
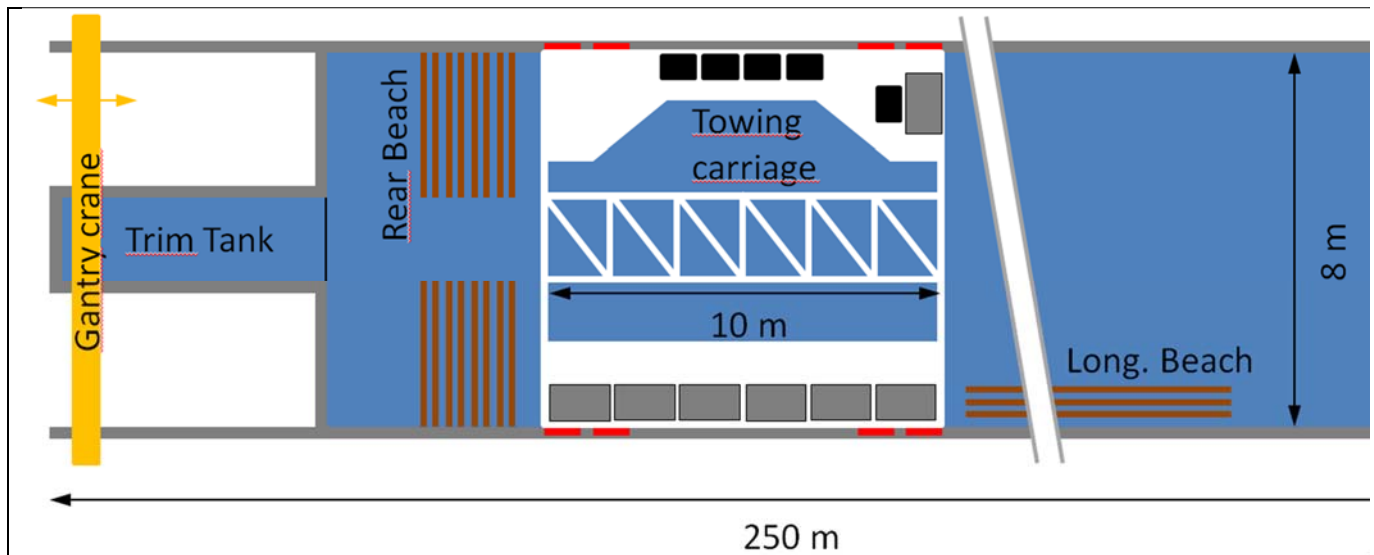


<b>Name of organization</b> Technische Universität Berlin Naval Architecture & Ocean Engineering Chair of Dynamics of Maritime Systems	<b>Year of information updating</b> 2017
<b>Year established</b> 1879	<b>Year of joining the ITTC</b> 2013
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<b>Type of facility</b> Towing Tank	<b>Year constructed/upgraded</b> 1903 / 1946 / 1993
<b>Name of facility</b> Large Towing Tank	<b>Location</b> Müller-Breslau-Str. 17, 10623 Berlin
<b>Main characteristics</b>  <p>The Large Towing Tank is used for testing of ship models up to 8 m in length and 2 m in breadth, twin hull ships in particular, high speed vessels and other maritime and ocean engineering systems.</p> <p>The fast towing carriage with a maximum speed of 12.5 m/s has a wide open space of 10 m in length under the test bridge. A wave absorber is installed at the far end and another at one of the long sides of the basin, mostly used for calm waves generated by models during high speed testing.</p>	
<b>Drawings of facility</b>  	



### Detailed characteristics

#### Basin

Length	250 m
Width	8 m
Depth	4.8 m

#### Towing Carriage

Built	1993 by Kempf & Remmers
Speed	12.5 m/s
Stability	1.0 mm/s

#### Measurement devices

Towing tank open water propeller dynamometer H29 (Kempf & Remmers):  $T_{\max} = 400 \text{ N}$ ,  $Q_{\max} = 15 \text{ Nm}$ ,  $n = 50\text{s}^{-1}$   
 Several ship model self propulsion propeller dynamometers by Kempf & Remmers (R31, R25, R33 & R69):  $T_{\max}$  between 100-600 N, and  $Q_{\max}$  between 4-20 Nm  
 Resistance dynamometer R74 (Kempf & Remmers) with optional friction deduction  
 Model clamp R75 (Kempf & Remmers)  
 Guiding arm R57 (Kempf & Remmers)

All measurement devices can also be installed in the other experimental facilities: UT2 and shallow water basin

### Applications

Large Towing Tank is used for testing ship models up to 8 m in length and 2 m in breadth, twin hull ships, high speed vessels and other maritime and ocean engineering systems in calm water.

Typical tests are resistance & propulsion tests, open water propeller tests, investigation offshore structures.

### Published description