

Process Chemical Storage & Distribution Systems

The Ultrasafe, robust, reliable Process
Chemical Bulk and Local Storage Systems for
critical sectors



Overview

Suncombe Process chemical storage and distribution systems provide a robust and reliable method, designed to provide a secure and controlled environment for storing, handling, and delivering chemicals safely and efficiently to support various manufacturing processes. These systems play a crucial role in maintaining the integrity and quality of the chemicals and ensuring that they are distributed and available as required, together with preventing accidents, and ensuring compliance with regulatory requirements.

They incorporate multiple engineering and safety measures to minimize the risks associated with chemical storage and distribution, ensuring the safety of workers and the surrounding environment, which are designed to take into account the COSHH and safety regimes detailed by risk assessments and HAZOPs.

Systems available for Bulk external/internal storage and local and distributed storage and distribution solution, the systems comprise all the necessary connections, lances, pumps, valves, pipework and related components and instrumentation to deliver the required storage and distribution operation in a safe and controlled manner.

Systems include a user-configurable recipe based control system and are pre-assembled and fully tested with operating utility supplies in our works to minimise risk and optimise installation and validation 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.

Applications

Filled from:

- ✓ Intermediate Bulk Containers (IBCs and Totes)
- ✓ Chemical Drums
- ✓ Chemical Carboys
- ✓ Road Tankers
- ✓ And other chemical transit and supply containers

Construction

- ✓ 316L stainless steel, minimal dead legs, fully drainable, material & weld traceability and chemically resistant thermoplastics, generally FDA approved components
- ✓ Control and instrumentation to GAMP5
- ✓ Robust, reliable, Safe, Repeatable Operation

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Welcome

Since our foundation in 1961, Suncombe Ltd and the **CIPProcess Niche product Division**, has pioneered the development of innovative solutions for Cleaning In Place, BioWaste decontamination, GMP Washers, GMP skids, Sanitary Tanks and Vessels. 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, just off the M25 in north London.

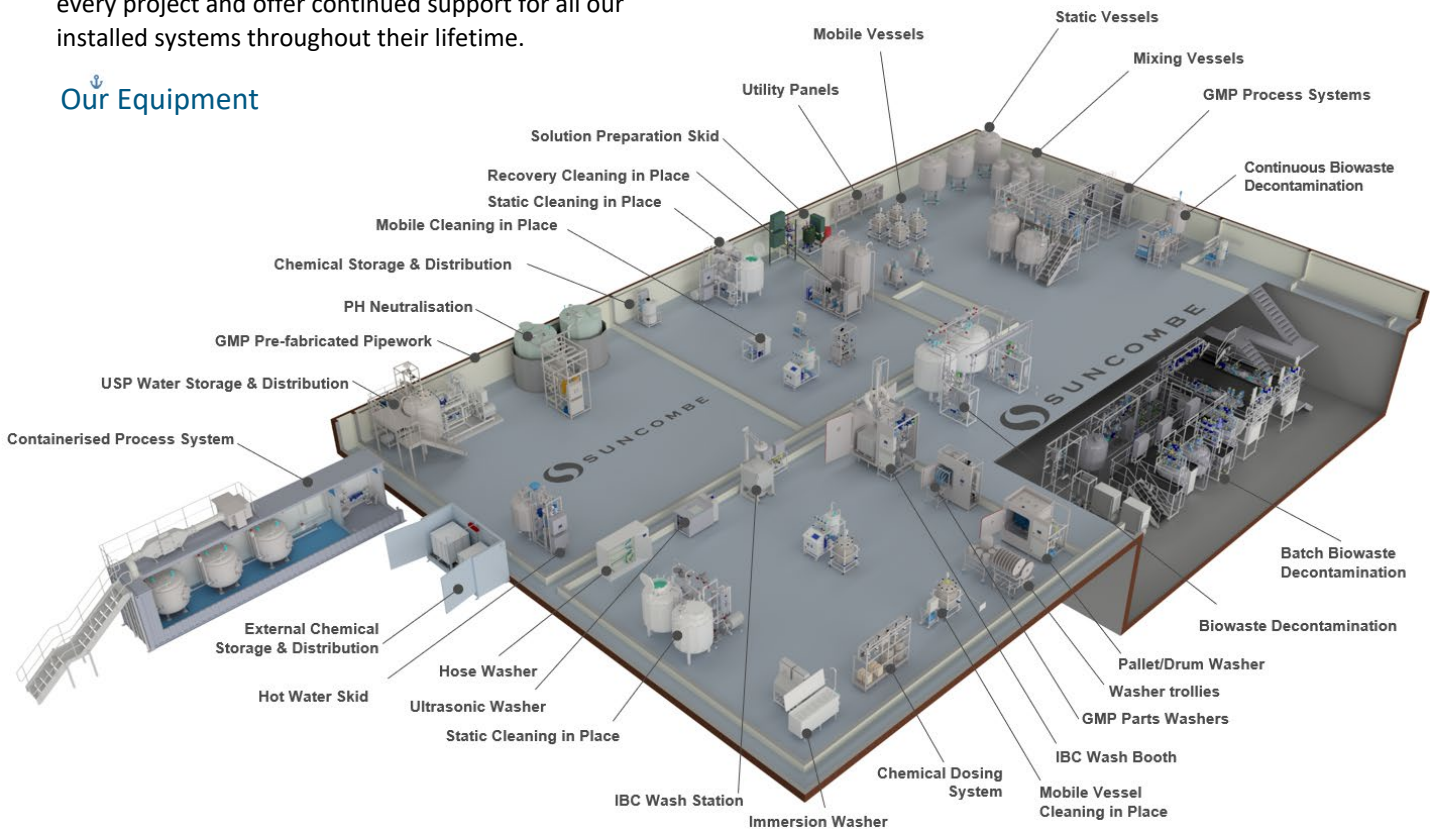
The team employ the very latest techniques, standards and best in class solutions. Having such a strong team allows us to offer the ability to carry out all of our work in-house, under our direct control and quality management systems, ensuring that we own and preserve all the knowledge and experience gained with every project and offer continued support for all our installed systems throughout their lifetime.

