

-25%*
annual
maintenance costs

SEW-EURODRIVE is reducing the waste in wastewater treatment.

A municipal wastewater facility faced persistent maintenance issues with its screw-lift drive system, resulting in frequent breakdowns and continuous repair expenses.

The existing system — relying on pulleys and sheaves — was prone to wear and tear, necessitating frequent repairs and replacements, incurring significant costs and causing constant operational disruptions.



Direct Drive Solution:

SEW-EURODRIVE engineering team worked closely with the wastewater facility to design and implement the direct drive solution which would eliminate belts and pulleys and create significant system efficiencies. This Retrofit Service addressed the first and critical process in the wastewater treatment flow, where influent water is lifted from its low-level entry to begin the treatment journey.

Using MC Series units with a special mounting adapter plate, SEW-EURODRIVE's solution offered several advantages:



Increased Reliability

With fewer moving parts and simplified design, the direct drive solution offered improved reliability and reduced susceptibility to breakdowns.



Enhanced Efficiency

The direct drive solution provided efficient power transmission, optimizing energy consumption and reducing operational costs.



Customization

SEW-EURODRIVE customized the direct drive solution to seamlessly integrate with the existing infrastructure, minimizing installation time and disruptions.

RESULTS

SEW-EURODRIVE's direct drive solution yielded significant benefits:

Cost Savings: By eliminating the need for frequent replacements of pulleys and sheaves, the plant saved thousands of dollars annually in repair costs.

Operational Efficiency: The enhanced reliability and reduced downtime resulted in uninterrupted sewage treatment operations, ensuring consistent service to the community.

Long-Term Reliability: The direct drive solution provided long-term reliability, offering peace of mind to plant operators and management.

Improved Sustainability: With reduced energy consumption and minimized maintenance requirements, the direct drive solution contributed to the plant's sustainability goals.

PROJECT TECH SPECS:

- Two MC Series gear units
- Output torque of 209,700 lb-in.
- Powered by 125 HP motor
- 36 RPM output speed



Before: Inefficient Pulleys and Sheaves

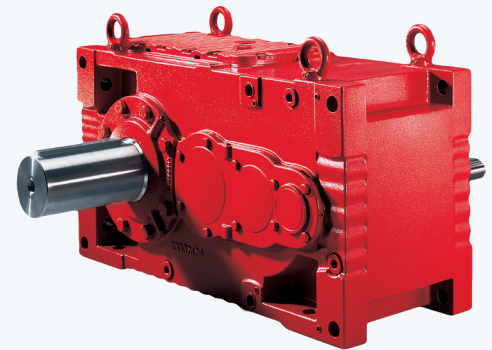


After: Modern Direct Drive

MC Series Industrial Gear Units

The MC Series is a compact industrial gear unit available in parallel shaft or right-angle design. It has a lower torque range up to 575,000 lb-in. and is available in eight frame sizes. Typical uses are large conveyor systems, mixing and agitating, and bulk material handling.

- The modular designs allows for multiple add-on options
- Extended bearing distance reduces radial and axial load stress
- Universal mounting positions
- Ratio range of 7.1 - 112



Read Our Latest Blog:

A Guide for Wastewater Treatment



Driving the world