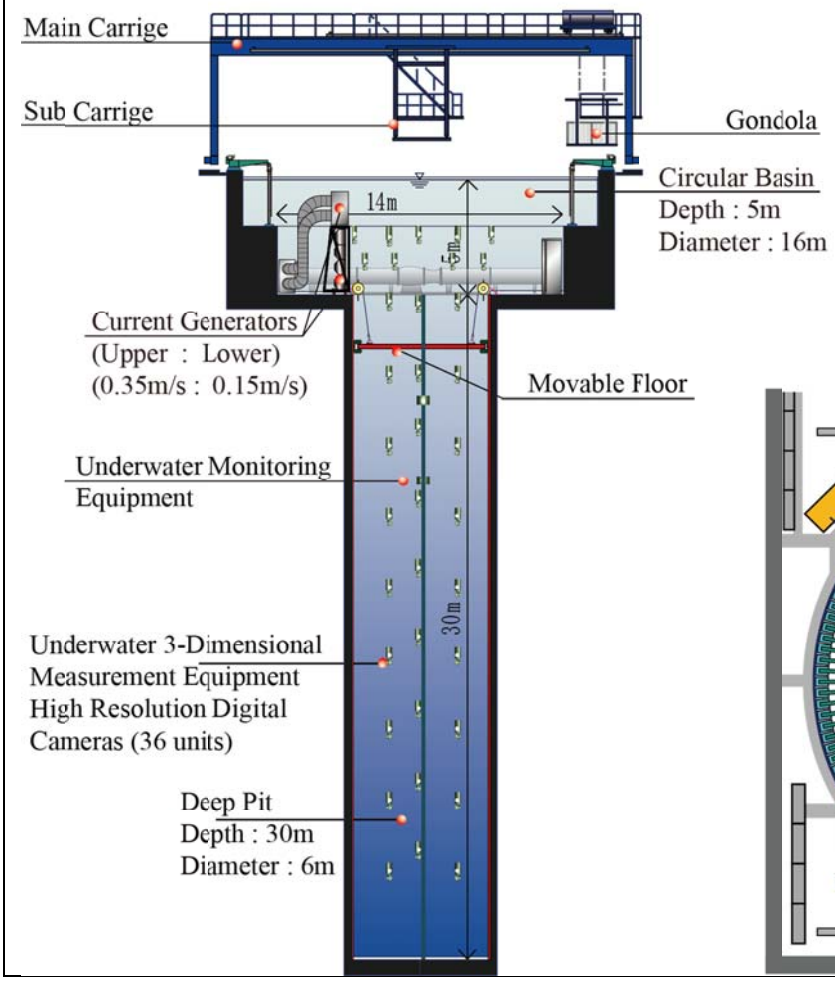
Name of organization National Maritime Research Institute	**Year of information updating** 2016
Year established 2001 (1916 established as the Ship Equipment Inspection Station)	**Year of joining the ITTC**
Address 6-38-1, Shinkawa, Mitaka, Tokyo 181-0004, Japan	**Status in the ITTC**
Contact details (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 Deep Sea Basin	**Year constructed / upgraded** 2002
Name of facility Deep Sea Basin	**Location** (if different from the above address)

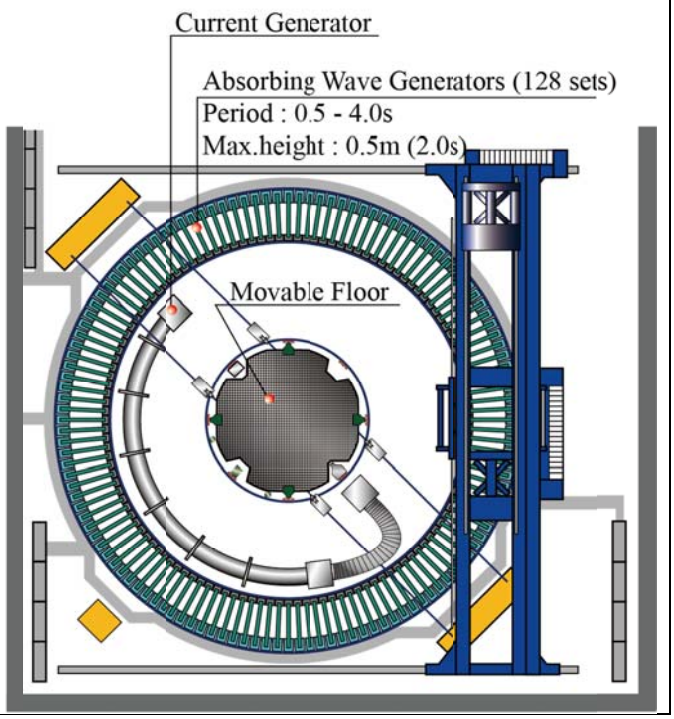
Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)
35m depth test basin for the experiments of slender submersed structures and offshore structures.

Drawings of facility

Corss-section-view plan



Top-view plan



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

Circular Basin : Depth	Depth : 5m Effective Diameter : 14m (Outside Diameter : 16m)
Deep Pit	Depth : 30m Effective Diameter : 6m
Active Absorbing Wave Generator	Flap Type Snake System 128 active absorbing wave generators distributed along the circumference of circular basin can generate multi directional regular and irregular waves. Flap Size Width : 0.3m, Height : 2.5m Drive Unit : 0.8kw, A/C Servomotor, Ball screw drive Wave Period : 0.5 - 4.0s Max. Wave Height : 0.5m (2.0s)
Current Generator	Current generators can be installed in the circular basin and the deep pit. Max. Flow Velocity Upper (circular basin) : 0.35m/s, Lower (deep pit) : 0.15m/s
Movable Floor	Movable floor can be lifted to reduce water depth in the deep pit. Max. Load : 1.0ton (dry) Range : 30m in deep pit
Underwater 3-D Measurement System	Equipment for 3-dimensional measurement of the model dynamic behavior Optical Device : High Resolution Digital Cameras (36 units)
Underwater Monitoring System	Monitoring equipment can be vertically moved in deep pit. Optical Device : 1/3-inch CCD Camera
Measurement Carriage	Main Carriage : X-Direction Sub Carriage : Y-DIrection It rans on the main carriage Z-Direction Range 3m
Gondola	Equipment for maintenance of the Deep-Sea Basin Max. Load : 350kg Range : 35m

Applications (Tests performed)

(1)measurement of the behavior of riser scaled model
(2)measurement of the motion of moored floater model in waves
(3)measurement of the motion of floater model which is positioned by DPS in waves
(4)measurement of pressure loss in pipes during hydraulic transport of solid particles

Published description (Publications on this facility)

Deep Sea Basin and Riser Technology (in Japanese)
https://www.nmri.go.jp/main/publications/paper/pdf
Study on safety of the Ultra Deep Riser System (in Japanese)
https://www.nmri.go.jp/main/publications/paper/pdf