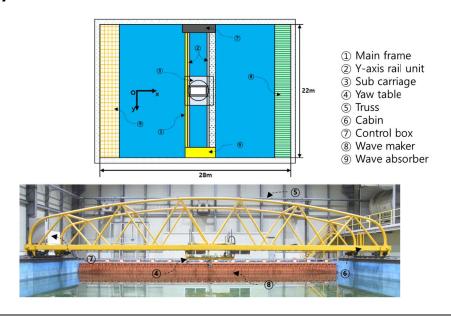
Name of organization Research Institute of Medium & Small Shipbuilding (RIMS)	Year of information updating 2022
<b>Year established</b> 1997	Year of joining the ITTC 2022
Address 38-6, Noksansandan 232-ro, Gangseo-gu, Busan, 46757 Korea	Status in the ITTC Member
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<b>Type of facility</b> Ocean Basin	Year constructed/upgraded 2009
Name of facility Ocean Engineering Basin	Location

#### **Main characteristics**

Length x Width x Depth =  $28 \times 22 \times 3 \text{ m}$ 

# **Drawings of facility**



#### **Detailed characteristics**

- Towing carriage
  - Driven by AC servo motors (one for each wheel)
  - Max. carriage speed: 1.5 m/s
- Wave generator
  - 1.0m x 8 segments piston type, server motor driven
  - 0.5m x 40 segments piston type, servo motor driven
  - Wave height: H ≤ 0.3m
  - Wavelength of regular wave:  $\lambda \leq 3.0 \text{ m}$
  - Range of generated wave periods:  $0.5 \text{ s} \leq T \leq 30 \text{ s}$
  - Type of generated irregular waves: Neumann, Pierson-Moskowitz, ISSC 1964, ISSC 1976, ITTC 1978, ITTC 1984, Bretschneider-Mitsuyasu, JONSWAP, Ochi-Hubble, and User Defined Spectrum
- Current generator(2ea, portable)
  - Axial pump type, motor speed control
  - Max. current speed: 0.6 m/s
  - Test section:  $L \times H = 2 \times 0.3 \text{ m}$
- Wind generator(2ea, portable
  - Axial fan type, motor speed control

- Max. wind speed: 10 m/s
- Air volume: 400m<sup>3</sup>/min / set at 25mmAq
- Other facility
  - Front beach for wave absorber (permeable panel type)
  - Model workshop: Urethane form ship model 12(L) x 6.5 x 3.5(H) m
- Instrumentation
  - Resistance dynamometers
  - Motion measurement devices: Inertial Measurement Unit(IMU), Motion Capture System (G4, Highspeed camera), Mechanical motion device and potentiometer
  - Tension gauge
- Max. model size: 2 m

## **Applications**

- Offshore model tests
  - Motion test (Captive or Free) in deep and shallow water
  - Mooring test in deep and shallow water
- Ship model tests
  - Resistance test in calm and in waves
  - Captive model test (Motion test) in deep and shallow water
  - Seakeeping test
- Other tests
  - Test for underwater vehicle
  - Test for wave energy convertor

### **Published description**