



KAIROSPACE
TECHNOLOGIES

INTRODUCTION TO KAIROSPACE INNOVATIONS

INJECTORS

CONTACT: JUAN BRAVIN - CEO
JUAN@KAIROSPACETECH.COM

Revolutionizing Water Treatment Technologies

Kairospace stands at the forefront of **water treatment innovation**, dedicating its expertise to crafting sustainable and efficient solutions for a global audience. With a focus on the future, our mission revolves around **enhancing water quality** across various sectors, including **agriculture, industry, and residential areas**. By introducing cutting-edge technologies such as our advanced cavitators and mixers, Kairospace is not just addressing current water treatment challenges but also paving the way for a more **sustainable and resource-efficient tomorrow**. Our commitment to research, development, and practical applications of our technologies ensures that we lead the charge towards a future where clean and safe water is accessible to all, making a significant **impact on global water management practices**.

Introducing the Future of Nanobubble Generation

Introducing Kairospace Injectors: A leap forward in water treatment technology, designed to optimize and enhance the infusion of gases into water systems.

Advanced Nanobubble Generation: Harnessing the power of nanobubbles for improved water quality, these injectors excel in mixing, generating hydrodynamic cavitation, and efficiently dissolving gases.

Versatile Applications: Whether for agricultural irrigation, wastewater management, or industrial processes, Kairospace Injectors are engineered to meet a broad spectrum of water treatment needs.

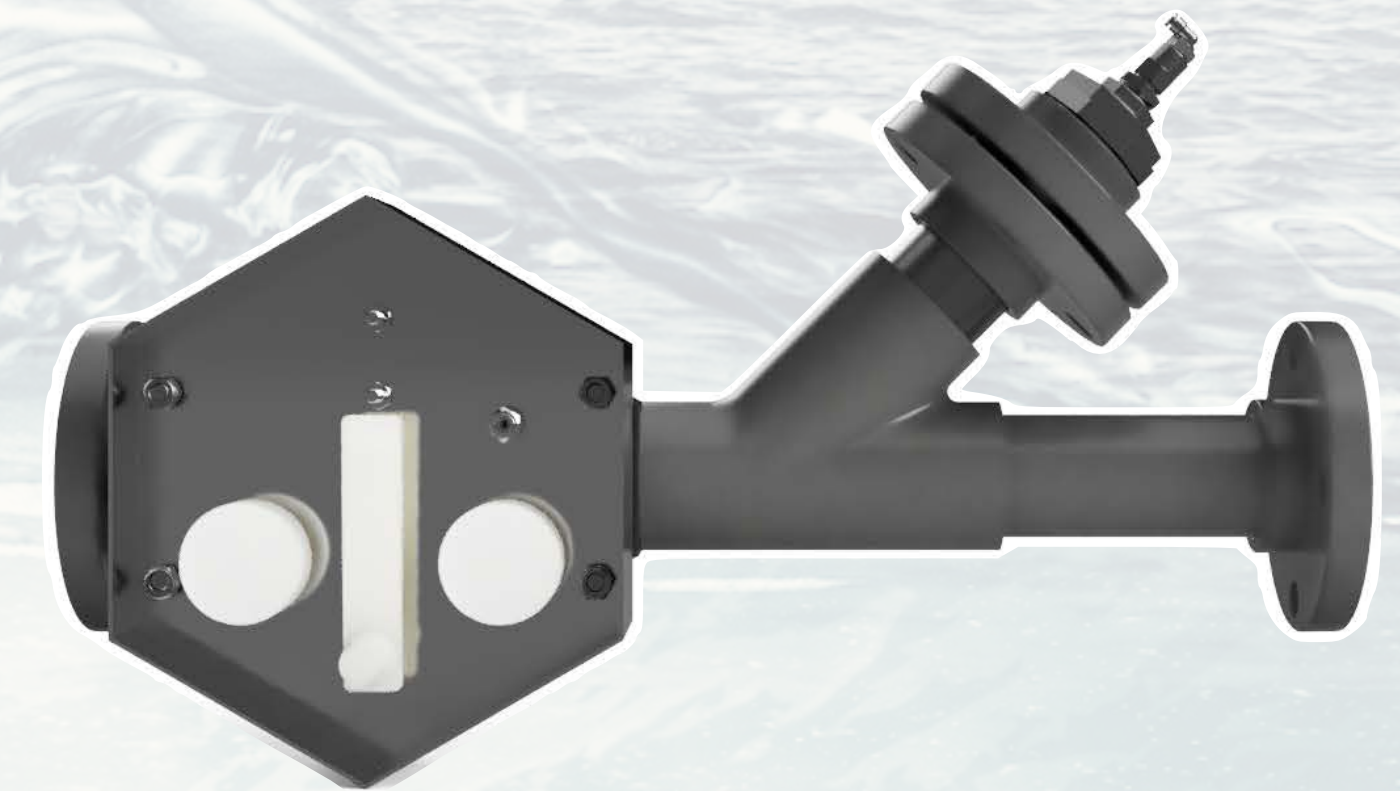
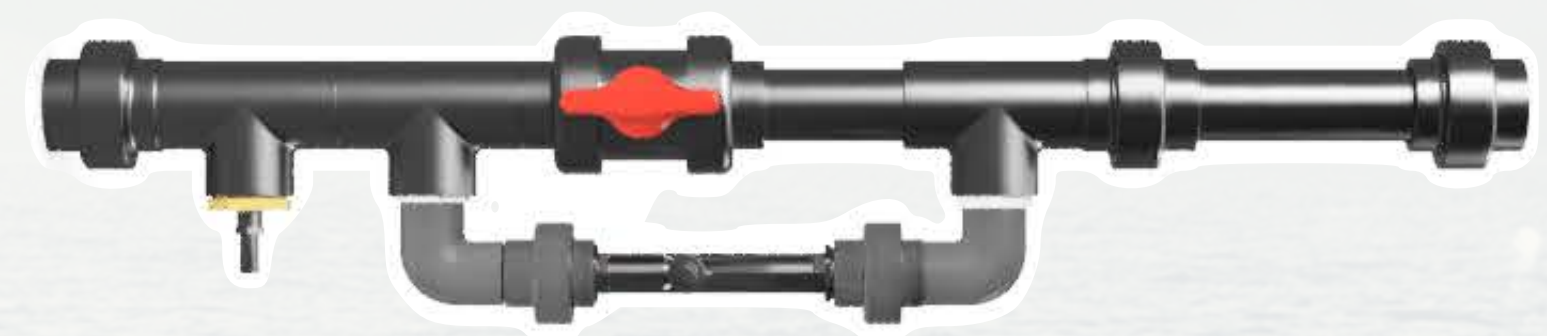


