

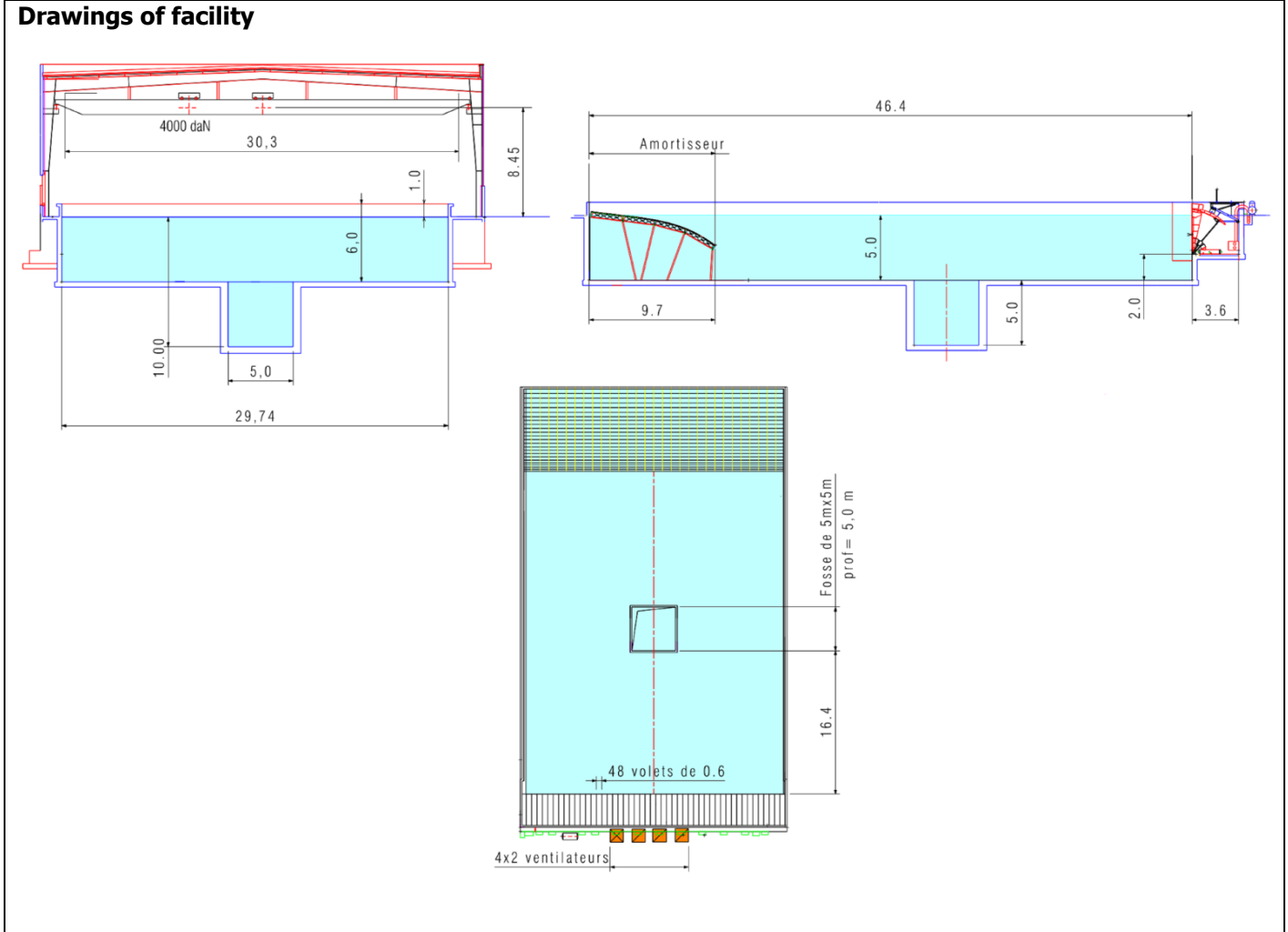
Name of organization Ecole Centrale de Nantes	Year of information updating 2022
Year established 1917	Year of joining the ITTC
Address 1 rue de la Noë 44321 Nantes cedex 3 -France	Status in the ITTC Member
Contact details (phone, fax, e-mail) Facility manager : Jérémy OHANA (hydro-facilities@ec-nantes.fr)	Website https://lheea.ec-nantes.fr/test-facilities/ocean-tanks/hydrodynamic-and-ocean-engineering-tank

