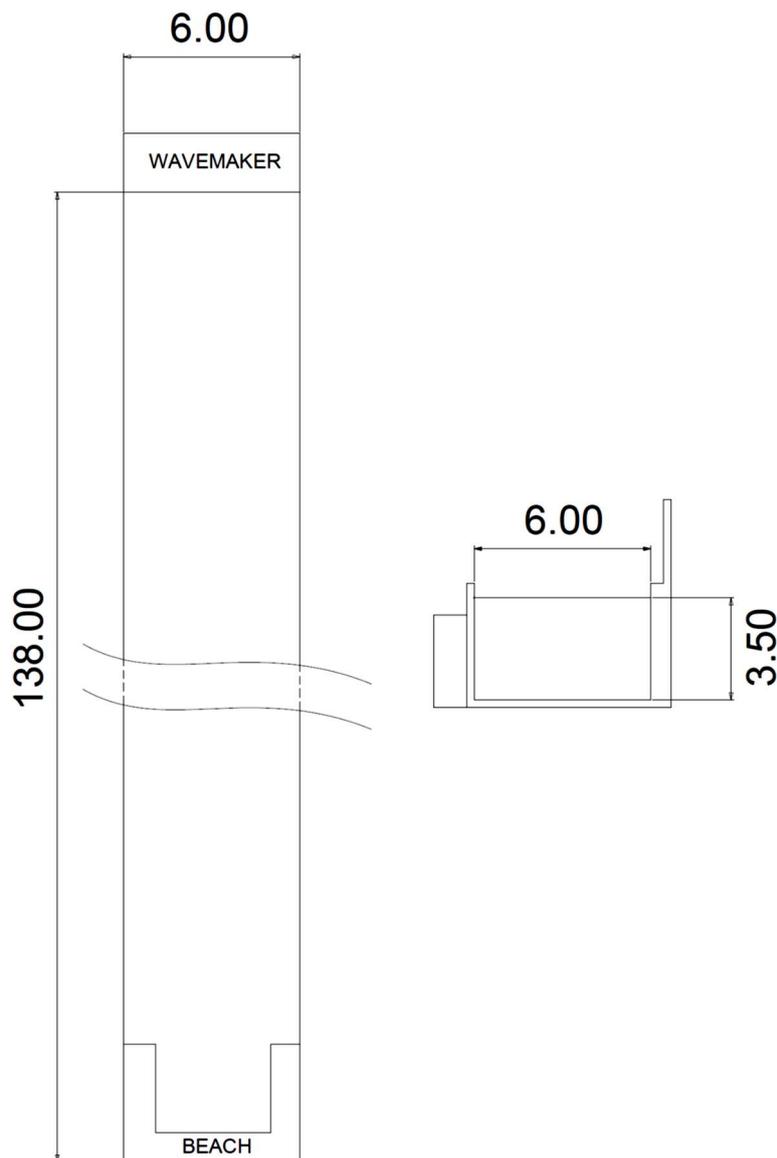


<b>Name of organization</b> University of Southampton		<b>Year of information updating</b> 2016	
<b>Year established</b> 1852		<b>Year of joining the ITTC</b> 1990	
<b>Address</b> Building 185 University of Southampton Boldrewood Campus, Burgess Road, Southampton, S016 7QF United Kingdom		<b>Status in the ITTC</b> Member	
<b>Contact details</b> (phone, fax, e-mail) Bertrand Malas Towing Tank Manager <a href="mailto:b.b.malas@soton.ac.uk">b.b.malas@soton.ac.uk</a> +44 (0) 2380 591 993		<b>Website</b> <a href="https://www.southampton.ac.uk/engineering/research/facilities/towing-tank.page">https://www.southampton.ac.uk/engineering/research/facilities/towing-tank.page</a>	
<b>Type of facility</b> Towing Tank		<b>Year constructed/updated</b> 2016	
<b>Name of facility</b> Boldrewood Towing Tank		<b>Location</b> (if different from the above address)	
<b>Main characteristics</b> (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top) 138.0 x 6.0 x 3.5 (m)			

**Drawings of facility**



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

- Monocoque aluminum carriage with dual cable drive system, top speed 12 m/s;
- 12 elements HR Wallingford wavemaker:
  - Regular waves up to 0.70 m height;
  - Irregular waves up to 0.35 m height;
  - Focused waves;
  - Straight and oblique waves;
  - Dynamic wave absorption capability.
- General Acoustics ultrasonic wave probes;
- Tow post dynamometer:
  - Drag range: 0 - 150,500,1000 N
  - Side force range: 0 - 150,500,1000 N
  - Vertical force: not measured
  - Roll moment range: 0 – 30 Nm
  - Yaw moment range: 0 – 40 Nm
  - Pitch moment: not measured
  - Pitch range: +/- 18 degrees
  - Roll range: +/- 45 degrees
  - Pitch: free
  - Roll: free or adjustable fixed
  - Yaw: adjustable fixed
  - Heave: free
  - Surge: fixed
  - Sway: fixed
- LaVision PIV system;
- Qualisys Motion capture system, both above water and under water;
- 6x2 m mnderwater platform;
- Automatic side beach;
- Pitot tube wake survey kit.

**Applications** (Tests performed)

- Resistance;
- Propulsion;
- Seakeeping / Ship Motions;
- Wake Survey;
- PIV;
- Open water;
- Offshore structures;
- Wave Energy Devices.

**Published description** (Publications on this facility)