

# KEE design and manufacture a gravity NuDisc wastewater treatment plant to replace a decades old treatment system.

KEE's solution was to provide a gravity system which incorporated all the clients wishes for ongoing operation and maintenance with enhanced Health and Safety features all within a smaller footprint than the existing treatment works.

Marc Goldby - Head of Home Investment at Bromford commented, "KEE have been an integral partner in Bromford's wastewater investment programme, consistently providing a first class service as highlighted by the project at Woodmancote, meeting all of our requirements and one both we and our customers can be confident in for years ahead."

### **Background**

KEE have been working with Bromford for many years supplying new wastewater treatment plants as well as maintaining existing installations.

Bromford approached KEE to design, manufacture and supply a new wastewater treatment system to replace an existing treatment plant that had been built and running for decades at Woodmancote, Gloucestershire.

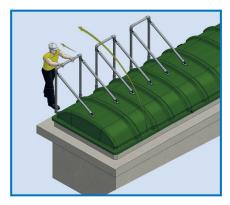
### The Challenge

- A key driver for the project was Process Rationalisation from the 1960's 6 stage treatment system with numerous levels and infrastructure.
- The plant needed to be operated and maintained by a single on-site operative.
- The plant bearings and gearbox need to be easily accessed for servicing at floor level rather than having to service the items within the pit at each end of the unit as is standard design.



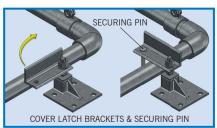
#### The Solution

KEE met the main project driver by rationalising the treatment system from the existing 6 stage system down to a 3 stage gravity treatment system, occupying just a third of the original site footprint. KEE designed and manufactured bespoke extension skirts to each unit supplied, this allowed the system to have the appropriate hydraulic profile for it to operate under gravity.

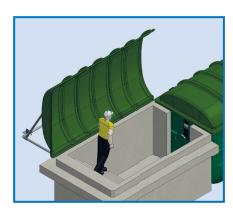


# The KEE 50S NuDisc Unit

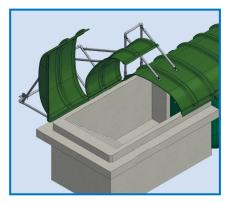
• In order for the covers to be handled by a single operative, KEE undertook a brand new design to allow the covers to be lifted and locked in place by 1 operative. A new metal framework system was added to the covers allowing an operative to use the framework handles as a lever and therefore easily lift the covers on their own.



A bespoke locking system was supplied and attached to the concrete surround of the unit allowing the covers to be locked into place once opened by the site operative, therefore negating any issue of the covers falling and causing injury.



 To allow plant bearings and motor gearbox maintenance at 'ground level', KEE designed an staired extended entrance section at each end of the unit allowing full engineer access just above the pit floor (essentially a 'new ground level').



 To avoid any health and safety issues such as the stairs becoming slippery, KEE designed and provided a bespoke extended cover arrangement over the pit access to the stairs. This extended cover set also incorporated the single operative lift metal framework system on the covers.

For more information on KEE's latest NuDisc® RBC, please visit our website or call KEE Process on:01296 634500

























# Specialists in Domestic & Industrial Wastewater Treatment

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