

MaxiEDS™

Effluent Decontamination System

The Validatable Treatment Based
Effluent Decontamination System
for Mid Volume Level BSL1, 2 and
3 Biowaste



Overview

The MaxiEDS™ is a medium Volume BioWaste Decontamination system for treating BSL 1, 2 & 3 waste using an innovative batch process allowing positive release of all of your waste. The system is available for 18 hour collection or 24 hours with an external collection tank and provides a set volume batch heat treatment facility, to treat the effluent in batches at variable f0 lethality settings.

The MaxiEDS™ is available for electrical and steam heating, it has been specifically developed to fit into new facilities or to be retrofitted into existing facilities.

Using robust, proven design principles, the systems decontaminate BioWaste and takes into account two main areas of concern. Firstly, the systems effectively sterilise or inactivate any harmful pathogens in the waste stream and secondly, that total containment is maintained at all times. The unit can be fully thermally and chemical decontaminated for maintenance.

Applications

Hospitals
Research Institutions
Animal Labs
Research Labs
Clinics
Mobile Operations
Biotech



MaxiEDS™ DATASHEET

VERSION 1.6



Welcome

Since our foundation in 1961, Suncombe has pioneered the development of innovative solutions for cleaning in place, bio-waste decontamination, GMP Washers, sanitary skids and vessel skids. 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.

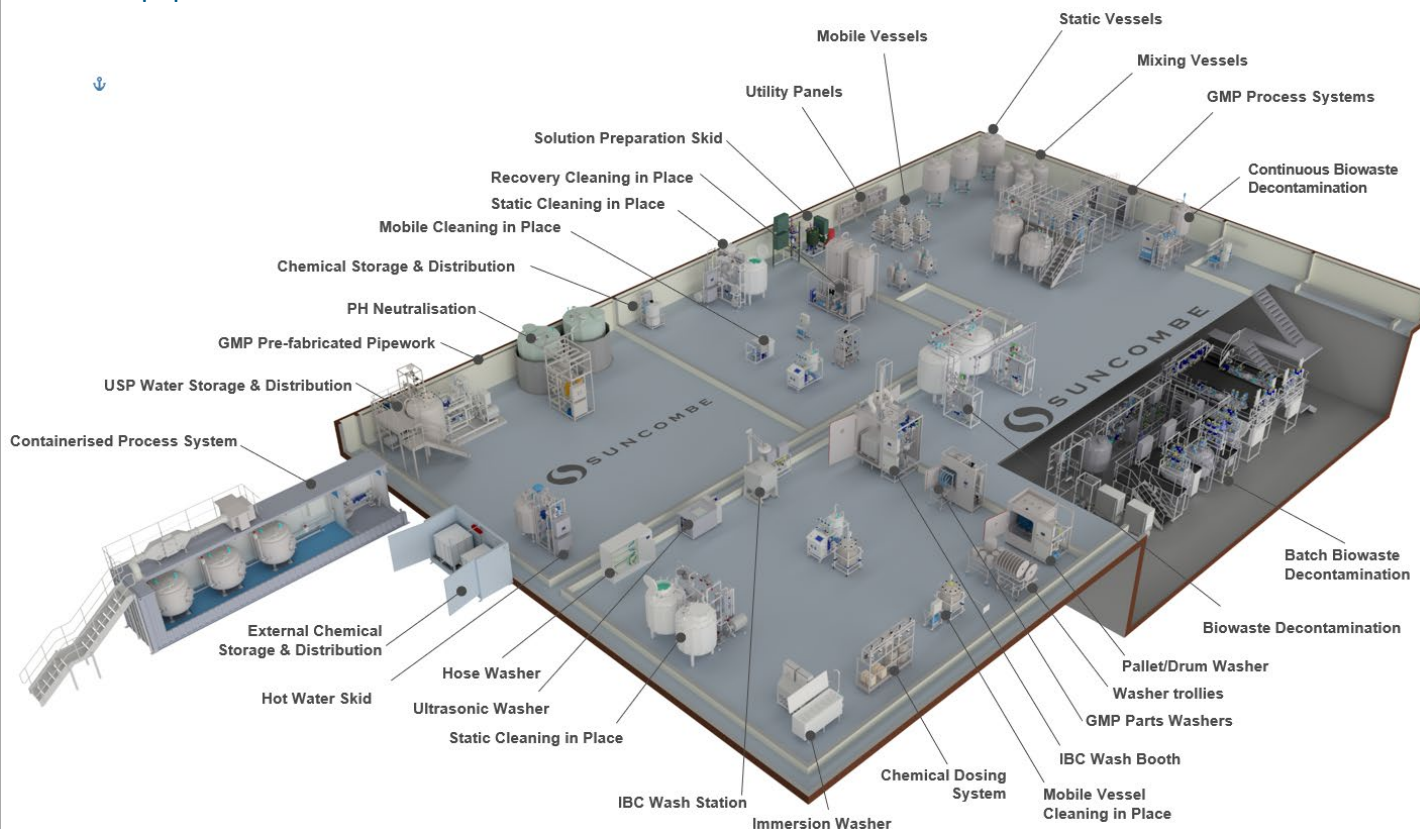
The team employ the very latest techniques, standards and best in class solutions. Having such a strong team allows us to offer the ability to carry out all of our work in-house, under our direct control

