

## Project Location:

Monaco

## Main Contractor:

Bouygues Travaux Publics

## Client:

Anse du Portier,  
Principaute de Monaco

## Project period

May 2018 – Jul. 2018

## Method Applied:

Vibro Compaction of an up to 35 m thick rubble fill, starting in 16 m water depth, with blocks of over 30 cm in size. Fill had before compaction already a relative density of about 61%. Compaction points were installed in a triangular grid of 3.80 m with 0.70 m compaction lifts reaching between lifts either 290 Ampere or 30 seconds holding time below 8 m and 40 seconds above 8 m.

## Quantities:

Over 1800 compaction points, about 36,000 lineal meters, 35m maximum thickness of compaction layer.

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## Technical Requirements:

Compaction of rubble fill material. Installation of Vibro Compaction with two cranes from one barge due to space restrictions in the port.



Top: Two cranes with B41 vibroflots working from one barge.  
Right: The rubble fill material that needed compaction.

## Quality Control Testing:

Typical Ampere-Depth log of the B41 vibroflot.

