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 TOWING TANK	**Year constructed / upgraded** 1979
Name of facility SHALLOW WATER TOWING TANK	**Location** (if different from the above address)

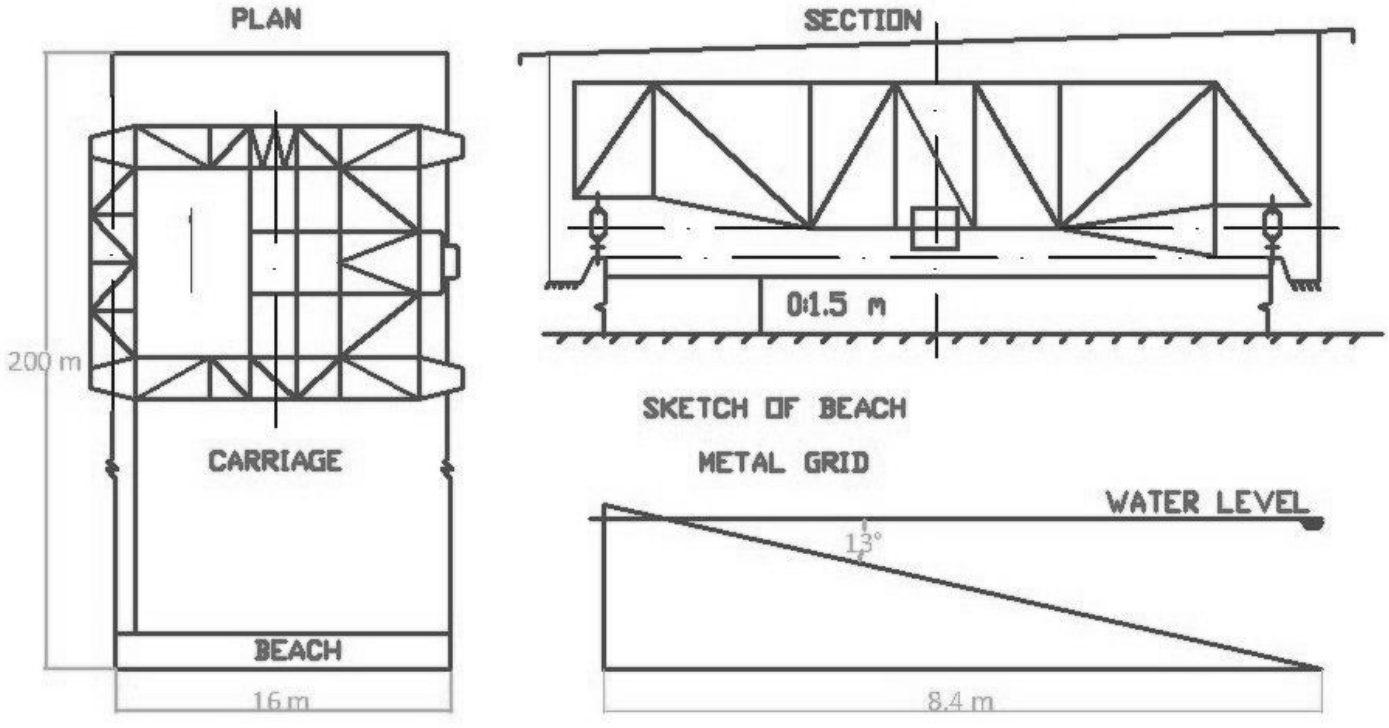
Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)

Length – 200 m
Width - 16 m
Depth - up to 1.5 m

Drawings of facility

Top-view plan

Corss-section-view plan



Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.)
Max. carriage speed - 6 m/s ,acceleration – 0.5 m/s^2 and PC controlled drive system with 0.0025 m/s accuracy
High Precision PC controlled motor drive systems for propellers and oscillator units

Instrumentation:
Towing apparatus for resistance and propulsion tests in calm water, type UB – 5A
Unit for effective model wake field investigations, type M1115
Large Amplitude Horizontal Planar Motion Mechanism
Open water propeller dynamometers, type H49/H29
Six-component balance with POD Dynamometers
QUALISYS Optical Motion Capture System
Unit for model wave pattern investigations with various types of wave probes
Set of force dynamometers
Dynamometers for measuring of CP propeller blade torque
Propeller dynamometers for ship models
Instrumentation Amplifiers with Filters
Measuring System - PC with NI Multifunctional DAQ Cards and Data Acquisition software based on LabView
Video System for underwater flow observation
Cameras for High Quality Video and Photo Documentation of the Experiments

Applications (Tests performed)

- Resistance tests on vessels and floating bodies in restricted water
- Self-propulsion tests
- Flow visualization
- Ship trim optimization tests
- Wakefield measurements
- Non-conventional propulsion, incl. water jets
- Hydrodynamics of barges, tug boats, river ships, push trains etc. vessels for inland navigation
- Restricted fairway effects

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