

LiqSure Systems Private Limited

Sector: Wastewater Treatment



KID: 20250204

Industrial wastewater often contains a complex mix of organic pollutants, chemicals, and microbes that must be treated before release. Conventional treatment systems—based on chemicals, membranes, or filters—are expensive, require large footprints, and can generate secondary waste. Industries demand cost-effective, energy-efficient, and sustainable alternatives.

LiqSure has developed a cavitation-based treatment system that meets these needs. Using only electricity to generate micro-bubbles, the system destroys contaminants without chemicals, membranes, or filters, saving on both capital expenditure (Capex) and operational costs (Opex). It also requires minimal space ($\approx 10 \text{ ft}^3$).

The company has built a 25 KLD commercial-scale plant and several smaller pre-treatment units. These have been validated using septage and STP wastewater from GHMC, Hyderabad.

Two systems have been sold commercially, and live trials are underway at Solapur textile CETP, Chincholi MIDC, and Sircilla, Telangana. A textile plant in Chincholi plans to install a 10 KLD unit. The system has also treated biogas slurry and paneer whey wastewater.

LiqSure's achievements are supported by multiple grants, awards, and accolades from state and central government bodies. Their innovation positions them as a reliable provider of sustainable, on-site industrial wastewater solutions.

With a focus on real-world deployment, LiqSure's systems are designed to be retrofitted easily into existing industrial infrastructure, making adoption seamless for companies looking to upgrade their environmental compliance.

The consistent performance across different effluent types—from urban sewage to agro-industrial waste—demonstrates the versatility and robustness of the technology.

By combining innovative design with operational simplicity, LiqSure is helping industries reduce their environmental footprint while also lowering treatment costs—marking a significant step toward scalable and sustainable water management solutions in India.



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