



SUNCOMBE

CIP, BIOWASTE & PROCESS SOLUTIONS

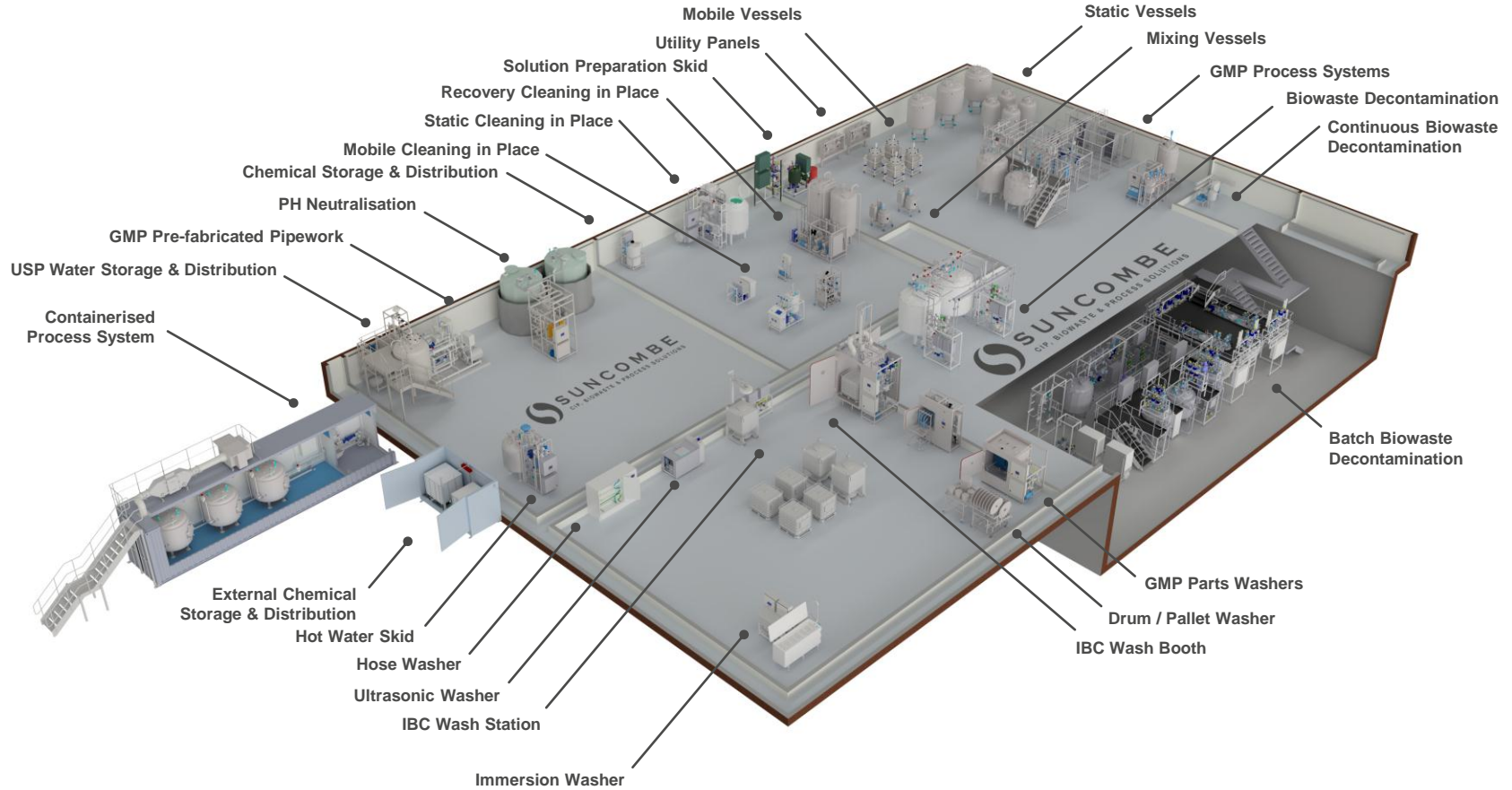
*Purified Water (PW) and
Water for Injection (WFI) Storage
and Distribution Skids*



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Product Portfolio

Purified Water (PW) and Water for Injection (WFI) Storage and Distribution Skids

Suncombe have been producing **Purified Water (PW) and Water for Injection (WFI) Storage and Distribution Skids** for over 30 years and supplying them to the worldwide BioPharm and Healthcare sectors.

