



Shallow Water Basin

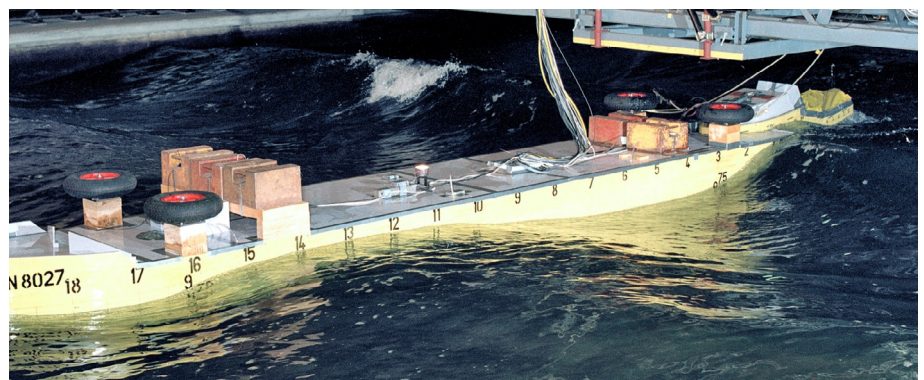
Model size range

Particularly equipped for inland waterways push-boat and tow configurations. Overall length of 26 m and total beam of 5.5 m is the largest tested so far
 Manoeuvring tests (zig-zag, PMM), model length up to 8 m
 Floating structures and mooring arrangements depending on water depth and wave conditions

Model tracking techniques

Objects are tracked by optical system

Dimensions	220 m × 15.8 m, 1.1 m deep
Carriage	Manned, motor-driven
Type of drive system and total power	AC Thyristor power supply, 4 × 15 kW
Maximum carriage speed	4 m/s
Other capabilities	PMM equipment
Wave generator capability	Regular and irregular waves Wave period 0.5 - 5 s Wave direction 0 - 180 deg Wave height up to 0.25 m (significant)
Wave maker type and extent	Piston type, on short side
Beach type	Adjustable in height, lattice type Portable electric resistance type wave probes
Wind	Generated by portable fans
Water depth	Adjustable, maximum 1.15 m for calm water, 1.0 m for wave tests



Test capabilities

- Manoeuvring tests, zig-zag tests, stopping tests, PMM tests for determination of manoeuvring coefficients as input for the manoeuvring simulator
- Resistance and self-propulsion tests especially for shallow water and/or narrow channels for ships and large push-tow fleets
- Seakeeping tests with measurements of motions, wave loads and added resistance in waves for self-propelled ships
- Behaviour of vessels in waves during beaching
- Oscillation tests and tests in waves with a restrained model to determine hydrodynamic coefficients
- Tests for moored and fixed objects to determine the motions, mooring forces and loads due to waves and wind

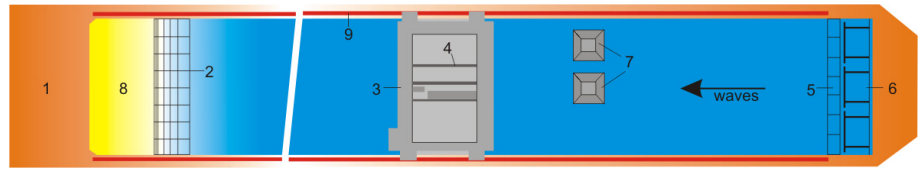
Instrumentation

MMS

(measuring frequency up to 10,000 Hz)

Number of channels: 40 (extendable)

High speed film and video recording equipment available



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|---------------------|---|--|
| 1 Working platform | 4 Sub carriage | 7 Pits (each 3 × 3 m, depth 2.2 m below tank bottom) |
| 2 Beach (removable) | 5 Strips to reduce cross-wave resonance | 8 Working pond |
| 3 Carriage | 6 Wave generator | 9 Walkway with rails |

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