We specialise in wastewater treatment instrumentation for **activated sludge plants**. With decades of experience with **dissolved oxygen** measurement, we offer a range of products and services for wastewater **respirometry** and **toxicity testing**.

Wastewater Treatment Measurement Systems Brochure

STRATHTOX
SI500

Compact bench-top precision respirometer for rapidly measuring actual bacterial performance of activated sludge.

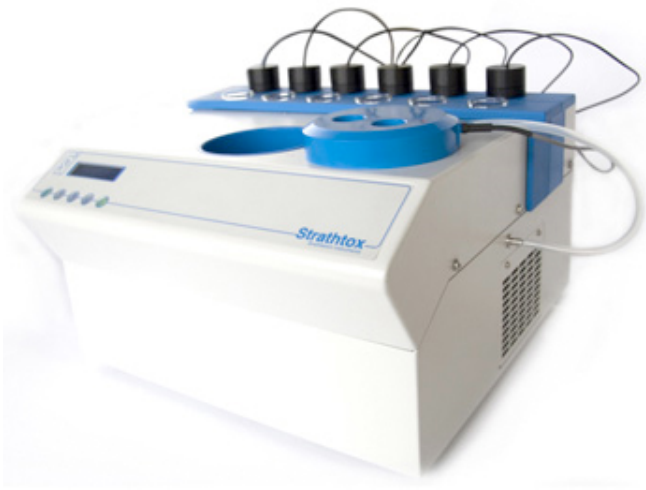
Wastewater treatment is a costly activity and even though a plant may be compliant, optimising these costs is a key driver for all types of business.

Traditional M&E methods can only go so far, whereas using the science of microbiology allows plant operators to focus on the key element in secondary wastewater treatment process, that is, the bacteria that biodegrade the wastewaters feed to them.

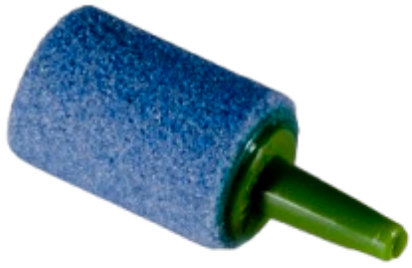
Strathtox™ provides an innovative method of determining how healthy your bacteria are, whether they are inhibited or not, the level of nitrification in your plant, the air they need and the key factors that will allow you to further optimise the costs of operating your plant.

FEATURES

- Respiration Inhibition Tests
- Short-Term BOD
- Sludge Health Monitoring
- Critical Oxygen Concentration Point Analysis
- Nitrification Inhibition Tests
- Nitrification Status
- Customer-Designed Respirometry (OUR and SOUR) Tests



Air stones are used in the aeration of the activated sludge in our Strathtox™. Air stones are sold as spares for the Strathtox™ in sets of 10.



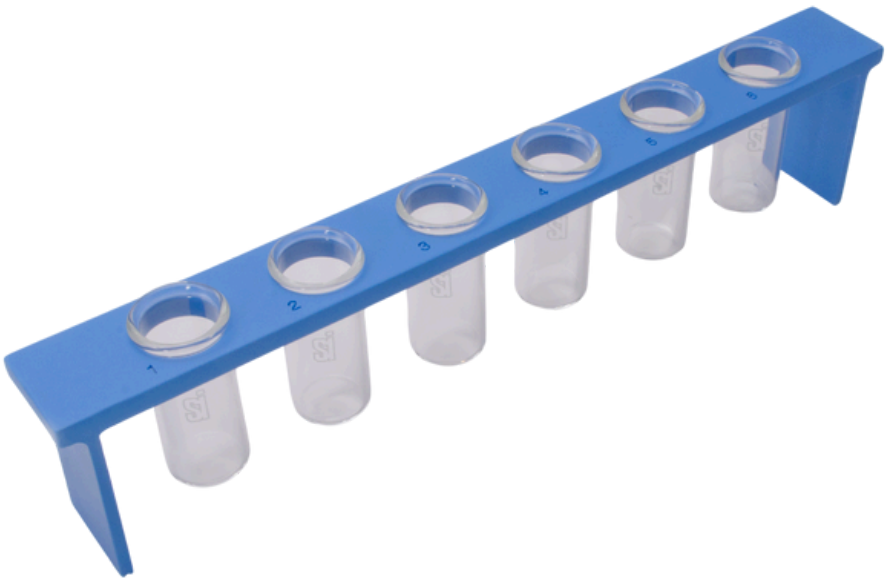
STRATHTOX AIR STONES SI087

Spare air stones to aerate activated sludge for use with our Strathtox™.

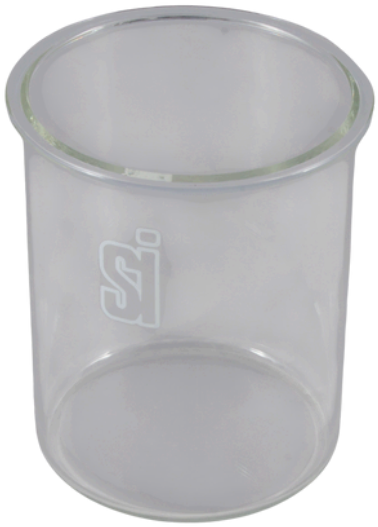
STRATHTOX
SPARE RACK
SI090

Spare rack for use with our Strathtox™ to hold more glass cells for extra testing.

