

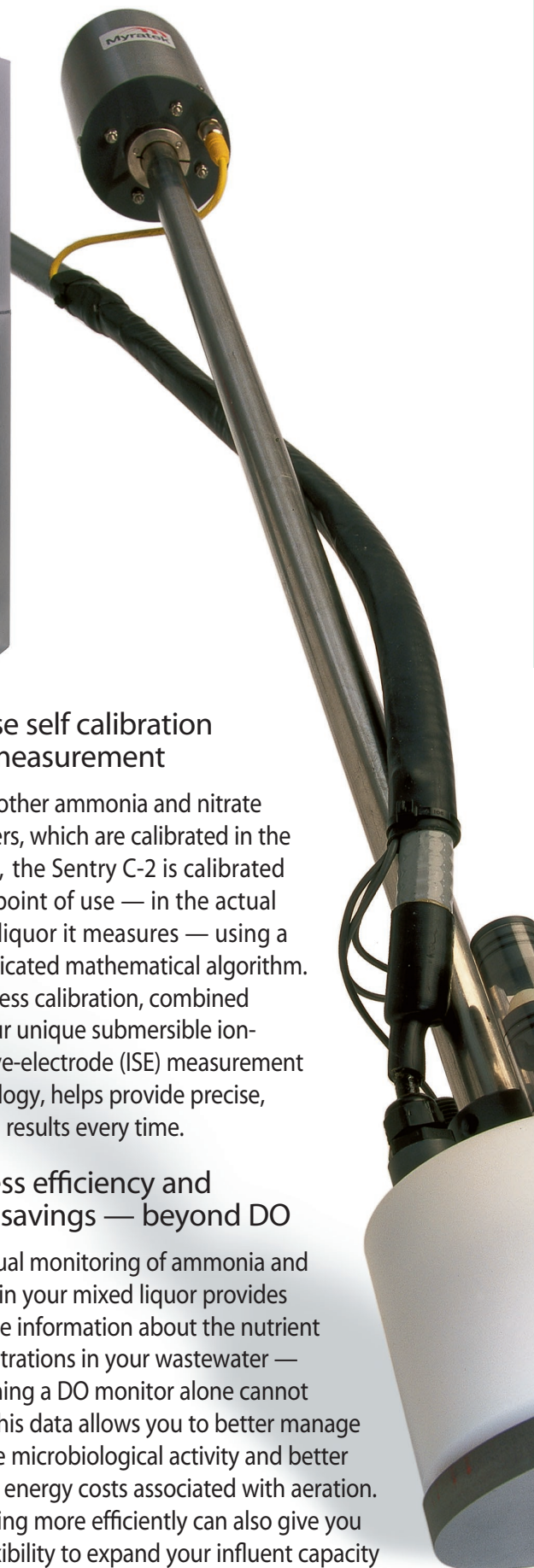
The Sentry C-2™ ammonia and nitrate analyzer

Real-time data for real-time solutions




Myratek®

Take control with the Myratek® Sentry C-2™ ammonia and nitrate analyzer



Influent is something you have little control over. Your effluent, however, is another story. That's where the Myratek® Sentry C-2™ comes in.

The Myratek Sentry C-2 continually measures ammonia and nitrate levels in the treatment process — even in the heaviest mixed liquor — with utmost accuracy. It provides on-the-spot analysis, giving you the powerful information you need to make crucial treatment decisions before it's too late to remediate. The Sentry C-2 puts you in control to help maximize your process efficiency and improve your effluent quality.



No pumps
No pipes
No filters
No kidding

The uniquely designed Sentry C-2 features a patented collection chamber that captures and analyzes samples directly in the tank.

There are no pumps, pipes, or filters required to transport, strain, and potentially corrupt the sample on its way for analysis. There are no settling, clogging, or maintenance issues, either.

Precise self calibration and measurement

Unlike other ammonia and nitrate analyzers, which are calibrated in the factory, the Sentry C-2 is calibrated at the point of use — in the actual mixed liquor it measures — using a sophisticated mathematical algorithm. In-process calibration, combined with our unique submersible ion-selective-electrode (ISE) measurement technology, helps provide precise, reliable results every time.

Process efficiency and costs savings — beyond DO

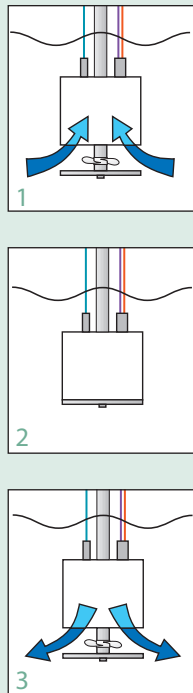
Continual monitoring of ammonia and nitrate in your mixed liquor provides valuable information about the nutrient concentrations in your wastewater — something a DO monitor alone cannot offer. This data allows you to better manage delicate microbiological activity and better control energy costs associated with aeration. Operating more efficiently can also give you the flexibility to expand your influent capacity without expanding your plant.

