## Conveyor System for the DS233 Deep Tunnel Storm Water System in Dubai

# The DS233 Deep Tunnel Storm Water project

How will the rapidly growing city of Dubai become resilient to future flooding and polluted bodies of water? With the Dubai Deep Tunnel Storm Water System. A complete system that will drain 40 per cent of the city's terrain during periods of heavy rainfall, including the land reserved for Expo 2020. It will also function as a sewer system at the same time. The drainage tunnel is one of the biggest of its kind in the region.

## Services provided by Marti Technik AG:

Our part of the overall contract is to create two conveyor systems that run independently. The scope of delivery includes two tunnel conveyors with a belt width of 800 millimetres, two horizontal belt storages, two elevator with a belt width of 1600 millimetres and a height difference of just under 50 metres each, two dumpsite conveyors with a belt width of 800 millimetres and a booster.

Drawn up:





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#### **Technical specification:**

- Conveying capacity 700 t/h
- Tunnelling method: EPB (Earth Pressure Balance Shield)
- Conveying material: Sandstone a sludge
- Conveying capacity: 700 t/h
- 2 tunnel conveyors total length 10.43 km
- 2 horizontal belt storages, 14-ply length of reel 500 m
- Elevators, 2 x 48 m
- 2 dumpsite conveyors, 61 m / 64 m
- 1 booster
- 2 complete system control units

Client: City of Dubai

Main contractor:
Porr (AUT) / Six Construct JV (ARE





DS233 consists of five elements: a groundwater and storm water collection network, a drainage tunnel, which at 10.43 km is the longest in the region, a storage basin, a highly efficient pumping station and an outflow to the sea. The drainage tunnel will run from the Expo site, near the Sheikh Mohammed Bin Zayed Road and Jebal Ali Lehab Road to the sea and divert the rainwater and groundwater as a sewer system. Two CREG tunnel boring machines will take care of the tunnelling work.