

ONGUARD™ ONLINE

Data management service



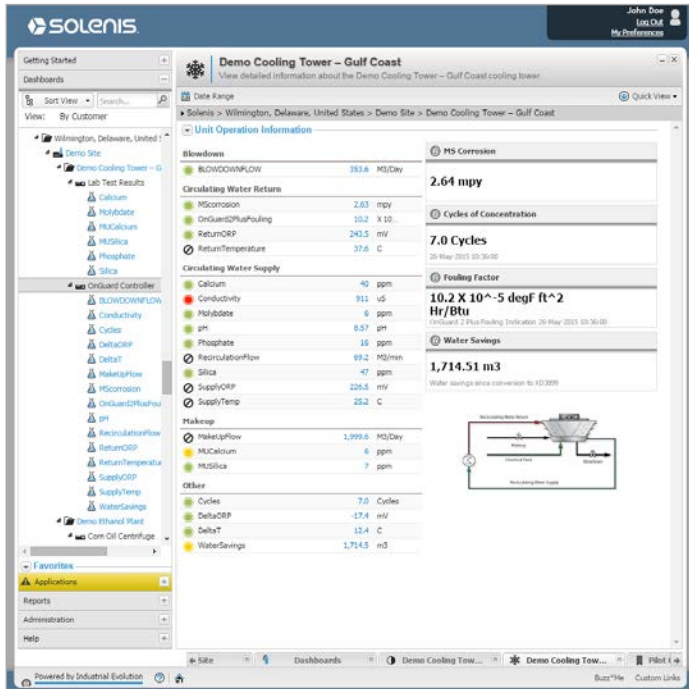
- **Fully secure, web-based access**
to monitor system performance
- **Enhanced data management tools**
to transform raw data into actionable information
- **Comprehensive alerts and alarms**
to allow rapid response to system upsets
- **Advanced reporting**
to communicate effectively

OnGuard™ OnLine data management service

Always on guard. Always monitoring your system.

OnGuard™ monitoring and control system is Solenis' comprehensive platform to provide water treatment and process system assurance 24 hours a day, 365 days a year. The centerpiece of this platform is OnGuard™ OnLine, which automatically collects system performance data and uses statistical process control (SPC) and statistical quality control (SQC) tools and techniques to display the data and help drive

program optimization and improvement. Plant personnel access these tools through the OnGuard OnLine website, where dashboards present a snapshot of performance variables and robust reporting capabilities allow for effective communication of results. Alert and alarming features provide automatic and instant notification of system upsets or exceptions, allowing rapid, expert response around the clock.



Unit operation dashboard

Integrate Multiple Sources of Data

The OnGuard OnLine system receives data inputs from sensors, analyzers and controllers across your plant, as well as from operators who input data manually. OnGuard OnLine also integrates fully with OnGuard OnTrax™, Solenis' PC-based data logging and SPC software.