Designed and developed to store and distribute high purity water, the skids ensure that the quality of water is maintained throughout the storage and distribution process by minimising microbial growth and preventing any contamination.

Custom Design

The skid are designed to ensure that adequate media is available for all of your requirements. In order to do this we offer a large range of different storage vessels sizes and media flowrates.

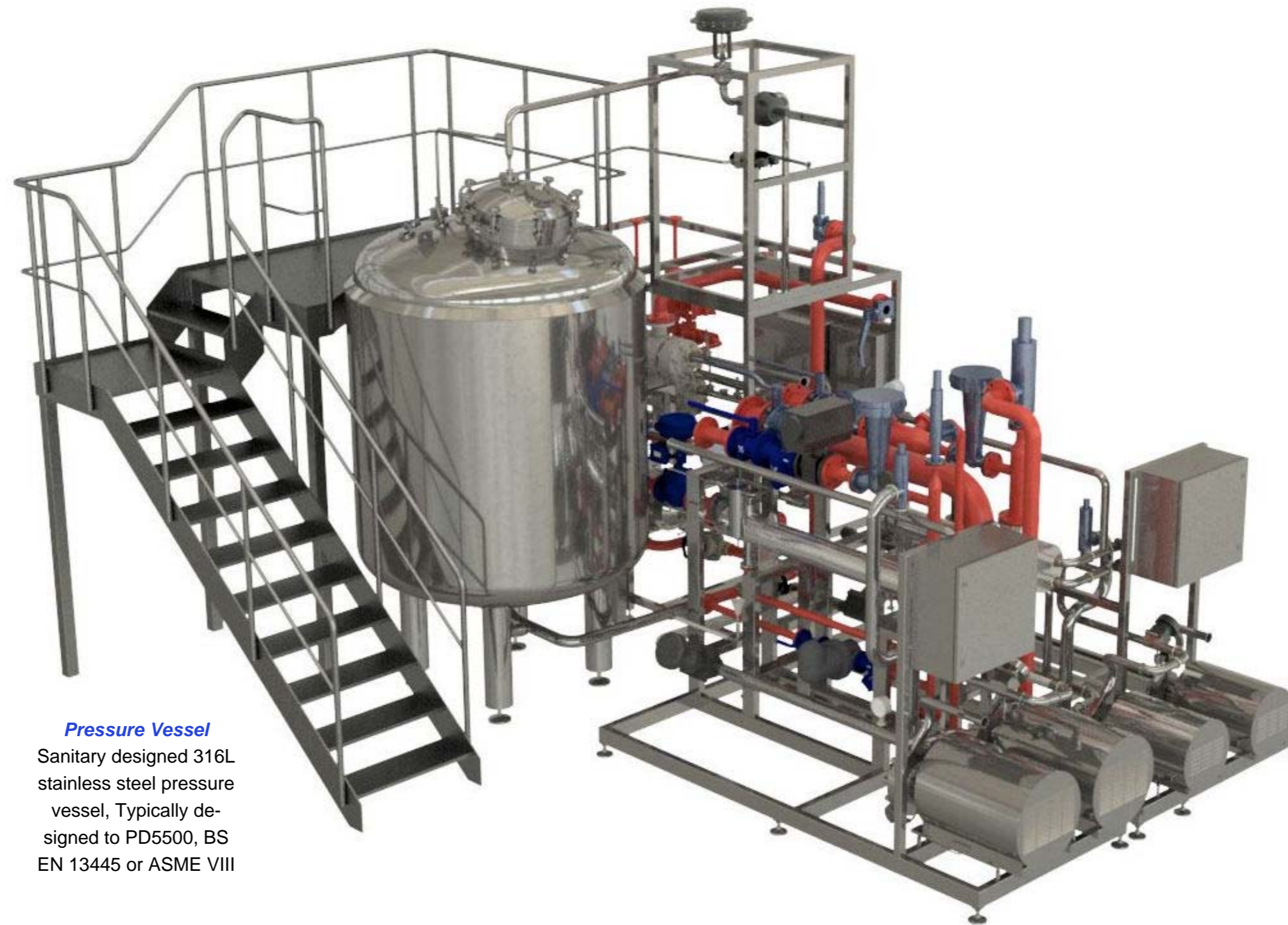
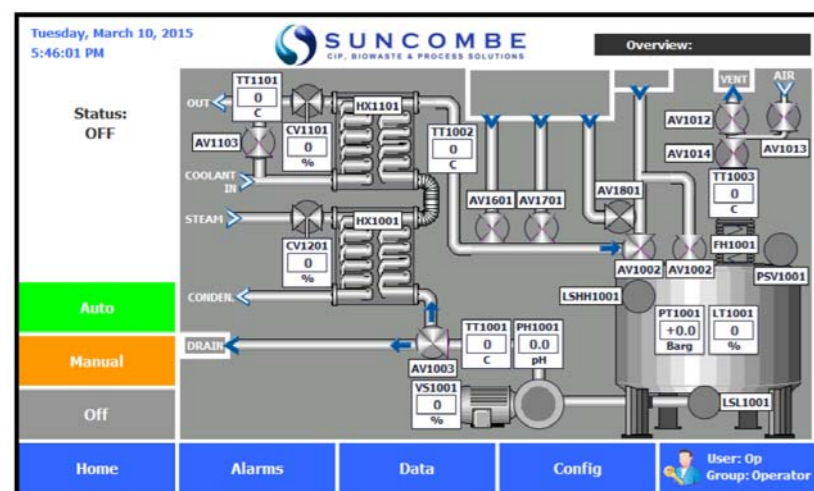
Skid Components

