



The Lifeline for the Industrial Gas Industry

NALCO  **Water**
An Ecolab Company



NALCO WATER

ADDRESSING INDUSTRY WATER CHALLENGES

Innovative solutions to fit your water sustainability goals and minimize water risk

Meet water specifications for unit operations

Deliver more than just products

Continue delivery of high-quality results

WATER MANAGEMENT

- ✓ Total Plant Assessment
- ✓ Scenario Planning
- ✓ Regular On-Site Technical Service & Support



PRE-TREATMENT

TROUBLESHOOTING AT THE SOURCE

Prevent scale buildup and corrosion

Minimize downtime and chemical consumption

Increase potential to use alternative water sources

Improve water clarity

RECOMMENDED PRODUCTS AND SERVICES

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



PROCESS

PROTECT YOUR MOST CRITICAL ASSETS

Reduce turnaround time

Reduce downtime

Predict and avoid downtime with proactive monitoring and control

Reduce power in compressors

Deliver consistent product quality

RECOMMENDED PRODUCTS AND SERVICES

- ✓ OMNI™ Total Heat Exchanger Performance Monitoring

HEAT EXCHANGE

DELIVERING CONSISTENT PERFORMANCE
IMPROVEMENT

Predict challenges, prevent outages and prolong operations

Reduce water use within single unit operation

Reduce energy consumption with clean cooling tower surfaces

Meet operational temperature specification to meet product and discharge requirements



RECOMMENDED PRODUCTS AND SERVICES

- ✓ 3D TRASAR Technology for Cooling Water
- ✓ High Performance Cooling Water Chemistry
- ✓ OMNI Total Heat Exchanger Performance
- ✓ PURATE™ Technology

COOLING TOWER

ENSURE OPERATIONAL EXCELLENCE

Meet regulatory compliance

Ensure enhanced cooling tower performance

Reduce maintenance costs



RECOMMENDED PRODUCTS AND SERVICES

- ✓ Water Safety Solutions
- ✓ Microbiological Testing
- ✓ Cooling Performance Test

STEAM

MAINTAIN RELIABILITY

Keep boiler surfaces free of scale

Increase reliability and uptime

Reduce cleaning maintenance and service calls

Avoid unnecessary costly repairs and total asset replacement

Reduce energy consumption

Improve pre-boiler condensate corrosion control



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 innovation

Nalco Water's unmatched service is paired with innovative products designed to deliver exceptional plant performance. As part of our holistic approach, expert service specialists will help you choose the solution best suited to protect your 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

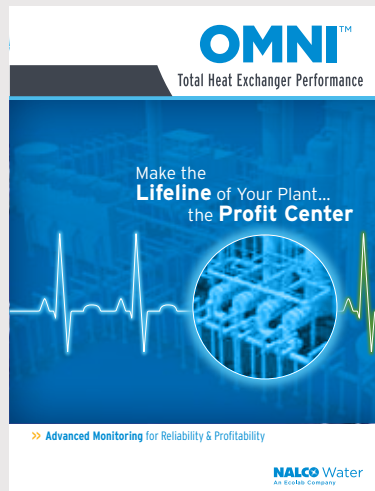
REDUCED CORROSION POTENTIAL

Does not contribute potentially corrosive chlorides like traditional halogen treatments

OMNI™ TOTAL HEAT EXCHANGER PERFORMANCE MONITORING

ADVANCED MONITORING AND PREDICTABILITY FOR RELIABILITY AND PROFITABILITY

A first-of-its-kind program guaranteed to maximize operational efficiency and improve your business outcomes – sustainably



PREDICT

Performance is predicted by using cloud analytics in partnership with Microsoft

PREVENT

Generate performance insights that allow our customers to prevent unscheduled downtime and informed decisions

PROLONG

Extend asset life and runtime by enhancing the ability to take action with data insights

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