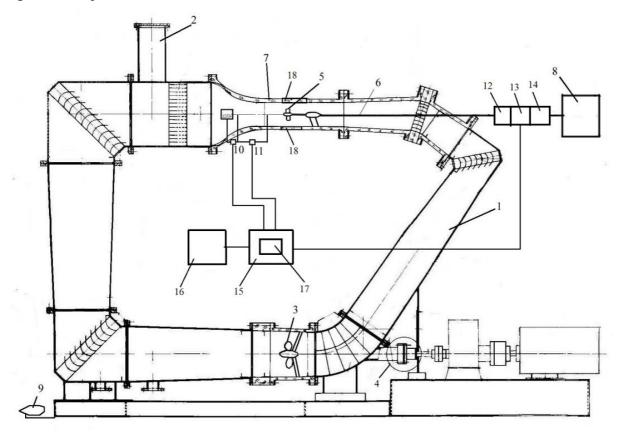
Name of organization Krylov State Research Centre	Year of information updating 2016
Year established 1894	Year of joining the ITTC 1955
Address 196158 St. Petersburg, Russia, 44, Moskovskoye shosse.	Status in the ITTC member organization
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Type of facility Cavitation tunnel	Year constructed/upgraded 1956/1976
Name of facility Medium Cavitation Tunnel	Location —

Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top) Length of test section – 1.6 m, Diameter of test section – 0.68 m, for simulators: full mission

Drawings of facility



1 - case; 2 - trunk; 3 - impeller; 4 - the impeller electric motor; 5 - propeller model; 6 - the shaft of model of a propeller; 7 - test section; 8 - the electric motor of model of a propeller; 9 - vacuum pump; 10, 11, 12, 13 - the test instrumentation; 14 - the detector of revolutions; 15 - control console; 16, 17 - collection and data processing system; 18 - stroboscope

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

Instrumentations: Three-components a propeller dynamometer;

Dynamometer for a dual-purpose nozzle.

Water flow velocity in test section: $2 \div 13 \text{ m/s}$;

Propeller speed: ±50 1/s; Max diameter of tested propellers: ±50 24 m;

Minimum cavitation index: 0.2;

Applications (Tests performed)

- 1. Determination of hydrodynamic & cavitation characteristics of CP & FP propellers.
- 2. Evaluation of erosion resistance of propellers, prediction of propeller cavitation erosion and levels of its severity.
- 3. Model test of ducted propellers and propulsion systems based on ventilated waterjet units at full-scale cavitation numbers.
- 4. Test of propeller models on inclined shaft.

Published description (Publications on this facility)

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