



On-line Analyzers for Wastewater Process Monitoring and Control

Sample Preparation & Nutrient Dosing Accessories

Isco-STIP analyzers are designed to handle conditions typically encountered in wastewater monitoring. The accessories listed here

facilitate successful installation and operation in specific environments and situations.

Sample preparation

PA-2	Sample preparation for high-solids wastewater, flow-through 1-8 m ³ /hour, diameter 40 mm, zero backpressure. Construction: PVC. Application: all systems except Buoy.
PA-3	Sample preparation for high-solids wastewater, flow-through 0.1-1 m ³ /hour, diameter 20 mm, zero backpressure. Construction: PVC. Application: all systems except Buoy.
PA-8	Sample preparation for high-solids wastewater, flow-through 1-8 m ³ /hour, diameter 40 mm, pressure rating 6 bar, temperature <100°C. Construction: Stainless steel V4A. Application: all systems except GENION and Buoy.
Sample chiller	Cools samples from <99°C to below 60°C. Construction: copper, PVDF. Application: with PA-8.
Sand filter	Combination decanter and sand filter, filtration of sludge with up to 150 ml/g TSS Application: with PA + SPECTRON
Separation system	Prevents wastewater from entering the clean water supply.
Ultrafiltration	Options: manual, semi-automatic, and fully automatic ultra-filtration. Application: with SPECTRON, GENION + sample reservoir
Sample reservoir	Supply of solids-free samples, for example with ultra-filtration above. Application: ultrafiltration
Standby	When all system pumps are stopped, system remains ready for use. Application: PHOENIX, STIP-toc
Two-channel measurement:	Automatically controlled, alternating supply of two sample streams. Application: PHOENIX, STIP-toc

Concentration modifications

Pre-dilution	Automatic mixing of sample stream with dilution water. Dilution ratio 4 : 100. Application: PHOENIX-thermcat, STIP-toc, SPECTRON, GENION 3.
High concentration	Automatically regulated fine dosing of the sample stream. Concentration increase to 100,000 mg/liter. Application: BIOX 1010, PHOENIX 1010
Low concentration	Additional oxygen concentration measurement in the sample preparation system for low BOD-concentration and rapidly changing oxygen content in the sample. Application: BIOX-1010, STIPTOX.

Additional dosing

BOD	BOD baseline dosing for temporarily BOD-free wastewater. Application: BIOX-1010
Nitrogen & phosphate	Nutrient supplement dosing for wastewater with unbalanced nutrient supply (C:N:P). Application: BIOX-1010, STIPTOX
ATH	ATH dosing for suppression of nitrification influence. Application: BIOX-1010.
Neutralization, monodirectional	For fluctuating pH; where values are always acidic (<4) or always basic (>10). Application: BIOX-1010, STIPTOX, PHOENIX 1010.
Neutralization, bidirectional	For fluctuating pH where sample may be either acidic or basic values >10 <u>AND</u> < 4. Application: BIOX-1010, STIPTOX, PHOENIX 1010.
Lime prevention	Controlled lowering of pH to 6. Application: BIOX -1010, STIPTOX.

Accessories

Lime converter	Alters the crystal structure of lime and prevents blockage of lines. Application: BIOX-1010, STIPTOX
Gas generator	For supply of air (CO ₂ -free). Application: PHOENIX-thermcat, STIP-toc.
Calibration device	For calibration against lab standards. Application: BIOX 1010, PHOENIX 1010.
Wheeled stand	Portable support for analyzer. Application: all systems except buoys.
Swing frame	For wall mounting analyzer. Application: all systems except buoys.

Additional measurement in bypass

Oxygen, pH, Redox, temperature, conductivity.



Analyzer houses customized to your needs

There are practically no limits to the size and layout of our analyzer houses. We can furnish anything from small, single-analyzer enclosures up to buildings for an extensive process control installation. We'll help evaluate your site and work with you to develop the station that best satisfies your needs.



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