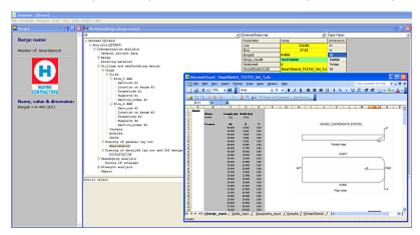
## **Taxonomy application examples**

## **QTRANS**

QTRANS is a pile transport engineering configurator developed in Quaestor for Heerema Marine Contractors, streamlining their process including analysis. The application involves an intelligence way of cargo definition which has to be transported on an existing barge (selection from a database). The location of cargo at the barge is automatically drawn in the integrated 3D CAD program MicroStation.

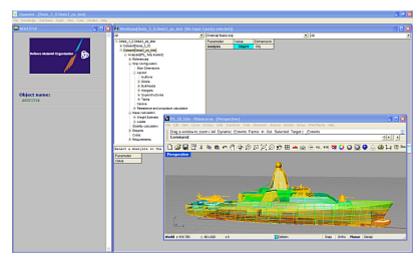


QTRANS can calculate transport motions and accelerations by either Noble Denton (interface with an inhouse spreadsheet) or Seakeeping analyses program Moses ( <u>satellite</u> program). Further the structural general and local strength of the cargo and barge is calculated with the integrated programs SACS and ROARK respectively. These are from importance for the grillage and seafastening design at the barge.

Finally results produced by QTRANS are presented in a marked-up MS Word document.

## **DESIS 3**

DESIS 3.0 is a conceptual ship design configurator of the Royal Netherlands navy managing the ship design workflow. While developing the concept ship design the concept is real time shown in the 3D CAD program Rhinoceros. Furthermore, geometrical data is obtained from Rhinoceros and used for further analyses and calculations in DESIS 3.0



DESIS 3.0 uses Marin's DESP for speed power predictions (see also QDESP). An extensive mass calculation based on the SWBS (Ship Work Breakdown Structure) is included. Hydrostatics an the first indication of the intact stability performance of the concept design is determined by Rhinomarine (plug in of Rhinoceros).

Finally results produced by DESIS 3.0 are presented in a marked-up MS Word document.

## **QAQWA**

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Gusto MSC has integrated their existing hydrodynamic tool AQWA in Quaestor knowledge based system. QAQWA streamlines the preparation of input, execute AQWA software modules and perform the analysis of the hydrodynamic performance data produced by AQWA. QAQWA uses integrated Matlab files to produce graphs and tables.

Finally results produced by QAQWA are presented in a marked-up MS Word document.

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