Our policy is to re-invest much of our profits into continuous development of our staff and our facilities, together with Research and Development to provide the optimum technical solutions for our clients requirements.

Our Clientele



Our Equipment



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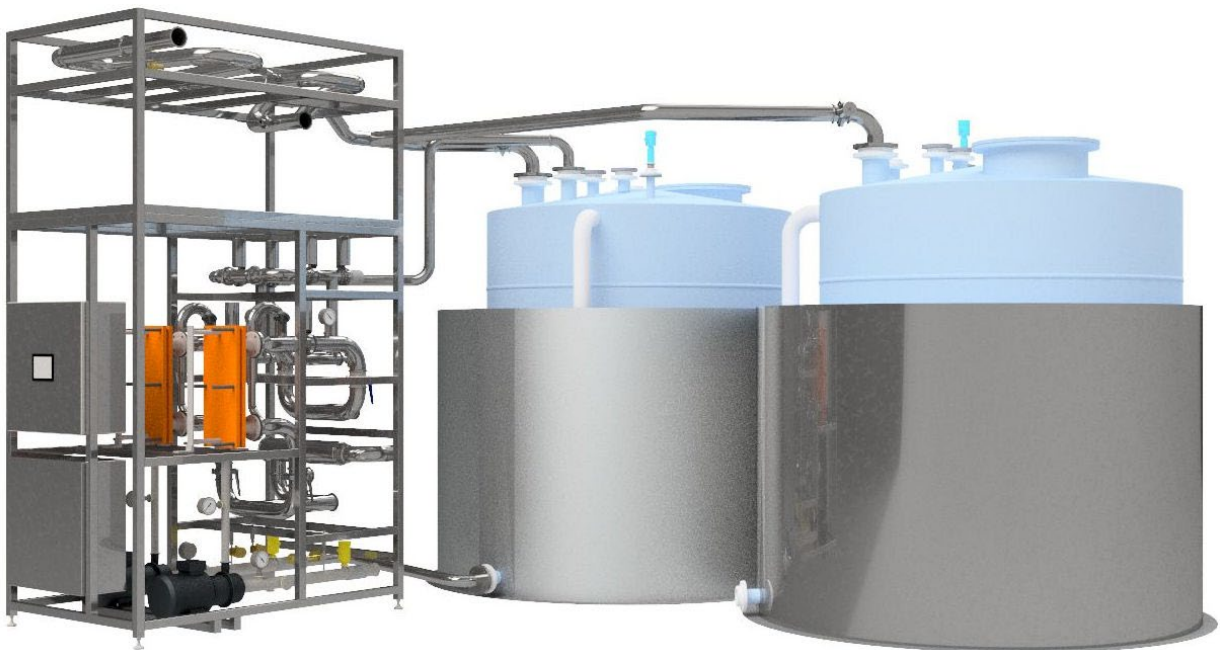
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High Volume Bulk Storage & Distribution

Suncombe Process Chemical Bulk High Volume Storage & Distribution Systems can be internally and externally located and include connection, storage, pumping, control, self-bunding and other safety and operational features.

Distribution from Bulk High Volume Storage can be carried out using a number of methods including via mobile containers or pipework systems.



Low Volume External Storage & Distribution from Transit Containers

Suncombe Process Chemical Bulk Low Volume Storage & Distribution Systems can be internally and externally located and include IBCs, Drums and Carboys, including connection, storage, pumping, control, self-bunding and other safety and operational features.

