

INNOVATIVE SCREENING SOLUTION FOR BULLSBROOK STP

CASE STUDY



THE CLIENT

The Bullsbrook WWTP owned and operated by Water Corporation was upgraded to include a new fine screening facility to protect the plant's assets from accumulation of rags, plastics and fine screenings.

OUR SOLUTION

A HUBER RoK4 Pump Station screen was chosen to be installed at the inlet to the bioreactors. The HUBER RoK4 is a vertical screen that consists of perforated basket, vertical screw, integrated screenings compaction and discharge chute.

The perforations provide a high screenings capture rate. The vertical design of the screen means that the technology can be installed into sewage pump stations.

For this installation the screen was installed at the inlet to a bioreactor, against the side wall. Flow is pumped to the RoK4 screen and the screened wastewater is discharged via gravity to the bioreactor.



Screenings are compacted and discharged to a bagging unit for hygienic collection of screenings.

The integrated screenings wash and compaction zone is driven by the main drive, so the system provides screening, transport, washing and dewatering in a single mechanism.

THE OUTCOME

All wetted parts are fabricated from 316 stainless steel. Operation of the internal screw is based on level control, which results in intermittent operation and a reduction in operating and maintenance costs.

Hydroflux provided a local control panel using a Siemens S7 PLC and HMI to automatically operate the screening system.

There are four sizes of HUBER RoK4 screens to suit pump stations that are up to 12m deep and with flows up to 160 L/s.

Item	Value
Peak Capacity	25L/s
Basket Diameter	300mm
Screen Aperture	2mm
Screen Aperture Type	Perforations
Materials	316SS