The SI090 Spare Rack is designed to hold more glass cells for extra testing while using our Strathtox™. The spare rack can hold up to six glass cells.
Please note that this product does not contain any glass cells.



The SB100 Stock Beaker can be used to capture water after rinsing off the electrodes between different sample runs while using our Strathtox™.



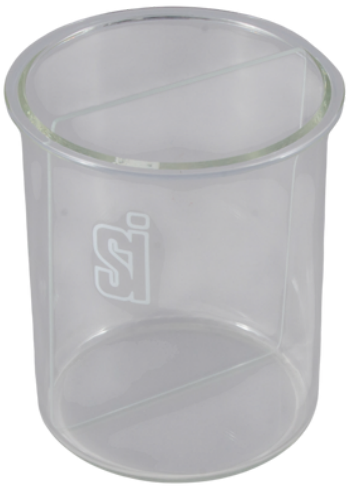
STRATHTOX STOCK BEAKER SB100

Stock beaker for capturing water when rinsing off electrodes between sample runs while using our Strathtox™.

STRATHTOX
SPLIT BEAKER
SB101

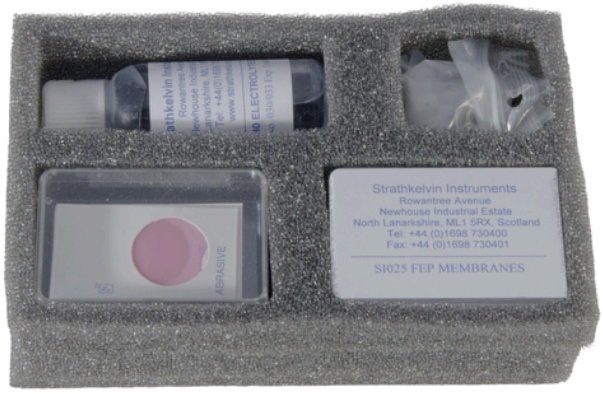
Split beaker for determining respiration inhibition of both carbonaceous and nitrifying bacteria within the same sample for use with our Strathtox™.

The SB101 Split Beaker can be used with our Strathtox™ to determine the respiration inhibition of both carbonaceous and nitrifying bacteria within the same sample activated sludge.



To use the split flask, add activated sludge to both sides of the beaker and then add allylthiourea (ATU) on one side. The ATU kills the nitrifying bacteria, which allows a determination to be made on the impact of the nitrifying bacteria on the overall health of the plant.

The SI020 Strathtox™ Electrode Service Kit is used to service the oxygen electrodes on our Strathtox™.



CONTENTS

- 6 × SI045 Polypropylene (PP) Jackets
- 35 ml of Electrolyte Solution
- 12 × Abrasive Membranes

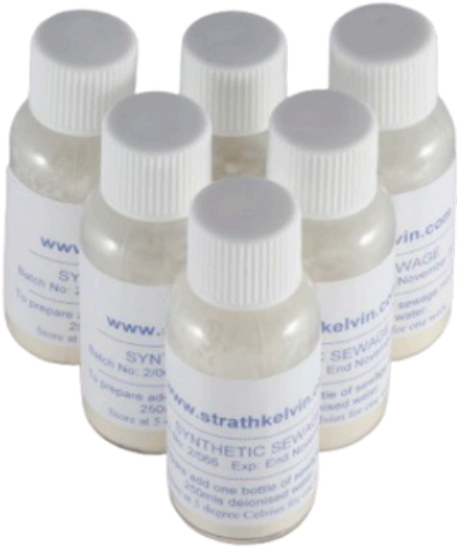
STRATHTOX ELECTRODE SERVICE KIT SI020

Service kit for the oxygen electrodes on our StrathtoxTM.

STRATHTOX
SYNTHETIC SEWAGE
SI093

Our specially formulated synthetic sewage for use with our StrathtoxTM and more.

The SI093 Synthetic Sewage contains 40 bottles of our specially formulated synthetic sewage and can be used with our Strathtox™.
To prepare, add the contents of one small bottle of sewage to 250ml of deionised water. Can be stored at 5°C for one week after preparation.



The AS-Bioscope is a portable instrument that allows you to measure and record important parameters of the wastewater treatment process at many different points in a number of treatment works.

This data can then be uploaded to a PC database that can be used to print reports and will keep track of changes over time.

By dipping the AS-Bioscope into the liquor in a wastewater treatment tank and taking a sample you can measure the liquor temperature, DO, OUR, SOUR and % settlement.

DIRECT MEASUREMENTS

- OUR (Oxygen Uptake Rate
- DO (Dissolved Oxygen)
- Critical Oxygen Point
- Temperature
- Settlement

Biodegradation Rate

Aerobic biological treatment plants operate by mixing biodegradable feed and activated sludge bacteria together in the presence of air to clean the influent flow.