Distribution from Bulk Low Volume Storage can be carried out using a number of methods including via mobile containers or pipework systems.



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High Volume Bulk Storage & Distribution

Suncombe Process Chemical Bulk High Volume Storage & Distribution Systems can be internally and externally located and include connection, storage, pumping, control, self-bunding and other safety and operational features.

Available in thermoplastics, 316 stainless steel and duplex alloys for corrosion resistance, bulk storage tanks can be internally or externally located with self-bunds, instrumentation, safety features and control and can incorporate distribution and dosing schemes.



Typical Thermoplastic Bulk Storage Tanks

Typical Thermoplastic Bulk Storage Tanks



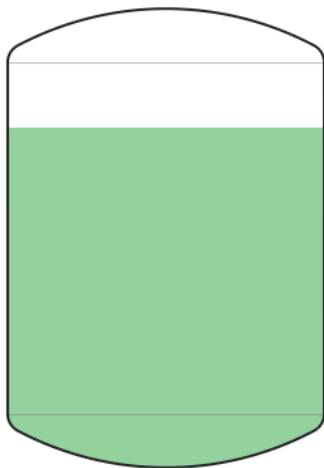
Typical Stainless/Duplex Bulk Storage Tanks

Typical Stainless/Duplex Bulk Storage Tanks

High Volume Bulk Storage Tank Dimensions

Suncombe Process Chemical Bulk High Volume Storage Bulk Tanks are available in 316 stainless steel, Hastelloy, duplex alloys and thermoplastics depending on application.

The table below details nominal dimensions. The dimensions noted are typical only and actual dimensions should be confirmed by Suncombe engineers before use. Alternative length/height/diameter ratios are available with dimensions to suit available space, enquire with Suncombe engineers for more details



Vertical Orientation



Horizontal Orientation

Capacity (litres)	Orientation	Diameter (mm)	Length (mm)	Height (mm)
200	Vertical	500	-	1000
200	Horizontal	500	1000	-
500	Vertical	750	-	1250
500	Horizontal	750	1250	-
1000	Vertical	950	-	1350
1000	Horizontal	950	1500	-
2000	Vertical	1200	-	1600
2000	Horizontal	1200	2000	-
3000	Vertical	1400	-	1800
3000	Horizontal	1400	2200	-
5000	Vertical	1700	-	2200
5000	Horizontal	1600	2400	-
10000	Vertical	2000	-	2700
10000	Horizontal	2000	3200	-
20000	Vertical	2700	-	3300
20000	Horizontal	2500	3700	-

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External Storage & Distribution from Transit Containers - IBC Dosing Station E/2/1000

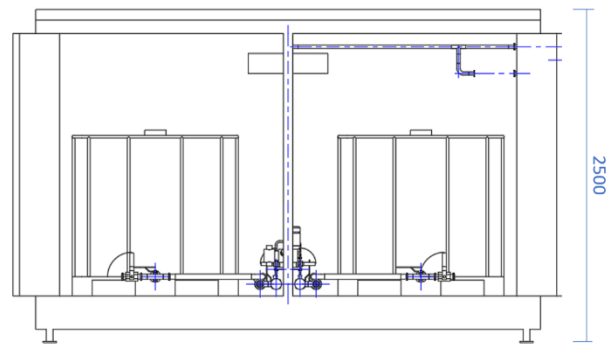
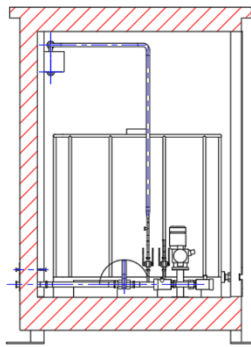
The Suncombe IBC Dosing Station E/2/1000, provides the facility for storing two Intermediate Bulk Containers externally in a weatherproof cabinet for storage and distribution. The unit incorporates fully automatic functionality including connection, storage, pumping, control, self-bunding and other safety and operational features.



