

Frank E. VanLare Wastewater Treatment Facility



Department of Environmental Services Frank E. VanLare Wastewater Treatment Facility

NEMA Premium™ Motors Reduce Energy Consumption and Expenses Monroe County

“Monroe County is sold on energy efficiency and sees the end result in a lower bottom line.”

– Jeff Newman
Kaman Industrial
Technologies

Background

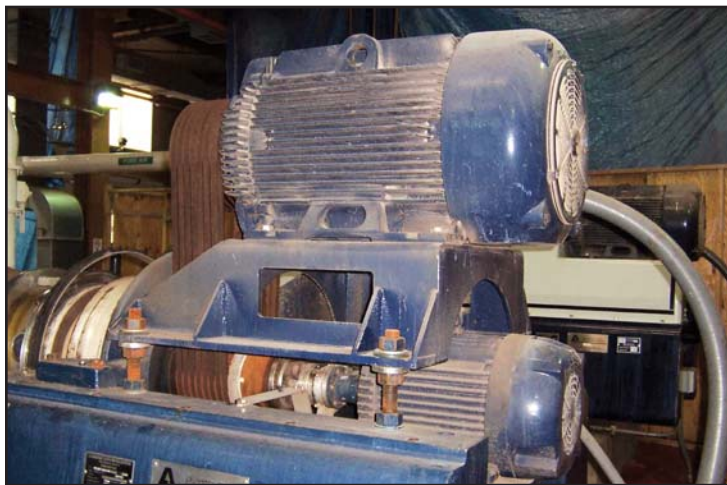
The Frank E. VanLare Wastewater Treatment Plant in Monroe County, NY is nestled on a vast, beautifully maintained piece of property located on the southern shore of Lake Ontario. It is one of several water treatment facilities operated by the county, which serves the City of Rochester and its surrounding area.



Due to increasing energy costs, Monroe County sought to reduce expenses while maintaining a high level of service to its taxpayers. The County's high priorities included reducing energy costs and greenhouse gas emissions. As a result, personnel devoted time to identifying methods that effectively implement new and creative ideas to accomplish their objectives.

Recommendations

With more than a thousand motors at this facility, motor efficiency was high on Monroe County's priority list. The County's motor management plan calls for replacement of failed motors with NEMA Premium™ motors. This is done when the payback is less than two years, and/or the cost to repair the failed motor is more than 50 percent of the cost of the replacement motor.



Results

Thirty motors ranging in size from 25 HP to 100 HP were replaced with NEMA Premium™ motors in 2004. The 50 HP and 200 HP NEMA Premium™ motors shown here operate one of the centrifuges in the facility.

Monroe County officials believe switching to NEMA Premium™ motors is smart business because these motors help hold down energy costs and increase the systems reliability.

Jeff Newman, sales engineer with Kaman Industrial Technologies in Rochester, NY, works closely with the VanLare plant to ensure their motor needs are met. He estimates that this facility has reduced their energy costs 4 percent to 6 percent by purchasing and installing 30 NEMA Premium™ motors.