How the In-Process Sampler makes accuracy possible

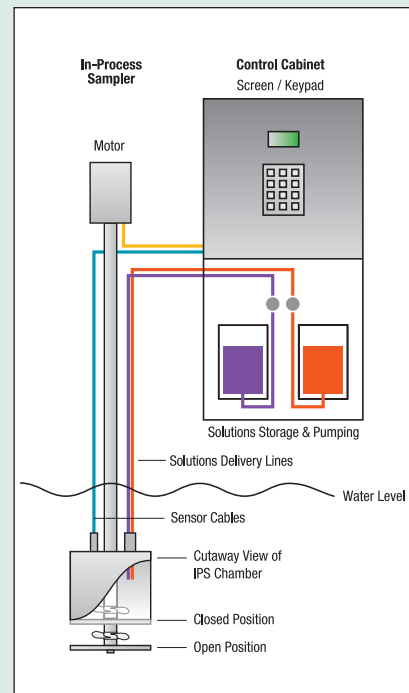
The Myratek Sentry C-2 features a patented In-Process Sampler (IPS) that sits in your tank, just below the water line. This innovative technology ensures that every sample provides a highly accurate, real-time picture of the actual state of your wastewater.

- 1 At user-selected intervals, a motor-driven shaft pushes the bottom away from the sample chamber, allowing it to capture a sample of the mixed liquor.
- 2 The bottom closes, sealing the sample inside where it is kept in suspension and analyzed.
- 3 After analysis, the chamber reopens and expels the analyzed sample.

Results of the analysis are stored in the data log and can be transmitted to your computer or SCADA system.



The Sentry C-2 In-Process Sampler connects to a compact stainless-steel control cabinet with two sealed compartments that protect components from harsh conditions and temperature extremes. The locking upper compartment safely houses electronic components. The bottom compartment contains the non-hazardous solution delivery system. The solutions are delivered to the IPS through a durable, heated conduit cable that transfers measurements electronically back to the cabinet. All cables and lines exit the cabinet via side-mounted weatherproof industrial-grade fittings.



Easy installation, maintenance, and use

The Sentry C-2 installs easily in under an hour with no construction or additional equipment required. Just mount it to the handrail and plug it in. Maintenance is equally trouble free. About once a week, simply spray a few shots of water into the sample chamber. That's all there is to it.

No hidden costs or surprises

With the Sentry C-2, you pay one competitive, all-inclusive price. Our analyzer comes complete with installation materials, including probes and solutions. There are no unexpected add-ons or unanticipated construction costs to absorb.

Real measurement where you need it most

Don't wait until it's too late to make critical decisions about your process efficiency and effluent quality. The Sentry C-2 places greater control at your fingertips, helping you to optimize your operating effectiveness, manage your energy costs, expand your treatment capacity, and keep your plant in compliance. It's the one thing you'll never want to remove from your wastewater.

Performance Features

- Operator tested and approved
- Provides real-time analysis directly in the treatment train with no pumps, pipes, filters, or settling
- Measures concentrations from 0.1 to 99.9 ppm
- Monitors continually from every 5 minutes to every 5 days
- Withstands harsh environments and temperature extremes
- Stands alone or fully integrated into any data acquisition or SCADA system

Design Features

- Designed by process engineers and made in the USA
- In-situ self-calibration providing precise measurement
- Keypad with scroll-through menus
- 80-character LCD backlit display
- Data storage of up to 18 years
- Proprietary ISE probes for increased reliability, longevity, and accuracy
- Non-hazardous solutions provided in easy-to-replace bags
- Easy to install and relocate
- Minimal maintenance required



Sentry C-2™ Technical Specifications Overview

Measurement Specifications

Measurement Parameters	ammonia and nitrate
Measurement Type	ion-selective, in situ
Measurement Range	0.1 to 99.9 ppm
Resolution	0.1 ppm
Reproducibility	within 5%
Accuracy	±5% of measurement or ±0.5 ppm (larger)
Measurement Response Time	5 minutes

General Specifications

Enclosure Ratings	NEMA 4x, IP 56
Temperature Rating (controller system)	-21°F to 140°F (-30°C to 60°C)

Electrical Specifications

AC Power Supply	115 VAC 60 Hz
Power Consumption	6 amp (max.)
GFCI	incorporated into controller for ground-fault protection

Data Display, Storage, and User Interface

Display Screen	sunlight readable LCD; 4 lines, 20 characters per line
Data Storage (approximate)	1 analysis/hour • 6630 days (18.2 years) 2 analyses/hour • 3692 days (10.1 years) 4 analyses/hour • 1957 days (5.4 years)
Data Storage Medium	standard 32 MB compact flash card
Data Presentation (on display screen)	96 scrollable measurements by date, hour, minutes, and ppm

Data Output

Analog	two 4–20 mA isolated; max load 500 ohm
Digital	RS-232, RS-422, RS-485 addressable network

Relay Outputs

Ammonia and Nitrate Hi/Lo Alarms (4)	normally open,
External Warning/Alarm (1)	AC 0.5A/125V,
Spares (3)	DC 1A/30V

Optional remote monitoring available

To find out more

For additional information on the Sentry C-2, or to hear about our single-parameter ammonia or nitrate analyzers, call Myratek today and talk to one of our dedicated sales-support representatives.



Real-time data for real-time solutions

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