IBC Dosing Station E/2/1000 Image



IBC Dosing Station E/2/1000 Internals



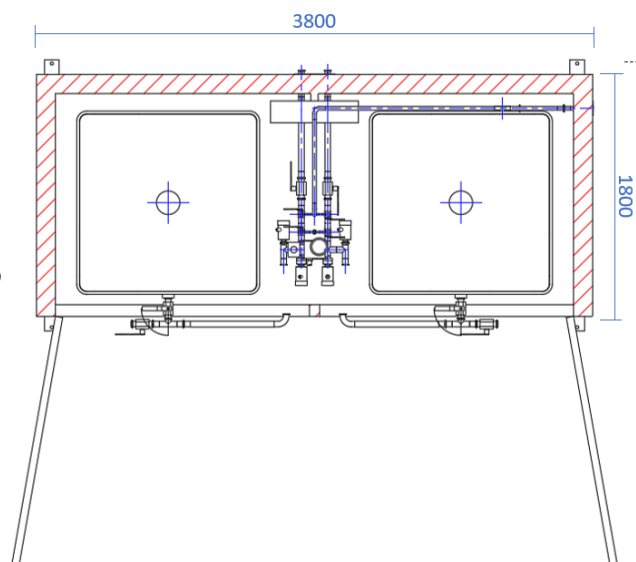
IBC Dosing Station E/2/1000 Dimensions

IBC Dosing Station E/2/1000 Construction

- ✓ Weatherproof with heaters, lightning, locks
- ✓ Enclosed Self Bund
- ✓ 316L stainless steel pipework and pumping skid
- ✓ Fully Automatic Control and instrumentation to GAMP5
- ✓ Robust, reliable, Safe, Repeatable Operation

IBC Dosing Station E/2/1000 Options

- ✓ IBC Tilting for complete emptying
- ✓ Remote alarms for refill status
- ✓ Automatic Changeover
- ✓ Safety Shower/Eye Wash

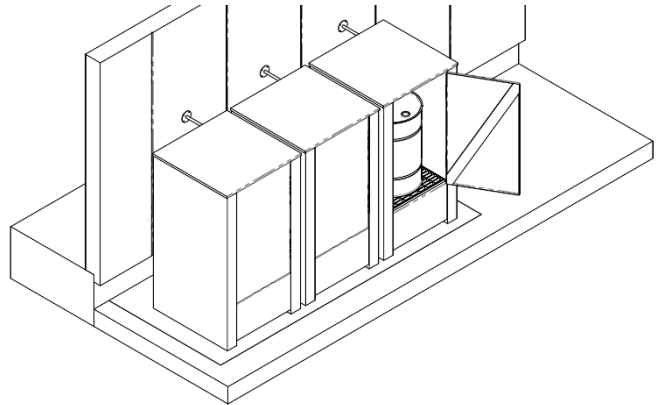


External Storage & Distribution from Transit Containers - Drum Dosing Station E/1/200

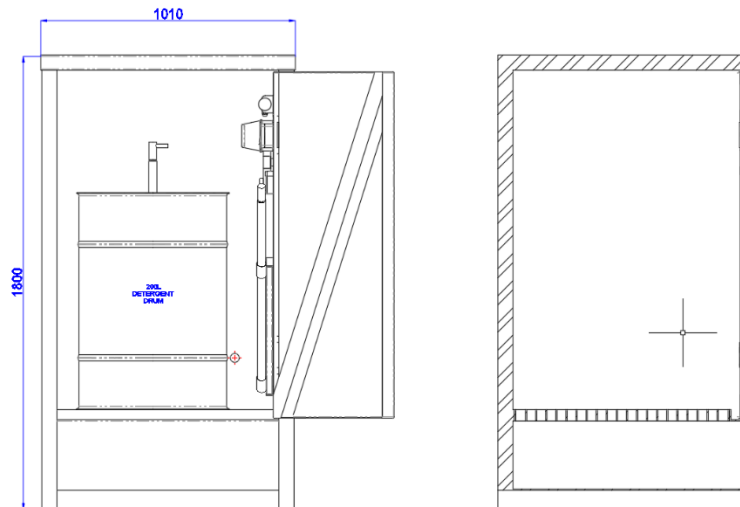
The Suncombe Drum Dosing Station E/1/200, provides the facility for storing a single 200 litre drum externally in a weatherproof cabinet for storage and distribution. The unit incorporates fully automatic functionality including connection, storage, pumping, control, self-bunding and other safety and operational features.



Drum Dosing Station E/1/200 Image



3 x Drum Dosing Station E/1/200 in Location



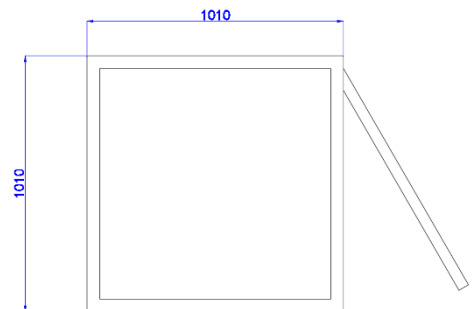
Drum Dosing Station E/1/200 Dimensions

Drum Dosing Station E/1/200 Construction

- ✓ Weatherproof with heaters, lightning, locks, insulation
- ✓ Enclosed Self Bund
- ✓ 316L stainless steel pipework and pumping skid
- ✓ Fully Automatic Control and instrumentation to GAMP5
- ✓ Robust, reliable, Safe, Repeatable Operation

