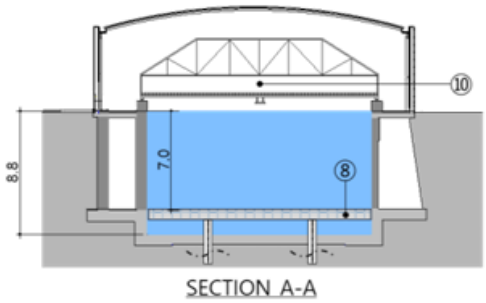
Name of organization Hanwha Ocean Siheung R&D Center	**Year of information updating** 2026
Year established 2018	**Year of joining the ITTC** 2020
Address 96 Baegot 2-ro, Siheung-si, Gyeonggi-do, Korea	**Status in the ITTC**
Contact details TEL : +82-2-2129-7394 E-mail : bgkim1@hanwha.com	**Website** www.hanwhaocean.com
Type of facility Towing Tank	**Year constructed/upgraded** 2018
Name of facility Hanwha Ocean Towing Tank	**Location** (if different from the above address)

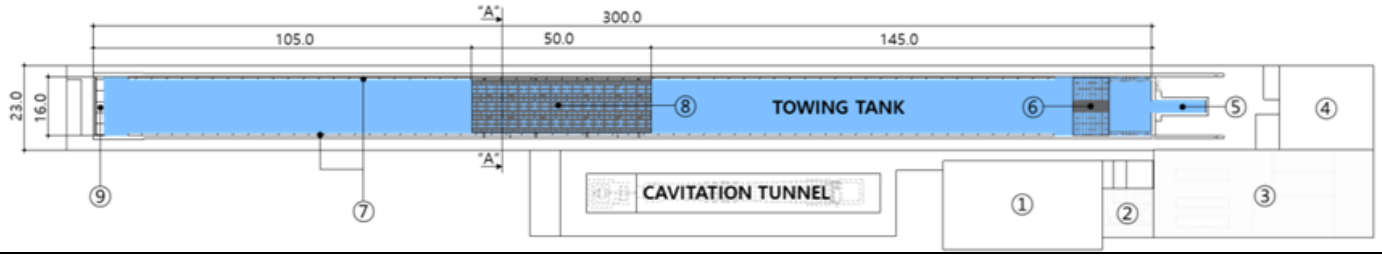
Main characteristics
Length: 300m, Width: 16m, Depth:7m

Drawings of facility



SECTION A-A

① Research building
② Propeller model manufacturing shop
③ Ship model manufacturing shop
④ Model storage
⑤ Trimming tank
⑥ Front wave absorber
⑦ Side wave absorber
⑧ Liftable floor
⑨ Wave generator
⑩ Towing carriage



Detailed characteristics
- Towing Carriage
  - Driven by AC servo motors (one for each wheel)
    (Low speed mode: 55 kW x 2 sets, High speed mode: 55 kW x 6 sets)
  - Max. carriage speed: 8 m/s (max. acceleration: 0.5 m/s^2)
- Wave generator
  - 0.5m x 32 segments flap type, server motor driven, wet-back design
  - Wave height of regular wave: H ≤ 0.6 m
  - Range of generated wave periods: 0.5 sec ≤ T ≤ 10.0 sec
  - Wave height for irregular wave: H ≤ 0.4 m
  - Type of generated waves: 2D long crested wave, 3D short crested wave
- Other facility
  - Front and side beach for wave absorber (permeable panel type)
  - Liftable floor for shallow water tests (water depth control range: 0.0 ~ 7.0 m)
  - Model ship lifter for test preparation in the trimming tank

- Instrumentation
  resistance dynamometers, propulsion dynamometers, Pitot tube rakes and five-hole Pitot tube, dynamic motion measurement devices, propeller open-water test system, PIV system
- Max. model size: Ship(wood) length 12 m, Propeller(aluminium) diameter 30cm

Applications (Tests performed)

- Resistance test, Propeller open water test, Self-propulsion test, wake measurement, Local flow measurement by PIV, Streamline visualization
- Maneuvering (zig-zag test, Planar Motion Mechanism (PMM) test & Vertical Planar Motion Mechanism (VPMM) test, Free sailing test, Directional stability test
- Various tests in shallow water
- Seakeeping (Motions, Green water, Impact load, etc.) tests, Speed loss test in waves
- Various Pod / Azimuth thruster tests