


PROJECT
MAIN BREAKWATER IN PORTO SANTO PORT - REHABILITATION
CATEGORY
HYDRAULICS & MARITIME WORKS
CLIENT
APRAM – ADMINISTRAÇÃO DOS PORTOS DA REGIÃO AUTÓNOMA DA MADEIRA, S.A.
LOCATION
PORTO SANTO ISLAND, MADEIRA, PORTUGAL
PROJECT YEAR
2005 - 2006
MAIN CHARACTERISTICS

Porto Santo Port is located on the south coast of Porto Santo Island, on the eastern edge of a beach about 9 km long. The main breakwater, with a total length of 900 m, consists of two straight sections, one with N-S orientation, perpendicular to the coastline, and the other with the direction N 80°E. The two sections are connected by a curve. The maximum depth in the head is about -10 m (CD). The breakwater has a width of about 18 m on the crowning platform, has a curtain wall with a height of +10.5 m (CD) and the resistant mantle consists of 100 kN tetrapods. The main objective of the project was to proceed to the breakwater rehabilitation, by executing a new resistant mantle consisting of 300 kN Antifer cubes, with a slope at 2:1 and crowning at elevation +7.4 m (CD). The foundation of the blocks was also made up of 300 kN Antifer cubic blocks, crowned at -5.5 m (CD), supported on a rockfill prism of 20 to 30 kN. In addition, the design of all terrestrial infrastructures was prepared, namely, the port roads, the pavements of the port embankments, including parks for containers, and technical networks...

PROVIDED SERVICES

Inspection of the emerged and submerged part of the structure; Numerical Modelling Studies; Preliminary Design and Detailed Design; Assistência Técnica.

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