## Practical experience:

## ACO Surface Water Management

Tema Port (Ghana) 2017- Ongoing

Fits like a glove:

# Tema Port Expansion Project Phase 1

An efficient and high-capacity surface drainage design for the Tema Port.

This major project worth \$1.5billion is entering its final phase of construction in 2022. The recently finished phase 1 was successfully completed ahead of schedule and this was mainly due to all participants in the project delivering exceptional products and services.

ACO DRAIN® Qmax was selected specifically for this project as the engineering team and consultants realized the advantages of installing HDPE manufactured channels instead of using traditional cast-in-situ concrete channels.

The client carefully considered the cost and time ratio. This was especially important, because of the quickly executed installation. After having been trained by the local ACO team the installation team carried out the installation swiftly and without problems.

Due to the high rainfall index in Ghana, sufficient hydraulic capacity is required. By calculating the hydraulic load based on the ACO hydraulic calculator, the ideal specification was achieved. After the rainfall season the client complimented the ACO system on the drainage capacity as well as on the flushing properties for sand and debris.

1400m quay | 16.5m depth | 121ha Yard | 4 berths | 3.85km breakwater | 3.5 million TEU annual capacity

### Advantages

- Speed of installation
- High flow rates that flush out sand from the drainage system
- High Flow rates and buffer capacity



# Drainage solutions along the ACO system chain







Main line installed phase 1

Main line installed phase 1





In-Situ gratings

## Information at a glance

**Object:** TEMA Port Expansion Project Phase 1(Ghana)

**Customer/ Investor:** Meridian Port Services | Bollore Transport and Logistics **Contractor/ Installer:** Bollore Transport and Logistics

**Planner:** Bollore Transport and Logistics **Year of construction:** 2017- Ongoing (Estimated completion 2023)

#### ACO Product:

- ACO DRAIN<sup>®</sup> Qmax 900
- Q-flow ductile iron rail
- F900 Chambers with F900 slot covers including accessories
- ACO DRAIN<sup>®</sup> S 300 D4 00 gratings for cast-in-situ installation
- F 900 manhole covers 600 & 850mm

### ACO Ahlmann

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