Name of organization School of Naval Architecture and Ocean Engineering, University of Ulsan	**Year of information updating** 2023
Year established 1973	**Year of joining the ITTC** 1999
Address (44610) 41-304, School of Naval Architecture and Ocean Engineering, 93, Daehak-ro, Nam-gu, Ulsan, Republic of Korea	**Status in the ITTC** Member
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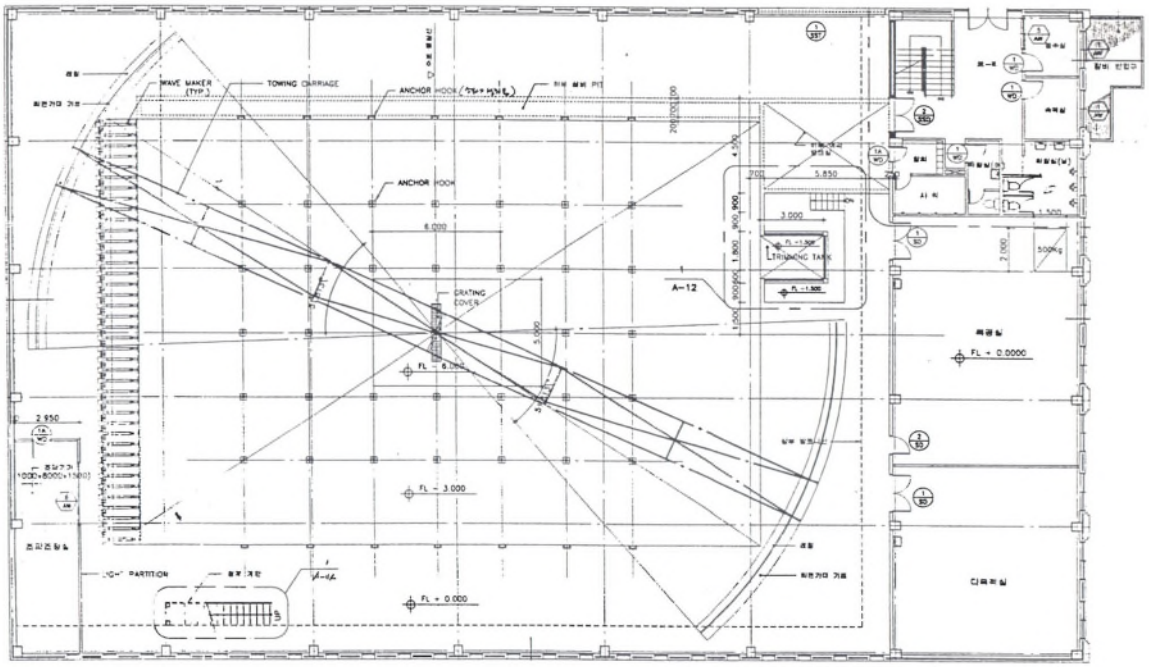
Type of facility Offshore Basin	**Year constructed/upgraded** 1998/T.B.D
Name of facility Ocean Engineering Wide Tank (OEWT)	**Location** (if different from the above address) N/A

Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)
Overal Size (Length × Width × Depth): 30 [m] × 20 [m] × 2.5 [m]
Pit Size (Length × Width × Depth): 6 [m] × 5 [m] × 3 [m]

