



Vlaamse  
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Maritiem onderzoekscentrum



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# Flanders Maritime Laboratory (FML)

In September 2016, the Government of Flanders decided to build a new research facility in Ostend with a towing tank and a wave basin (Coastal & Ocean Basin, COB). In 2023 these facilities shall be operational.

## Towing tank II

The new towing tank have a total length of 174 m (of which 136 m useful length for testing), a width of 20 m and a maximum water depth of 1 m. In addition to this water level, waves with an amplitude up to 20 cm can be generated. The ship model designed for use in this towing tank has an overall maximum length of 8 m and a width of 1.5 m.

In contrast to the current towing tank, the new towing tank have observation windows and an observation tunnel to easily visualise the flow next to and beneath the ship model. The fully automatic towing carriage will offer the same features as the current towing tank and additional functionalities are still being considered.

## Coastal & Ocean Basin (COB)

The COB is a cooperation between the Universities of Ghent and Leuven and Flanders Hydraulics. In this 30 x 30 m wave basin, scale models may be subjected to waves as well as currents and wind. Various wave paddles will allow a multi-directional wave climate to be created in combination with maximum currents of 0.4 m/s. Wind loads up to a maximum speed of 70 km/h can also be applied. The basin can be utilised in a wide range of fields and markets such as wave and tidal power, offshore engineering, coastal engineering or wave/current-vegetation interactions.

