

In-house testing facilities

Physical Model Testing

Optimise and future-proof your port infrastructures

3D breakwater stability test © DHI

The safe and cost efficient way

Physical modelling is an established and proven, yet still highly relevant and important tool that bridges the gap between numerical models and real world challenges. It provides the most accurate simulations through the ability to:

- **Verify and optimise all kinds of breakwater designs and port layouts in challenging environments** – De-risk your investment and supplement numerical port models with the ability to test both present and future environmental load conditions
- **Calculate load, response and operability of complex vessel berthing and ship-to-ship operations** – Rely on physical modelling for witness testing and to help validate and approve your digital twin

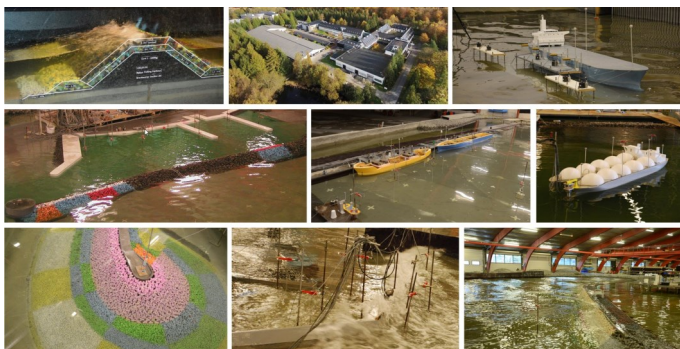


DHI's physical modelling facilities are world-class and we have been impressed by the professionalism, responsiveness and expertise of their team. Their organisation is a pleasure to work with and a credit to the profession.

Mr Peter Simpson, MEng.
Senior Port Engineer
Royal HaskoningDHV, UK

Always a facility suitable for your port challenge

In collaboration with DHI's experts, you can pick and choose which flume and/or basin facility is best suited for the nature of your work and intended outcome for maximum flexibility and greatest value.



DHI's model test facilities located at the head office in Hørsholm, Denmark

Capabilities

Basins:

- 30 m x 20 m, 3 m deep basin (offshore) for 3D waves, current and wind
- 35 m x 25 m, 0.80 m deep basin for 3D waves and current
- 32 m x 30 m, 0.45 m deep basin for waves
- 30 m x 30 m, 0.75 m deep basin for waves and current
- 62 m x 30 m, 0.45 m deep basin for waves

Flumes:

- 35 m x 5.5 m, 0.8 m high flume for waves and current
- 28 m x 0.74 m, 1.20 m high flume for waves
- PCs equipped with the DHI Wave Synthesizer package controls the wave generation as well as data logging and postprocessing analysis
- 3D wavemakers in the shallow basin are equipped with the 'DHI AWACS' - our proprietary Active Wave Absorption Control System
- Movable wind generating fan systems can be installed in the facilities when required

Did you know? Our hardware and software model testing technologies have been adopted by more than **80 laboratories** around the world.

To learn more about our port services and technology, visit: waterchallenges.dhigroup.com/port-efficiency-solutions-to-global-challenges/