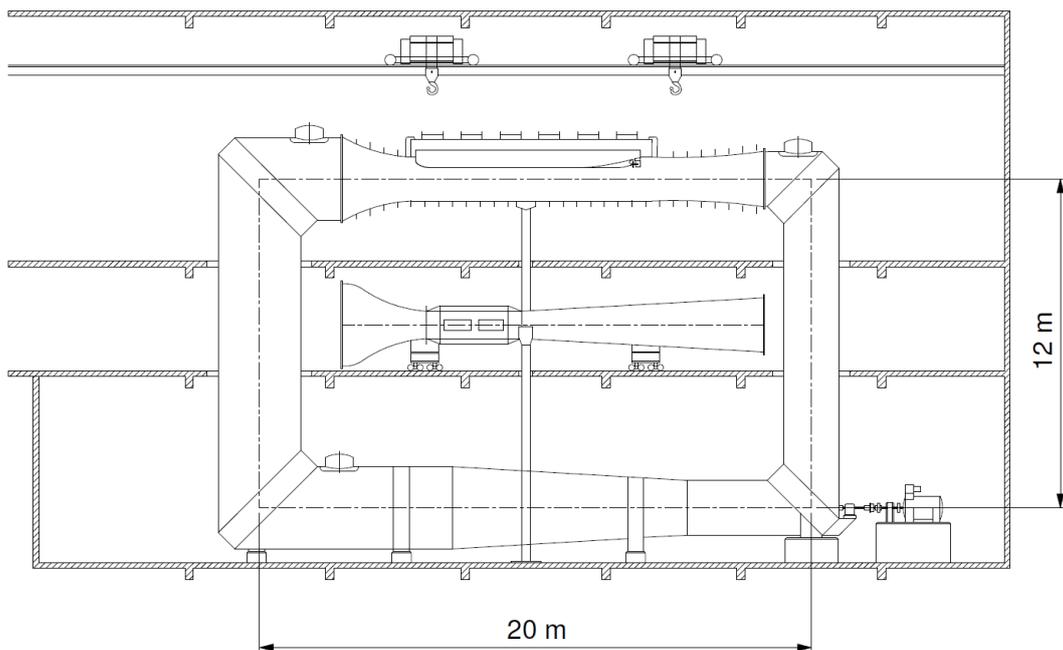


Name of organization SSPA Sweden AB		Year of information updating 2017	
Year established 1940		Year of joining the ITTC 1948	
Address Chalmers Tvärgata 10, Box 24001, SE-400 22 Gothenburg, Sweden		Status in the ITTC Advisory Council member	
Contact details (phone, fax, e-mail) Phone: +46 37 772 90 00 Fax: +46 37 772 91 24 info@sspa.se		Website www.sspa.se	
Type of facility Cavitation tunnel		Year constructed/upgraded 1970 / Constantly upgraded	
Name of facility SSPA Cavitation Tunnel		Location (if different from the above address)	
Main characteristics Test section 1: Diameter 1 m // Test section 2: 2.6 m*1.5 m // Test section 3: 2.1m*1.22 m			

Drawings of facility



Top-View plan / Cross-section-view plan



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

Tunnel section	1	2	3
Length, metres	2.5	9.6	8.0
Test section, m ²	diam 1 m	2.6 × 1.5	2.1 × 1.22
Max speed, m/sec	23	6.9	9.9
Min cav number	0.06*	1.45**	0.30**

* Empty tunnel

** With the propeller in a position 0.2 m below the ceiling

SSPAs Cavitation tunnel consist of 3 interchangeable measuring sections allowing high speed testing of propellers up to 23 m/s as well as large ship models of up to 10 meters in section number 3.

When performing cavitation studies for ships, the complete ship models can be installed in SSPAs cavitation tunnel, which provides a very good representation of the wake field. Since SSPA's cavitation tunnel is a very cost-effective facility, there are many possibilities for solving any problems that might occur. In addition to cavitation studies and erosion prediction, the tunnel is used to measure pressure pulses and radiated noise. Tests can be performed for all kinds of vessels, including merchant ships and fast naval ships, as well as submarines and other underwater vehicles. In addition to study the ship propeller also energy saving devices, rudders, fins and PODs can be included in the scope.

The cavitation tunnel, with its three interchangeable sections, is also very valuable in various types of flow studies. Well correlated traditional methods are combined with high-speed video, PIV etc. Both in-house and external tools and programs are available to analyze the results.

The cavitation tunnel can also be used for studying and developing the latest green technologies such as ships equipped with an air cavity, air lubrication of ship hulls and tidal water turbines.

Published description (Publications on this facility)

www.sspa.se