

Factsheet TTC (Tidal Testing Centre)



HIGH TIDAL FLOW SITE FOR INTERMEDIATE SCALE TESTING

The Tidal Energy Testing Centre in Den Oever, provides excellent opportunities for Tidal Energy Testing at intermediate scale. Water flows up to 4,5 m/sec are available depending on the tide.

The facility uses an existing sluice, of which the basic function is to discharge water from the IJsselmeer to the Waddenzee, twice a day.

The main function of the sluices always remains dominant; testing equipment therefore has to be placed in a way that it can be easily removed or lifted in case of emergency.

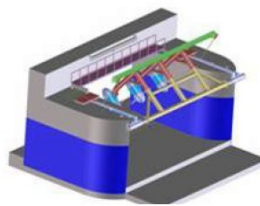
Testing facilities available are a feed-in electrical grid-connection, with a capacity of 160 kVA, if needed scalable to higher kVA.

Data acquisition services are available via the network of the Tidal Testing Centre. Daily flow

can be predicted because of the scheduling options for opening/closing of sluice.

Easy accessible by truck via road and via boat. When the sluice is closed there is no water flow, which enables preparation and inspection activities under calm conditions.

The Tidal Testing Centre can facilitate a number of specific services, dedicated to client wishes and specifications, such as logistic support, Engineering and testing support, obtaining all required permits and rent of office space.



Free testing under FP7 MaRINET programme

March 8th, 2012 -- The first call under the MaRINET programme for access to TTC has closed. Applications are now being reviewed and results will be announced in April. The second call for access will open in July 2012 for access between January-July 2013. The deadline for submissions under the second call is 26th September 2012. Tidal Testing Centre Den Oever welcomes queries from potential users for 2013. Please contact the infrastructure manager on ps@tidaltesting.nl to express your interest.

Dimensions

- The size of a sluice is 16 m wide with a depth of 4,2 m
- Ideal for 'intermediate scale' testing of offshore devices (best practice for offshore Tidal scale Testing is $\pm 1:3$)
- Suitable for 1:1 scale testing of small in river power units

Characteristics

- 2 cycles a day
- Water velocity accurately predictable (1.5 - 4.5 m/s)
- Laminar flow

Accessibility

- Access by bridge, dingy or diver.
- larger (crane vessels) can be used for a longer period, from 12 hours to several days
- Accessible by truck via parallel road
- Sensors / camera's can be easily installed.
- Grid connection (400V - ca. 160KVA) available.

Available equipment

- ADCP 3D
- Power metering
- wifi / Ethernet with access to high speed internet
- Assistance with data logging and controls



