

<b>Name of organization</b> Technical Research Center, Japan Marine United Corporation	<b>Year of information updating</b> 2016
<b>Year established</b> 2013	<b>Year of joining the ITTC</b> 2013
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<b>Type of facility</b> Towing Tank	<b>Year constructed/upgraded</b> 1977
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<b>Name of facility</b> Tsu Ship Model Basin	<b>Location</b> (if different from the above address)
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**Main characteristics** (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)  
Length:240m, Width:18m, Depth:8m

**Drawings of facility**

Top-view plan  
Corss-section-view plan

The drawings include a top-view plan of the 240m long basin, showing various rooms and equipment locations marked with circled numbers 1 through 9. Cross-sections A-A and B-B provide vertical dimensions and structural details. Detailed views of the main carriage and auxiliary carriage show their mechanical components like gears, racks, and platforms.

①	Wave generator machine room
②	Wave generator control room
③	Wave generator (flap padded type)
④	Space of preparation for tests
⑤	Ship model fabrication shop
⑥	Wave absorber
⑦	Auxiliary carriage
⑧	Main carriage
⑨	Ship model basin

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

Carriages: driven by DC motors, controlled by PLC  
Main carriage (longitudinal direction): maximum speed 7m/sec  
Auxiliary carriage (transverse direction): maximum speed 1.5m/sec  
(rotation around vertical axis): maximum speed 15deg/sec

Wave generator: flap type, hydraulic, 18m wide  
Wave generation capability: length 0.6-18m, height 0-0.52m  
Wave absorber: trimming tank side (beach length 10m) and lateral side (slit panels)

Instrumentation: data acquisition by PCs

Model size: 6-12m for resistance and self-propulsion tests  
3-8m for seakeeping and maneuvering tests

**Applications** (Tests performed)

Resistance and self-propulsion tests in calm water or in waves,  
Propeller (conventional, ducted, contra-rotational) or pod-drive open water tests  
3-D wake survey by 5-hole pitot tubes  
Wave analysis  
Hydrodynamic force measurement in maneuvering motions  
Maneuvering tests by free-running models  
Wave induced motion and loads measurement

**Published description** (Publications on this facility)

Nippon Kokan Technical Report-overseas, September 1978 & March 1979