Drum Dosing Station E/1/200 Options

- ✓ Drum Tilting for complete emptying
- ✓ Remote alarms for refill status
- ✓ Safety Shower/Eye Wash
- ✓ Through wall dosing facility

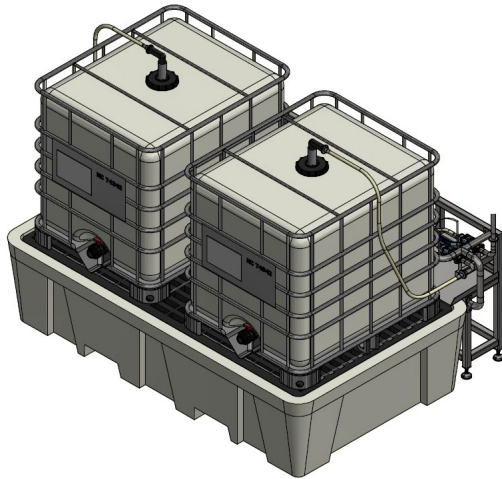


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Internal Storage & Distribution from Transit Containers - IBC Dosing Station I/2/1000

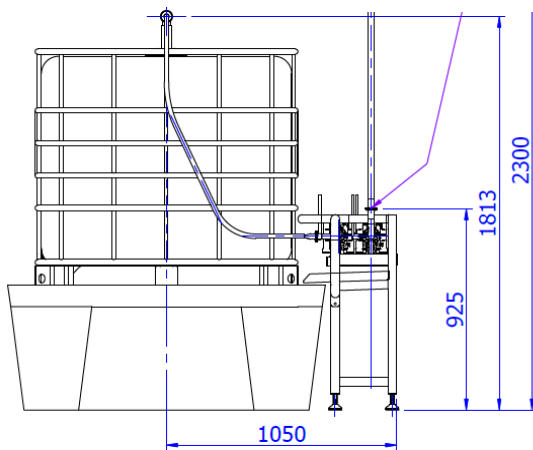
The Suncombe IBC Dosing Station I/2/1000, provides the facility for storing to Intermediate Bulk Containers internally for storage and distribution. The unit incorporates fully automatic functionality including connection, storage, pumping, control, self-bunding and other safety and operational features.



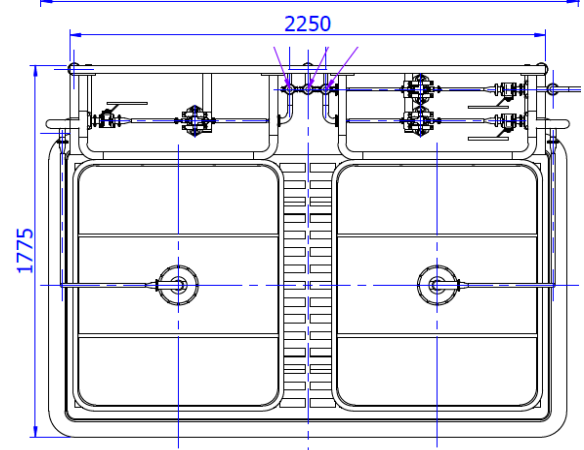
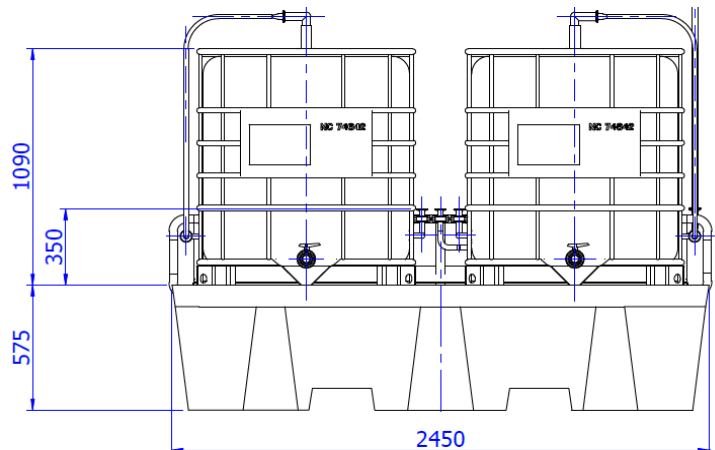
IBC Dosing Station I/2/1000 Model



IBC Dosing Station I/2/1000 Image



IBC Dosing Station 2/1000 Dimensions



IBC Dosing Station I/2/1000 Construction

- ✓ Thermoplastic Self Bund
- ✓ 316L stainless steel pipework and pumping skid
- ✓ Fully Automatic Control and instrumentation to GAMP5
- ✓ Robust, reliable, Safe, Repeatable Operation

