CONSTRUCTING MODERN PORTS WITHOUT STEPPING ON WATER

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When the decision for the construction of a new port is taken, investors and operators look for a modern and economic engineering solution and a tight schedule for construction and starting of operations.

Engineering solutions for mostly ports structures involves the installation of piles supporting concrete or steel superstructures. In the case of Piers and Jetties an approach trestle is required to reach adequate water depths, and in some cases, pass along shallow or mangrove areas inaccessible or avoided for floating equipment.

For these situations, the strong integration between the structural design and the construction methodology is a key factor for the execution of the works. The cantitravel method which is a system that allows the work to progress regardless of the environmental conditions without stepping in water also means less impact on the environment.

The paper approaches 20 modern port installations worldwide designed and constructed with innovative construction solutions for achieving low costs, low risk, reduced construction time and reduced downtime due to adverse environmental conditions.

These 20 ports where successfully constructed in Brazil (8), Peru (6), Cuba (1), Dominican Republic (1), Equator (1), Algeria (1) and Republic of Djibouti (2).

The description and the conception of the projects, the environmental conditions, the restrictive conditions and the construction methods will be deeply approached in the paper.

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