Case study 611

Treatment works requires pump solution

When a large sewage treatment plant in Kent required supplementary pumping to increase capacity and discharge quality, Sykes Pumps were approached and tasked with assisting the overall project. Some large overpumping schemes had been planned, but these faced complications due to issues with locating pumps nearby. Following a site survey conducted by technicians based at our Ashford depot, we recommended six 8" super silent units to be deployed as close as possible to the pumping location. This particular hire arrangement was quickly installed and allowed the next phase of development to commence on time.

The increase of flows on site meant that the pumping station would need to be upgraded with larger pumps. In order to closely replicate the existing system, and after checking the levels and different flows, an alternative solution was delivered and set up. This was centred around four XFP301M electric submersibles and diesel-drive HS200 solids-handling units. The flow required was close to the working parameters of the XFP301M units but was the biggest flow pump that would fit into the chamber – operating via the available power supply.

To ensure that friction loss was kept to a minimum, the discharge pipework was in 400mm flanged steel and 300mm flexed hoses. This therefore required accurate measurement and installation but was carried out within a 3-day period. Our decision to use diesel-driven pumps as the stand-by and site electrics to power our submersibles helped the customer achieve a substantial cost saving – as well as complete the assignment on time.

Motor Type 415V (3-Phase)
Motor rating 75kW
Running current 140 Amps
Running speed 980rpm
Discharge port (mm) 300
Suction inlet port (mm) 300
Maximum solids (mm) 127x110
Weight 1470kg
Guide rail option (mm) 1955 x 1095