- Pipework designed to ASME BPE with no deadlegs, fully drainable, enclosed head orbitally welded, full hydroscopic examination
- Large range of standard volumes or custom size Pressure Vessel 316L Stainless steel storage pressure vessel designed to PED/PD5500/ASME BPE (other codes available). Built with NA-connects to minimise inlet/outlet dead space
- Variable Speed single or duty and standby ASME BPE sanitary centrifugal pump/s with flowrates from 1,000 to 30,000 litres per hour and greater
- ASME BPE shell and tube heaters and coolers, steam, hot/col water or electrical
- Biopharma specification straight through, tandem and zero dead leg diaphragm valves
- Instrumentation for monitoring and control of level, pressure, temperature, conductivity and flow rate (TOC optional).
- Hot water, chemical or ozone sanitation systems.
- Return loop back pressure control and spray devices in the storage tank
- Sealed system with 0.2 µm heated vent filters with sanitary Bursting disc

Automation System

The Integrated Suite3™ automation packages are designed to be operator friendly and simple to use whilst providing flexibility and optimisation. Reliable and robust, they have been developed over the last 20 years in co-ordination with clients operations staff, engineers and validation staff. They encompass all elements required to provide a controllable, repeatable automatic system.

Incorporating alarms, trends and reporting, 21CFR11 compliance is standard on the Suite3™ packages. Based on Siemens hardware, the control systems are developed, designed and configured by in-house per-



Pressure Vessel

Sanitary designed 316L stainless steel pressure vessel, Typically designed to PD5500, BS EN 13445 or ASME VIII

Features

- ASME BPE standard Pipework
- 316L Stainless Steel with Guaranteed surface finishes
- Fully drainable construction
- Project Management and experienced project team
- Equipment Design and development to GAMP development lifecycle procedures to biopharma standards
- Autocad Drawings and 3D Models
- Functional Design Specification, schedules and calculations
- Control panels designed to EN60204
- Material traceability with 3.1 Material certificates
- Orbital Welding with weld tables and weld maps
- Coded/certified welders, welding procedures, welding machines
- 100% Boroscopic Inspection and CD Record
- Hydrostatic pressure testing and certification
- Instrument calibration and certification
- Generation of FAT protocol and pre-FAT Testing
- FAT testing
- Validation information and manuals,
- Instruction and Operational Manuals
- CE Marking and PED Certification



