



Grundfos pumps eliminate clogging challenges at an essential wastewater pumping station

In the heart of Taman Pendamar Indah, Port Klang, Plant KXG 034 stands as a critical wastewater pumping station essential for ensuring the cleanliness of the local water environment. However, the plant faces significant operational challenges due to frequent clogging issues.

THE SITUATION

Operated by Indah Water Konsortium (IWK), Malaysia's wastewater concessionaire, Plant KXG 034 utilizes two different pump brands for its operation. Unfortunately, these pumps have been experiencing recurring clogging issues, leading to disruptive vibrations that inflicted damage upon components such as bearings and shaft seals.

The persistent clogging not only renders the equipment unreliable but also leads to operational inefficiencies, requiring frequent maintenance interventions that further increase expenses. These difficulties highlight the urgent need for effective solutions to reduce clogging problems and ensure Plant KXG 034's long-term efficiency and sustainability.



GRUNDFOS 

Possibility in every drop



About the **Open S-tube®**

Open S-tube® semi-open impellers with two or more channels are highly efficient and ideal for variable speed operation and wide operating areas. They are available in Grundfos SE/SL pumps, together with a range of other hydraulic designs, including Closed S-tube® impellers and SuperVortex free-flow impellers, offering reliable and efficient operation at the highest level of performance across all wastewater applications.

THE SOLUTION

The Grundfos Product Management team launched a field test unit showcasing the Grundfos Open S-Tube hydraulics, tailored



for a specific kW range. Seizing an opportunity, the Malaysia Service team approached IWK, highlighting how this pump could improve their pumping solutions.

Facing costly repairs and frequent tripping due to clogging, IWK agreed to try the new solution.

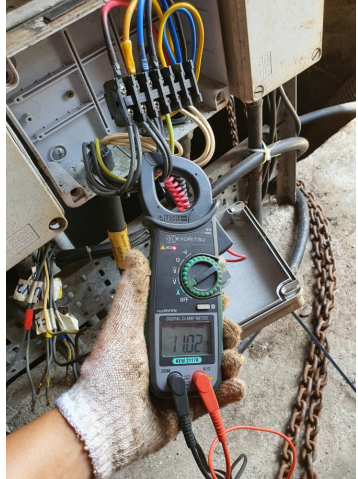
Grundfos skilled service technicians brought the pump to our workshop in Malaysia, replaced the hydraulics, tested it, and installed it at the customer's site in July 2021.

Following up on their commitment to excellence, the service technicians made a subsequent site visit approximately 1-2 months later. They were pleased to find the pump working perfectly, providing uninterrupted performance.

THE OUTCOME

The client expressed satisfaction with the results achieved, citing an improvement in operational efficiency and reliability. Prior to installing the Open S-Tube pump in July 2021, IWK site personnel were frequently called to address clogging issues, with up to three visits per week. However, since implementing the Open S-Tube solution, site personnel only needed to visit the facility for monitoring purposes and routine maintenance, which is performed at least once a year on all pumps.

Furthermore, this success story resonated strongly with other branches of Indah Water nationwide when it was shared during the Indah Water Open S-Tube seminar in 2023, sparking significant interest in the product. Encouraged by this success, Indah Water Konsortium is now eager to replace other pumps and explore the application of this technology in similar plants facing similar challenges.




Indah Water Konsortium (IWK) is Malaysia's national sewerage company, dedicated to providing a modern and efficient sewerage system across the country.



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