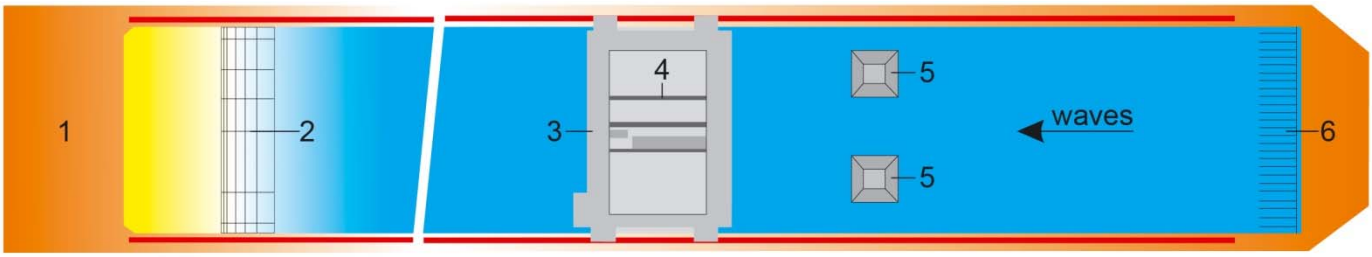
Name of organization MARIN	**Year of information updating** 2017
Year established 1932	**Year of joining the ITTC** 1932
Address Haagsteeg 2 6708 PM Wageningen The Netherlands	**Status in the ITTC**
Contact details (phone, fax, e-mail) +31 317 493 911 +31 317 493 235 info@marin.nl	**Website** www.marin.nl www.marin.eu
Type of facility Towing tank, shallow water	**Year constructed / upgraded** 1958
Name of facility Shallow water 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)

Length	220	m
Width	15.8	m
Water depth	0 1– 1.15	m (variable)

Drawings of facility



1 Working platform
2 Beach (height adjustable)
3 Carriage
4 Sub carriage
5 Pits (each 3 × 3 m, depth 2.2 m below tank bottom)
6 Wave generator

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

Description of carriage	Manned, motor driven, four drive wheels, four pairs of horizontal guide wheels
Type of drive system and total power	Servo controlled, 4 * 45 kW
Maximum carriage speed	4 m/s
Other capabilities	PMM (horizontal plane)
Wave generator capability	Regular and irregular waves Wave period 0.5 – 3 s Wave direction 0 – 180 deg. Wave height up to 0.25 m (significant)
Wave maker type:	Piston type wave generator, 3 sections
Beach type and length	Circular beach with lattice structure, length 3.6 m, adjustable in height
Other capabilities **Wind**	Wind generation by portable wind fans

Water depth	Water dept adjustable, - maximum 1.15 m for calm water - maximum 1.00 m for wave tests
Instrumentation	Dynamometers for - towing force - thrust and torque at propeller hub, - 6 component force balances, - 5 and 6 component balance for shaft forces and blade forces - 4 component for rudder and fins Thrusters with thrust and torque measurement at propeller hub Photo, video, underwater video, Wave height transducers 5 hole pitot tube
Model size range	1.5 – 12 m
Model tracking techniques	NDI camera (optical tracking)
Test performed **Still water performance**	Resistance and propulsion test in calm water especially for shallow water and / or narrow channels. Flow observations by paint and tufts in shallow water Longitudinal wave cut experiments
Manoeuvring	Manoeuvring tests, model length 1.5 – 8 m PMM tests, model length 1.5 – 2.5 m Crabbing tests, model length up to 12 m.
Seakeeping	Seakeeping tests with measurements of motions, wave loads and added resistance of self propelled ships.
Offshore	Floating structures and mooring arrangements depending on water depth and wave conditions Test on moored and fixed object to determine motions, mooring forces and loads due to waves. Current load test (especially in shallow water)
Other remarks	
Published description (Publications on this facility) http://www.marin.nl/web/Facilities-Tools/Basins/Shallow-Water-Basin.htm	