

With existing waste water treatment works and sewer systems at risk of becoming overwhelmed and with the potential that this could lead to localised flooding, IBS was contracted to design, supply and install five electrically actuated penstocks to control the flow and level of storm water within a newly constructed detention tank, during extreme weather events.



IBS' RPS range of penstocks was chosen, as this design offers excellent performance and durability, with added features such as a unique door stiffener design, which alleviates the risk of crevice corrosion due to the trapezoidal shape and drainage slots.

This feature is ideal for sewage and wastewater applications, where a build-up of debris and sludge can often cause accelerated deterioration of equipment.

The project, on behalf of contractor MMB for United Utilities, was not without its challenges; the main issue being the discovery by the main

contractor of a clash between two of the penstocks, which was only found whilst the penstocks were in production.

As a result, the penstock frame fixing clamps would not fit in the correct locations, which resulted in IBS designing and fabricating a special double clamp arrangement that would allow 1 fixing clamp assembly

to secure 2 penstock frames, thereby avoiding the need for costly and time consuming remodelling of the civil designs.

An additional challenge was the need for works to be installed and commissioned in time to meet the project's regulatory dates, which meant close cooperation and collaboration between the IBS installation team and the principle contractor ensure the project's success.

Project Success

All works were completed on time and to budget, and to the satisfaction of the customer.

Sector:
Utilities

Location:
Lancashire

Client:
United Utilities

Main Contractor:
MMB

Product/s:
5 no. stainless steel
penstocks; electric actuators

Size:
2000 x 2000 (1 no.)
1800 x 1800 (1 no.)
600 x 600 (1 no.)
450 x 450 (2 no.)