



New Laâyoune harbour

Design and optimization of maritime viaduct piles
2020 – On-going



MOROCCO

Client

JESA TEAM MAROC

Partners

SETEC MAROC

Terrasol's services

fees

15 k€

Highlights

Maritime viaduct 3170m long

80 spans of 40-m each



The Project

The new harbour in Laâyoune is a facility that will enable exploitation of the Boucraa phosphate deposits.

This structure – designed for an operating lifetime of 100 years – is subject to specific loading conditions owing to its exposure to a marine environment, which is always aggressive

The studies and works are being carried out by the Greek company Archirodon with support from the Danish company Cowi for the project management.

Key features

- Geotechnical assistance
- Design and optimization of the piles

Our Services

For more than a year, Terrasol and Setec Maroc have been working together on behalf of Jesa Team Maroc which is accomplishing a general assistance and consulting mission for Phosboucraa, a subsidiary of the OCP SA group.

Terrasol's and Setec Maroc's missions are essentially focussed on the foundations of a maritime viaduct providing access from landside to the quays of the vast harbour zone.

With a length of 3170m, this structure runs perpendicular to the coastline, and includes nearly eighty 40-m long spans. Each span is built on supports comprising 5 driven steel piles, some of which are inclined.

The design of the piles is based on a variety of compression and traction loading tests that were analysed by Terrasol and Setec Maroc. Optimisations were sought taking care, however, to guarantee a sufficient degree of robustness and reliability.