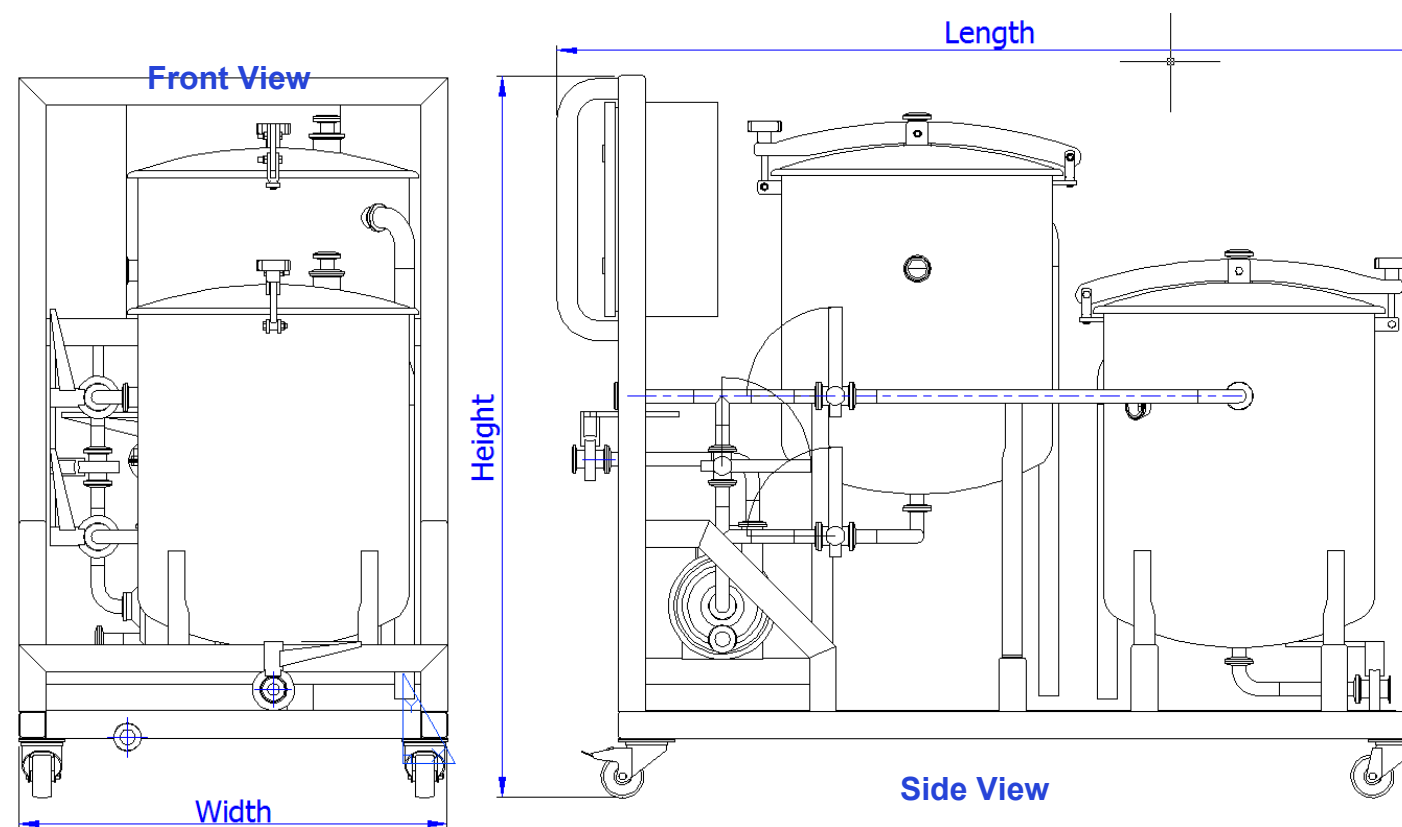
LEAN Technology

Adopting LEAN principles, the units were developed to minimise utilities and wash times, whilst ensuring the safety of the operators and the efficiency of the processing. Our automated systems are configured to incorporate LEAN principles including Overall Equipment Effectiveness, Energy Lean and minimise downtime maintenance.

