**Name of organization**
National Maritime Research Institute

**Year of information updating**
2016

**Year established**
2001 (1916 established as the Ship Equipment Inspection Station)

**Address**
6-38-1, Shinkawa, Mitaka, Tokyo 181-0004, JAPAN

**Contact details** (phone, fax, e-mail)
[FAX] +81-422-41-3258  [E-mail ] info2@nmri.go.jp

**Website**
http://www.nmri.go.jp/english/research_facilities.html

**Type of facility**
Cavitation Tunnel

**Year constructed/ upgraded**
1975

**Name of facility**
Large cavitation tunnel

**Location** (if different from the above address)

**Main characteristics** (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)
Length: 18m, height: 10m, Max. and Min. Abs. Pressure: 196kPa, 4.9kPa, Max. velocity: 20m/s(No.1 W.S.), 6.5m/s(No.2 W.S.)

**Drawings of facility**

**Detailed characteristics**
Description of facility: kemf and Remmers, vert. plan, closed recirculation.
Type of drive system: 4-bladed axial flow impeller with inverter control system
Total motor power: 355kw, 1150rpm
Working section Max. velocity: 20m/s(No.1 working section), 6.5m/s(No.2 working section)
Max. and Min. Absolute pressure: 196kPa, 4.9kPa
Cavitation number range: sigma= 0.2 to 10
Instrumentation: 3 kinds of propeller dynamometer, 5 hole pitot tube, various pressure sensors, laser Doppler velocimeter and High-speed camera system.
Type and range of torque and thrust dynamometer:
- T range: ±5884N
- Q range: ±294Nm (Type J-26)
- ±1961N
- ± 98Nm (Type H-38)
- ± 687N
- ± 39Nm (Type R-46)

Propeller or model size range: diameter of propeller: from 150 to 400mm
250mm typical
Length of ship model; 7m Max.
6m typical

Applications (Tests performed)
(1) propeller test in uniform flow and non-uniform flow by wire mesh screen and behind ship model
(2) force and pressure distribution an hull, propeller blade, 2D or 3D wing, etc.

Published description (Publications on this facility)