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

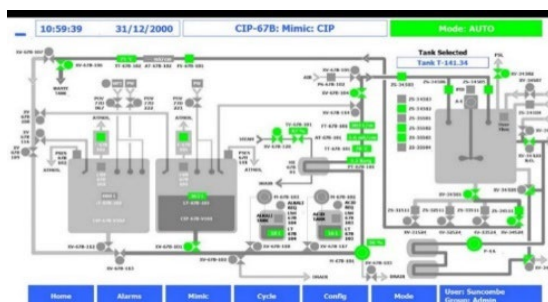
- Robust and reliable
- Pre-tested at Suncombe
- Plug n Play after delivery
- Electrical heating and Steam versions Available
- Adjustable kill temperature and time
- Gravity or pumped discharge to sewers

Containment Level	BSL1, BSL2, BSL3
Treatment Vessels	0
Collection Vessels	1
System Capacity (litres)	500L and 1000L per day with up to 4000 litres per day with external collection
Treatment Parameters	Variable and preset to 121C for up to 30 minutes
System Cooling	43C with cooling utility
Material of Construction	316 Stainless Steel
Operating Voltage	230VAC 24A or 400 VAC
Automation	BioSuite Level 2000 standalone control system with touch panel display.



Options

Material of Construction	SAF 2205 duplex or Hastelloy for chlorine resistance
Operating Voltage	Various
Automation	Biosuite Level 3000 with 21CFR 11 reports, records and networking
Safety	Failsafe versions available for SIL 2 and SIL 3
Covers	Thermoplastic or stainless steel covers
CIP	Chemical CIP for system cleaning
Pump Feed	Discharge pump to transfer waste
Remote Control	Remote start and remote HMIs



Typical HMI Display

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Designers, manufacturers & installers of quality, hygienic processing and cleaning systems and Equipment

Key Features	Benefits
Sanitary 316L stainless steel construction and components	Systems are constructed to the highest sanitary standards with 3.1/2.2 material traceability and welding dossier. This ensures a fully validatable and cleanable treatment environment.
Vent Filter	Sterile, HEPA Vent Filter included
Treatment Parameters	Variable configuration to provide Temperature/Time, f0 or log kill requirements. Temperatures up to 136°C.
Siemens PLC and 9" colour HMI with options for larger 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.
Suncombe BioSuite software	Control software specification has been developed and proven over many years for EDS applications and includes a wide range of user or administrator configurable parameters to enable customised decontamination profiles. User passwords, Active Directory, Audit Trails, Electronic 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. Software complies with FDA 21CFR and EU GMP regulations.
Fully automated batch processing	The system allows 18 hours collection prior to treatment or 24 hours treatment combined with a collection facility and Suncombe's BioSuite software enables fully automated treatment of waste and safe release to drain.
Fully automated batch report	Electronic pdf reporting included – printed report optional
Automatic Operation	Automatic Waste Inlet and Automatic Waste treatment Automatic Waste Discharge Automatic Alarms and Warnings
Simplified Utility Requirements	Systems only requires compressed air, water and electrical (and/or steam) utility connections.
Coolant Utility	Water or glycol Coolant.
Drainage	Under gravity at <55°C
Containment Level	Systems suitable for the treatment of BSL 1, 2 and 3 Waste.
Continuous monitoring of key parameters	Decontamination process is highly repeatable and validatable.
Safety	Alarms, interlocks and fail-safe design prevent waste discharge in the event of an unsuccessful treatment. This encompasses scenarios such as power loss and under-temperature events.
Plug 'n' Play	Comprehensive in-house testing to ensure fast start up on site.
Covers	The systems are also available with stainless steel or thermoplastic covers
Compact design	Designed to fit into new facilities or to be retrofitted into existing facilities.
Configurable	Based on standard modules, we can supply individual units custom designed for your specific requirement.
Cleaning In Place	Prepared for CIP with optional Automatic or Manual Cleaning In Place System
Waste Distribution	Optional sump pumps, discharge Stations available to pump waste

