Name of organization Krylov State Research Centre		Year of information updating 2016
Year established 1894		Year of joining the ITTC 1955
Address 196158 St. Petersburg, Russia, 44, Moskovskoye shosse.		Status in the ITTC member organization
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Type of facility   Cavitation tunnel	Year constructed/upgraded 1961	
Name of facility Large Cavitation Tunnel	Location –	

**Main characteristics** (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top) Length of test section – 6 m, Width of test section – 1.3 m, Depth of test section – 1.3 m; for simulators: full mission

## Drawings of facility



1 - case; 2 - test section; 3 - trunk; 4, 5 - means for flow equalization; 6 - impeller electric motor; 7 - impeller; 8 - electric motor of model of a propeller; 9 - the propeller shaft; 10 - dynamometer; 11 - propeller model; 12 - dump tank

Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.)Instrumentations:Three-components a propeller dynamometer;<br/>Nine-components a two-propeller dynamometer azimuthalpod-type;<br/>Propeller hydraulic drive;<br/>Rimm-drive;<br/>Acoustic box.Water flow velocity in test section: $1 \div 10 \text{ m/s}$ ;<br/> $\pm 40 \text{ 1/s}$ ;<br/>0.6 m;Operating pressure in test section: $(-0.5 \div 2.0) \cdot 10^5 \text{ Pa}$ ;

Applications (Tests performed)

- 1. Determination of propeller & waterjet performance curves in open- water and behind -hull conditions.
- 2. Tests of propellers in podded units to determine forces.
- 3. Quasi-acoustic model tests of propellers and waterjet units in open-water and behind-hull conditions.
- 4. Measurement of cavitation and non-cavitation noise levels on propeller and waterjet models in open-water and behind-hull conditions.
- 5. Measurement of pressure fluctuations induced on model hull by propellers and waterjets.
- 6. Measurement of unsteady forces on model propellers and waterjet systems behind hull.
- 7. Visualization of cavitation phenomena.
- 8. Measurement of vibrations on various types of structures.

Published description (Publications on this facility)