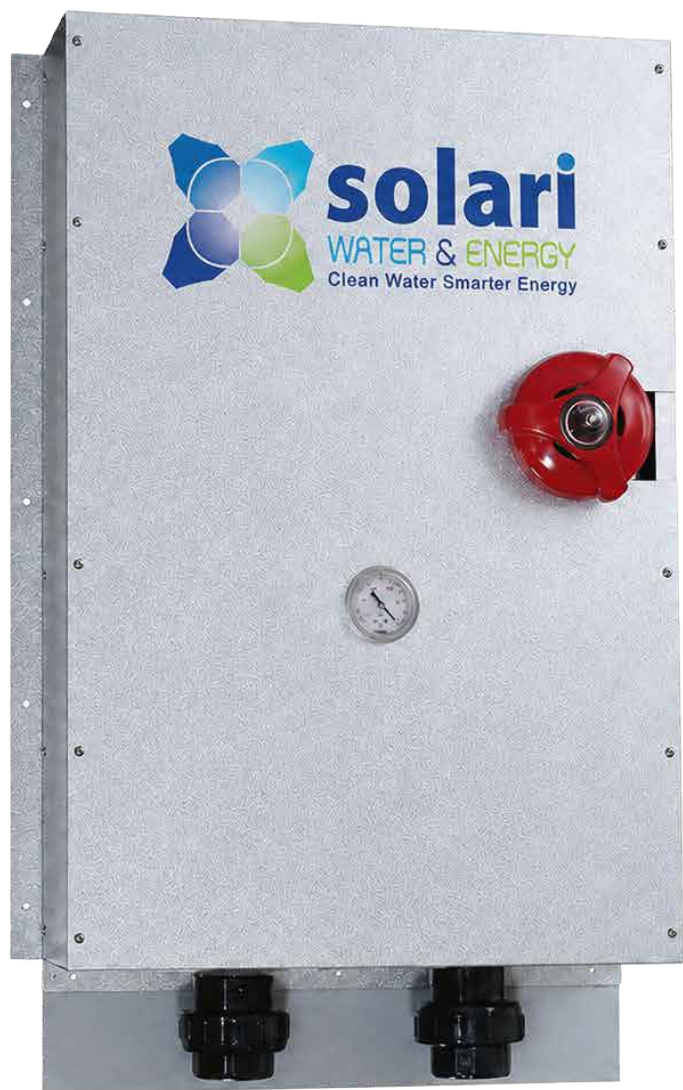




Solari O₃ Nanobubble Systems

Ozone Nanobubble Systems for
Advanced Water Treatment



Conventional ozone injection can allow ozone to escape before it has fully reacted. Solari O₃ combines venturi injection with turbulent nanobubble mixing to improve ozone transfer, reduce off-gassing and extend effective contact time. This keeps ozone dissolved in the water longer, supporting more effective oxidation, disinfection and water-quality improvement across agricultural and industrial applications.

SOLARIWATER.COM.AU



Advanced Ozone Nanobubble Technology for Water Treatment

HOW SOLARI O₃ WORKS

Solari O₃ combines active inlet or venturi injection with turbulent nanobubble mixing to introduce ozone into flowing water under vacuum. After injection, the ozone and water pass through the mixer, where ultra-fine ozone bubbles are generated.

This process improves ozone mass transfer, reduces off-gassing and keeps ozone residual in the water longer than normal injection alone, supporting oxidation and disinfection.

KEY BENEFITS

- Improves ozone transfer into water
- Reduces ozone loss through off-gassing
- Extends ozone residual and effective contact time
- Supports oxidation and disinfection
- Maximises ozone surface-area-to-volume ratio
- Uses safe injection under vacuum
- Mixer requires no external electrical connection
- Supports chemical-free water-cleaning applications

STRAIGHTFORWARD INTEGRATION

The wall-mounted mixer connects directly to the water inlet, water outlet and ozone gas supply. On venturi systems water flow creates the venturi vacuum required to draw ozone into the system, while a diaphragm valve and vacuum gauge allow manual adjustment and monitoring. Can be installed inline by bring water to the system.

A water pump and ozone generator are required. Inlet filtration is also required where particles larger than 1-2 mm may be present.

SOLUTIONS FOR WATER TREATMENT WORLDWIDE

Solari O₃ models support water flow rates from 75 to 400 L/min, providing scalable solutions for:

- Greenhouse and hydroponic water-system disinfection
- Livestock drinking-water disinfection
- Agricultural water treatment
- Wastewater ozonation
- Industrial oxidation and water-treatment processes

Powered by Acniti technology.