IBC Dosing Station I/2/1000 Options

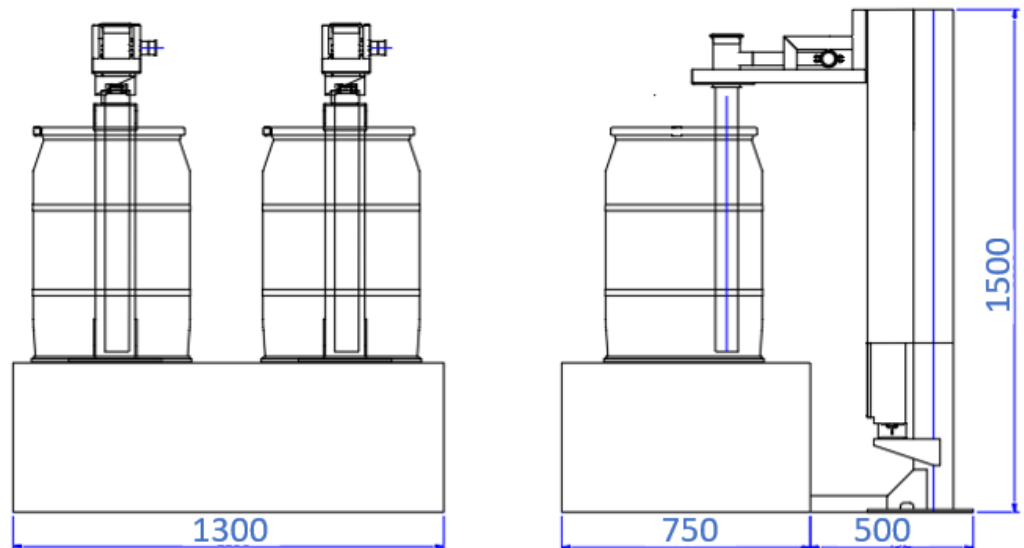
- ✓ IBC Tilting for complete emptying
- ✓ Thermoplastic pipework
- ✓ Remote alarms for refill status
- ✓ Automatic Changeover
- ✓ Clear Thermoplastic covers
- ✓ Safety Shower/Eye Wash

Internal Storage & Distribution from Transit Containers – Drum Automatic Dosing Station 2/200

The Suncombe Drum Automatic Dosing Station 2/200, provides the facility for mounting 2 x 200 litre drums to provide a for continuous chemical supply, incorporating self-inserting spray lances with a drip free mechanism on removal and an automatic changeover. The unit incorporates fully automatic functionality including connection, storage, pumping, control, self-bunding and other safety and operational features.



Drum Automatic Dosing Station 2/200 Image



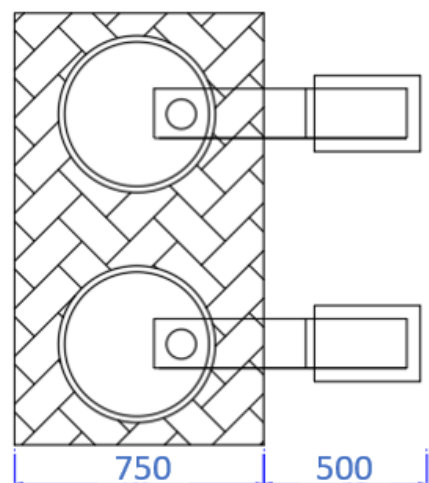
Drum Automatic Dosing Station 2/200 Dimensions

Drum Automatic Dosing Station 2/200 Construction

- ✓ 2 x 200 litre drums with self-inserting spray lances
- ✓ Drip free mechanism on removal
- ✓ Automatic changeover for continuous supply
- ✓ Stainless Steel, Thermoplastic Bund or Site Bund Available
- ✓ 316L stainless steel pipework and pumping skid
- ✓ Fully Automatic Control and instrumentation to GAMP5
- ✓ Robust, reliable, Safe, Repeatable Operation

Drum Automatic Dosing Station 2/200

- ✓ Drum Tilting for complete emptying
- ✓ Remote alarms for refill status
- ✓ Clear Thermoplastic covers
- ✓ Safety Shower/Eye Wash



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Localised Storage & Distribution

Suncombe Process Chemical Localised Storage & Distribution Systems are storage solutions that are located in a centralise location, local to the Point of Use for further distribution. They include connection, storage, pumping, control, self-bunding and other safety and operational features.

Distribution from Localised Storage can be carried out using a number of methods including via mobile containers or pipework systems.



