

Name of organization SINTEF Ocean (formerly MARINTEK)	Year of information updating 2017
Year established 1939	Year of joining the ITTC
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Type of facility Towing tank	Year constructed/upgraded 1979
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Name of facility Tank no. I+III	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)
Length: 260 m, Width: 10.5 m, Depth: 5.6/10 m

Drawings of facility

Top-view plan

Corss-section-view plan

① Model store
② Drawing office
③ Reception
④ Tank II
⑤ Ship model manufacturing shop
⑥ Trimming tank
⑦ NC milling machine for model production
⑧ Instrumentation workshop
⑨ Carpenter workshop
⑩ Propeller model manufacturing shop
⑪ Cavitation laboratory
⑫ Dock gate
⑬ Wave absorber, Tank I + III
⑭ Wavemaker, Tank III and Tank I+III
⑮ Wave absorber, Tank III

Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.)
Towing carriage maximum speed: 10 m/s, Seakeeping carriage maximum speed: 5 m/s, Double flap wavemaker, max. wave height 0.9 m, PMM, Hexapod (Motion platform).

Applications (Tests performed)

Main tests performed in towing tanks I+III

- Resistance, open water, propulsion tests, 3D wake measurements
- Seakeeping tests (motions, sea loads, slamming, whipping, active control)
- Manoeuvring (zig-zag tests, Planar Motion Mechanism PMM tests)
- Directional stability tests
- Crabbing tests
- Dynamic positioning tests
- Ship-Ship interaction tests
- Forced motion tests
- Lifeboat drop tests
- Measurement of current forces on offshore structures
- Measurement of forces and moments in six degrees of freedom
- Measurement of displacement in six degrees of freedom
- Propeller blade loading measurements
- Six-component propeller shaft measurements
- Propeller nozzle loading measurements.
- Tests using yacht dynamometer
- Various Pod / Azimuth thruster tests
- High speed video recordings (above and under water)

Published description (Publications on this facility)