GPM-Eliminator™ Pump Success Story

Finding NEMO - The under(waste)water adventure with GPM & Netzsch pumps

SUMMARY

Netzsch NEMO® Progressive Cavity Pump slows things down to ramp up reliability and performance in digested sludge application.

THE CUSTOMER

Upper Midwest Municipal Wastewater Treatment Plant (WWTP)

THE CHALLENGE

By definition, Anaerobic Digestion is the biological oxidation of degradable organic sludge by microbes under anaerobic conditions. As the process goes, the heavier digested sludge settles to the bottom, which is then generally pumped out with a progressive cavity style pump. The WWTP was having issues with the current pump's everyday upkeep, high maintenance costs and prolonged downtime. This included shaft wear from the packing and increased shear on the liquid end parts from running at the (higher) RPM to meet the condition point. The average repair downtime was 6-8 weeks due to several factors, including limited parts availability. There had to be a better way...

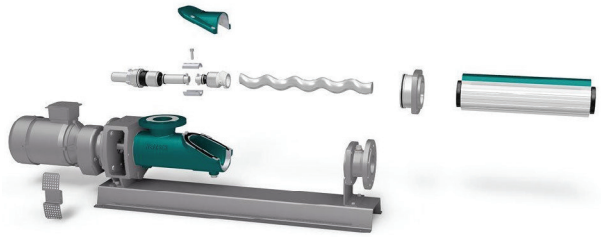
HOW GPM HELPED

Partnering with GPM to address rotating equipment challenges opens up an opportunity to work with several global leaders in industrial pumping solutions. Netzsch's NEMO progressive cavity pumps are designed to tackle tough applications like digester sludge. Based on the application specifications, the Netzsch pump selected was going to run at a lower RPM and still meet system requirements. With greater pump efficiency at a slower speed, it also reduced the liquid end shear, increasing MTBF. Additionally, the pump included a mechanical seal which eliminated the recurring packing adjustment issues. Another critical design feature was the FSIP (Full Service in Place). This allowed for a much faster repair turnaround, greatly reducing downtime. After confirming measurements, the new Netzsch pump was delivered, installed and commissioned. All fit properly and is in operation as promised.

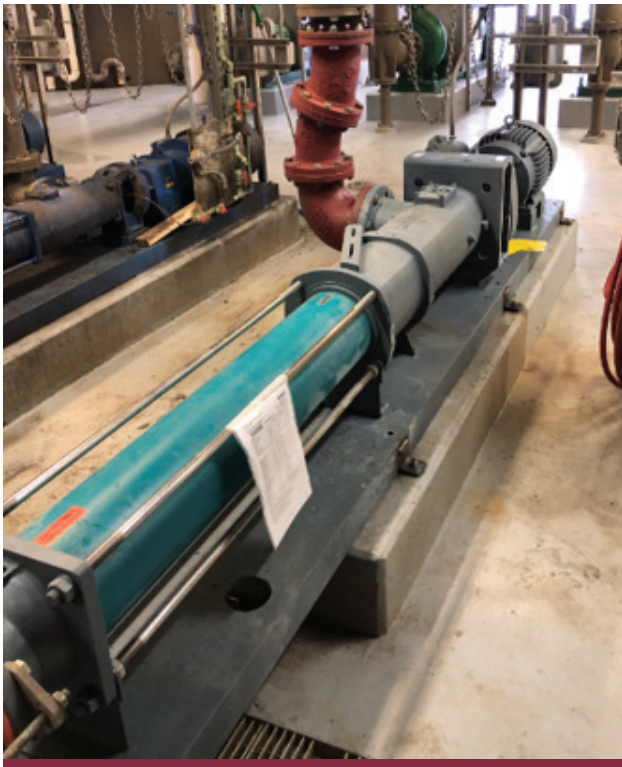
THE RESULTS

The new Netzsch NEMO pump has been operating without any issues since installation. Looking ahead, the user anticipates saving more than $15,000 per year per pump with reduced maintenance costs and enhanced reliability. We're all glad that this NEMO found its way home.

NETZSCH



Exploded View of FSIP (Full Service In Place) Netzsch NEMO Pump



Actual Product