Name of organization Bulgarian Ship Hydrodynamics Centre	**Year of information updating 2016**
Year established 1976	**Year of joining the ITTC** 1975
Address Bulgaria, Varna 9003, William Froude Str. 1	**Status in the ITTC** AC member
Contact details (phone, fax, e-mail) Phone +35952370501; Fax +35952370514; e-mail: office@bshc.bg	**Website** www.bshc.bg

Type of facility SEAKEEPING AND MANOEUVRING TANK	**Year constructed / upgraded** 1979
Name of facility SEAKEEPING AND MANOEUVRING TANK	**Location** (if different from the above address)

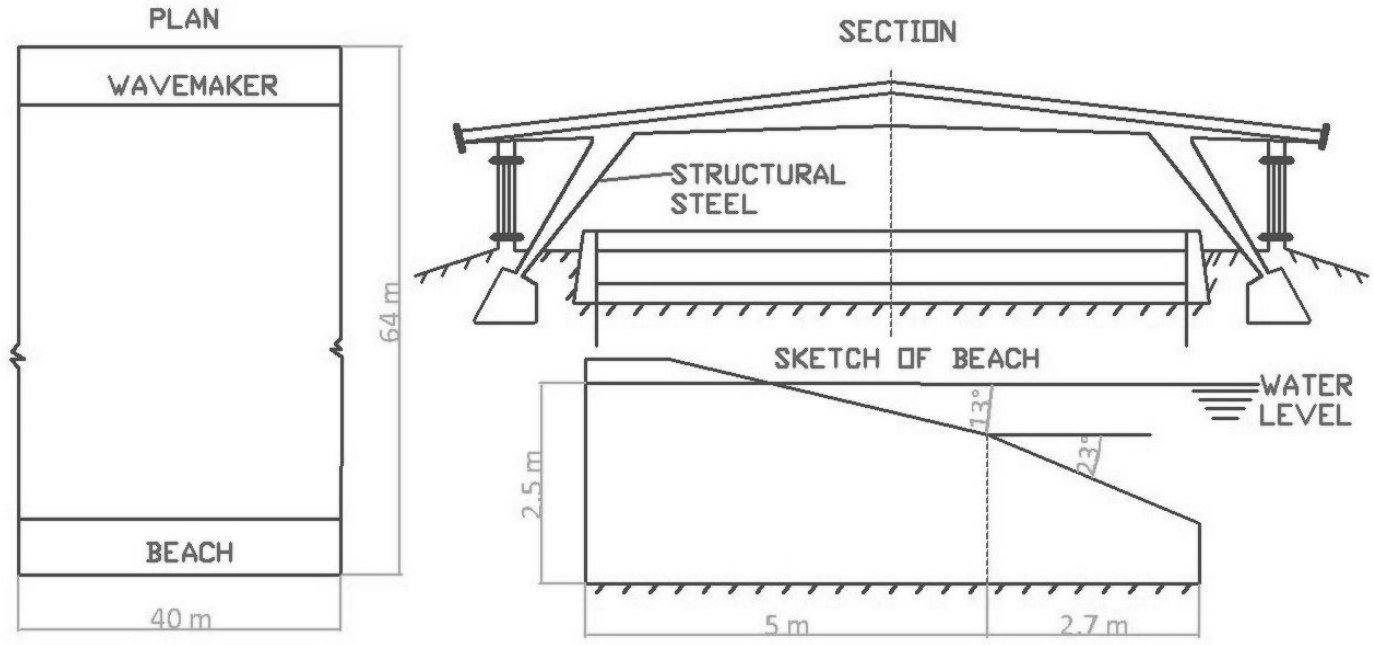
Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)

Length – 60 m
Width - 40 m
Depth - up to 2.5 m

Drawings of facility

Top-view plan

Corss-section-view plan



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

Wave maker for regular and irregular waves with electrical motor drive system

Wave length - up to 10 m

Wave height - up to 0.3 m

Max. Ship models length – 4 m

Wave breakers – flat grid sections at different angles

High Precision PC based Programmable control system with remote radio-control for free-running models

Instrumentation:

Model tracking system - ultrasonic computerized

Wave probes for wave measurement

Rate gyros, course gyro

Set of force dynamometers

Set of pressure transducers

Accelerometers

6-DOF Motion measurement system (MOTAN 6A)

PC Network for measurements and control of the tests in seakeeping - maneuvering basin

Propeller dynamometers for ship models

Instrumentation Amplifiers with Filters

Measuring System - PC with NI Multifunctional DAQ Cards and Data Acquisition software based on LabView

Cameras for High Quality Video and Photo Documentation of the Experiments

Applications (Tests performed)

- Experimental prediction of ship behavior in waves
- Model tests on offshore structures
- Model tests on mooring systems
- Model tests on non-standard floating units
- Free running model tests of mono- and multi-hull vessels
- Restricted water 4-quadrants maneuvering, including shallow water, channels, locks etc.
- Maneuvering and course keeping in waves
- Assessment of vessel's maneuverability compliance with IMO standards

Published description (Publications on this facility)

1. BSHC Brochure, last edition 2014
2. Proceedings of the Scientific Session dedicated to the 40-th Anniversary of BSHC, October 2016