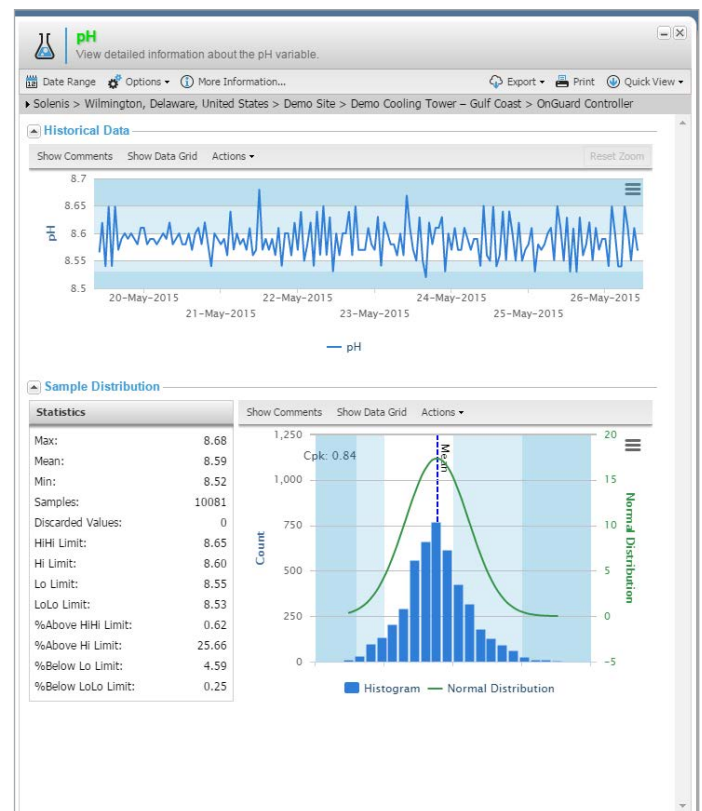
Access Real-time Information

Secure historian-to-historian transfer ensures that real-time plant and system performance data flows to the OnGuard OnLine system securely and at extremely high speeds. Dashboards for each operating unit combine data from these different sources to provide the most recent performance statistics that will help you to quickly determine if your process is in or out of desired ranges.

Transform Data into Business Intelligence

With advanced data management and analysis tools at your fingertips, you can quickly manage unit operations to ensure that the system performance is continuously optimized. Data mining and trend analysis allow you to make quick fact-based decisions during routine operation and most importantly during system upset. With the OnGuard OnLine system, you can:

- Measure and monitor critical parameters via SPC/SQC tools
- Calculate KPIs and benefit analysis
- View data and parameters over selectable time periods
- Compare variables quickly and easily



Statistical Process Control graphs

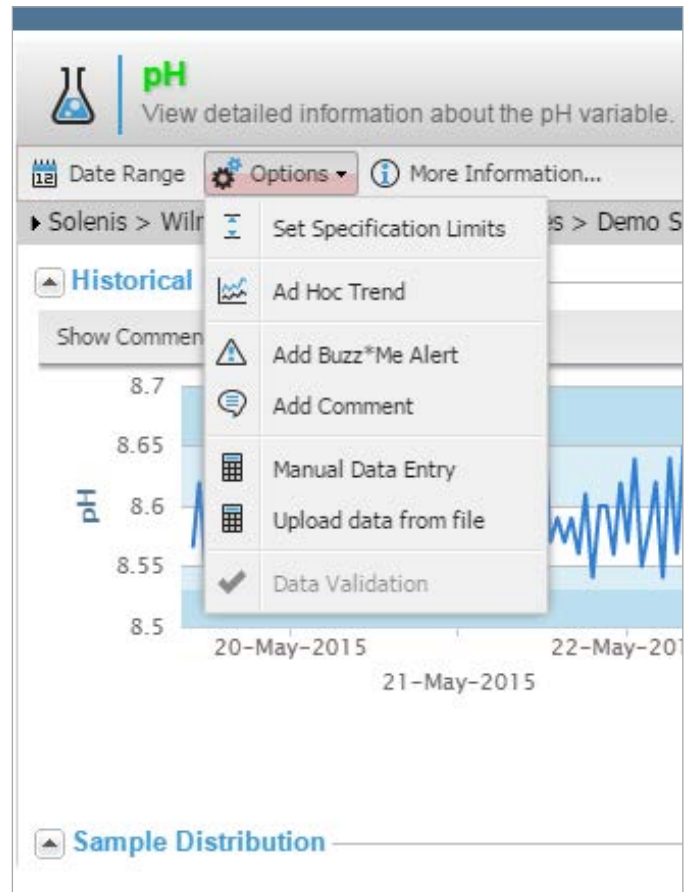
Communicate Effectively to All Stakeholders

The OnGuard OnLine system makes it easy to keep key stakeholders informed of plant and system performance even when not logged in. The service includes robust alerting and reporting features that provide automatic and rapid notification of system upsets or exceptions, allowing rapid, expert response 24 hours a day, 7 days a week. OnGuard OnLine includes:

