Name of organization Korea Research Institute of Ships and Ocean Engineering(KRISO)	Year of information updating 2016
Year established	Year of joining the ITTC
1973	1978
Address	Status in the ITTC
1312-32 Yuseongdaero, Yuseong-gu, Daejon 34103, KOREA	Advisory Committee
Contact details (phone, fax, e-mail) 82-42-866-3114 82-42-866-3002 hsahn@kriso.re.kr	Website www.kriso.re.kr

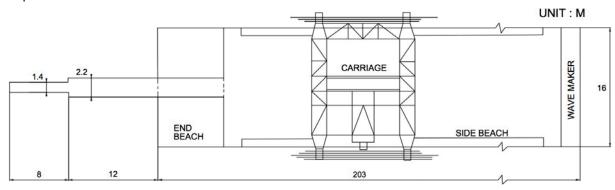
Type of facility Towing Tank	Year constructed/upgraded 1978/2014	
Name of facility KRISO Towing Tank	Location (if different from the above address)	

Main characteristics

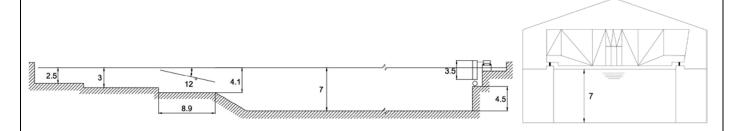
Dimensions of tank: length = 221 m, width = 16 m, water depth = 7 m, false-bottom (width=10 m, length=54 m)

Drawings of facility

Top-view plan



Corss-section-view plan



Detailed characteristics

Description of carriage: driven by 8 x 65kW DC motors (one for each wheel) with digital dc drive, manual or automatic control, automated model tests by integrated control program

Max. carriage speed: 6.0 m/s

Other capabilities: vertical and horizontal PMM for surface ships and submerged bodies, false-bottom for shallow water tests (depth control range= $0.0 \sim 6.5 \text{ m}$)

Beach type & length: 8.9 m long permeable panel type end beach, brush type side beach

Wave generation capability: regular waves of 0.3 ~ 20.0 m in length, maximum wave height of 0.5 m

maximum significant wave height of irregular wave is 0.3 m

Wave-maker type: single flap type, 16 m wide, motor driven, wet-back design

Method of irregular wave generation: random phase method & white noise filtering method

Wave measurement: ultrasonic wave probes on the carriage

Instrumentation: resistance dynamometers, propulsion dynamometers, planning boat dynamometers, one-component force gages, six-components force gages; Pitot tube rakes and five-hole Pitot tube; servo needle type wave probes, ultrasonic wave

probes; laser trim and sinkage measurement devices, dynamic motion measurement devices; propeller open-water test system; wave added resistance measurement system; towing stereo-PIV system

Model size range: model ship of 6 ~ 12 m in length, model propeller of 0.25 m in diameter as a standard propeller size

Applications (Tests performed)

- resistance and self-propulsion in calm water and waves
- propeller open-water tests
- hydrodynamic performance tests for electric propulsion system
- 3-dimensional wake surveys and flow visualization
- longitudinal wave cut measurements
- vertical and horizontal PMM tests
- flow field analysis by five-hole Pitot tube and towing stereo-PIV system
- wave induced motion and load measurements on ships, floated and moored structures
- hydrodynamics force measurements on foils, submerged bodies, and etc.
- shallow water tests

Published description (Publications on this facility)