ADWRSTM



Advanced Dye Wastewater Reuse System

ADWRS™ is an innovative wastewater reuse system that enables highly efficient and robust treatment of difficult-to-treat wastewater generated from the textile industry that is generally high in both biochemical oxygen demand (BOD) and chemical oxygen demand (COD), because of compounds such as spent textile dyes, suspended solids, mineral oils, electrolytes, and surfactants.

With the dyes and textiles industry contributing 17 billion tons of wastewater and accounts for 20% of global water pollution, ADWRS™ enables textile factories to convert their generated wastewater into reusable water that meets with statutory guidelines, promote water sustainability and tackle climate change.



Transform Wastewater into Resources

ZWEEC's proprietary wastewater reuse technology makes use of a combination of membranes and proprietary solutions, and the system is effectively proven to give reliable performance, reusing wastewater enable water savings and cost savings.

To date, ZWEEC's wastewater treatment and remediation solutions have been deployed in Singapore, Malaysia and China.

ZWEEC's Dye Wastewater & Treated Water Quality



Parameter	Wastewater (Before)	Effluent (After)
рН	8.71	8.69
COD	1739 mg/L	7.75 mg/L
TDS	3110 ppm	94 ppm
Colour	>500 PCU	26 PCU

Key Benefits

- ✓ Facilitates large scale water recycling in the industrial parks.
- ✓ Enables water reuse (e.g. general domestic cleaning, cleaning, cooling, landscaping, etc).
- ✓ Enables water & cost savings (additional water reuse supply/resource).
- ✓ Enables regulatory cost savings (in compliance with trade effluent discharge regulations).
- ✓ Significantly minimizes industrial impact on environment.
- ✓ Promotes sustainability and circular economy.
- Custom-based specifications according to requirements.

Applications



Dye Chemical Industry



Paper Industry



Polymer Industry



Detergent Industry



Textile Industry



Leather Industry



Building the Next Evolution in Water Technology

ZWEEC is a leading Singapore-based technology company focused on building innovative and secure water technology solutions. Adopting an integrated and data-driven approach, our solutions leverage on advance analytics, artificial intelligence and predictive modelling to power IoT solutions that drive early intervention opportunities. Our award-winning water technology solutions, available as on-premises implementation and as secure cloud solutions, are trusted by water industry leaders from Singapore, Australia, China, Taiwan, the US, and the Middle East.

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