Dual Injection Mechanisms: Enhanced Flexibility

Dual Mechanisms: Featuring two distinct gas injection methods:

- **Venturi System (VS):** Ideal for air-driven processes, the Venturi System can operate efficiently without the need for an additional compressor. It is also suitable when gas delivery pressure is lower than pressure in the liquid line.
- **Diffuser System (DS):** Perfect for scenarios where gas can be delivered at 7-10 PSI above the line pressure, the Diffuser System facilitates direct gas injection into the water stream.

This dual approach allows for tailored solutions to meet specific operational requirements, **maximizing efficiency and adaptability** in different water treatment contexts. Both systems are integrated with one or more of **Kairospace's patent-pending cavitators**.

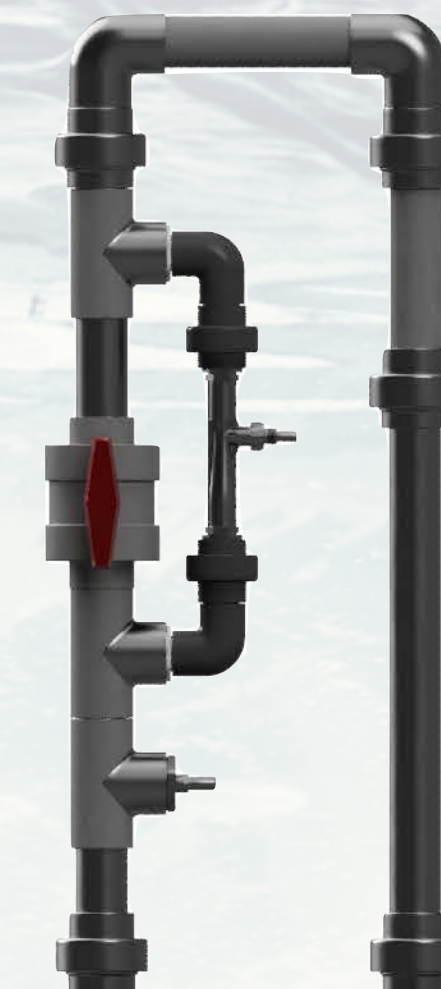


Engineered for Durability and Flexibility

High-Quality Materials: Featuring internal components crafted from **premium plastic polymers** and different types of **steel** to ensure lasting durability in various operational environments.

Adaptable Design: Engineered with versatility in mind, our cavitators and mixers offer in-line installation options for seamless integration into existing water treatment systems without the need for extensive modifications.

Tailored Solutions: Whether for **industrial, agricultural, or residential** applications, our technology is designed to meet the specific needs of any water treatment process, reflecting our commitment to providing adaptable and efficient solutions.



Precision-Engineered Cavitation for Optimal Performance

Our cavitation systems are **meticulously designed** to cater to a wide range of operational needs, ensuring precision and adaptability in generating **nanobubbles with low and high occurrence of hydrodynamic cavitation**.

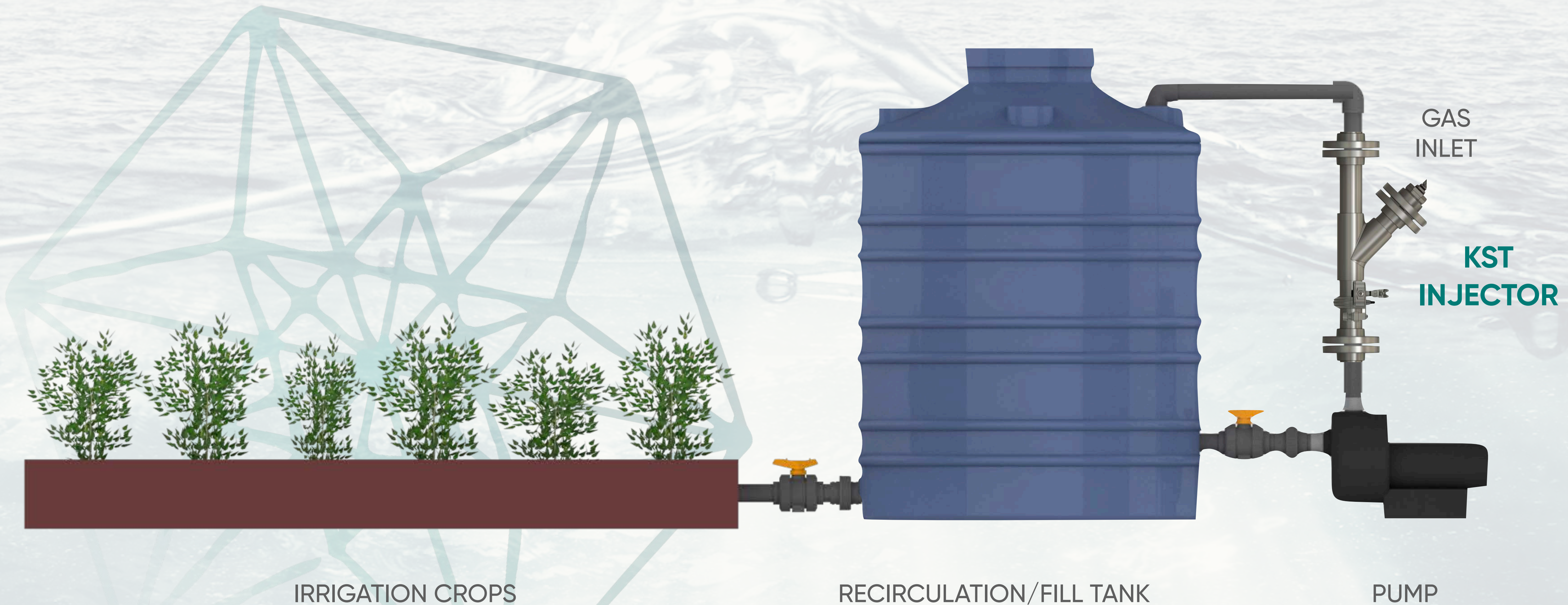
The performance data provided in the slide below is a reference for the potential gas to be injected into the line to create nanobubbles of gas in the liquid.

