

CASE STUDY



[CONTACT US](#)

CUSTOMER

Alexandria Lakes Area Sanitary District

BACKGROUND

The Alexandria Lakes Area Sanitary District (ALASD) operates the wastewater treatment plant serving Alexandria and the surrounding area. The influent station was previously equipped with aging line-shafted centrifugal pumps that posed operational challenges, including frequent clogging, high maintenance demands, and inefficiencies.

PROBLEM

The existing line-shafted centrifugal pumps were prone to clogging due to debris and solids in the incoming wastewater. This led to regular operational downtime and increased maintenance costs. Additionally, the complexity of maintaining these pumps made it difficult for staff to ensure optimal performance, resulting in higher energy consumption and reduced reliability.

SOLUTION

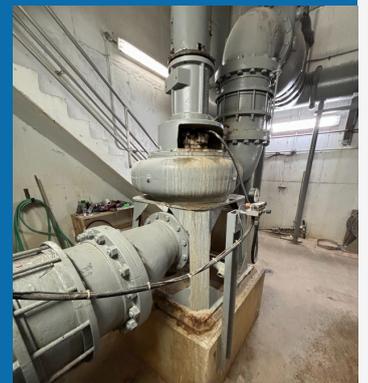
To address these issues, ALASD replaced the old line-shafted centrifugal pumps with Flygt pumps featuring the “N” impeller and an innovative horizontal “Z” configuration. This upgrade provided several key advantages:

1. **Elimination of Clogging:** The Flygt “N” impeller is specifically designed to handle solids and debris more effectively, significantly reducing clogging incidents and ensuring smoother operations.
2. **Simplified Maintenance:** The pumps horizontal configuration is easier to maintain, allowing staff to perform routine inspections and servicing without the complications associated with the previous system.
3. **Enhanced Efficiency:** Flygt pumps operate with greater energy efficiency compared to the old pumps, resulting in lower operational costs and improved performance.

CONCLUSION

The transition from line-shafted centrifugal pumps to Flygt pumps with “N” impellers in the Z configuration at the Alexandria Lakes Area Sanitary District resulted in enhanced operational performance, reduced maintenance burdens, and improved energy efficiency. This upgrade not only resolved existing challenges but also positioned ALASD for future success in wastewater management.

BEFORE



AFTER

