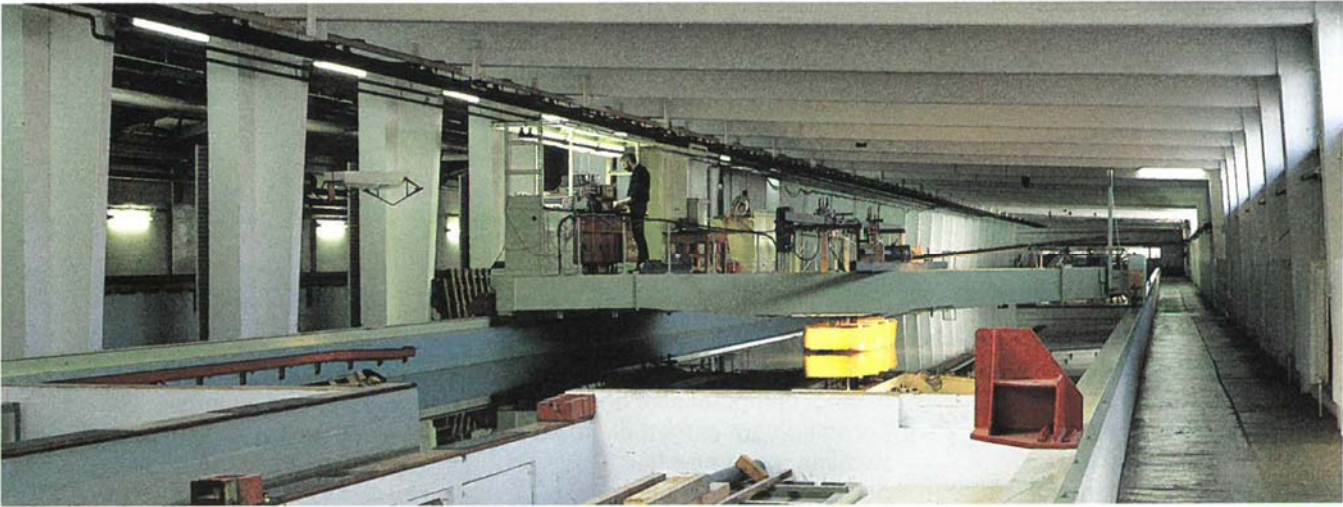
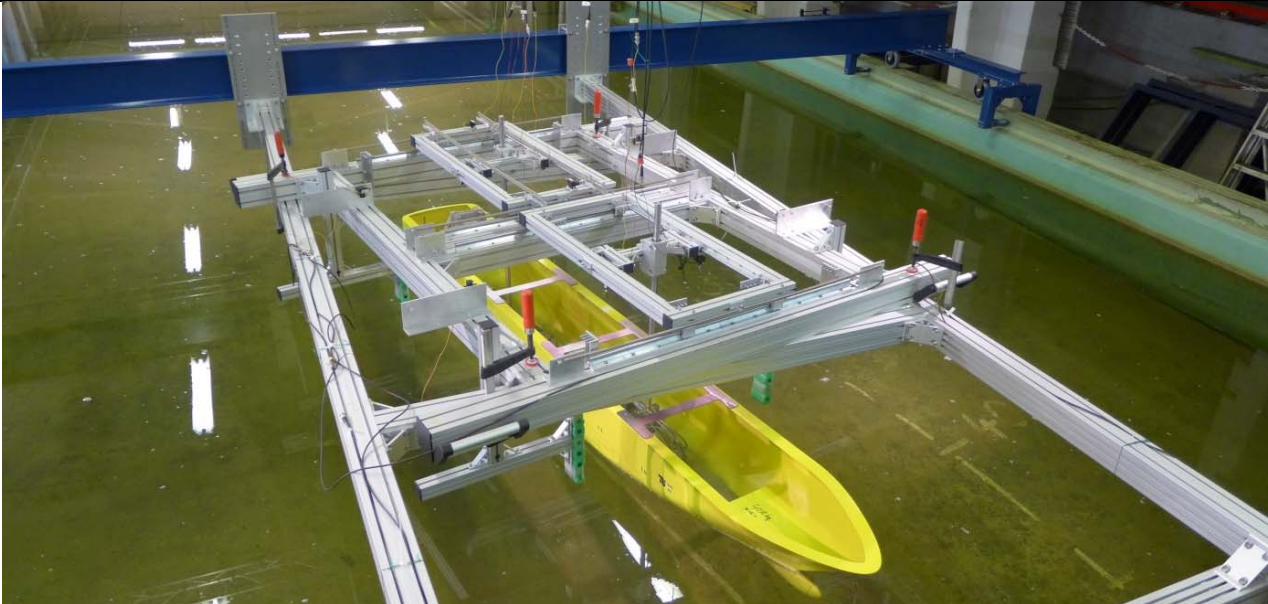


<b>Name of organization</b> Technische Universität Berlin Naval Architecture & Ocean Engineering Chair of Dynamics of Maritime Systems	<b>Year of information updating</b> 2017
<b>Year established</b> 1879	<b>Year of joining the ITTC</b> 2013
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<b>Type of facility</b> Shallow Water and Seakeeping Basin	<b>Year constructed/upgraded</b> 1953 / 1994
<b>Name of facility</b> Shallow Water Basin	<b>Location</b> Müller-Breslau-Str. 17, 10623 Berlin
<b>Main characteristics</b>  For tests in shallow waters the water depth can be varied from 0.2 to 1.1 m. The basin has a combined piston / flap type wave maker at the end for generating very accurate waves.	
<b>Drawings of facility</b>  	



Measurement device to determine the mean forces in waves

### Detailed characteristics

#### Basin

Length	120 m
Width	8 m
Depth	0.2 to 1.1 m

#### Towing Carriage

Speed	4 m/s
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#### Wave generator

Wave heights	0.05 to 0.30 m
Wave lengths	0.4 to 20 m
Piston or flap type	
Regular and irregular waves, rogue waves, wave packets, user-defined wave trains	

#### Measurement devices

Two 6-axis K6D40 forces-torque sensors with each  $F_x = F_y = 500$  N,  $F_z = 2000$  N,  $M_x = M_y = 20$  Nm and  $M_z = 40$  Nm  
 Motion measurement of 6DoF through use of displacement sensors

### Applications

This towing tank is used for model tests at shallow water depths (e.g. for inland shipping) and for tests on ship/structure interaction for coastal engineering (harbours, canals).

The wave generator permits tests on coastal and offshore structures under seakeeping conditions. Regular, irregular and rogue waves as well as wave packets can be generated.

An innovative measuring device to investigate mean wave forces, while accurately measuring the motions of the model with displacement sensors, can be installed behind the towing carriage.

Being anytime at disposal for long-term investigations, this basin is also useful for free manoeuvring tests and for testing new developed measurement techniques.

### Published description