

A brand of Aqseptence Group

Geiger® Water Intake Equipment for Dublin Waste to Energy Plant, Ireland

PROJECT-REPORT

Dublin Waste to Energy Plant installed Innovative Seawater Screening Equipment as ideal solution to their mechanical seawater cleaning requirements.

Challenge

The Dublin Waste to Energy plant is the Irish capital's first such facility and treats up to 600,000 tons of waste annually, providing electricity for 80,000 homes and district heating for upwards of 50,000 homes. Before using seawater as a cooling medium, it has to be mechanically cleaned of debris in order to protect pumps, condensers and other sensitive downstream equipment from clogging and other damage. Aqseptence Group's Geiger®-branded two stage water intake screening system was chosen for this purpose.



Solution

For the first stage in the mechanical screening of seawater (coarse screening), the efficient and robust <u>Geiger® Cable-Operated Bar</u> <u>Screens with Grab-Cleaner</u> were implemented, and for the second (fine screening) the innovative, compact and low-maintenance <u>Geiger MultiDisc®</u>.

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Technical Data

- The seawater screening equipment consisted of the following:
- 2 Geiger® Cable-Operated Bar Screen with Grab-Cleaner
- 2 Through-flow, zero carry-over Geiger MultiDisc® travelling water screens with fish repelling system, spray water system and debris container
- 2 stop logs
- Control cabinet for fully automatic operation
- Materials: 316L for seawater wetted parts, well-proven in combination with the Geiger Sacrificial anodes
- Flow Rate per Channel: 7,200 m³/h
- Number of Channels: 2
- Bar Screen Spacing: 40 mm
- Geiger MultiDisc® Mesh Spacing: 5 mm
- Water Source: Sea Water

Key Features

Commissioning year: 2018

Benefits:

- Low/easy maintenance
- Robust and highly reliable
- Compact design saves on construction costs/ space required (Geiger MultiDisc®)
- Easy, time-saving installation (Geiger MultiDisc®)
- Zero carry-over of debris to the clean water side (Geiger MultiDisc®)
- Fish Protection according to EPA CWA 316b



Aqseptence Group GmbH Product Line Water Intake Systems

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