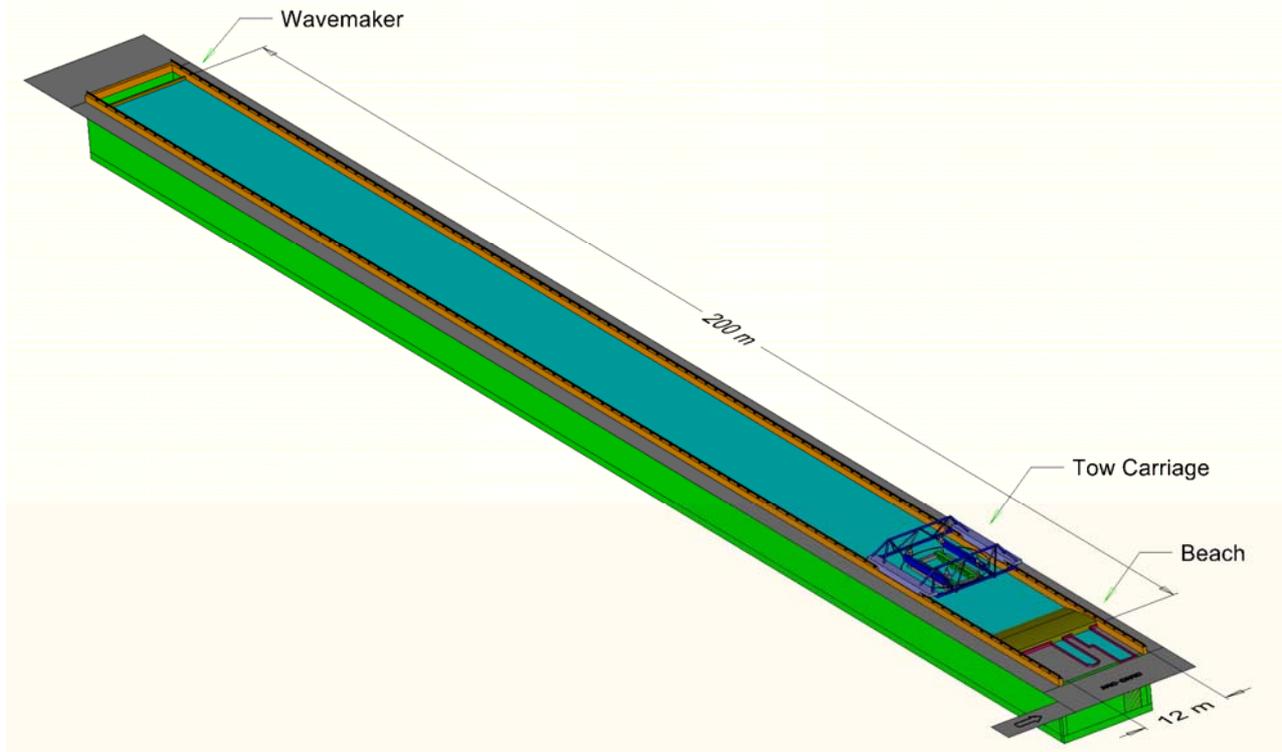


**INTERNATIONAL TOWING TANK CONFERENCE CATALOGUE OF FACILITIES
TOWING TANKS, SEAKEEPING AND MANOEUVERING BASINS**

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TOWING TANK (1985)



TOWING CARRIAGE: Single manned carriage with 8 wheel synchronous motor drive, 85,000 kg, 746 Kw power, 0.001 m/s – 10 m/s speed range. Test frame adjustable for model size.

WAVE GENERATOR: Dual flap hydraulic wave board with digital computer control, program controlled regular or irregular waves. Maximum wave height of 1m for regular waves and 0.5m significant for irregular waves.

WAVE ABSORBER: Parabolic corrugated surface beach with transverse slats, 20m long slope with 10.5 slope at the waterline, flexible side absorbers.

WIND GENERATION: 8 fan bank, maximum wind speed of 10 m/s @ 10 m from fans. Wind carriage can be coupled to main carriage.

TEST EQUIPMENT Planar Motion Mechanism (PMM), Marine Dynamics Test Facility (MDTF), Yacht Dynamometer, capacitance and sonic wave probes, Qualisys optical tracking for model position, propulsion control systems for free-running models, under and above water HD video and Line-scanning camera.

MODEL SIZE RANGE: Ship models up to 12m in length, floating structures 0.5m – 4 m in diameter.

TESTS PERFORMED: Resistance and propulsion, wake survey, flow visualization, propeller open water, seakeeping, manoeuvring (PMM), loads due to waves, wind and current on floating and moored structures, lift and drag, dynamics of underwater vehicles.

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Website www.nrc-cnrc.gc.ca/end/rd/ocre/