



The Lifeline for the Industrial Gas Industry

Solutions for Air Separation and Hydrogen Gas Operations

NALCO Water
An Ecolab Company



NALCO WATER

DEFINING INDUSTRY STANDARDS OF OPERATIONS

- Digitally standardize information gathering to quickly unveil actionable insights
- Enable enterprise views across multiple sites
- Focus on reliability of critical assets - main air compressors, heat exchangers and boilers
- Help exceed sustainability goals such as water and energy savings
- Deliver consistent service and exponential value across all plant operation types

WATER MANAGEMENT

- ✓ One Global Service Model
- ✓ Create and Maintain Value Process
- ✓ ECOLAB 3D Digital Dashboard and Alarms
- ✓ Customized Water Treatment Plans

PRE & POST TREATMENT

TROUBLESHOOTING AT THE SOURCE AND OUTFALL

- Prevent scale buildup and corrosion
- Minimize downtime and chemical consumption
- Increase potential to use alternative water sources



RECOMMENDED PRODUCTS AND SERVICES

- ✓ PARETO™ Mixing Technology
- ✓ Raw Water Biocontrol
- ✓ Ion Exchange and Membrane Services



DIGITAL SOLUTIONS

TAKING DATA TO ACTION WITH CRITICAL ASSETS



Value Delivered

RECOMMENDED PRODUCTS AND SERVICES

- ✓ OMNI™ Powered by ECOLAB 3D

- Capture critical inputs and outputs to identify troubleshooting actions
- Calculate return on investment on capital and operating budgets
- Roll-up site-level data for enterprise dashboard
- Avoid downtime with proactive monitoring and control

COOLING TOWER

ENSURE OPERATIONAL EXCELLENCE

- Meet regulatory compliance
- Ensure enhanced cooling tower performance
- Reduce maintenance costs



RECOMMENDED PRODUCTS AND SERVICES

- ✓ 3D TRASAR™ Technology for Cooling Water
- ✓ High Performance Cooling Water Chemistry
- ✓ Cooling Water Dashboard
- ✓ PURATE™ Technology for Microbial Control
- ✓ Water Safety Solutions

STEAM

MAINTAIN RELIABILITY

- Recover process condensate
- Minimize water footprint
- Optimize energy balance
- Monetize steam export



RECOMMENDED PRODUCTS AND SERVICES

- ✓ 3D TRASAR™ Technology for Boilers
- ✓ Ion Exchange and Membrane Services
- ✓ 3D TRASAR™ Technology for Membranes
- ✓ Nalco Water Corrosion Scale Monitor (NCSM)

The standard of reliability

Nalco Water's unmatched service is paired with innovative products designed to deliver exceptional plant reliability. As part of our holistic approach, expert service specialists will help you choose the solution best suited to protect your most critical assets, extend turnaround time and reduce variability with your systems.



PURATE™ CHLORINE DIOXIDE SYSTEM



INNOVATIVE CHEMISTRY

Unique stabilized solution of sodium chlorate and hydrogen peroxide

UNIQUE DESIGN

High-efficiency generator is a two-chemical feed system that can be easily piped at application point

COST EFFECTIVE

Effective treatment program in wide range of pH and various constituents in system

ENGINEERED FOR RELIABLE AND EFFICIENT OPERATION

>95% generation efficiency with design safety interlocks

REDUCED CORROSION POTENTIAL

Does not contribute potentially corrosive chlorides like traditional halogen treatments

Experience
PURATE
in Virtual
Reality at
www.ecolab.com/purate



OMNI™ Powered by ECOLAB 3D

ADVANCED MONITORING FOR RELIABILITY AND PROFITABILITY

- A first-of-its-kind program guaranteed to maximize operational efficiency and improve your business outcomes sustainably
- Provides enterprise and plant visibility of overall operational health
- Communicates notifications and actionable insights
- Identifies and quantifies most critical key performance indicators



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