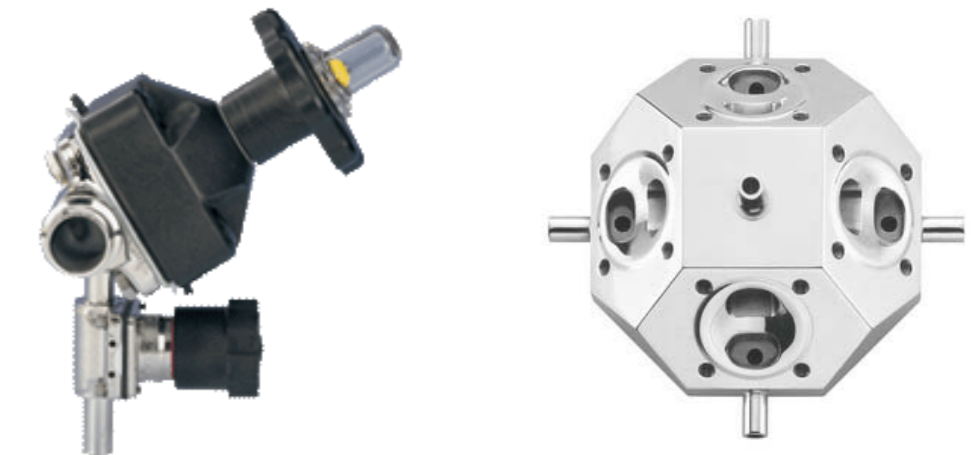
Instrumentation

High quality analytical and process instrumentation.



Process Valves

Sanitary and sterile process routing valves providing mixproof, dead leg free routing.



Filter Housings

Single or multi-element sanitary housings with heaters and 0.2 µm filters from 316L stainless steel



