

A brand of Agseptence Group

# Geiger® Seawater Intake Equipment KPONE, Ghana

KPONE Independent Power Plant, Ghana installed maintenancefriendly Seawater Screening Equipment as ideal solution to their mechanical seawater cleaning requirements.

## Challenge

In 2016 KPONE Independent Thermal Power Station (CCGT) was constructed to improve the distribution of electricity throughout the country. The power plant is a 340 MW (460,000hp) multi-fuel-fired thermal power station. At KPONE, seawater accessed through underground pipes is used to feed the power plant's cooling water system.



#### Solution

For the first stage in the mechanical screening of seawater (coarse screening), the efficient and robust <u>Geiger® Cable-Operated Bar Screen Cleaner</u> was implemented, and for the second (fine screening) the innovative, compact and low-maintenance <u>Geiger MultiDisc®</u> filtration machine. A <u>Geiger® Impressed Current Cathodic Corrosion Protection System</u> protects the screening equipment in aggressive mediums i.e. seawater.

01 May 2022 Page 1

### **Technical Data**

The seawater screening equipment consisted of the following:

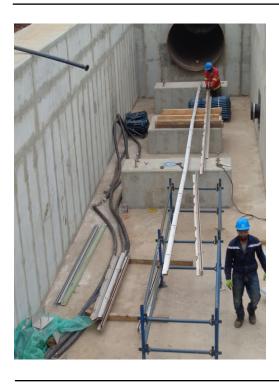
- 4 <u>Geiger®Cable-Operated Bar Screen</u> Cleaners with conveyor belt for debris transportation
- 4 through-flow, zero carry-over <u>Geiger MultiDisc®</u> travelling water screens with spray water system
- 4 stop logs
- Control cabinet for fully automatic operation
- Materials: 316L for seawater wetted parts, well-proven in combination with the Geiger® Impressed Current Cathodic Corrosion Protection System
- Flow Rate per Channel: 15,000 m³/h
- Number of Channels: 4
- Bar Screen Spacing: 60 mm
- Geiger MultiDisc® Filtration (mesh): 9.5 mm
- Water Source: Sea Water

# **Key Features**

Commissioning year: 2018

#### Benefits:

- Low/easy maintenance
- Robust and highly reliable Travelling Water Screen (Geiger Multi Disc®)
- Compact design saves on construction costs/ space required for the onshore pump chamber (Geiger MultiDisc®)
- Easy, time-saving installation (Geiger MultiDisc®)
- Zero carry-over of debris to the clean water side (Geiger MultiDisc®)





Passavant-Geiger GmbH Water Processing Solutions

Product Line: Water Intake

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01 May 2022 Page 2