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Capacity Table

Part #	Daily Capacity Litres	BioWaste Levels	Max Treatment Temperature	Storage Capacity Litres	Electrical Supply or Steam	With 24 hour Collection Availability		With 18 hour Collection Availability	
						Collection litres per day*	Treatment litres per day*	Collection litres per day*	Treatment litres per day*
MaxiEDS™ 500 — Electrical	0 - 500	BSL1, 2, 3	136°C	500	400 or 230 VAC	-	-	500	500
MaxiEDS™ 500 — Steam	0 - 500	BSL1, 2, 3	136°C	500	Steam	-	-	500	500
MaxiEDS™ 500 (with external collection)	0 - 2500	BSL1, 2, 3	136°C	500	400 or 230 VAC or Steam	-	2000	-	2000
MaxiEDS™ 1000 — Electrical	0 - 1000	BSL1, 2, 3	136°C	1000	400 or 230 VAC	-	-	1000	1000
MaxiEDS™ 1000 — Steam	0 - 1000	BSL1, 2, 3	136°C	1000	Steam	-	-	1000	1000
MaxiEDS™ 1000 (with external collection)	0 - 5000	BSL1, 2, 3	136°C	1000	400 or 230 VAC or Steam	-	4000	-	4000

Our Sustainability Operations



Sustainability of Suncombe Equipment

As a company, we recognise the importance of sustainability and the need to minimise our environmental impact. All Suncombe equipment has been re-developed for sustainability purposes and incorporates techniques and methodologies to minimise impact on the environment, including technologies that reduce energy consumption, emissions, and waste, as well as adopting practices that promote sustainability and reduce the environmental impact of operations.

Social Responsibility

Our company philosophy is one of Social Responsibility and under this banner we are fully committed to the need to balance economic growth with environmental stewardship and social responsibility.

Overall, Suncombe demonstrates a commitment to sustainability and environmental responsibility in our operations and products. For further details Suncombe have produced Sustainability and Lifecycle White Papers available **on request**

Here are some of the ways we achieve this:

- ✓ Efficient use of resources: Suncombe uses energy-efficient technologies in our equipment, which helps to reduce energy consumption and carbon emissions.
- ✓ Waste reduction: Suncombe strives to reduce waste throughout our operations, from manufacturing to product disposal. We use sustainable materials and designs that minimise waste and maximise product lifespan.
- ✓ Recycling: Suncombe promotes recycling and reusing of materials to reduce waste. We also recycle our own equipment where possible.
- ✓ Compliance with regulations: Suncombe adheres to environmental regulations and standards set by governing bodies, ensuring that our operations do not harm the environment.
- ✓ Green initiatives: Suncombe invests in research and development of new, sustainable technologies and processes to further reduce our environmental impact.
- ✓ Lifecycle Considerations: The company emphasizes the entire lifecycle of our equipment, from design and manufacturing to use and disposal. We strive to select materials and components that are environmentally friendly and can be recycled or disposed of responsibly. Featuring design with margin, upgrading and future-proofing extends the equipment lifecycle.