

SIMONIZ®

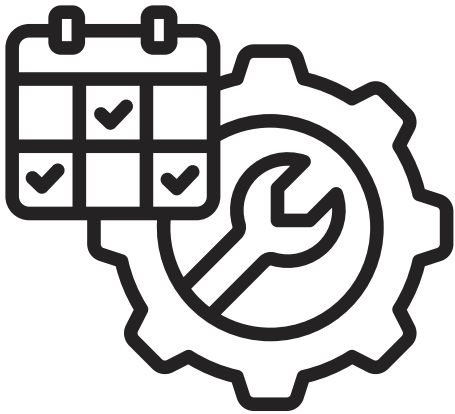


CRS

CHEMICAL REDUCTION SOLUTIONS

Nanobubble **water conditioning** for WashWorld In-Bay-Automatics.

Drier Cars. More Foam. Reduced Maintenance.



Car Wash Water Is Working Against You

Mineral scale, poor water behavior, and inefficient chemistry reduce wash quality, reduce chemical performance, create maintenance headaches, and limit throughput

All this adds cost and labor expense to any car wash business



Simoniz® Solution

Simoniz® installs a patent-pending, passive nanobubble generator inline on key car wash water lines. Using hydrodynamic cavitation and electro-ionization, the system continuously conditions water before it reaches RO machines, chemistry injectors, manifolds, and rinse stages

Key Benefits



- Improved chemical effectiveness & coverage
- Better rinse performance & spot-free drying
- Less scale buildup in plumbing, injectors, and RO systems
- Improved efficiency and reliability
- Extended equipment life
- Less algae growth in bays
- No electricity or consumables

Connect with Simoniz® and CRS

www.simoniz.com
www.chemicalreduction.com

BETTER WATER. BETTER EQUIPMENT. BETTER ECONOMICS.



CRS
CHEMICAL REDUCTION SOLUTIONS

SIMONIZ®

WHAT IS A
NANOBUBBLE?



Tiny. Stable. Game Changing.

2500 times smaller than a grain of sand, nanobubbles are so small that they have a lower buoyancy and will remain suspended in water for a long time

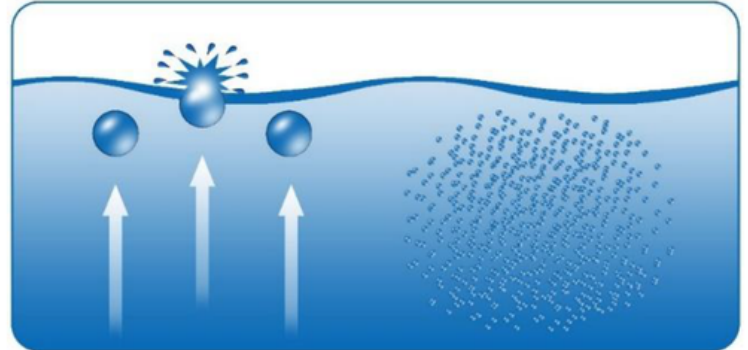


Industrially Useful

Nanobubbles are useful in removing and preventing scale and biofilm growth, improving heat transfer, inhibiting rust, reducing surface tension and improving filtration efficacy

We are the **future**
of your business

CRS and Simoniz® are on a mission to use their economical and simple nanobubble generator, the NanoBubblizer®, to improve profitability and reliability of water systems



nanobubbles remain suspended in water

575+

NANOBUBBLIZERS®
DEPLOYED IN 2025

MORE THAN

15 years

OF NANOBUBBLE
EXPERIENCE

500+ million

GALLONS OF WATER
TREATED PER MONTH



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HOW ARE NANOBUBBLES FORMED?



Hydrodynamic Cavitation

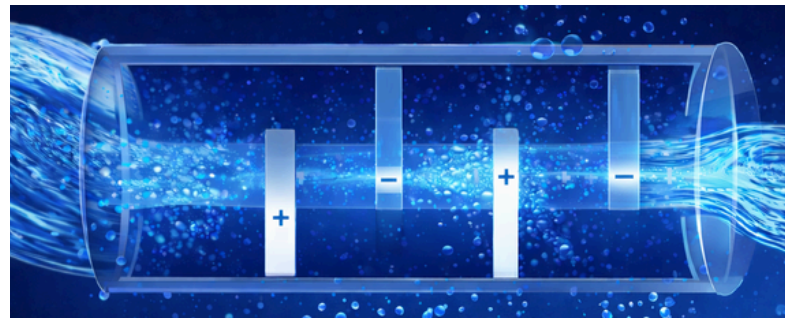
As water flows through the NanoBubblizer®, the geometry creates localized pressure differentials and high shear zones. Under appropriate flow conditions, these effects induce controlled hydrodynamic cavitation



