

# SEAKEEPING BASIN

In the seakeeping laboratory the following is carried out: researches of the dynamics of different-purpose ships at navigation in specified wave conditions and possibility of using the ship at fulfillment of those or other tasks, determination of admissible environmental conditions at which the operational safety of technical means and fulfillment by the crew of their tasks are ensured.



## Deep water part

## Shallow water part

• Length, m	90.0	70.0
• Breadth, m	20.0	20.0
• Depth, m	4.1	0.2–1.5
• Maximum speed of towing carriage, m/s	5.5	2.0
• Wavemaker	Plate-like, mechanical «snake» type	Pneumatic sectional
• Wave parameters	Regular and irregular waves in the range of relative bearings (0°–90°)	
Length, m	1.5 – 12.0	1.0–10.0
Height, m	0.30	0.30

**The Krylov Centre addresses wide spectrum of problems related to design and operation of offshore structures:**

- Prediction of general (navigational) seakeeping performance – motions, displacements, speeds, accelerations in specified points of vessels of various architecture and purpose under wave effect in deep and shallow waters .
- Hull shape optimization to ensure enhanced seakeeping performance, in particular, reduced green water and slamming effects.
- Improvement of crew’s comfort thanks to optimum selection of motion stabilizers for specified vessel along with prediction of her primary members and operation efficiency.
- Improved safety of intact and damaged vessels in waves, including navigation in stormy waters.
- Safe cargo handling operations at sea, including fuel and equipment.
- Safe marine operations related to towing of emergency structures, installation of floating and underwater equipment, recovery of submerged objects.

## UNIQUE EXPERIMENTAL OPPORTUNITIES

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