

# Investigation of Industrial Waste Water Treatment using Direct Contact Membrane Distillation System

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**Abstract:** Textile industry wastewater is characterized by high organic load, complex composition and color, which pose a significant challenge for effective treatment. Direct contact membrane distillation (DCMD) has emerged as a promising technology for textile wastewater treatment due to its high efficiency and low energy requirements. In this review, we provide an overview of the current status of DCMD methods for treating textile wastewater, including a summary of the different types of membranes, operating conditions, and performance metrics. We also highlight recent developments and future directions for DCMD technology in the context of textile wastewater treatment.

**Keywords:** Direct contact membrane distillation, Textile waste water, membrane , treatment, distillation