Each cavitation system, coming in sizes from **1 inch to 12 inches**, is crafted to withstand varying maximum operating pressures, showcasing our commitment to durability and versatility.

Ask information for food and beverage or medical grade cavitation, or gas generation systems at info@kairospace technologies.com

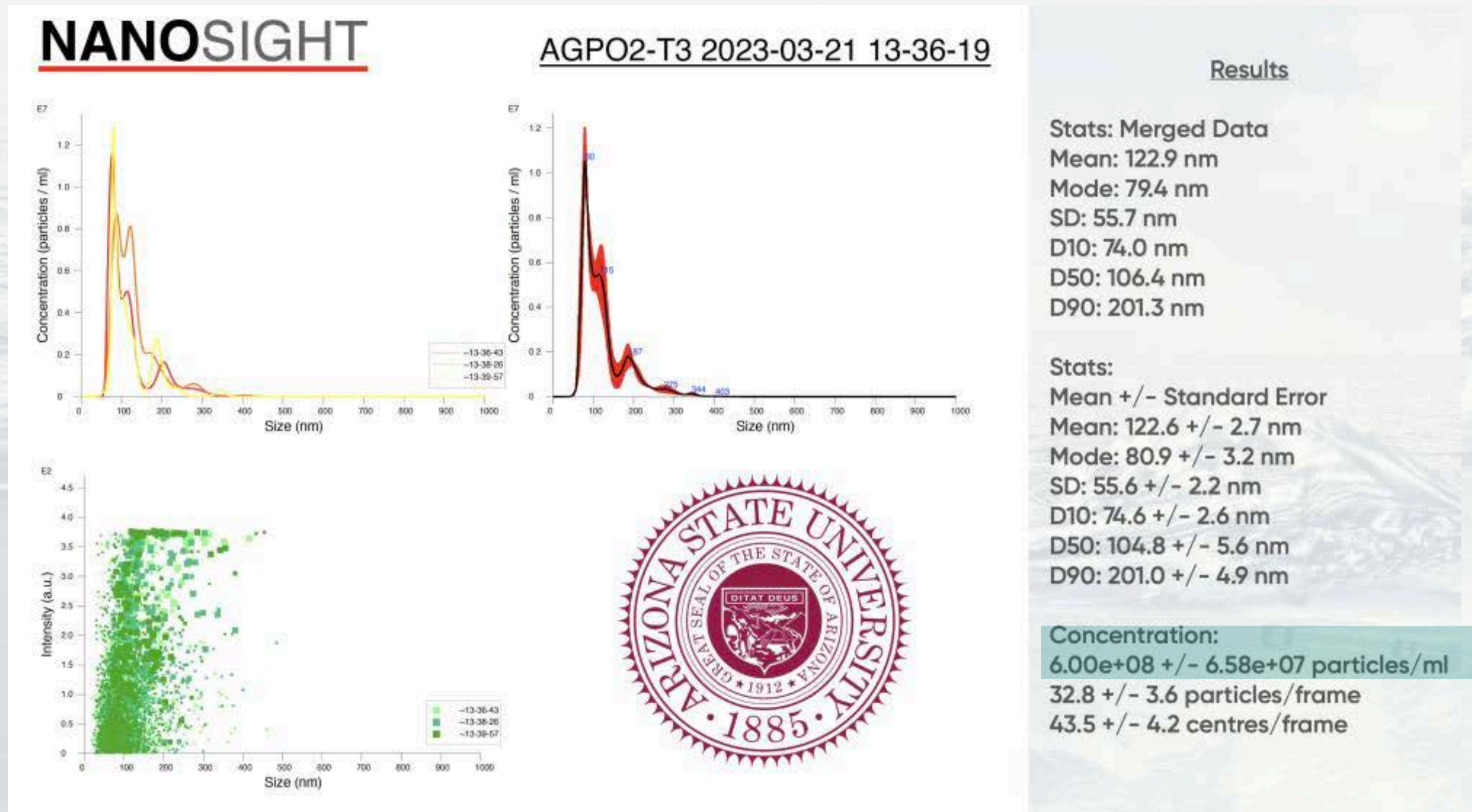


SETUP AGRICULTURE



Performance

+ 500 millions nanobubbles/ml and 3-4 X in dissolved oxygen levels **on a single pass**



Treatment Capacity

	1 inch	2 inches	3 inches	4 inches
Operational Parameters				
Temperature	1-60 °C (avoid freezing)	1-60 °C (avoid freezing)	1-60 °C (avoid freezing)	1-60 °C (avoid freezing)
Solids allowed	Up to ½ solids, strainer or mesh filter is recommended	Up to ½ solids, strainer or mesh filter is recommended	Up to ½ solids, strainer or mesh filter is recommended	Up to ½ solids, strainer or mesh filter is recommended
Gases	O2, N2, H2, CO2, O3	O2, N2, H2, CO2, O3	O2, N2, H2, CO2, O3	O2, N2, H2, CO2, O3
Connections				
Water Inlet/Outlet	1" NPT Union or Flanged connection	2" NPT Union or Flanged connection	3" NPT Union or Flanged connection	4" Flanged connection
Gas Inlet	1/4" barb connector	1/4" barb connector	1/4" barb connector	1/4" barb connector
Injector Construction Material's				
Injector piping	PVC sch 80.	PVC sch 80.	PVC sch 80.	PVC sch 80.
Injector	Titanium	Titanium	Titanium	Titanium
Bulkhead	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Gaskets	Viton	Viton	Viton	Viton
Flow Specifications				