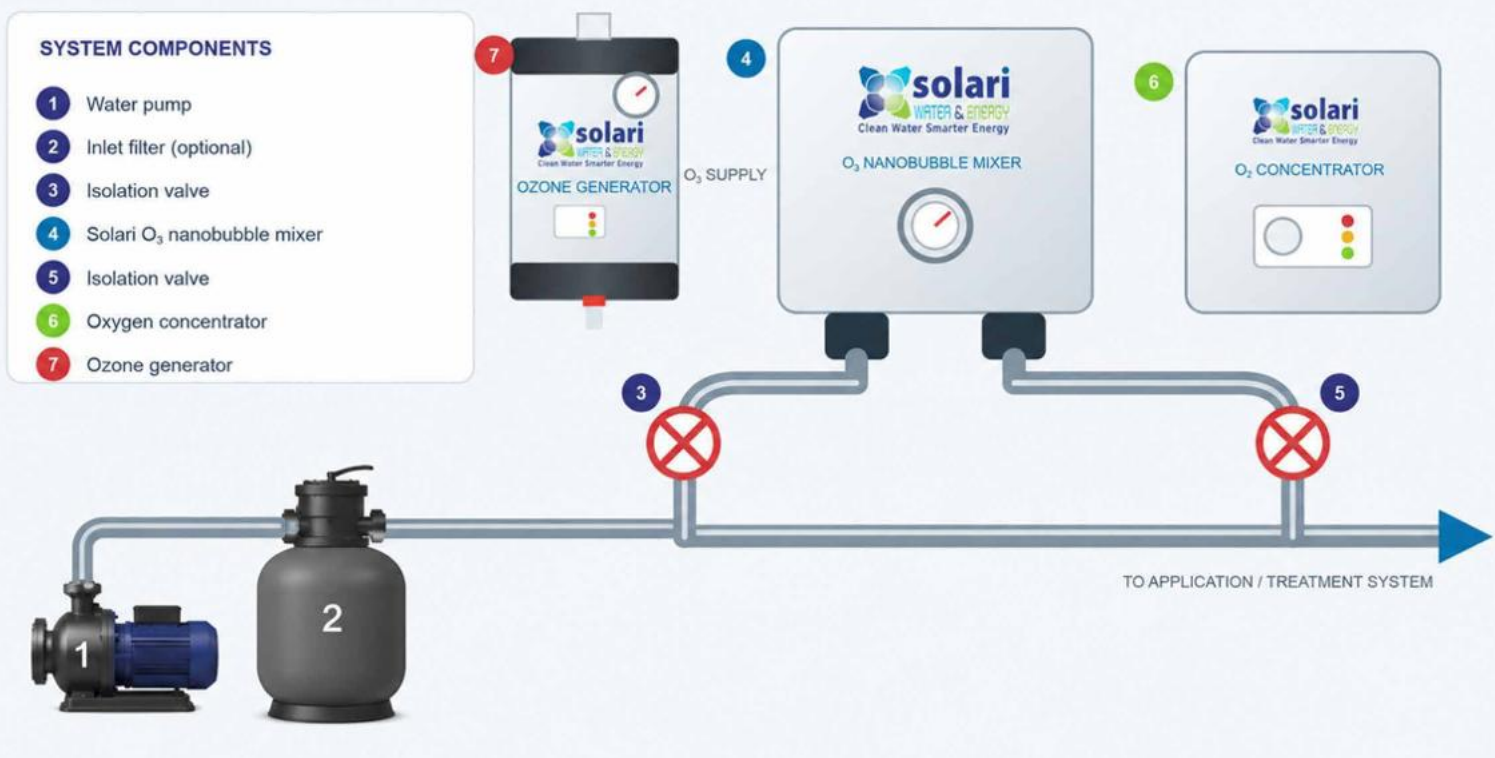


Designed to Integrate. Engineered for Better Ozone Transfer.

Solari O₃ integrates with new or existing water-treatment systems. The wall-mounted mixer connects to the water inlet, outlet and ozone supply, while a diaphragm valve and vacuum gauge provide manual control. The mixer itself requires no external electrical connection.

Solari O₃ Installation Overview

Simplified ozone nanobubble water-treatment configuration



More Ozone Retained Where It Can Work

Ozone nanobubble mixing produces a total mass-transfer coefficient 1.8 times higher than venturi injection alone. Ozonated nanobubble water also retained its ozone residual longer, while reducing the amount of ozone released through off-gassing.

By combining venturi injection with turbulent nanobubble mixing, the system increases the ozone surface-area-to-volume ratio and supports enhanced ozonation.