- E-mail or SMS alert/alarm capability
- Acknowledgement and escalation of alerts
- Automated or scheduled reporting
- On-demand reporting
- Ability to comment on graphs and statistical summaries

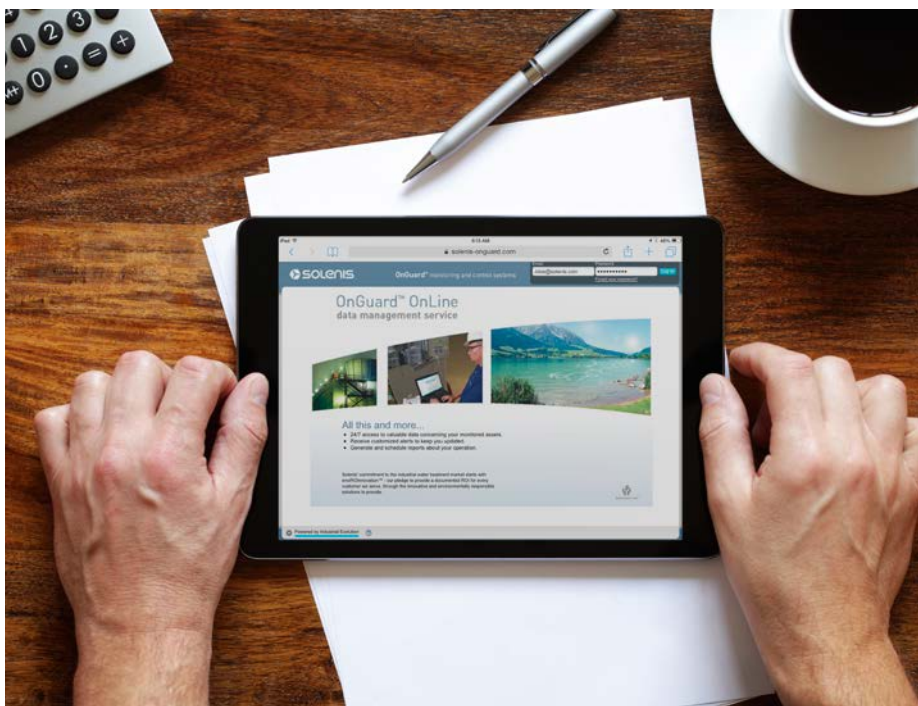
Calculate ROI and Maintain Profitability

With the OnGuard OnLine system, you can squeeze value out of every system running in your plant. Inventory management is simplified with reorder points predetermined along with flat line (no feed) or overuse alerts available. Energy savings, machine efficiencies, product quality, chemical performance, cooling tower cycles, water use and much more can be calculated with an ongoing ROI determined and visible. Armed with this information, plant executives can make decisions with more confidence than they've ever had before.



OnGuard OnLine System Technical Specifications

The OnGuard OnLine system is web-based and requires no special programming or software. The system can be accessed from anywhere — even mobile devices.



Rock-solid Security

OnGuard OnLine uses the same secure encryption protocols as banks.

Always-on Encryption

Every communication is sent over a secure, encrypted connection. With the OnGuard OnLine system, you can feel confident that your data is always safe and secure.

Role-based Permissions

With enhanced, multi-level access control and security, data is viewable only to authorized individuals and site functions are permission based



Solenis

Strong Bonds. Trusted Solutions.

Solenis supplies specialty chemicals for water-intensive industries, including the pulp and paper, oil and gas, chemical processing, mining, biorefining and power markets. Whether you want to increase production, develop new products, reduce costs or simply do more with less, we can help. With our innovative technologies, passionate people and unrivaled experience, Solenis is ready to deliver the solutions you need.

To learn more, contact your technical sales representative or visit us online.

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