

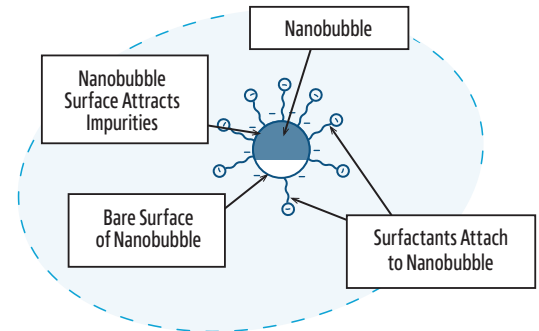
## TECHNOLOGY OVERVIEW

Unlock the power of nanobubbles with PicoPure and learn how these revolutionary systems create immediate ROI and transform water and chemical usage in car washes. With PicoPure, you can save money by squeezing more out of every drop of water and chemical!



### What Are Nanobubbles?

Nanobubbles are extremely small gas bubbles that are dispersed in liquid and invisible to the naked eye. Due to their tiny size, they have unique properties, such as high stability, a large surface area to volume ratio, and the ability to remain suspended in liquids for extended periods. Nanobubbles are extremely useful in car wash applications for treating reclaim water, enhancing cleaning processes and enabling overall use of less chemistry to produce a clean car.



### Why Size Matters?

In the world of nanobubbles, smaller is better because smaller bubbles means higher surface area to volume and therefore increases the bubbles' ability to catalyze chemical reactions. A pico is 1,000 times smaller than a nano, and PicoPure hydrodynamic cavitation devices create bubbles as small as 7,000 picos in diameter, making it superior to any other nanobubble generator on the market.

### Nanobubble Uses for Car Wash

Every car wash should consider introducing nanobubble technology as a way to directly reduce their operating costs. The ROI can be measured in terms of (1) reduced chemical cost, (2) deferred pit cleaning, (3) energy savings and more.

## BENEFITS OF NANOBUBBLES

### WATER RECLAIM BENEFITS:

- Improves oxygen transfer and increases nutrient bioavailability for aerobic bacteria in reclaim water
- Promotes oxidation, disruption and break down of pollutant structures
- Stimulates microbial activity and biofilm formation
- Coagulates suspended particles in reclaim water

*All these factors result in cleaner water that is available for use by tunnel applications.*

### CLEAN WATER BENEFITS:

- Boosts cleaning power of surfactants by creating more contact area between surfactants and surface and lifting dirt particles more effectively
- Tiny bubbles create a mild scrubbing action, dislodging dirt and grime for a more effective cleaning and penetration of microscopic crevices on car's surface
- Improves emulsification process, making oils and greasy substances easier to remove
- Reduces amount of soaps needed thereby lowering environmental impact
- Hydrophobic water molecules improve rinsing action by lifting away residues more effectively and reducing water spots and streaks, leaving a cleaner, shinier finish
- High surface tension of water acts as natural drying agent as molecules bead up and easily run off of vehicle's surface

*PicoPure is the ultimate solution for car washes to save money and contribute to a cleaner environment.*

## PRODUCT LINE

### PicoPure MAX includes

- Software UI available locally and from web app
- Nanobubble Reactor with pump
- Onboard compressed air, oxygen or ozone
- Sensor array for Water Quality Monitoring

### PicoPure BASE includes

- Nanobubble Reactor with pump
- Onboard compressed air, oxygen or ozone

### PicoPure BOOST Upgrade includes

(for Guardian 1000 Customers)

- Software UI available locally and from web app
- Nanobubble Reactor with pump
- Onboard compressed air, oxygen or ozone

### PicoPure PLUS Upgrade includes

(for PicoPure BASE Customers)

- Software UI available locally and from web app
- Sensor array for Water Quality Monitoring
- Automated dosing based on water testing

- Dosing pumps for 4 water treatment products
- Automated dosing based on water testing
- Inventory tanks for 4 products
- Reactor Tank with skimmer

- Reactor Tank with skimmer

- Sensor array for Water Quality Monitoring
- Automated dosing based on water testing
- Reactor Tank with skimmer

- Dosing pumps for 4 water treatment products
- Inventory tanks for 4 products



## COMPETITOR SIDE BY SIDE

	COMPETITOR 1	COMPETITOR 2	PICOPURE
Technology	Permeable Membrane	Hydrodynamic Cavitation	Hydrodynamic Cavitation
Nanobubble Size	As small as 115 nm	Claim to as small as 101 nm	As small as 7 nm
Concentration	879 million per ml	324 million per ml	332 trillion per ml
Bubble Surface Area	$3.65 \times 10^7 \mu\text{m}^2$ per ml H <sub>2</sub> O	$1.04 \times 10^7 \mu\text{m}^2$ per ml H <sub>2</sub> O	$5.11 \times 10^{10} \mu\text{m}^2$ per ml H <sub>2</sub> O
Maintenance Requirements	Routine Cleaning and Filter Changes	No Moving Parts, No Cleaning Requirements	No Moving Parts, No Cleaning Requirements
Strengths	Patented Tech, Marketing Resources, Time in Market	Unsure	Patented Tech, Highest Infusion Concentration in Market, No Maintenance, No Blockage
Weakness	Regular Cleaning and Maint, Industry Adoption, Market Awareness	Absence of Gas Infusion Makes Nanobubble Formation Impossible, No Dissolved O <sub>2</sub> Increase	Limited Market Awareness, Technology Acceptance
Market Position	Current Leader across several industries	New to market with strong global inquiry across multiple sectors	New to market with strong global inquiry across multiple sectors

**PICOPURE GENERATES:**  
**1,400 x** bubble surface area per ml than Competitor 1!  
**4,900 x** bubble surface area per ml than Competitor 2!

### WHY THIS MATTERS?

Bubble surface area is where the 'magic happens' and ALL chemical reactions take place. It is DIRECTLY tied to performance.

### SPECIFICATIONS

#### WATER TREATMENT CAPACITY:

MODEL	GALLONS/MIN	GALLONS/HR	GALLONS/DAY
C-5	22 GPM	1,320 GPH	31,680 GPD
C-10	44 GPM	2,641 GPH	63,384 GPD
C-15	66 GPM	3,961 GPH	95,064 GPD

System can be sized to accommodate specific water processing needs.

Contact us today for more information!

Pricing Available Upon Request



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FLUID MANAGEMENT & CONTROL SYSTEMS

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