

# Operational Navigation Support Model Rotterdam (OSR)

Svašek Hydraulics has developed an operational hydrodynamic model of the entire port of Rotterdam. The model calculates at a very detailed degree currents and water level. Model results support the port authorities and harbour pilots with guiding ships safely through the port.

Ship guidance is important for reducing the risks of accidents. Ship traffic is influenced by water level and currents. Currents and water level are constantly changing. From time to time currents can be very tricky. Obviously safe ship traffic is closely related to reliable information about currents and water level.

The model not only calculates the present situation, but also makes a prediction for the coming 24 hours. To make a reliable prediction within a reasonable time, advanced techniques are being used: Kalman-filtering, model nesting, 3D WAQUA-model schematisation, parallel computing. Svasek also presents the model results by means of an access restricted internet-site.

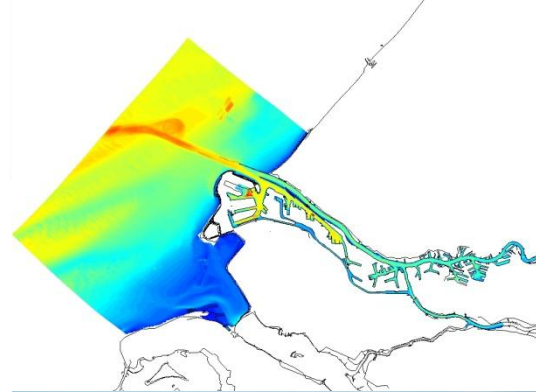
The model is constantly being adapted, following developments in the port area and new demands. In the near future the model can be supportive to all kinds of port activity, like port (re)construction.

CLIENT  
Port of Rotterdam N.V.

LOCATION  
Port of Rotterdam

DATE  
2007 - present

SERVICES  
On-line Hydrodynamic model,  
3D-WAQUA modelling of port area,  
Website-design.



**SVASEK**  
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