DuPont: Reducing Water Consumption by More Than 99.5 Percent at a Chemical Compounding Plant in India

DuPont Engineering Polymers' (EP) Savli compounding operation in India is located in a zero discharge zone where water consumption and water effluent are critical aspects of the right to operate. To meet the strict water requirements, a team consisting of Savli personnel, EP Japan compounding technical experts and an Indian environmental consultant in 2001 redesigned the entire vacuum extraction system for the Zytel® GRZ process. They essentially eliminated water consumption and ensured that the small amount of water effluent met requirements for site general-purpose use. Overall water consumption was reduced by more than 99.5 percent, driving savings of $5,000 (USD) per year in potable water purchases. Without this innovation, it is likely that the business would not have been able to produce in India and alternative sourcing of polymer would have seriously jeopardized the health of the business.