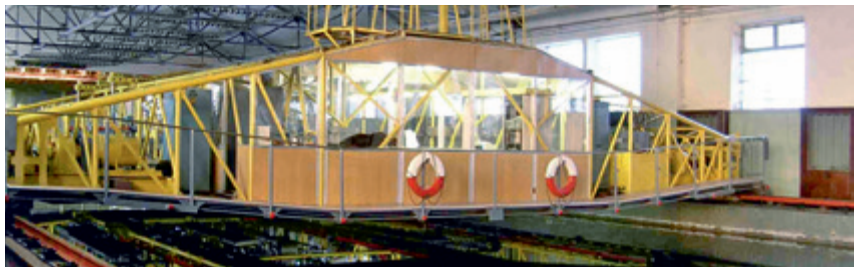
# MODEL TESTS ON OFFSHORE ENGINEERING STRUCTURES

## in limited water depth and wave conditions


- Model studies into propulsive performance of ships and vessels of various types.
- Model studies into hydrodynamic performance of propulsors of various types
- Analysis of model flow pattern with fluid.
- Hull-shape optimization for ships, vessels and offshore engineering structures.
- Determination of added resistance of vessels and floating rigs in waves.
- Development of projects for offshore structure transportation to installation sites.
- Experimental investigation into scour and tanker behavior at operation of main propulsors during loading nearby drilling platforms in shallow-water and wave conditions.
- Development of protection means for foundations of offshore drilling platforms of gravity type against scour as a result of wave and current effect.

**Basic parameters of the tank:**

| | |
|---|---|
| • Tank length | 202 m |
| • Tank width | 16 m |
| • Water depth | 0–1.75 m |
| • Towing carriage speed | 0.1–6.0 m/s |
| • Model length | up to 10.0 m |
| • Regular waves: | |
| • Wave length | 1.0–10.0 m |
| • Wave height | 0.02–0.35 m |

**Tank testing equipment:**

- Powered towing carriage
- Pneumatic wave maker for regular waves
- End inclined wave damper with lowered sections
- Docks for model loading and ballasting
- Experimental site to study scour effect nearby offshore engineering structures
- Area for model preparation, adjustment and instrumentation calibration

## UNIQUE EXPERIMENTAL OPPORTUNITIES

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