Ionization of Entrained Gas

Nanobubbles are formed under more lenient flow conditions when the gases that are entrained in water are ionized or charged by NanoBubblizer®'s proprietary metal alloy baffles

Hydrodynamic cavitation plus entrained gas ionization



Hydrodynamic cavitation is a well-documented physical phenomenon in which microscopic vapor- or gas-filled cavities form and collapse due to transient pressure reductions in a moving liquid. In the NanoBubblizer®, this process also results in the formation of stable micro- and nanobubbles

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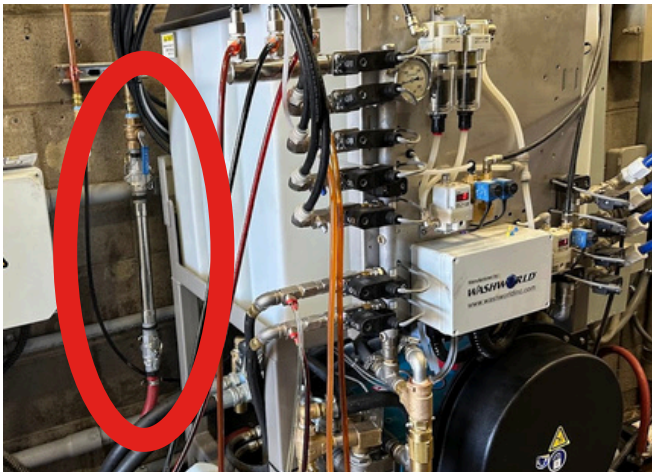
NAN614 NANOBUBBLIZER®

Low Pressure Pump Feedline Installation Instructions

APPLICATIONS

- Suitable for all WashWorld in-bay-automatics
- Infuses feedwater with nanobubbles
- Enhances foaming performance and coverage of car wash chemistry
- No power, no programming, no maintenance required
- Can flow in either direction

IMPORTANT INSTALL LOCATION



THREAD SEALANT REQUIREMENT

- Use Loctite 55 cord
- Apply to all NPT threads
- Do not use excessive sealant

BENEFITS FOR OPERATORS

- Higher Wash Quality
- Better Drying Performance
- Enhanced Coverage and Foaming Action
- Long Term Equipment Protection
- Reduced Algae Growth in the Bay

SIMONIZ®

✕ INSTALLATION STEPS

01

Shut Off Water Supply

and relieve pressure by opening a downstream fitting

02

Disconnect the water line to the low pressure pump

03

Install NAN614 inline

Using appropriate thread sealant and fittings

04

Restore Water Supply

05

Check for Leaks

06

Flush and Return to Service

If machine is badly scaled a good flush should be done before re-using

TECH NOTES (FOR SERVICE MANAGERS)

- Take a video of a car wash prior to installation and compare to post-installation
- Passive device – cannot fail electrically



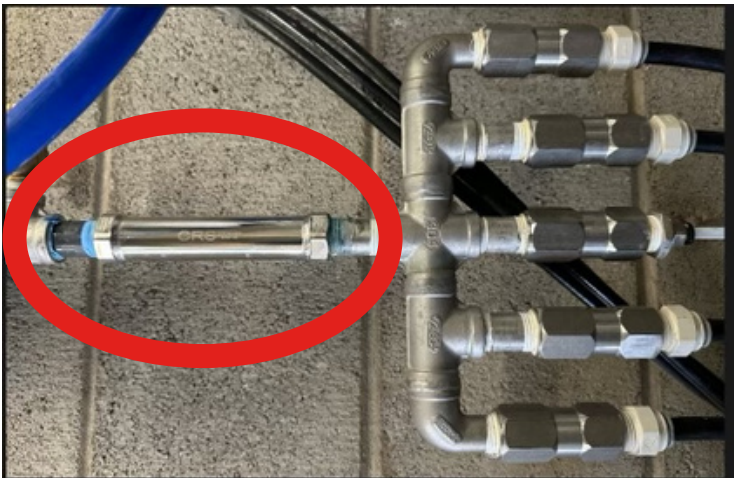
NAN15 NANOBUBBLIZER®

Upper Manifold Installation Instructions

APPLICATIONS

- Suitable for all WashWorld in-bay-automatics that use an upper manifold (otherwise known as a “pitch fork”)
- Enhances foaming performance and coverage of car wash chemistry
- No power, no programming, no maintenance required
- Can flow in either direction