Sanitary Pump

Sanitary Centrifugal Variable Speed Pumps



ASME BPE Pipework and Triclamp Fittings

SF0 to SF5 standards with minimal joints with bolted clamps

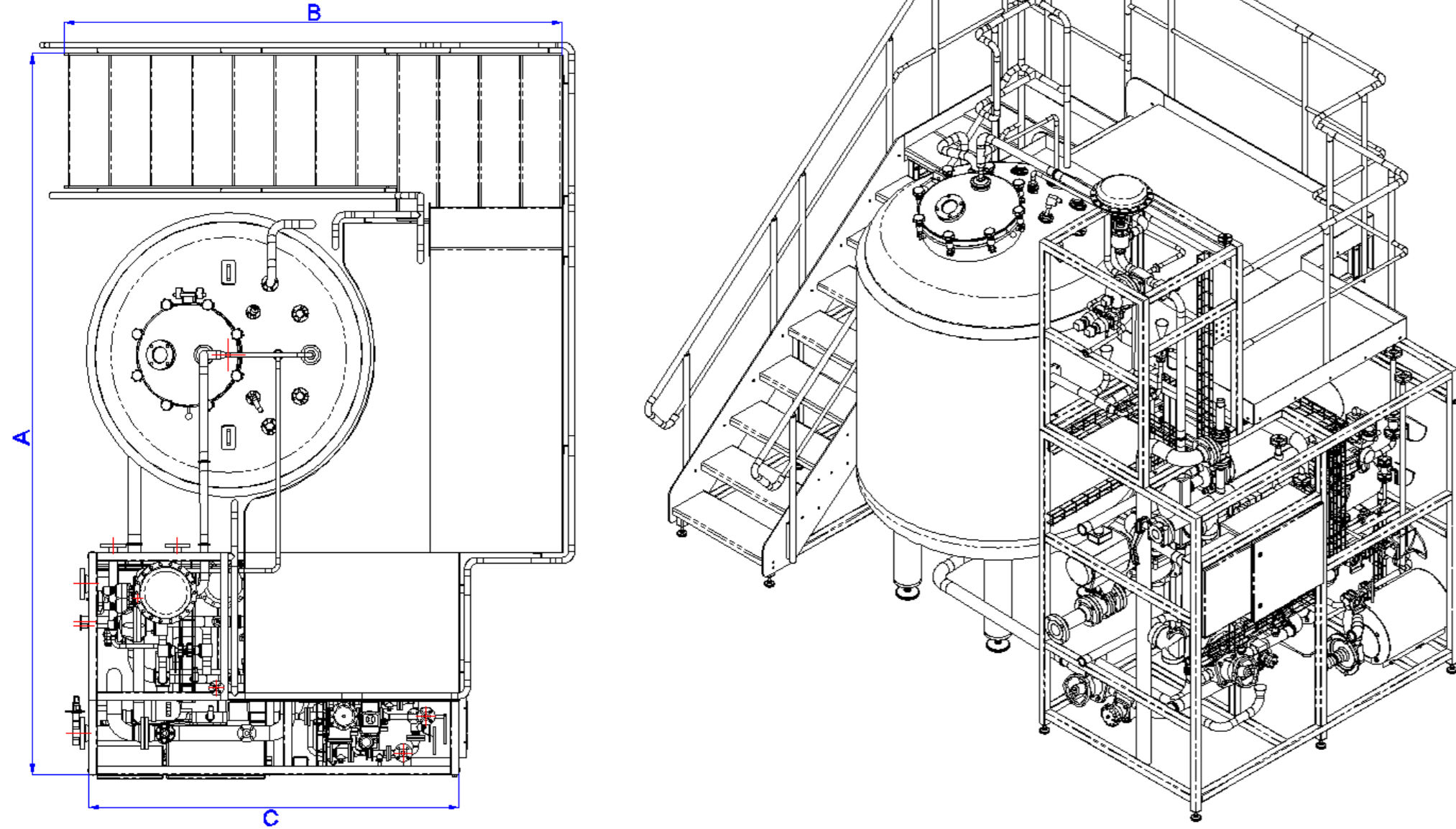


Purified Water (PW) and Water for Injection (WFI) Storage and Distribution Skids

Suncombe Purified Water (PW) and Water for Injection (WFI) Storage and Distribution Skids with singlex distribution.

Suncombe Purified Water (PW) and Water for Injection (WFI) Storage and Distribution Skids with duplex distribution.