For greenhouse, hydroponic, livestock and wastewater applications, Solari O₃ improves ozone transfer and extends ozone exposure to support oxidation and disinfection within the water-treatment process.

Ready to Improve Your Ozone Treatment Process?

Talk to Solari about the right O₃ nanobubble mixer for your application.





Solari O₃ 828

Ozone Nanobubble Mixer 75–150 L/min

Designed for lower-flow agricultural and industrial water-treatment applications, the Solari O₃ 828 combines venturi injection with turbulent nanobubble mixing to improve ozone transfer, extend ozone residual and reduce off-gassing.

OPERATING SPECIFICATIONS

	Metric	Imperial
Water flow rate	75–150 L/min	20–40 gal/min
Water flow per hour	4.5–9.0 m ³ /h	159–318 ft ³ /h
Water temperature	–20 to 40°C	–4 to 104°F
Particle management	Not supplied; Inlet strainer required where particles exceed 1–2mm	
Ambient temperature	–20 to 40°C	–4 to 104°F
Relative humidity	1 – 100%	

OZONE SUPPLY

	Metric	Imperial
Ozone flow rate	3.0–5.0 L/min	0.8–1.3 gal/min
Ozone flow per hour	180–300 L/h	48–79 gal/h
Ozone pressure	100–350 kPa	15–51 psi
Gas suitability	Ozone	
Injection method	Venturi injection under vacuum	

INSTALLATION AND CONSTRUCTION

Pump	Not Included
Estimated power consumption	750–1,000 W
Operation	Manual diaphragm-valve control with vacuum-gauge monitoring
Wetted components	PVC, SUS304, SUS316, PVDF, EPDM, silicon, Viton, PPS and FKM
Water inlet	Rc 1¼-inch female thread
Water outlet	Rc ¾-inch female thread
Gas inlet	10 mm or ⅝-inch SUS316 ferrule fitting

DIMENSIONS AND SHIPPING

	Metric	Imperial
Unit dimensions (W × D × H)	650 × 270 × 1,014 mm	25.6 × 10.6 × 39.9 in
Unit weight	40 kg	88.2 lb
Shipping dimensions	670 × 370 × 1,070 mm	26 × 15 × 42 in
Shipping weight	45 kg	99 lb





Solari O₃ 838

Ozone Nanobubble Mixer 150–400 L/min

With a flow capacity of 150–400 L/min, the Solari O₃ 838 provides a higher-capacity option for greenhouse, livestock and wastewater installations requiring improved ozone transfer, longer ozone retention and reduced off-gassing.

OPERATING SPECIFICATIONS

	Metric	Imperial
Water flow rate	150–400 L/min	40–106 gal/min
Water flow per hour	9.0–24 m³/h	318–848 ft³/h
Water temperature	–20 to 40°C	–4 to 104°F
Particle management	Not supplied; Inlet strainer required where particles exceed 1–2mm	
Ambient temperature	–20 to 40°C	–4 to 104°F
Relative humidity	1 – 100%	

OZONE SUPPLY

	Metric	Imperial
Ozone flow rate	5.0–8.0 L/min	1.3–2.1 gal/min
Ozone flow per hour	300–480 L/h	79–127 gal/h
Ozone pressure	100–350 kPa	15–51 psi
Gas suitability	Suitable for ozone	
Injection method	Venturi injection under vacuum	

INSTALLATION AND CONSTRUCTION

Pump	Not Included
Estimated power consumption	750–2,000 W
Operation	Manual diaphragm-valve control with vacuum-gauge monitoring
Wetted components	PVC, SUS304, SUS316, PVDF, EPDM, silicon, Viton, PPS and FKM
Water inlet	Rc 2-inch female thread
Water outlet	Rc 1-inch female thread
Gas inlet	10 mm or 3/8-inch SUS316 ferrule fitting

DIMENSIONS AND SHIPPING

	Metric	Imperial
Unit dimensions (W × D × H)	650 × 270 × 1,014 mm	25.6 × 10.6 × 39.9 in
Unit weight	42 kg	92.6 lb
Shipping dimensions	670 × 370 × 1,070 mm	26 × 15 × 42 in
Shipping weight	47 kg	104 lb

For larger sizes, use the Solari SolAqua Range.



READY TO IMPROVE YOUR OZONE TREATMENT PROCESS?

Whether treating greenhouse and hydroponic water, livestock drinking water or industrial wastewater, Solari can help identify the right O₃ nanobubble mixer for your application.

Each solution is selected according to water flow, ozone supply, filtration requirements and installation configuration—providing a tailored approach to improved ozone transfer, longer ozone retention and reduced off-gassing.

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