

Deep Water Towing Tank



PMM Manoeuvring tests in the deep water towing tank

Main particulars of deep water towing tank:		
Length:	240,0	m
Width:	12,0	m
Water depth:	5,5	m

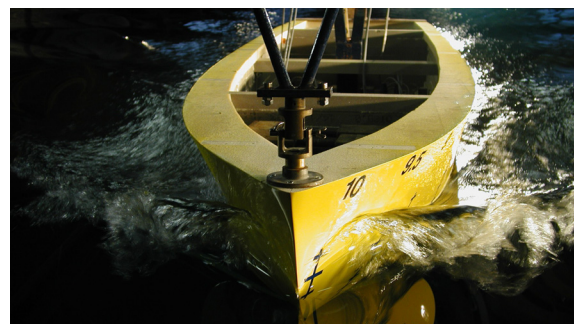
Towing carriage in deep water towing tank:

Powering: 4 x 75 KW Asynkron AC Motors,
Siemens PLC control
Speed: from 0 to 14 m/s
Accuracy: $\pm 0.2\%$ of the actual value

The carriage can be fitted with a trailing auxiliary carriage and moving seabed setup depending on the test requirement.

The carriage is equipped with state-of-the-art data acquisition system and analysis system ensuring accurate data acquisition and rapid data analysis.

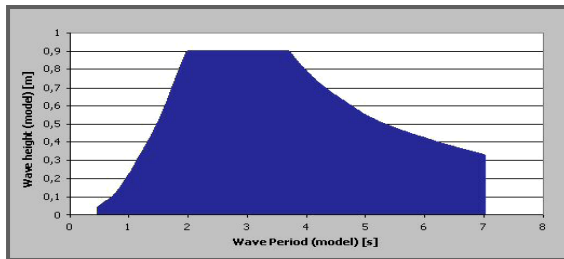
Network communications to the carriage by WLAN.



Luxury motor yacht in the deep water towing tank

Double flap wave maker

Computer controlled hydraulic double flap wave maker fitted with advanced Siemens PLC control system for generation of accurate regular and irregular waves. Maximum wave height 0.9 m. Wave periods in the range from 0.5 to 7 s. Waves are generated and controlled by an advanced in-house developed control system.



Wave maker capability

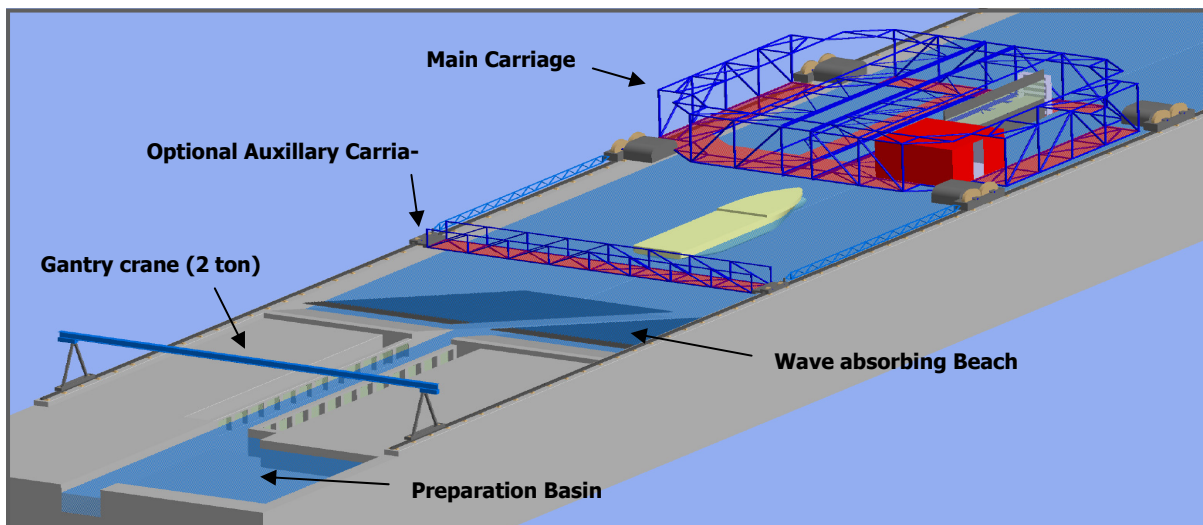
The towing tank is fitted with a wave absorption beach in the opposite end of the wave maker.

Waves are measured by means of stationary wave probes mounted on the carriage or on the model or by means of state of the art wave kinematics probe mounted on the carriage.

Video & Photo

Onboard digital video & photo system synchronised with data logging system ensuring accurate documentation of the tests. Video system also include an advanced subsea setup allowing for high quality underwater digital video.

Both video and photo can include overlay text with test information.



Towing carriage arrangement

Equipment	
<p>Dynamometers available for:</p> <ul style="list-style-type: none"> • Towing force • Propulsion tests (conventional and thruster/Pod units) • Propeller open water tests. • Thruster / Pod open water tests • Sailing yacht tests 	<p>PMM and VPMM:</p> <ul style="list-style-type: none"> • Planar Motion Mechanism (PMM) for captive ship manoeuvring tests in deep and shallow water. • Vertical Planar Motion Mechanism (VPMM) for establishment of added mass and damping of floating and submerged bodies.
<p>Tests equipment for ships and offshore units including:</p> <ul style="list-style-type: none"> • Pressure gauges • Force gauges (1DOF to 6 DOF). • Accelerometers • Relative wave probes 	<p>Test equipment for free sailing ships and offshore units performing:</p> <ul style="list-style-type: none"> • Free sailing manoeuvring tests • Free sailing seakeeping tests. <p>Equipment includes optical position tracking system, autopilot system etc.</p>



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Subject to changes without notice

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