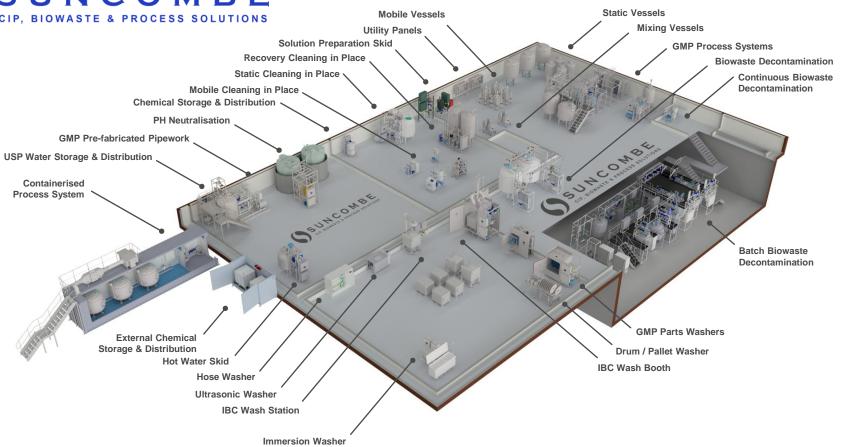


Custom Tanks, Vessels, Mixers and Skid Systems







Suncombe have been producing Custom Tanks, Vessels, Mixers and Skid Systems for over 50 years and supplying them to the worldwide BioPharma and other critical processing sectors.

Custom Design

The vessels are high quality units, with each individual vessel being specifically designed by our engineers for your particular requirement.

Manufacturing Location

All Suncombe equipment is designed, developed, modeled, manufactured, finished, tested, documented and Factory Acceptance Tested in our manufacturing facility in the United Kingdom. The equipment is available for inspection throughout production.

Tanks and Vessel Considerations

A Tank is defined as a container for holding gases or liquids at atmospheric pressure. A vessel (or pressure vessel) is defined as a closed container designed to hold gases or liquids at a pressure different from the ambient pressure. Suncombe can supply both Atmospheric Tanks and Pressure Vessels, as required for the application. Pressure Vessels are typically designed to PD5500, ASME VIII or EN13445, although other standards are available.

Materials of Construction

Typical vessels are built from 316L Stainless Steel with optional materials including duplex and hastelloy with PTFE or similar FDA compliant elastomers.

Sanitary Construction

Suncombe vessels have a sanitary construction with full drainability.

Internal and External Surface Finish

Surface finishes are available for 2B (original material finish), satin finish or guaranteed surface finish typically following ASME BPE finishes SF1 to SF6, with surface roughness values from 0.76 to 0.38 µmra, with mirror finish and electropolishing available.

Nozzles can be fitted as required to the vessels typically with a combination of triclamp and NA-connect connections although other connections can be used as required.

Spraydevices

Permanent or removable spray devices can be fitted to the vessels for cleaning and flushing.

Jackets

Pressurised and non-pressurised heating and/or cooling jackets can be incorporate with or without integral heating abilities.

ATEX

Suncombe vessels can be rated for safe area use or for use in ATEX areas.

Instrumentation

Instrumentation can be incorporated into the vessels including level, pressure, temperature, conductivity, flowrate, pH, TOC etc.

Mixers/Agitators/Homogenisers

Mixers/Agitators/Homogenisers can be fitted into the vessels for low shear, and high shear mixing and powder incorporation — options are available for top, bottom or side mounted mixers with suitable sealing, magnetic mixers with no vessel intrusion or recirculation mixers.

Custom Tanks, Vessels, Mixers and Skid Systems



Process Pressure Vessels



Mixing Vessel Skid



Mobile Pressure Vessels



Mobile Vessel

Mobile Mixing Vessels

Mobile Mixing Vessel Skids

Small Volume Mobile Vessel

Vessel Geometries

From a processing perspective the optimum height to diameter of a vessel is typically between L/D=1.0 and L/D=0.8. Our custom designed vessels are available with any L/D to suit client requirements.

Cleaning In Place and Steaming In Place

Suncombe vessels can be designed for cleaning in place and steaming in place.

Automation

The vessels are available with automation systems to suit the requirements, from simple junction boxes to full PLC/HMI controlled system with records, reports and audit capabilities.

Vessel Skids

Our designers can incorporate other processing equipment onto vessel skids, to provide a full processing system. These skids can incorporate processing components including pipework, pumps, valves, instruments, heater/coolers etc.

Project Inclusions

- Project Management and experienced project team
- Equipment Design and development to GAMP lifecycle
- Autocad Drawings and 3D Models
- Material traceability with 3.1 Material certificates
- Orbital Welding with weld tables and weld maps
- Coded/certified welders, welding procedures, welding
- 100% Boroscopic Inspection and CD Record
- Hydrostatic pressure testing and certification
- Functional Design Specification, schedules and calculations
- Control panels designed to EN60204
- 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





Static Storage Vessels