Flow Rate (GPM)	10-19	40-80	80-150	150-260
Maximum water pressure (bar/psi)	10 / 145	10 / 145	10 / 145	10 / 145
Air Flow Rate (LPM/SCFH)	0-3 / 0-6	2-8 / 4-16	16-29 / 34-60	29-50 / 61-106
Gas delivery pressure (bar/psi)	0.4-0.6/5.8-8.7 above water pressure	0.4-0.6/5.8-8.7 above water pressure	0.4-0.6/5.8-8.7 above water pressure	0.4-0.6/5.8-8.7 above water pressure
Max gas pressure	100 PSI	100 PSI	100 PSI	100 PSI
Dimensions				
Height (inches)	6	13	15	13
Width (inches)	20	24	34	56
Depth (inches)	12	9	11	13
Shipping weight estimate (lbs)	16	19	23	27

Applications

- **Cooling Walls:** Enhances thermal management for industrial processes, ensuring systems operate within optimal temperature ranges.
- **Lake Aeration:** Improves water quality and ecosystem health by increasing dissolved oxygen levels in aquatic environments.
- **Swimming Pools:** Elevates user experience with cleaner and clearer water, reducing reliance on chemical treatments.
- **Fertigation Systems:** Optimizes the use of water and fertilizers in agriculture, promoting healthier crop growth and yield.
- **Mining Operations:** Assists in the processing and management of mine water, contributing to more sustainable mining practices.
- **Wastewater Treatment:** Advances the purification and recycling of water, crucial for environmental protection and resource conservation.
- **Agricultural Irrigation:** Increases water efficiency and supports plant health, pivotal for sustainable farming and water savings.