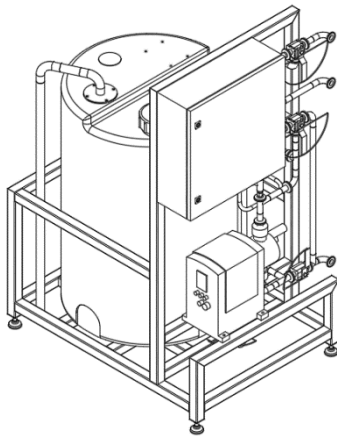
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Localised Storage & Distribution – Local Dosing Station 1/500/T

The Suncombe Local Dosing Station 1/500/T, provides the facility for local storage of different volumes of chemical for local distribution. The unit incorporates fully automatic functionality including connection, storage, pumping, control, self-bunding and other safety and operational features.

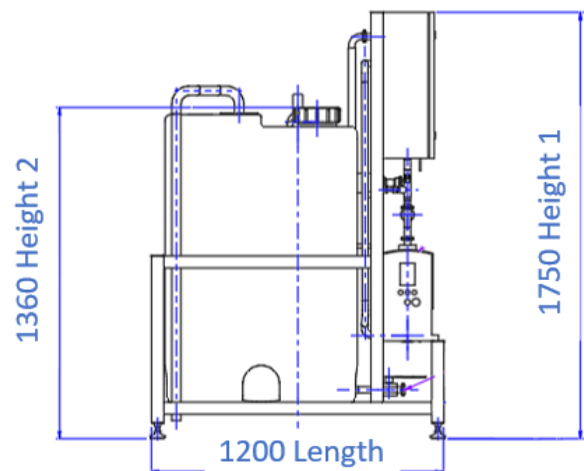
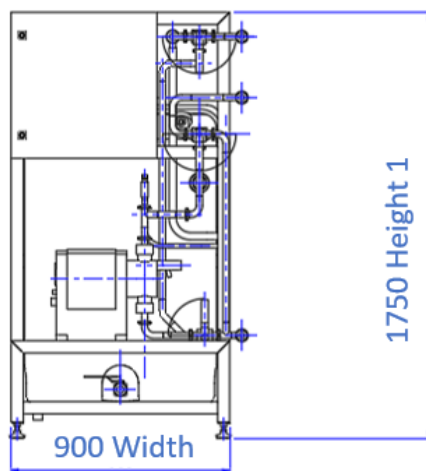


Local Dosing Station 1/500/T Model

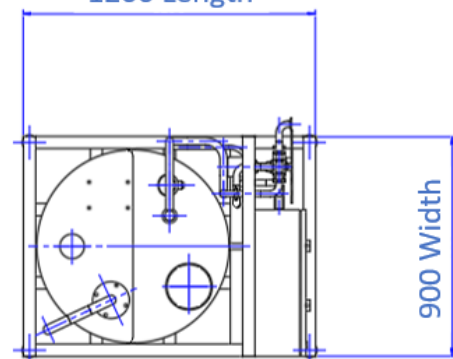


Local Dosing Station 1/500/T Image

Local Dosing Station 1/500/T Dimensions



1200 Length



Local Dosing Station 1/500/T Details

- ✓ Thermoplastic Storage Tank. Also available in 316 Stainless Steel
- ✓ Available in storage volumes of 50 litres to 1,000 litres.
- ✓ Dimensions for 500 litre version shown.
- ✓ Thermoplastic Bund or Site Bund Available
- ✓ 316L stainless steel pipework and pumping skid
- ✓ Fully Automatic Control and instrumentation to GAMP5
- ✓ Robust, reliable, Safe, Repeatable Operation
- ✓ The units can be combined for multiple chemicals.

Local Dosing Station 1/500/T Options

- ✓ Thermoplastic pipework
- ✓ Remote alarms for refill status
- ✓ Automatic Changeover
- ✓ Clear Thermoplastic covers, Safety Shower/Eye Wash

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Localised Storage & Distribution – Local Dosing Station 1/150/SS

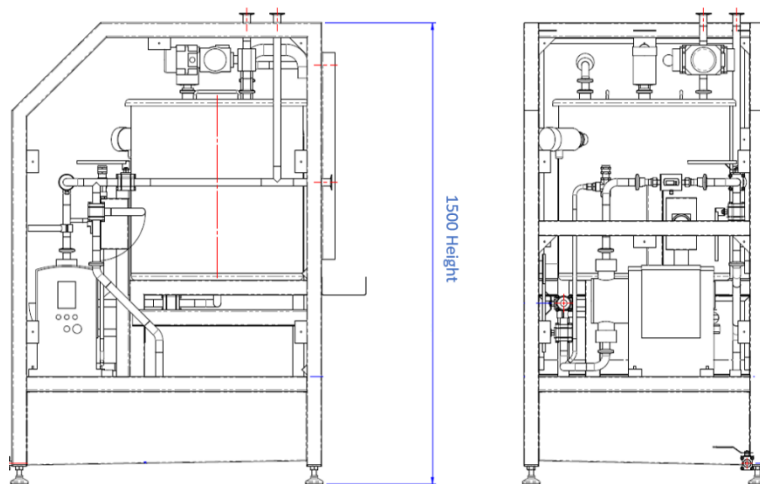
The Suncombe Local Dosing Station 1/150/SS, provides the facility for local storage of different volumes of chemical for local distribution. The unit incorporates fully automatic functionality including connection, storage, pumping, control, self-bunding and other safety and operational features. The units can be combined for multiple chemicals.



