

## MARINA OF PORTIMÃO, PORTUGAL

# Beach enhancement using GEOTUBE



**Industry:** Water  
**Sub-industry:** Coastal protection and reclamation  
**Location:** Portugal  
**Product:** **GEOTUBE®**

## Challenge

The installation of the Solmax **GEOTUBE** systems was a primary component of this project, conducted by a diving company skilled in underwater operations. The project faced challenges typical of marine environments, such as weather fluctuations and sea conditions, which could potentially delay

## Overview

The Marina of Portimão, specializing in marina operation and maintenance, embarked on a project to protect a beach with reduced wave action. The initiative aimed to enhance beach attractiveness and reduce maintenance requirements. The project, was executed in 2023 near the entrance of the Port of Portimão. Solmax and Geosin, leveraging their European project experiences, updated the initial design to meet specific needs. This project promised significant benefits for the Marina of Portimão, including future maintenance cost savings.

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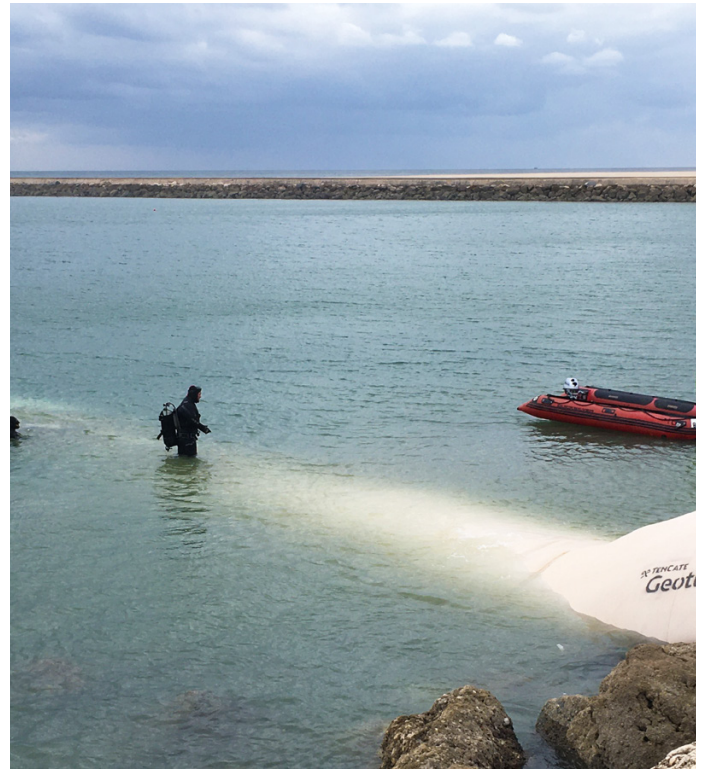
## CASE STUDY

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the filling process and installation. These issues were mitigated by the diving company's meticulous preparation, supported by Solmax and Geosin's expertise. The project's uniqueness lay in its innovative underwater installation method, the first of its kind in Portugal.

## Solution

Solmax's role was pivotal in the successful completion of this project. The primary products used were the Solmax **GEOTUBE** systems (Ø3,25 m [10.7 feet] GT1000MB) and **GEOTUBE** Scour aprons GT600M. These products were selected based on water depth, hydrological circumstances, and their suitability for the beach environment. The sand colored **GEOTUBE** GT1000MB blended well with the beach, and all products were CE certified and adhered to ISO standards. This project demonstrated the advantages of using **GEOTUBE** systems over traditional rock solutions, highlighting their reversibility and utilization of local filling materials. Notably, the project was completed ahead of schedule, underscoring Solmax's expertise, product quality, and the effectiveness of the distributor. This success has set the stage for future collaborations.



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