Testing

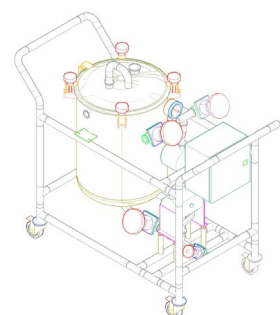
All functions of the equipment would be fully wet and dry tested and test results would be documented in the **‘Pre-Factory Acceptance Test’ (FAT)** protocol. Following successful completion of this protocol, the client will be invited to the FAT test, where all tests can be repeated or the pre-FAT tests results can be used.

CIPtrolley™ Cleaning In Place System Layout



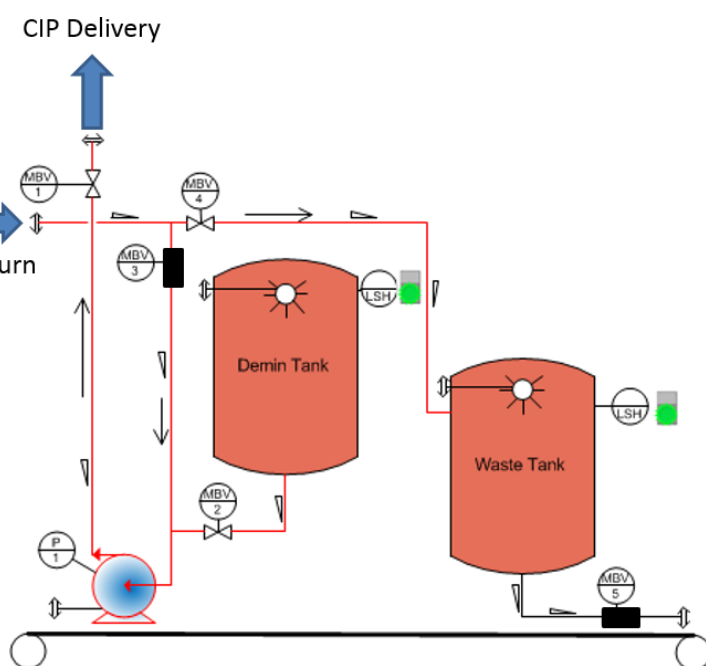
Part #	Typical Dimensions				
	System Pipework " (mm)	Flowrate litres per minute	Length mm*	Width mm	Height mm*
CIPtrolley™ 12	1/2" (12)	<20	1,200 –2,000	800	1,200 –1,800
CIPtrolley™ 25	1" (25)	<60	1,200 –2,000	800	1,200 –1,800
CIPtrolley™ 40	1.5" (40)	<90	1,200 –2,000	800	1,200 –1,800

* Length and Height Dimensions vary dependant on number and volume of



Single tank options

Single tank options are also available if two tanks are not required. Suncombe are happy to make design adjustments to our standard systems in order to accommodate your requirements. The single tank systems pictured (left) also features complete pump shrouding for work in hazardous or sensitive environments.



Typical Operation with Waste Tank

Options	Description
Tanks	Number and Capacity of Tanks
Valves	Number and Type of Valves
Automation	Manual, Sem-automatic, Automatic
Dosing	Chemical Pumping Modules to add chemicals to the CIP Liquids
Heating	Electrical, steam and hot water heat exchangers to heat the CIP Liquids
Pumps	Delivery, return and drain pumps
Air Purge	Compressed air filtration and control equipment to purge the CIP liquid from the equipment
Environment	Safe area units and ATEX units available

Typical Utilities	
Water	60 litres/min @ 1 bar
USP Water (optional)	60 litres/min @ 1 bar
Air	Minimal use @ 7bar
Electricity	5 kW 400Vac 3ph+n 50hz
Drain	60 litres/min @ 1 bar