Type of facility Ocean Basin	Year constructed/upgraded Built 2000
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Name of facility BHGO - Bassin d'Hydrodynamique et de Génie Océanique	Location (if different from the above address)
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Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)

The basin is used for research, education and commercial experiments.
Main dimensions: 50 x 30 x 5 [m] with a 5 x 5 x 5 [m] central pit.



Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.)

Carriages:

3 carriages: one small one for sensors, one medium one for access and one large one for heavy equipment.

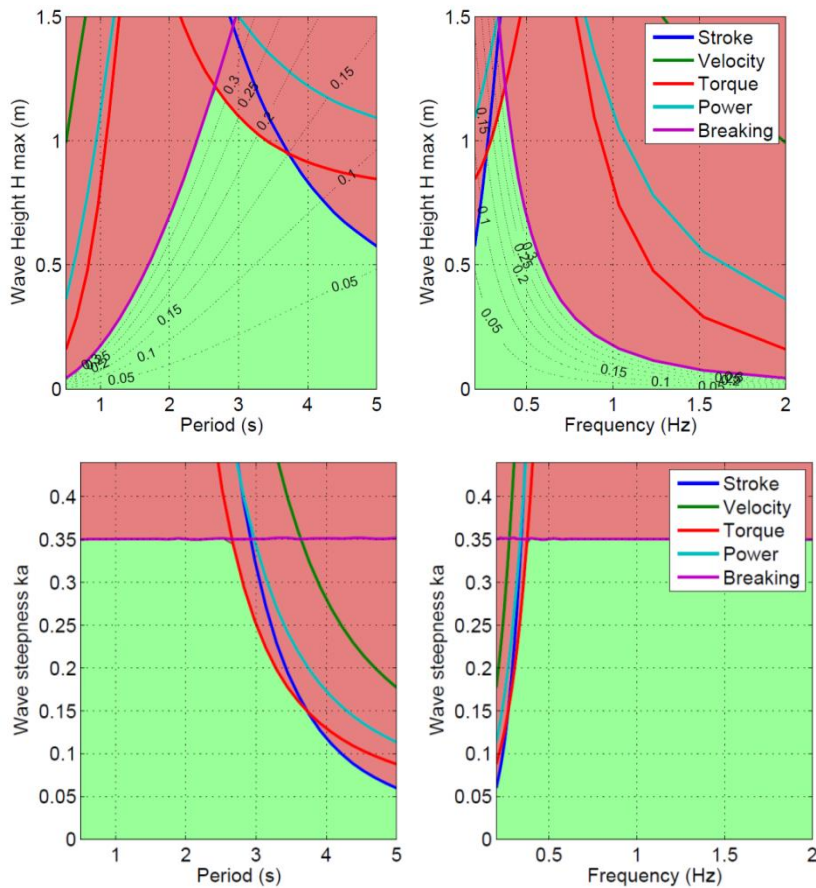
Wavemaker:

48 paddles Edinburgh wavemaker, refurbished in 2022

Force or position mode

Active absorption

Passive beach



Instrumentation:

Several dynamometers (3 components, 6 components)

Resistive, capacitive and ultrasonic waveprobes

Large Tripod and Hexapod

Qualisys Motion Capture (both above and below water)

Remotely operated HD cameras (both above and below water)

Other:

2x overhead cranes covering the whole basin, SWL 4 tonnes

Applications (Tests performed)

Freerunning models (seakeeping, manoeuvrability)

Floating wind

Wave energy

Plane and helicopter ditching

Fluid/Structure interactions

Multi-body interaction

Anchoring

Survival studies

Non-linear wave generation

Published description (Publications on this facility)