

Praj pioneers solution to treat textile effluents

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Praj pioneers innovative solution to treat textile effluents



Tirupur, a textile hub in Tamil Nadu had been facing a the crisis of severe pollution of water bodies due to discharge of coloured effluent from the bleaching and dyeing units. More than 600 bleaching and dyeing units remained closed for almost two years for want of a reliable solution. Though various technologies were implemented, none could solve the groundwater pollution problem effectively. This extended the closure of textile dyeing clusters till the recent installation of the Zero Liquid Discharge (ZLD) unit by Praj that has helped to build confidence for reopening of the textile units in compliance with the pollution norms.

Praj, a global process engineering solutions provider, offers innovative solutions to significantly add value in water and waste water treatment plants, bioethanol and brewery plants, critical process equipment and systems. It has received their 2nd repeat order for ZLD application from the Common Effluent Treatment Plants (CETPs) based in Tirupur textile belt. The first two orders were from Veerapandi Textile CETP and the 3rd one from Sirupooluvapatti CETP, Tirupur, Tamil Nadu.

Praj successfully commissioned a 100 kilolitre per day ZLD system based on multi effect evaporation technology at Veerapandi, Tirupur. The entire plant was designed, engineered, fabricated and erected by Praj on turnkey basis. The final end products are process condensate and salts which are reusable in the textile dyeing units. The solution treats effluent stream rejects of Reverse Osmosis (RO) plant applying Praj's innovative Evaporation & Crystallization technology. This unique technology is instrumental in solving the groundwater pollution problems arising due to discharge of colorants.

"The repeat orders show the faith of client in Praj's technology and its commitment to the industry and society. Our Zero Liquid Discharge System is energy efficient with low maintenance cost and operates for a longer period between cleaning cycles. The salts recovered from the CETP plant are being re-used by the dyeing units, resulting into considerable savings in operating cost, annually." said Mr. Pramod Chaudhari, executive chairman, Praj Industries.

Praj introduced a number of solutions including periodic collection and testing of effluent samples, study of existing effluent treatment plants, developing customized process & engineering solutions and demonstrating the efficacy of the solution on the first plant at Veerapandi.

Based on the successful operation of the first plant at Veerapandi CETP, Praj contracted a second order for treatment of effluent from the textile dyeing cluster. The CETP will treat 700 kilo liters of effluent per day. Praj bagged an order from Sirupooluvapatti CETP Limited for treatment of 5000 Kilo litres per day of effluent, making it the largest installation. It consists of 3 stage treatment including the ZLD system based on multi effect evaporation.

Praj launched its water & wastewater treatment solutions over 3 years ago. Since then, Praj has supplied technology & systems for many a industrial applications inlcuding pharmaceuticals, chemicals, agro chemicals, ,F & B, textiles and other Industrial CETPs including orders from overseas.With over 500 references across five continents, Praj is a leading ethanol technology & Plant supplier with a strong focus on second-generation bioethanol process development. Praj Matrix - the innovation center, is the R & D Center of Praj Industries.