This process is known as biodegradation, and optimum processing conditions for this process depend on managing the bacterial population, influent composition and flows as well as the aeration supply.

Effective biodegradation activity profiling can assist the plant manager to optimise operating conditions, microbiology and cost of running the treatment works.

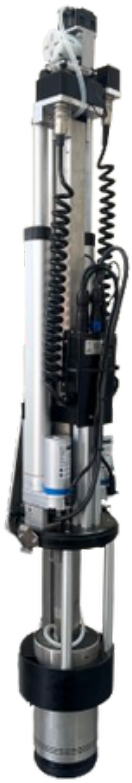
The AS-Bioscope has been designed to provide the plant operator with information of biodegradation profiling, dissolved oxygen levels, temperature levels and sludge settlement characteristics.

AS - BIOSCOPE

Handheld portable respirometer that quickly measures the real-time performance of bacteria in activated sludge plants.

ASP-CON
SI800

In-situ respirometer and multi-parameter instrument for activated sludge plants.

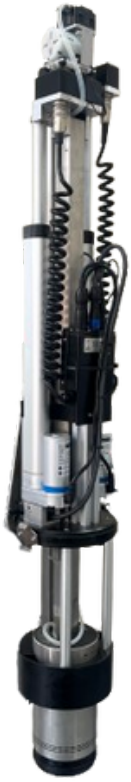


The ASP-Con, short for Activated Sludge Plant Controller, is a multi-parameter instrument by Strathkelvin Instruments that provides automated measurements of the activated sludge process in wastewater treatment plants (WWTPs), including dissolved oxygen levels, ammonium concentration, pH and many more.

Additionally, by measuring the oxygen uptake rate (OUR) of bacteria in real-time, the ASP-Con can provide indicators of bacterial activity through respirometry.

By significantly improving the visibility of operating conditions, the ASP-Con allows operators to improve their control of WWTPs on a dynamic basis, improving compliance and reducing energy consumption and carbon dioxide emissions.

The ASP-SVI, Activated Sludge Plane - Sludge Volume Index, is an instrument in our ASP-Con Range that automatically performs %Settlement, MLSS and SVI testing. The test frequency can be programmed by the operator. The system is fully compatible with PLC, SCADA and DCS systems and has local alarm trending and test interrogation capability as standard. Remote access, alarm and I/O capability are also provided as optional extras.



DIRECT MEASUREMENTS

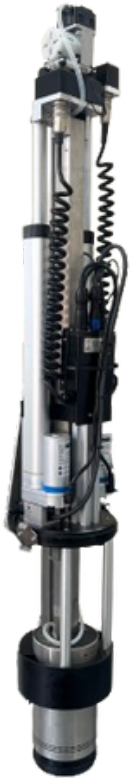
- SVI
- MLSS
- % Settlement

ASP-SVI
SI800

In-situ instrument for measuring SVI, MLSS and settlement in activated sludge plants.

ASP-TOX
SI800

In-situ toxicity detector for activated sludge plants.

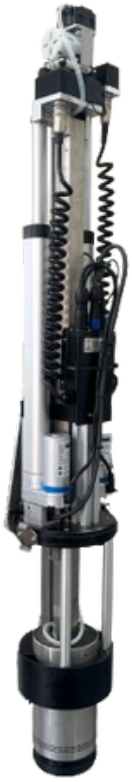


The ASP-Tox, short for Activated Sludge Plant - Toxicity Meter, is an instrument by Strathkelvin Instruments that is able to detect toxicity in activated sludge plants. Based on our award-winning ASP-Con, the ASP-Tox measures toxicity to both carbonaceous and nitrifying bacteria.

DIRECT MEASUREMENTS

- Toxicity to carbonaceous bacteria
- Toxicity to nitrifying bacteria
- OUR

The ASP-OUR, short for Activated Sludge Plant - Oygen Uptake Rate, is a an instrument by Strathkelvin Instruments that is able to measure the oxygen uptake rate of bacteria in activated sludge plants. Based on our award-winning ASP-Con, the ASP-OUR is also able to measure dissolved oxygen, MLSS and SVI.



DIRECT MEASUREMENTS

- Oxygen Uptake Rate (OUR)
- Dissolved Oxygen (DO)
- Mixed Liquor Suspended Solids (MLSS)
- Temperature

ASP-OUR
SI800

In-situ respirometer and multi-parameter instrument for activated sludge plants.

CSO

Multi-parameter instrument for combined sewage overflows.

The CSO, short for Combined Sewage Overflow, is an instrument by Strathkelvin Instruments that is able to measure parameters in combined sewage overflows. Based on our award-winning ASP-Con, the CSO is also able to measure dissolved oxygen, turbidity and ammonium.

DIRECT MEASUREMENTS

- Dissolved Oxygen
- Turbidity
- pH
- Ammonium
- Potassium or Nitrate
- And many more

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