Connect with Kairospace for a Water Revolution

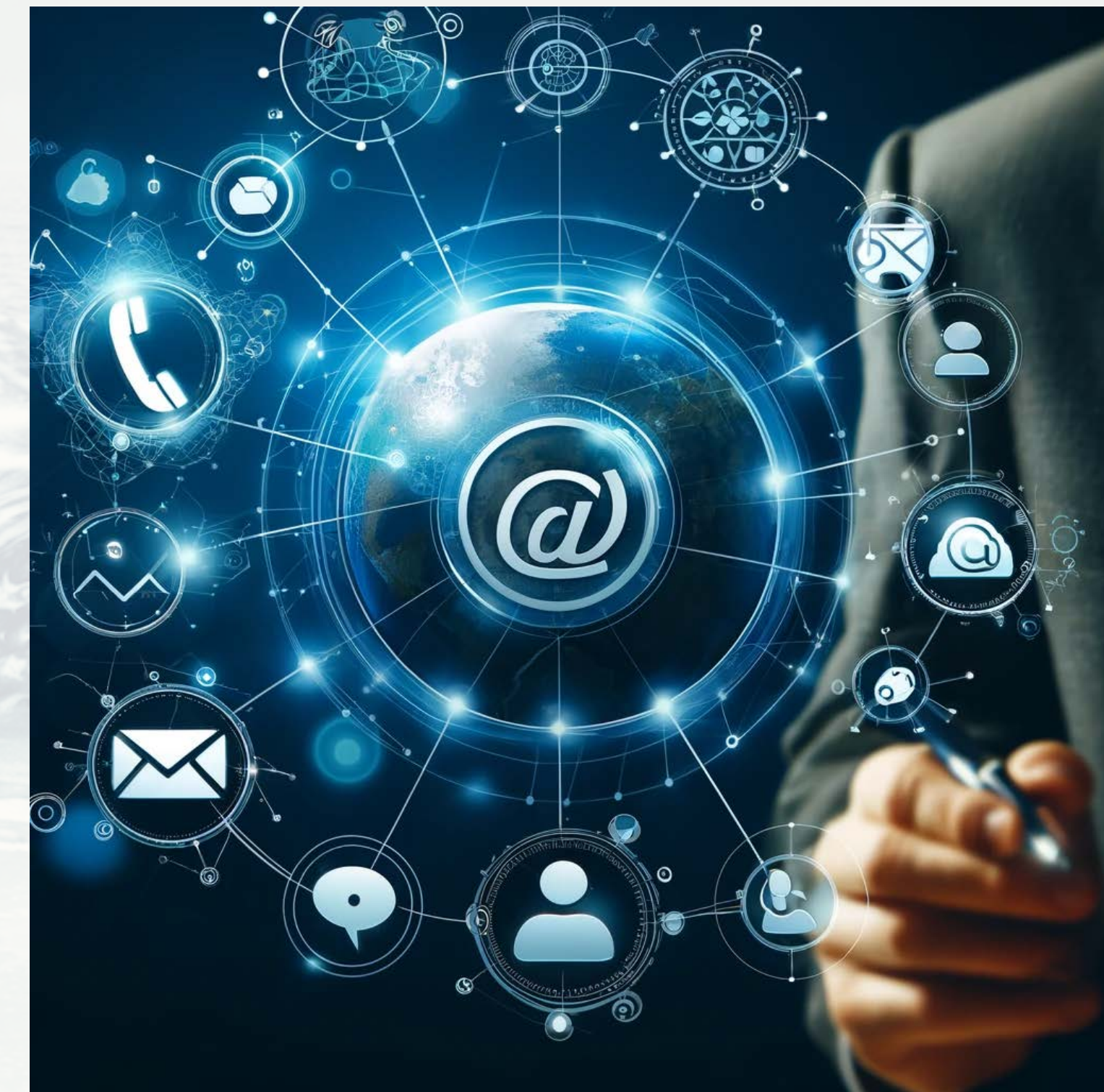
Get in Touch: Reach out to explore how Kairospace can **enhance your water treatment strategy**.

Contact us at info@kairospace.com.

Collaborative Opportunities: Learn about **partnership opportunities**, product demonstrations, and tailored consultations.

Take the Next Step: Whether it's a pilot project, a site assessment, or a detailed discussion, **we're here to guide you** through the integration of our technologies.

Stay Informed: Follow us on [LinkedIn](#) for the latest updates, insights, and success stories.





KAIROSPACE
TECHNOLOGIES

WWW.KAIROSPACETECH.COM