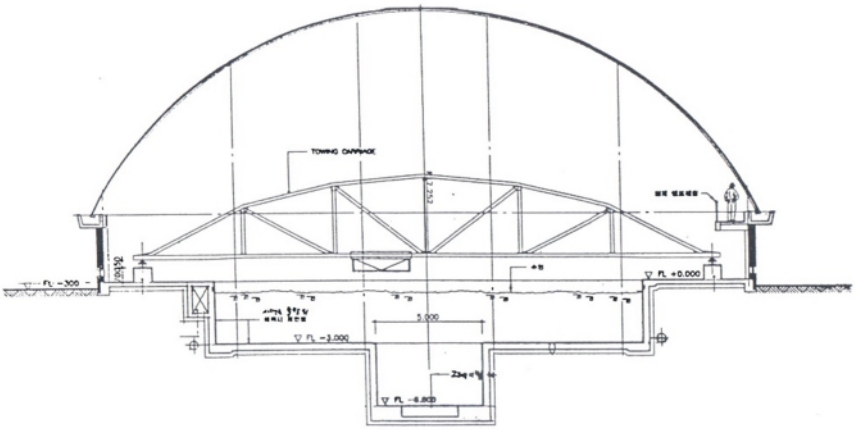
Drawings of facility

Top-view plan



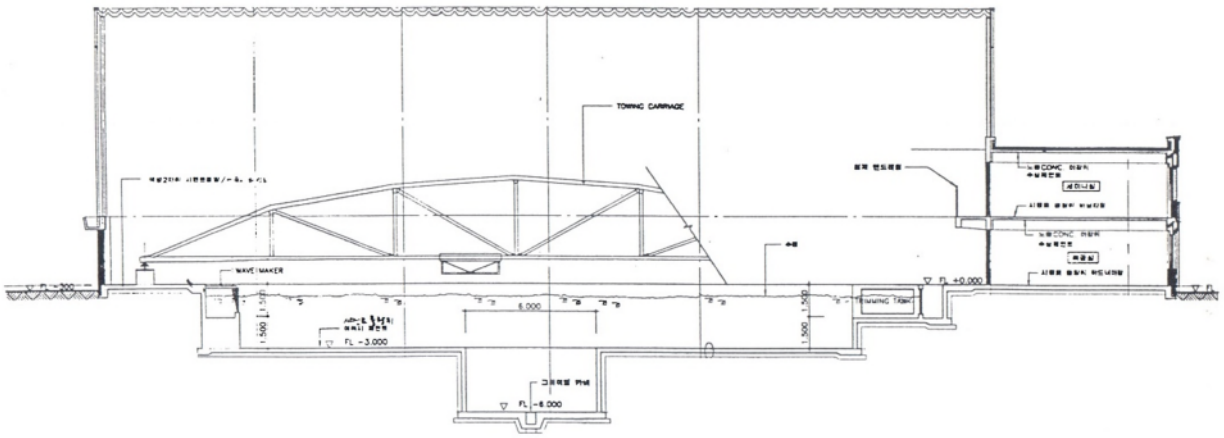
< First floor plan >

Cross-section-view plan



< Cross section drawing >

Longitudinal-section-view plan



< Longitudinal section drawing >

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

● Towing Carriage
- Driven by high power brushless servo-motor
- Maximum velocity limit (X, Y): 2 m/s
- Maximum acceleration limit (X, Y): 1 m/s^2

● Wave generator
- Driven by an electric servo-motor via a belt
- 0.5 m × 40 wave boards (flap type) fitted at short side (20 m)
- Wave height: 0.2m at 0.875Hz
- Range of generated wave period: 0.5 sec ≤ T ≤ 5 sec
- Regular wave generation: Sine wave (Parallel and Angled)
- Irregular wave generation: ISSC, JONSWAP, Scott, ITTC, Neumann, Pierson-Moskowitz, etc.

● 2D wave tank
- Piston type wave maker
- Dimension (Length × Width × Height): 35 [m] × 0.5 [m] × 0.5 [m]
- Measuring window (Width × Height × Thickness): 996 [mm] × 598 [mm] × 12 [mm]
- Dimension (Width × Height × Thickness): 594 [mm] × 847 [mm] × 60 [mm]

Applications (Tests performed)

- Ship damaged stability tests
- Added resistance tests
- Autonomous vessel tests
- Free running tests (incl. zigzag tests, 35° turning tests)
- Towing stability tests of ships and offshore structures
- Wave force measurement tests
- Motion measurement tests (floating offshore wind turbines, semi-submersible, spar, TLP, and (moored) ships)
- Tests of floating offshore structure installation
- Tests for guyed tower platforms
- Forced oscillation tests of spar buoys
- Floating offshore wind turbine tests
- Slamming tests
- Breakwater tests

Published description (Publications on this facility)
N/A