

Hydro-Sludge® Screen Protects Treatment Works from Rag

Project profile

Objective

To have the wastewater treatment works meet the stringent European Urban Waste Water Directive and to help local beaches meet the European Bathing Water Directive.

Solution

Installation of the Hydro-Sludge® Screen was fundamental to protect the treatment process from excessive incoming rag.

Product profile

- Enclosed system, reducing odour problems.
- Screening, dewatering and coarse material discharge in one operation.
- No washwater requirement.
- Fully automatic for either continuous or intermittent screening of sludges with varying dry solids content.
- Reverse function in manual mode to allow the retention cone to be backed off without disconnecting the air supply.

Find out more at: hydro-int.com

Southern Water's new £80 million wastewater treatment works for the Margate and Broadstairs catchment area has been constructed to meet the stringent European Urban Waste Water Directive. As well as bringing extensive environmental benefits to the area, it will help local beaches meet the European Bathing Water Directive and boost the tourist trade. The installation of four Hydro-Sludge® Screen units was essential to protect the treatment process from excessive incoming rag.

The new works are next to the existing Weatherlees WTW near Sandwich, which already separately treats wastewater from Ramsgate, Deal and Sandwich. The new works also takes wastewater pumped from Foreness Point and North Foreland WTW via nearly 15 km of new underground pipeline, and treats 20 million litres of wastewater generated daily by the 93,000 Margate and Broadstairs residents and visitors.

Project engineer Alan Coles of consulting engineers Black and Veatch commented: "The four Hydro-Sludge® Screen units are required because some of the untreated wastewater from particular areas has a high rag content which needs to be removed before the full treatment process. The screens operate with three screening and one on standby to minimise any downtime. They are installed on a single concrete plinth, over skips which collect the rag for disposal; their small footprint is ideal for a modern treatment works."

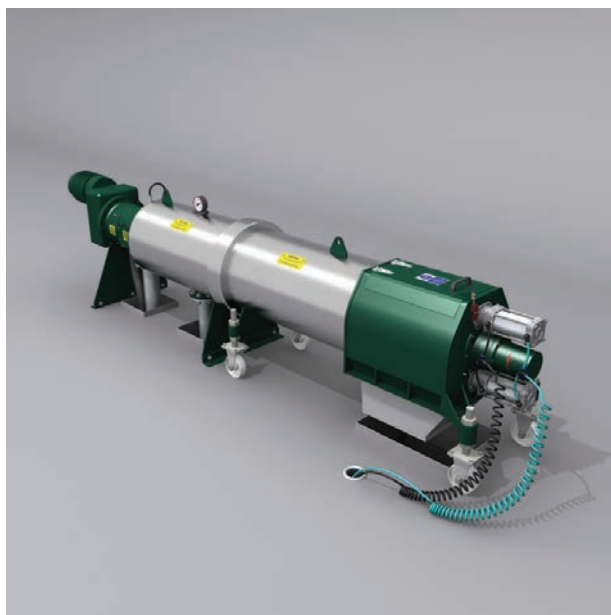


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Alan Coles, Project Engineer, Black and Veatch

The project was implemented by a joint venture consortium between Black and Veatch for design and installation, M&E and process engineering and Costain Construction for civils work including pipelines and tunnelling.

The new process at Margate Headworks removes solid waste, with the Hydro-Sludge® Screen system removing rag content. The wastewater then flows to Weatherlees Hill WTW to undergo full treatment including disinfection with UV before pumping it back to Margate WTW for safe release out to sea through the existing long sea outfall.



In addition to the supply of new equipment, Hydro International's expert service teams provide plant condition assessment and planned maintenance programmes for our wide range of water and wastewater treatment equipment through tailored Service Agreements to meet the needs of each site.

Hydro International maintains a comprehensive and well-managed store of spares for all its equipment. Hydro International's customers can be assured of speedy delivery of plant, helping to reduce the time our customers need to spend sourcing replacement parts.

To enable wastewater and water treatment operators to avoid interruption to their processes during planned downtime, Hydro International offers a full equipment hire service for a wide range of primary, secondary and tertiary treatment plant, which can be operated on a stand-alone basis or integrated with existing equipment.

Learn more

To learn more about how the Hydro-Sludge® Screen can help you to manage water more effectively, visit hydro-int.com, search **Hydro-Sludge Screen** online or contact us:

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