Two high performance industrial pumps from Mono NOV®, Europe’s leading designer and manufacturer of pumps, parts, grinders, screens and packaged systems, have been specified by Yorkshire Water to meet heavy duty demands at its Normanton Wastewater Treatment Works.

The two Mono pumps installed at Normanton are used on a desludging duty, which involves taking sludge from the plant’s primary tanks and feeding it into a sludge storage tank. Mono pumps were installed at the works because the plant’s previous pumps could not cope with the high viscosity of the sludge, which can contain up to 12% dry solids, coupled with a required suction lift of four metres.

Working directly with Yorkshire Water and its engineering partners, Mono was involved in the project right from the outset to ensure the most efficient pump was selected to meet the requirements of this demanding duty. In addition to supplying the pumps, Mono carried out the design and full installation, which included removing the existing pumps, amending the system pipework and installation, and commissioning of the new duty/standby pump units.

Chris Gough, Site Operations for Normanton Wastewater Treatment Works, commented: “The diaphragm pumps that were previously installed at the works really just weren’t up to the job. We knew that Mono’s pumps would be ideal because they are specifically designed for the transfer of sludge and can handle high viscosity materials. The pumps have run perfectly since they were installed and we have had no need for any spares”

Progressing cavity pumps, such as those in Mono’s industrial range, use a positive displacement action, which provides excellent suction capabilities at the inlet, so, unlike centrifugal alternatives, submersing the pump for medium or full priming is not required. The characteristic pumping action of progressing cavity pumps, which involves a cavity being gently moved almost completely from inlet to discharge by the rotor, allows effortless transportation of materials of varying viscosities which otherwise could be seen as non-flowing.

Mono’s industrial pumps are specifically designed to minimise whole life costs and deliver reduced spares requirements in wastewater applications. Pumps in the range feature the patented Flexishaft®, which eliminates wearing between the drive end and the pumping element, and carries a 10 year guarantee.

Pump: 2 off industrial pumps
Product: Primary Sludge
Capacity: 18m³/h
Pressure: 3 bar
Pump Speed: 233 rpm
Drive: Fixed speed gearbox