Local Dosing Station 1/150/SS Model – 3 Channel version

Local Dosing Station 1/150/SS Image – 3 Channel version

Local Dosing Station 1/500/T Dimensions

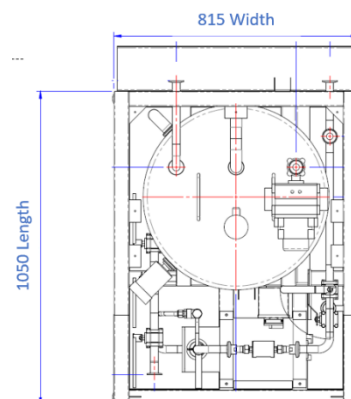


Local Dosing Station 1/150/SS Details

- ✓ 316 Stainless Steel Storage Tank. Also available in Thermoplastic
- ✓ Available in storage volumes of 50 litres to 1,000 litres.
- ✓ Dimensions for 150 litre version shown.
- ✓ Stainless Steel, Thermoplastic Bund or Site Bund Available
- ✓ 316L stainless steel pipework and pumping skid
- ✓ Fully Automatic Control and instrumentation to GAMP5
- ✓ Robust, reliable, Safe, Repeatable Operation
- ✓ The units can be combined for multiple chemicals.

Local Dosing Station 1/150/SS Options

- ✓ Thermoplastic pipework
- ✓ Remote alarms for refill status
- ✓ Automatic Changeover
- ✓ Clear Thermoplastic covers, Safety Shower/Eye Wash



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Point Of Use Storage & Distribution

Suncombe Process Equipment can be supplied with Point of Use Chemical Storage & Distribution equipment, including connection, storage, pumping, control, self-bunding and other safety and operational features.



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Control and Automation System

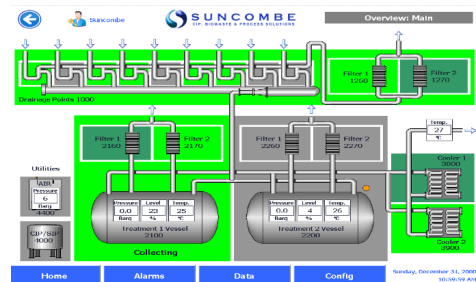
Renowned for their ease of operation and versatility, Suncombe systems are designed and manufactured for reliability, repeatability and longevity, whilst complying with the highest international regulatory standards. With dedicated in-house automation personnel for control design and software, Suncombe engineers have tremendous experience in incorporating a broad range of control solutions to suit your specific control requirements.

Developed to the GAMP 'V' model (Verification and Validation), system life cycle approach, which links the three main qualification activities (installation, operation and performance) back to the design process, the system software is produced in house by qualified software engineers, encompassing software development standards, quality control systems and change control during and post development.



Standards and Guidelines

- ✓ GAMP Guidelines
- ✓ FDA 21CFR11 Compliance
- ✓ ASME BPE
- ✓ EU Machinery Directive
- ✓ EU Low Voltage Directive
- ✓ EU cGMP Guidelines
- ✓ EU EMC Electromagnetic Compatibility Directive
- ✓ IEC 61131 for PLCs
- ✓ EN 60204 Safety of machinery
- ✓ EN 60439 Low Voltage Switchgear
- ✓ CE and UKCA Marks



Typical Operator Interface



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Containerised Storage & Distribution

Suncombe Process Chemical Bulk Storage & Distribution Systems, are also available as containerised versions mounted in shipping containers. Containerised units can improve space utilization and reduce the commissioning, validation and maintenance durations as the modular equipment is supplied in a “ready to operate” state, needing only utility connections on site. Containerised units can speed up projects and substantially reduce capital costs, by minimising the infrastructure requirements, whilst they also allow relocation in the case of changing operations.

Available in 3, 6, 12 or 12m high cube containers, the containers are modified to provide an internal clean space using epoxy or stainless flooring. The containers are pre-configured with pipework, electrics, lights, heating and application specific items such as Emergency doors, knock out panels, HVAC, showers, dunk tanks, access steps, roof mounted equipment etc.

For larger projects multiple containers can be used which can be located side by side or vertically, to provide the spacial requirements for the equipment/ applications within these containers. Designed and manufactured in house at Suncombe Ltd facilities close to London in the United Kingdom, the containerised units are supplied worldwide.

