Case study 637

Sewage overpumping solution for major construction company

When one of the country's top construction companies encountered some logistical difficulties on site, Sykes Pumps were contacted midway through the project and tasked with keeping it on track. Our client needed to overpump a 1.2m diameter main sewer, with flows of up to 1050 litres per second required on a constant basis. This particular sewer needed to be relayed on a new path away from a modern housing development being built. As well as the huge task of locating pumps capable of handling such a high flow of raw sewage, there were also constraints from any sound impact on the local environment.

The company in question contacted us at an early stage which allowed a sales engineer to complete a survey and discuss specific options with the project manager. The solution had to be 100% reliable because as soon as the pipe was broken in to and a stopper installed, the pumps would have to cope with the full flow of sewage for five days without interruption.

Our solution was to use two Sykes Super Wispa 300 12" units and four Sykes Super Wispa 200 8" diesel units. They were installed with their own suction lines but the 8" pumps were partnered up and connected into 12" discharge pipe work to minimise the amount of pipework and labour required. Two 8" pumps and one 12" pump were kept on standby in case of any issues or if greater flows were required. To reduce the visual and noise impact of the setup, a high level sound proof hording was erected around the pumps.

After installation a Sykes Pumps' Engineer followed up with a number of visits to ensure everything was running smoothly.







Performance Max head: 18m, Max flow: 415 l/s, Max solid: 70mm
Weight 3913 kg with fuel, 3500 kg without fuel
Dimensions (m) 3300 x 1180 x 2700
Noise level @ 10m = 66 dBA
Fuel tank capacity 480 litres, Max 24 hours
Pipe connections Suction: 12" DN 300 PN10,
Discharge: 12" DN 300 PN10, Bauer couplings option

Fuel consumption Full load @ 1800 rpm: 14.9 litres/hour Energy Efficient duty point Fuel consumption

@ 1500 rpm: 13.6 litres/hour





0800 211 611 sykes-pumps.com