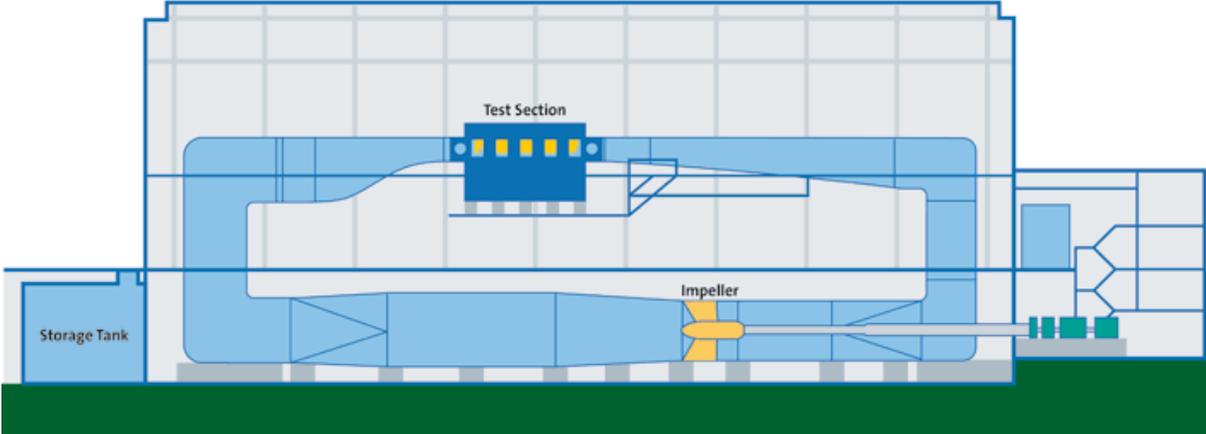


Name of organization Hamburgische Schiffbau-Versuchsanstalt GmbH (HSVA)		Year of information updating 2016
Year established 1913		Year of joining the ITTC since its foundation
Address Bramfelder Strasse 164, 22305 Hamburg		Status in the ITTC Advisory council member
Contact details (phone, fax, e-mail) Phone: +49 40 69203 0 Fax: +49 40 69203 345 Email: info@hsva.de		Website www.hsva.de
Type of facility Cavitation tunnel	Year constructed/upgraded 1990	
Name of facility HYKAT	Location (if different from the above address)	
Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top) Closed type cavitation tunnel for installation of complete ship models		
Drawings of facility		
		
Detailed characteristics (carriages, wave/current/wind generators, instrumentations, etc.) Closed circulating cavitation tunnel with horizontal top, bottom branch submerged in a trench, numerous acoustic treatment features, aeration/deaeration system, planar motion mechanism, high speed video system, PIV system Test section: 11 m x 2.8 m x 1.6 m (L x B x H) Max. velocity: 12.6 m/s Max propeller speed: 60 1/s 2 Dynamometers: Strain gauges, inside the flooded ship model, 21 kW each		

Applications (Tests performed)

Propeller and rudder cavitation observations

Cavitation inception investigations

Thrust break down tests

Force measurements

Determination of hydrodynamic coefficients from maneuvering tests

Flow visualization

Noise tests on complete hull - appendage - propulsor configurations

Investigations on surface ships, submarines, torpedoes and full scale propulsor units

Flow noise investigations

Wake measurements

All types of tailor-made investigations

Published description (Publications on this facility)

www.hsva.de

Arndt, R.E.A. and Weitendorf, E.A.: „Hydrodynamic Considerations in the Design of HYKAT“, STG-Sprechtage Propellers and Cavitation, Hamburg, June 1990