GE
Water & Process Technologies
Analytical Instruments

Special Applications

Microelectronics Applications for the Sievers* 900 Series TOC Analyzers

From low parts-per-million (ppm) concentrations in feedwater, to low parts-per-billion (ppb) concentrations prior to final polishing, manufacturers in electronics, microelectronics, and semiconductor industries deal with a wide range of TOC, and a variety of challenges in measuring TOC accurately.

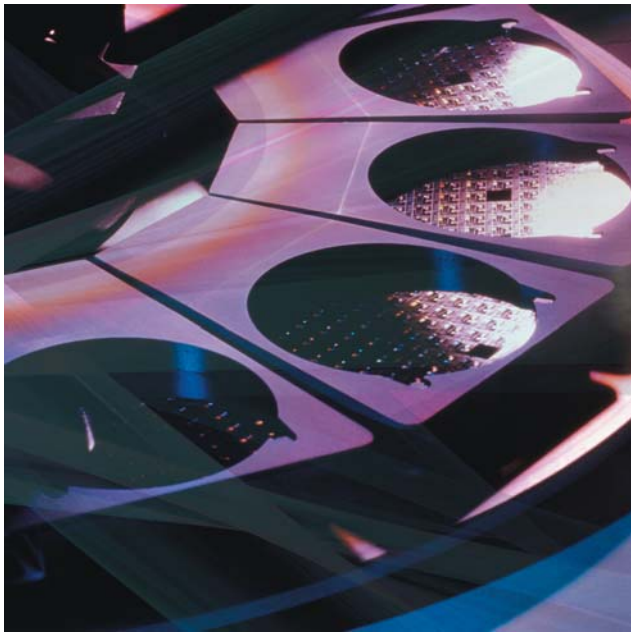
The patented Sievers Membrane Conductometric Detection Technology solves these problems, offering the widest analytical range of any TOC analyzer (0.03 ppb to 50 ppm[1]), while maintaining high sensitivity and resistance to interfering chemicals and compounds harmful to the manufacturing process. Combined with the ***Turbo*** mode configuration (now with an expanded range of 0.20 ppb to 10 ppm) for reclaim applications, the 900 Series delivers the most reliable, quick-responding reclaim TOC analyzers available.

The 900 Series Analyzers make collecting, using, and sharing data easier than ever, utilizing a standard USB port for batch data downloads without stopping analysis or removing data cards.

Application Needs and Solutions

General Water System Monitoring

The unsurpassed analytical range of the 900 Series Analyzers makes it possible to use one type of analyzer throughout the plant. Each 900 Series Analyzer features a range of 0.03 ppb to 50 ppm[1], easily accommodating the most challenging water systems and applications. When used in Autoreagent mode, guesswork is eliminated as the instrument automatically calculates optimum reagent flow rates for each sample. In addition, the patented Sievers Membrane



Conductometric Detection Technology delivers unsurpassed accuracy, even in the presence of compounds that interfere with and confuse other TOC instrumentation.

Reclaim Monitoring

The patented Sievers Membrane Conductometric Detection Technology eliminates interference from compounds commonly used in the Fab environment. The 900 ***Turbo*** Analyzers deliver the most reliable, fast-response reclaim monitoring available, updating TOC measurements every four seconds. This speed and accuracy give users ample time to make proper decisions regarding reclaim waters affecting the manufacturing process.

Sievers* 900 Series TOC Analyzers

Sievers 900 Laboratory TOC Analyzer

Streamlined to occupy minimal bench space, the 900 Laboratory Analyzer can be operated as a stand-alone unit or teamed with the 900 Autosampler. The Autoreagent adjustment feature optimizes analysis conditions for challenging samples, without requiring user intervention or data interpretation.

Sievers 900 On-Line TOC Analyzer

The wall-mounted 900 On-Line TOC Analyzer is housed in a dust-resistant and spray-proof IP-45 rated enclosure for demanding environments. The patented Sievers Integrated On-Line Sampling System (IOS System*) allows a quick and simple one-step transition to grab mode for measuring samples from other locations.

Sievers 900 Portable TOC Analyzer

The world's only full-range portable TOC analyzer weighs just 12.5 kg (27.5 lb), can be used standalone to measure continuous on-line samples, or moved to the laboratory to work with the 900 Autosampler. Using the same IOS System as the 900 On-Line, the Portable 900 Analyzer handles grab samples and standards vials even when used on-line.

* Trademark of General Electric Company; may be registered in one or more countries.

1 Stated analytical performance is achievable under controlled laboratory conditions that minimize operator and standards errors.

For more information, visit www.geinstruments.com. Find a sales partner near you through the "Contact Us" Section.

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