Name of organization SAMSUNG SHIP MODEL BASIN (SSMB)	Year of information updating 2015
Year established	Year of joining the ITTC
1996	1996
Address	Status in the ITTC
217 MUNJI-RO, YUSEONG-GU, DAEJEON 34051, KOREA	AC Member
Contact details (phone, fax, e-mail) TEL: +82-42-865-4100 FAX: +82-55-630-7670 E-mail: ssmb@samsung.com	Website

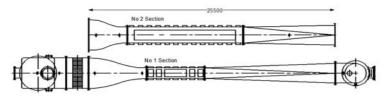
Type of facility CAVITATION TUNNEL	Year constructed/upgraded 1996
Name of facility	Location (if different from the above address)

Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)

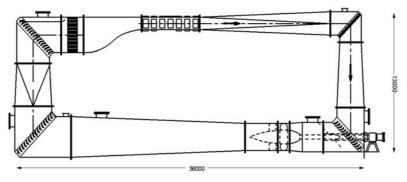
 $L \times D = 36m \times 13m$

Drawings of facility

Top-view plan



Corss-section-view plan



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

- Description: Vertical, plan, closed recirculation water tunnel
- Drive system and power: 7-blades axial flow impeller driven by electric motor(2,600kW, 100RPM)
- Maximum flow speed: 18 m/s for No.1 test section (1.2m x 1.2m x 6m)

12 m/s for No.2 test section($3.0m \times 1.4m \times 12m$)

- Pressure range: 0.1~4.0bar
 Cavitation number: σ ≥ 0.063
- Instrument: Propeller dynamometer, Contra-rotating dynamometer, Force balancer, PIV system,

High speed camera, Acoustic measuring system

Model size: Propeller 150~600mm diameter(normally 250mm), Ship 8~10m length

Applications (Tests performed)

- Cavitation: Cavitation observation(Propeller, Rudder), Pressure fluctuation measurement, Cavitation inception test, Propeller erosion test, Underwater noise test
- Visualization: Wake measurement by PIV/Pitot tube, Paint test, Tuft test

Published description (Publications on this facility)