



STERILE SAFE
SOLUTIONS



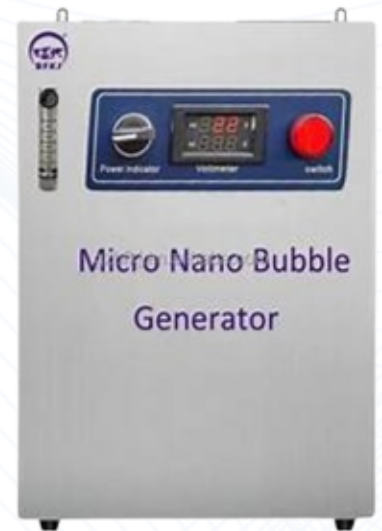
S3 INTEGRATED WATER TREATMENT SOLUTION

**REVOLUTIONIZING BEVERAGE INDUSTRY WITH CLEAN-LABEL,
CHEMICAL-FREE TECHNOLOGY**

Triple-Action Purity | Scalable ROI | Sustainable Compliance

The Executive Advantage: Why S3?

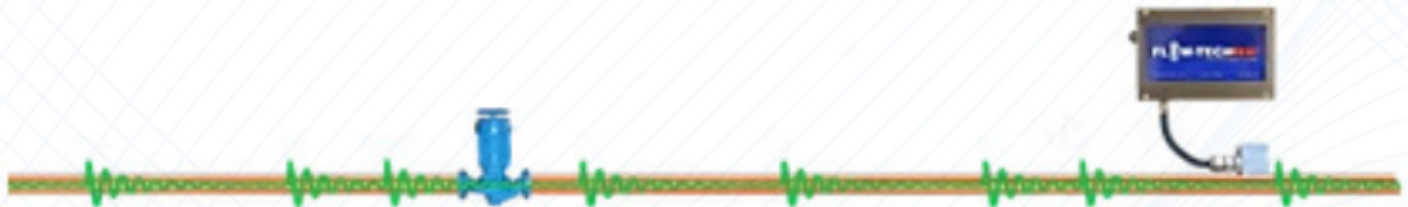
S3's Integrated Water Treatment System—combining Plasma-Activated Water (PAW), Nano Bubble Technology, and a Weak AC Current Field—replaces traditional chemical disinfectants and sanitizers with a breakthrough, non-thermal, residue-free alternative.



Next-Generation Water Treatment: *The S3 Triple-Action System*

- 1. Plasma-Activated Water (PAW):** Injects reactive oxygen and nitrogen species (RONS) for potent microbial inactivation.
- 2. Nano Bubble Technology:** Generates ultra-fine gas bubbles that disrupt biofilms, increase surface contact, and create localized oxidative stress.
- 3. Weak AC Current Field:** Applies a low-frequency electric field to prevent mineral scaling and enhance water quality throughout piping systems.

Together, these technologies deliver continuous disinfection, scale prevention, and zero-residue sanitation—without heat or chemicals.



Smart Applications for Beverage Plants

- » **Container Rinsing:** Replaces chlorinated or ozonated water rinses with antimicrobial PAW + Nano Bubbles
- » **Filler Nozzle & Pipe Sanitation:** Circulate PAW under AC field to eliminate biofilms and reduce Cleaning In Place (CIP) reliance
- » **Process Water Polishing:** Final purification step before carbonation or ingredient addition
- » **Cooling Loops:** Protect heat exchangers and chillers from biofilm and scale buildup
- » **CIP Alternative:** Reduces chemical usage, energy costs, and system downtime



Example

Cost Category	Traditional	S3 Hybrid	Annual Savings
Chemical Sanitizers	\$60,000	\$10,000	\$50,000
Hot Water (CIP)	\$45,000	\$5,000	\$40,000
Downtime (Manual Cleaning)	\$20,000	\$5,000	\$15,000
Filter Fouling & Replacements	\$25,000	\$10,000	\$15,000
Rinse Water Consumption	\$30,000	\$15,000	\$15,000
Total Estimated Savings: \$135,000			
Initial Investment: ~\$85,000			
ROI Period: 8–10 months			


Elevate Sanitation. Reduce Costs. Protect Your Brand.

With the S3 Water Treatment System, you gain:

- » Competitive advantage with clean-label compliance
- » Reduced regulatory exposure—no chlorine, Trihalomethanes (THMs) & Haloacetic Acids (HAAs)
- » Support health issues for sustainability and ESG objectives
- » Extended equipment life and more production uptime

READY TO TRANSFORM YOUR BEVERAGE LINE?

Contact S3 Water Solutions

 **310.991.9798**

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Engineered for performance. Designed for leadership.