Name of organization ***FORCE Technology***	**Year of information updating** *2016*
Year established 1959	**Year of joining the ITTC**
Address ***Hjortekaersvej 99, 2800 Kgs. Lyngby, Denmark***	**Status in the ITTC** AC member
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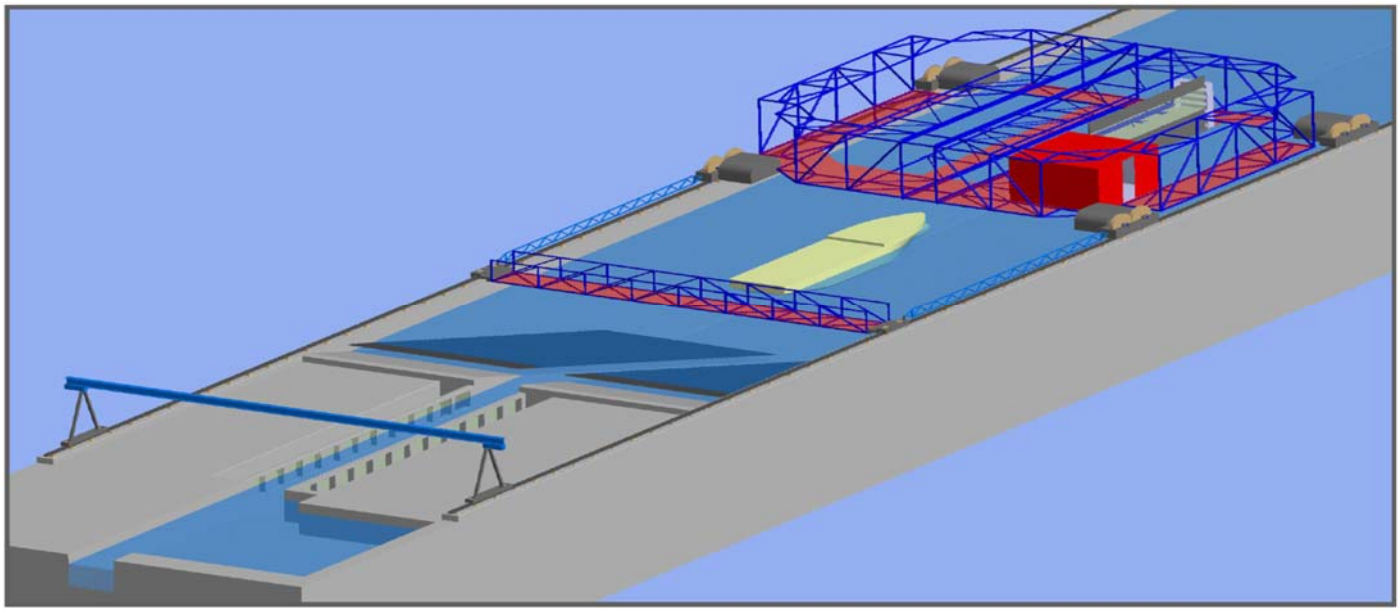
Type of facility *Deep water towing tank*	**Year constructed / upgraded** 1959
Name of facility	**Location** (if different from the above address)

Main characteristics

Length: 240.0 m
Width: 12.0 m
Water depth: 5.5 m

Powering: 4 x 75 kW Asyncron AC motors
Speed range: from 0 to 14 m/sec
Accuracy: +/- 0.2% of the actual value

Drawings of facility



Detailed characteristics:

- Double flap wave maker – maximum regular wave height of 0.9m with wave periods in the range from 0.5 to 7 seconds.
- State-of-the-art data acquisition and analysis system (up to 80 logging channels)
- Onboard digital video & photo system synchronized with data logging system.
- Large amplitude Planar Motion Mechanism (PMM) for captive model testing in horizontal plane.

Equipment:

a) Dynamometers available for:
- ✓ Towing force
- ✓ Propulsion tests (conventional and thruster/pod units)
- ✓ Propeller open water test
- ✓ Thruster/pod open water test
- ✓ Sailing yacht test

b) Test equipment for ships and offshore units:
- ✓ Pressure gauges
- ✓ Force gauges (1DOF to 6DOF)
- ✓ Accelerometers
- ✓ Relative wave probes
- ✓ Optical position tracking system
- ✓ Autopilot system
- ✓ Underwater video camera(s) and visualization system

Applications (Tests performed)

Still water performance tests

- ✓ Propeller open water test
- ✓ Resistance and self-propulsion tests (including verification of Energy Saving Devices (ESDs) and EEDI test)
- ✓ Bollard pull tests
- ✓ Streamlines and appendage alignment tests
- ✓ 3-D nominal wake measurements
- ✓ Maneuvering (PMM) tests and simulations
- ✓ VIV/VIM tests (offshore)
- ✓ Added mass and damping tests

Sea-keeping test

- ✓ Free-sailing propulsion tests in regular and irregular head waves (6-DOF motions, slamming and deck wetness)
- ✓ Added resistance/power tests
- ✓ Full DP tests
- ✓ Wave drift forces and current load tests (offshore platforms)
- ✓ Optimization of roll damping tanks and active roll damping fins

Published description