Skid Layout



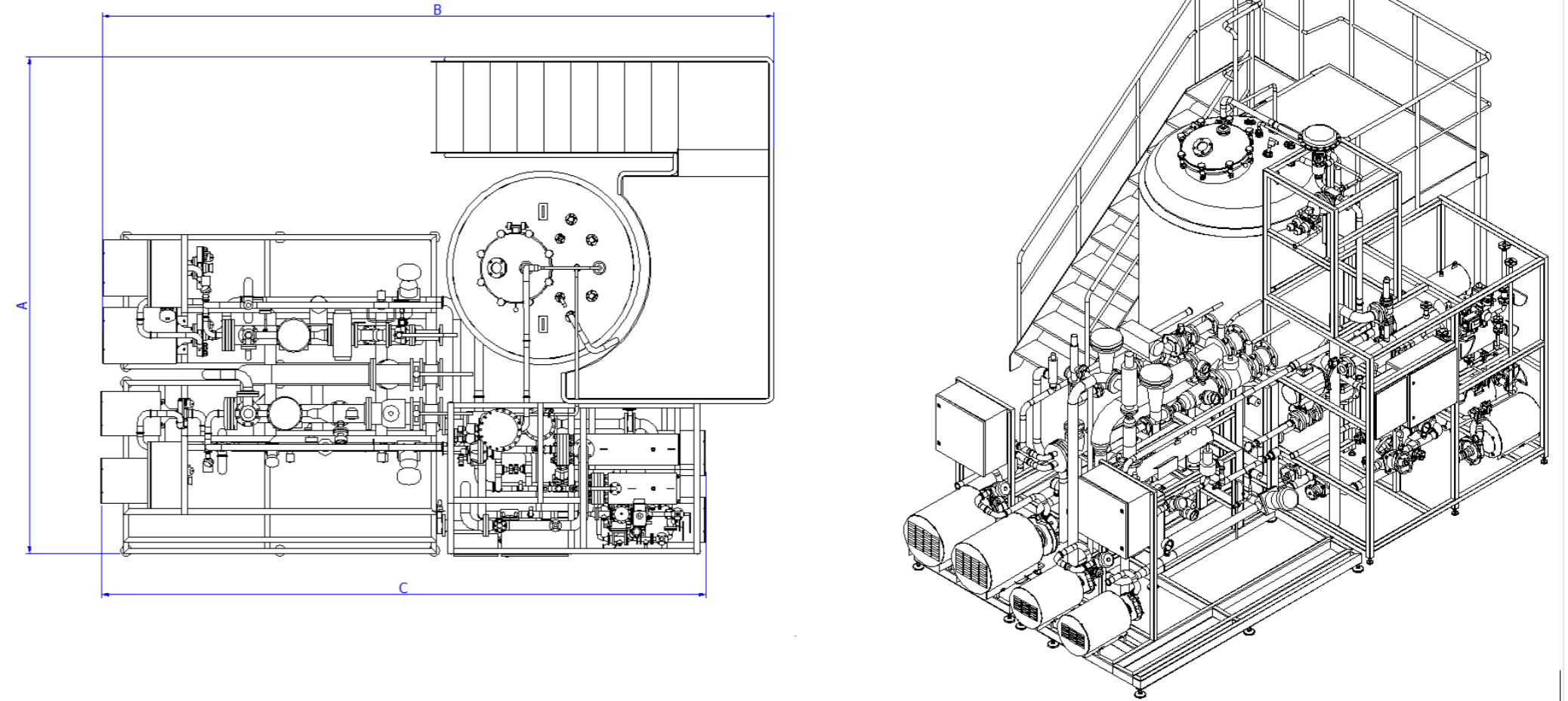
Standard or Custom Configurations

Standard packages as detailed in the above tables or custom designed modules to suit site specific requirements.

Skid Dimensions

Part #	Duty Details			External Dimensions mm				
	Storage Volume (litres)	Distribution Flowrate (litres per minute)	Distribution Pressure (barg)	A	B	C	Height	Notes
PW Skid 250/1	250	0 - 100	>6	2600	1900	1100	2200	Available with or without gantry
PW Skid 500/1	500	0 - 150	>6	2600	2100	1300	2300	Available with or without gantry
PW Skid 1000/1	1000	0 - 150	>6	2800	2100	1300	2500	Available with or without gantry
PW Skid 2000/1	2000	0 - 200	>6	3250	2550	1750	3000	
PW Skid 2500/1	2500	0 - 300	>6	3350	2650	1850	3000	
PW Skid 3000/1	3000	0 - 400	>6	3450	2750	1950	3100	
PW Skid 4000/1	4000	0 - 400	>6	3600	2900	2100	3300	
PW Skid 5000/1	5000	0 - 400	>6	3700	3000	2200	3500	

Skid Layout



Standard or Custom Configurations

Standard packages as detailed in the above tables or custom designed modules to suit site specific requirements.

Skid Dimensions

Part #	Duty Details			External Dimensions mm				
	Storage Volume (litres)	Distribution Flowrate (litres per minute)	Distribution Pressure (barg)	A	B	C	Height	Notes
PW Skid 250/2	250	0 - 100	>6	2600	3900	3100	2200	Available with or without gantry
PW Skid 500/2	500	0 - 150	>6	2600	4100	3300	2300	Available with or without gantry
PW Skid 1000/2	1000	0 - 150	>6	2800	4100	3300	2500	Available with or without gantry
PW Skid 2000/2	2000	0 - 200	>6	3250	4550	3750	3000	
PW Skid 2500/2	2500	0 - 300	>6	3350	4650	3850	3000	
PW Skid 3000/2	3000	0 - 400	>6	3450	4750	3950	3100	
PW Skid 4000/2	4000	0 - 400	>6	3600	4900	4100	3300	
PW Skid 5000/2	5000	0 - 400	>6	3700	5000	4200	3500	