IMPORTANT INSTALL LOCATION



THREAD SEALANT REQUIREMENT

- Use Loctite 55 cord
- Apply to all NPT threads
- Do not use excessive sealant

BENEFITS FOR OPERATORS

- Higher Wash Quality
- Better Drying Performance
- Enhanced Coverage and Foaming Action
- Long Term Equipment Protection
- Reduced Algae Growth in the Bay

SIMONIZ®

✕ INSTALLATION STEPS

01

Shut Off Water Supply

and relieve pressure by opening a downstream fitting

02

Disconnect the water line immediately before the upper manifold

03

Install NAN15 inline

Using appropriate thread sealant and fittings

04

Restore Water Supply

05

Check for Leaks

06

Flush and Return to Service

If machine is badly scaled a good flush should be done before re-

TECH NOTES (FOR SERVICE MANAGERS)

- Take a video of a car wash prior to installation and compare to post-installation
- Passive device – cannot fail electrically



BETTER WATER. BETTER EQUIPMENT. BETTER ECONOMICS.

NANOBUBBLIZER®

Spot Free Rinse Installation Instructions

APPLICATIONS

- Suitable for all reverse osmosis machines
- Designed for municipal or treated water
- No power, no programming, no maintenance required
- Installs before the pre-filter
- Can flow in either direction

IMPORTANT INSTALL LOCATION

The NanoBubblizer® MUST be installed BEFORE the water filter. Why? Nanobubbles cause suspended minerals and impurities to coagulate, which:

- Extends filter life
- Improves filtration effectiveness
- Reduces scale and biofilm inside the RO machine



THREAD SEALANT REQUIREMENT

- Use Loctite 55 cord
- Apply to all NPT threads
- Do not use excessive sealant

TWO INSTALLATION STRATEGIES (SIMPLE & PERFORMANCE BOOSTING)

Single Pass: Place NanoBubblizer® upstream of your earliest pre-filter to protect your RO system, improve pre-filtration, lower scale buildup and infuse both RO permeate and reject water with nanobubbles

Multi-Pass Recirculation (Premium Drying Performance): Use a NAN-SUB submersible NanoBubblizer® to create a recirculation loop inside the RO permeate tank using a submersible pump.

SIMONIZ®

✕ INSTALLATION STEPS

01

Shut Off Water Supply

and relieve pressure by opening a downstream fitting

02

Disconnect the water line immediately before the filter

03

Install NanoBubblizer® inline

Using appropriate thread sealant and fittings

04

Restore Water Supply

05

Check for Leaks

06

Flush and Return to Service

If machine is badly scaled a good flush should be done before re-using

TECH NOTES (FOR SERVICE MANAGERS)

- No pressure drop impact on RO machines
- Compatible with carbon, sediment, and other pre-filters



BETTER WATER. BETTER EQUIPMENT. BETTER ECONOMICS.

NANOBUBBLIZER®

Spot Free Rinse Unit Model Selection

INSTALL TIPS

- Use the lowest flow NanoBubblizer® that will NOT trigger a low pressure fault on the RO machine
- After initial installation and after running the NanoBubblizer® for several days, change RO pre-filters to maximize effect
- The NanoBubblizer® cannot repair RO membranes with channels and holes, but can improve lifespan



SIMONIZ®



NANOBUBBLIZER® MODEL SIZING

01

Measure the Total RO Flow

Permeate Flow + Reject
Flow = Total Flow

02

Choose the Right NanoBubblizer®

TOTAL RO FLOW
(Permeate + Reject)

NanoBubblizer®

1 - 2 GPM

NAN03

3 - 4 GPM

NAN15

5 - 7 GPM

NAN39

8 - 13 GPM

NAN614

14 - 20 GPM

NAN1020

SONNY'S MODEL NUMBERS

SONNY'S RO Machine	NanoBubblizer®
VROF-2	NAN39
VROF-4	NAN614
VROF-6	NAN1020
VROF-8	NAN1020
VROF-12	NAN2040

