Name of organization University of Strathclyde	**Year of information updating** 2022
Year established 1796	**Year of joining the ITTC** unknown
Address Kelvin hydrodynamics laboratory University of Strathclyde 80, acre road, Glasgow, G20 0TL Scotland, United Kingdom	**Status in the ITTC** Member
Contact details (phone, fax, e-mail) +44(0)1413302840 kelvin-hydro-lab@strath.ac.uk	**Website** https://www.strath.ac.uk/engineering/navalarchitectureoceanmarineengineering/workingwithbusinessorganisations/ourfacilities/kelvinhydrodynamicslaboratory/

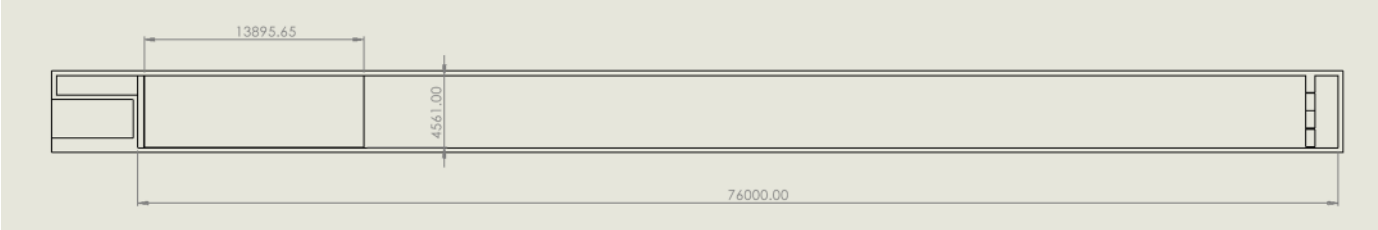
Type of facility Towing tank	**Year constructed/upgraded** 1960s/2010
Name of facility **Kelvin hydrodynamics towing tank**	**Location** (if different from the above address)

Main characteristics (dimensions of tank/basin/test section; for simulators: full mission, part task or desk top)

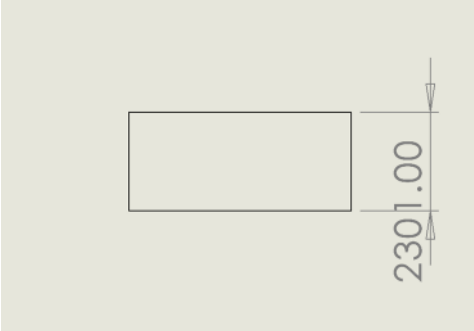
$76 \times 4.6 \times 2.1\ (m)$

Drawings of facility

Top-view plan



Corss-section-view plan



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

- Towing carriage, up to 5m/s
- Variable water depth 4 flap-type dry back active absorbing wave maker. Maximum regular wave height above 0.5m, wave period range 0.5-2s.
- Multiple DAQ system, up to 100 channels.
- Resistance and ultrasonic wave probes.
- Pressure transducers, absolute and relative.
- Above and underwater optical motion tracking system
- Single and multi-axis load cell.
- Wired/wireless accelerometer.
- Self propulsion dynamometer.
- PIV, ADV for flow visualization.
- High speed camera, HD above/underwater video cameras.
- 6 DOF motion platform.
- EDFs for wind load simulation.

Applications (Tests performed)

- Resistance, added wave resistance test.
- Seakeeping
- self-propulsion tests
- oil & gas platform wave and current loading.
- Floating wind platform motion response.
- Tidal turbine tests
- Wave energy converter test.
- Water sport tests.
- Underwater robotics, AUV.

Published description (Publications on this facility)