

PHYSICAL MODELLING OF WAVES AND STRUCTURES

Manly Hydraulics Laboratory provides a full service in physical modelling for coastal solutions. Facilities at the Laboratory include:

- 2D random wave flume 30 m long x 1 m wide
- 3D enclosed random wave basin 30 m x 18 m
- A range of indoor and outdoor modelling areas for specific project modelling
- Unrestricted water supply from adjacent Manly Dam via a 500 mm gravity main

The random wave generators used are computer controlled to allow selection of appropriate wave spectra and wave groupiness.



The 2D wave flume is used for physical modelling of structure cross-sections, wave overtopping and testing of wave deflectors and scour protection options.

The MHL capability includes short and long period wave modelling. Project work includes seiche modelling of harbours and enclosed basins.



The 3D wave basin is available for major breakwater (jetty) design and upgrading, assessment of armour unit performance, oblique wave studies, runup and overtopping studies.

