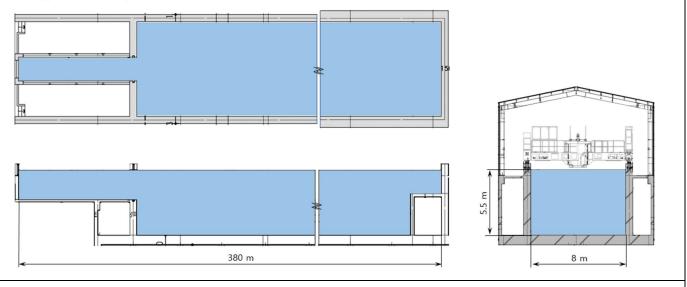
Name of organization Research Institute of Medium & Small Shipbuilding (RIMS)	Year of information updating 2022
Year established 1997	Year of joining the ITTC 2022
Address 38-6, Noksansandan 232-ro, Gangseo-gu, Busan, 46757 Korea	Status in the ITTC Member
Contact details Tel: +82 51 974 5554, Mobile: +82 10 2705 5605 Fax: +82 51 719 4725 E-mail: csshin@rims.re.kr	Website www.rims.re.kr

Type of facility Towing Tank	Year constructed/upgraded 2021
Name of facility High-speed Towing Tank	Location 23, Mieumsandan 5-ro 42beon-gil, Gangseo-gu, Busan, Korea

Main characteristics

Length x Width x Depth = $380 \times 8 \times 5.5 \text{ m}$

Drawings of facility



Detailed characteristics

- Towing carriage
 - 1) High-speed Towing Carriage
 - Driven by AC servo motors, 30 kW x 8 wheel sets
 - Max. speed: 13 m/s (max. acc.: 0.6 m/s²)
 - Unmanned control over 8 m/s
 - 2) Super high-speed Towing Carriage
 - Towed by wire rope winch system (towing 375 kW, tension 55 kW)
 - Max. speed: 40 m/s (max. acc.: 5 m/s²)
 - Unmanned control for full speed range
- Wave generator
 - 1.0m x 8 segments piston type, server motor driven
 - Wave height of regular wave: $H \le 0.5$ m, irregular wave: $H_{\rm S} \le 0.3$ m
 - Range of generated wave periods: $0.5 \sec \le T \le 5.0 \sec$
- Other facilities
 - Front and side beaches for wave absorber (permeable panel type)
 - Model ship lifting table for test preparation in the trimming tank
 - HPMM test system (to be installed)
- Instrumentation

Resistance dynamometers, Propulsion dynamometers, Propeller open-water test dynamometer, Rudder force dynamometer, Pitot tubes wake rake system, Pitot tube traverse system, Optical motion measurement devices

• Max. model size: Ship(wood) length 6 m, Propeller(aluminum) diameter 200 mm

Applications

- Resistance test, Self-propulsion test, Propeller open water test, Wake measurement, Local flow measurement, Streamline visualization
- Super-cavitating test for submerged body
- Maneuvering (Planar Motion Mechanism (HPMM) test, Free sailing test), Directional stability test
- Seakeeping (6-DOF Motion, Green water, Impact load, etc.) tests, Speed loss test in waves
- Water-jet propulsion, Azimuth thruster

Published description