

Blake's Lock Pumping Station

Application market	Wastewater
Market segment	Wastewater collection
Pumped medium	Wastewater
Pump product	Bearing Frame
Country	United Kingdom



Challenge

Blake's Lock pumping station, located just east of the town on the River Kennet, is Reading's main sewage pumping station and feeds most of the town's sewage and drainage flows to Island Road STW. The £2.6M refurbishment of this pumping station was part of the overall works back in 2004. Blake's Lock pumping station dates from the 1870s when the pumps were powered by turbines that traversed the river at the adjacent Blake's Lock weir. Electric pumps were installed earlier last century but these were prone to blocking. With the new treatment works due to open it was critical that the pumps be reliable and efficient.

Solution

Hidrostat supplied a package solution of five Hidrostat Screw Centrifugal Pumps, each coupled with a 200 kW premium efficiency motor supplied by WEG Electric Motors (UK) Ltd. During normal (dry) weather conditions, three pumps operated; one as 'duty', one as 'assist' for extra capacity and the third as 'standby'. The remaining two pumps, designed as 'storm', are activated in adverse weather conditions. The first three Hidrostat pumps became operational in December 2003 and the remaining two were commissioned in early 2004. Flows are pumped south of the town via twin 700mm rising mains, which are situated on the bed of the River Kennet, to the Island Road sewage treatment works which became operational in May 2004.

Benefits

After 10 years service, Rick O'Sullivan, Thames Operations Manager, has expressed his delight with Hidrostat's pumps: „**Since installation the pumps have not had to come out of service for a refurb. They have been brilliant and blockages are extremely rare. I could not be happier with these pumps, they have served the site well**“.

Quantity of units sold	5
Pump type	L12K-H02R + LLM1W-XM.K
Motor data	200 kW / 6 pole / 50 Hz / 400 V
Material combination	Cast iron pump body with nodular iron impeller and Hidrohard wear parts
Duty point	Flow: 500 litres per second / Head: 36 meters
In operation since	2003