

Vanox™ System for Point-of-Use Ultrapure Water Treatment Systems

Siemens introduces an effective method for removing total organic carbon (TOC) in point-of-use (POU) ultrapure water treatment systems for semiconductor applications.

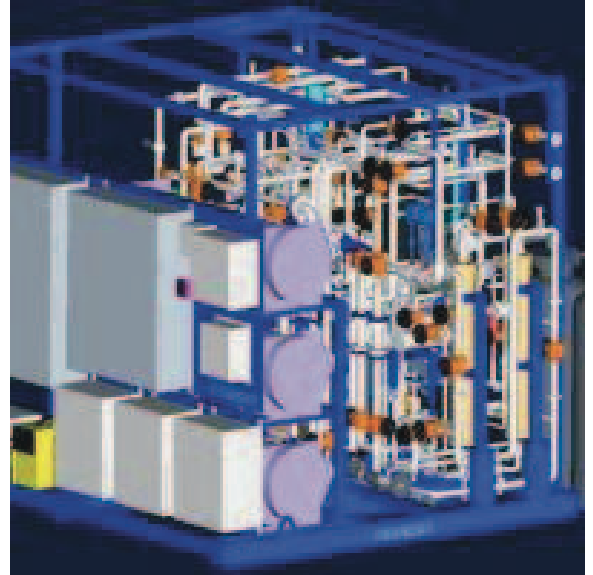
Our proprietary advanced oxidation process – the Vanox™ POU system – can consistently reduce TOC to 0.5 parts per billion (ppb) and treat seasonal TOC variations in feed water. This is important because TOC elevations above 1.0 ppb can directly affect the manufacturing process.

The Vanox™ system consistently controls urea primarily associated with THMs (Trihalomethane), such as chloroform, which is generated as a by-product from the use of chlorine. The system also addresses urea and IPA, the primary organics that can require a more elaborate treatment and cause potential risk to a fabricator/manufacturing plant.

When our process is applied in a POU system, it provides a better solution to target trace organics. The Vanox™ system provides a more effective destruction of IPA and other organic compounds that traditional ozone and peroxide/UV does not provide in re-use and reclaim facility waste streams.

The Vanox™ POU system also delivers critical control temperature, low trace metal contaminates and reduces particles to less than 100 units per litre at .05 microns. The current industry standard for POU particle reduction is 200 – 500 units per litre.

Because the typical water quality requirement for ultrapure water is 1.0 ppb, our process allows for reliable and consistent TOC reduction and control. The Vanox™ POU system has made improvements in the reactor design, allowing reductions in power and capital costs, and reductions in chemical use.

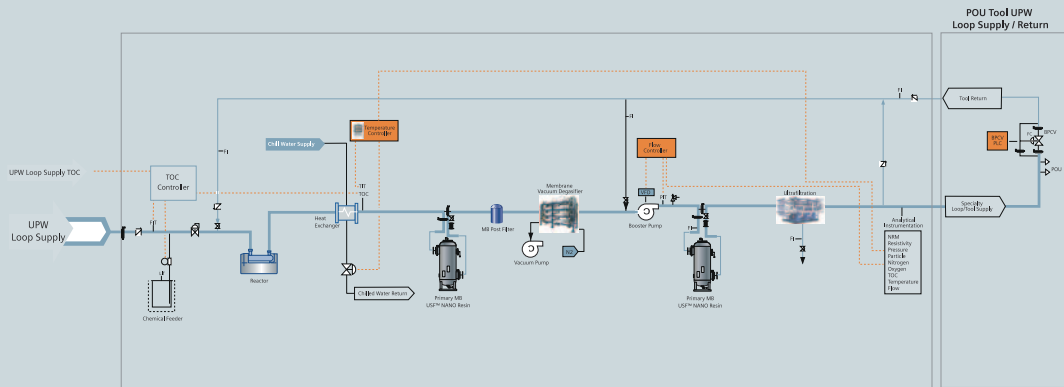


Product Sheet

Water Technologies

SIEMENS

Vanox™ Advanced Oxidation Point-of-Use System Technology Map



- Legend**
- BPCV PLC Back Pressure Control Valve Programmable Logic Controller
 - FC Fail Close
 - FI Flow Indicator
 - FIT Flow Indicating Transmitter
 - HX Heat Exchanger
 - LIT Level Indicating Transmitter
 - PIT Pressure Indicating Transmitter
 - POU Point Of Use
 - TIT Temperature Indicating Transmitter
 - TOC Total Organic Carbon
 - VFD Variable Frequency Drive

- Consistent Process Control**
- Reliable TOC Reduction
 - Reduced Particle Count
 - Low Metal Contaminants
 - Consistent Temperature Control

SIEMENS
www.siemens.com/water

semi
WATER
Vanox and USP are trademarks of Siemens, its subsidiaries or affiliates.
© 2008 Siemens Water Technologies
HPS-VANOXPOU-DS-1011 Subject to change without prior notice.

Siemens Industry, Inc.

10 Technology Drive
Lowell, MA 01851

+1.800.875.7873 ext 5000 Technical Support
+1.800.466.7873 Customer Support
+1.978.934.9349 ext 5000 (tel)
+1.978.441.6025 (fax)

© 2011 Siemens Industry, Inc.
HPS-VANOXPOU-DS-1011

Subject to change without prior notice.

USF and Vanox are trademarks of Siemens, its subsidiaries or affiliates.

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.