



Qdos pump on brewery effluent polymer dosing duty

- Diaphragm pumps replaced due to clogging
- Brewery reports long service life with new pumphead

At a major UK brewery, SUEZ is using the Qdos ReNu PU for dosing polymer as part of its wastewater treatment processes and replaced diaphragm metering pumps that were frequently becoming clogged with the polymer.

There is growing worldwide demand for polymer dosing systems in wastewater treatment. The majority of these systems dose polymer for some form of coagulation and flocculation. Dewatering sludge waste can considerably reduce transportation and disposal costs.

At the brewery, the environmental solutions provider SUEZ is contracted to operate and maintain the site's effluent treatment plant.

Effluent treatment

All of the brewery's waste is sent to the site's anaerobic digestion (AD) effluent plant where it is treated. The brewery's waste is digested by the bacteria which

produces methane gas. This is either burnt by boilers for heat or, more typically, used to power an electricity generator.

"After the wastewater has passed through the main bioreactor it is aerated, which further reduces the chemical oxygen demand (COD)," explains Dave Burrows of SUEZ UK, who is responsible for the effluent plant. "From here it goes through a dissolved air flotation (DAF) process where we remove solids and introduce polymers using a Qdos pump from Watson-Marlow."

The process of dewatering the sludge at this stage means that the volume of sludge transported offsite is reduced, so significantly reducing transportation costs.





Decreasing downtime by replacing diaphragm pumps

The brewery had previously used a diaphragm metering pump. However, the small non-return valve within the diaphragm pump would easily become blocked by the polymer. In turn, the pump would require frequent cleaning, a process made more challenging by the polymer's high viscosity.

“We don’t have any such issues with the Qdos, which reliably doses polymer for around 12 hours every day,” says Mr Burrows. “I really can’t fault the reliability or simplicity of the Qdos pump. In addition, when the pumphead reaches its end of life, you get a useful notification. Replacement is quick and easy – we’re up and running again with 5-10 minutes.”

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