

NICO VANTA NANOBUBBLE SYSTEM PRECISION OXYGENATION FOR ULTRAPURE WATER ENVIRONMENTS

Ultra-pure water (UPW) systems demand the highest levels of control, consistency, and contamination-free performance. The **NICO VANTA Nanobubble System** is engineered to deliver precise, chemical-free oxygenation, enhancing water purity, improving process stability, and ensuring consistent high-performance output across sensitive, high-spec applications.

Challenges In Ultra-Pure Water Systems

Maintaining ultra-pure environments presents critical challenges:



Dissolved Gas Instability

Fluctuating oxygen levels impact process consistency



Micro-Contaminants & Residues

Even trace impurities affect high-precision applications



Inconsistent Cleaning Performance

Limits efficiency in precision manufacturing environments



System Compatibility Constraints

Many technologies disrupt UPW integrity or resistivity



Chemical Dependency

Conventional oxidation relies on additives that risk contamination

Key Benefits

Delivering measurable improvements across UPW systems:



Controlled & Pure Oxygenation

Precise dissolved oxygen control with zero contamination



Chemical-Free Processing

Reduces reliance on chemical oxidants and additives



Enhanced Cleaning Performance

Superior micro-surface cleaning for precision applications



Stable System Integration

Compatible with existing DI and UPW infrastructure



Improved Process Reliability

Consistent performance in critical environments

Why NICO VANTA?

NICO VANTA is purpose-built for ultra-pure water systems, delivering unmatched precision and purity:



Controlled & Pure Oxygenation

Enables precise dissolved oxygen control without ionic impurities.



Enhanced Cleaning Efficiency

Improves removal of micro-particles and contaminants.



Chemical-Free Processing

Reduces or eliminates the need for chemical additives.



Improved Process Stability

Ensures consistent performance in high-precision environments.



Ultra-High Purity Maintenance

Preserves the integrity of sensitive UPW systems.

Key Application Areas



Semiconductor Wafer Cleaning & Rinse Optimization

Enhances particle removal and surface cleanliness



Cleanroom Applications (Chemical-Free)

Supports contamination-free cleaning processes



Demineralized (DI) Water Polishing

Improves stability and consistency of high-purity water



Precision Optics & Instrumentation Cleaning

Maintains clarity and surface integrity



Microelectronics Surface Cleaning

Enables residue-free cleaning of sensitive components



Advanced Oxidation (No Chemical Residue)

Enables oxidation without introducing contaminants



ISO Certified Quality Standards



Global Presence



Customizable, Application-Specific Solution

Achieve Ultra-Pure Water Performance with Precision Nanobubble Oxygenation

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