



Loading Instrument for Inland Navigation Tanker Vessels



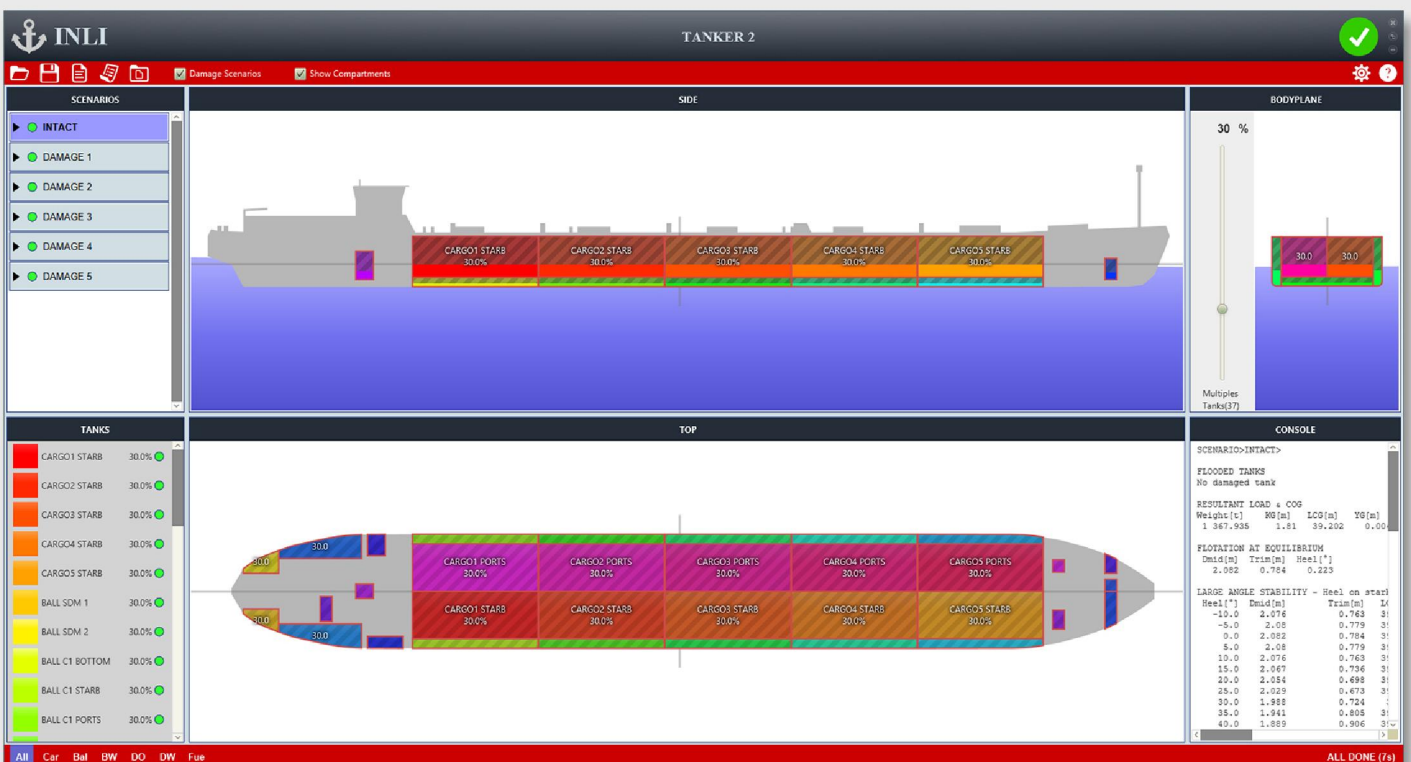
Purpose of the software

INLI is a loading tool for tanker vessels in accordance with the requirements of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).

“The proof of sufficient stability shall be shown for every operating, loading and ballast condition in the stability booklet, to be approved by the relevant classification society, which classes the vessel. If it is unpractical to pre-calculate the operating, loading and ballast conditions, a loading instrument approved by the recognized classification society which classes the vessel shall be installed and used which contains the contents of the stability booklet.” [ADN 2015, par. 9.3.x.13.3]

This requirement applies from January 2015 for new ships and on renewal of the certificate of approval for vessels in service before January 2015. [1.6.7.2.2.2 ADN - Table of transitional provisions for tank vessels]

In order to assist the boatmaster during loading and to ensure the safety of the navigation, the software allows checking whether the stability and longitudinal strength criteria are met with respect to the filling levels in the tanks of the ship.





Features

- Validation of the load cases specified by the user with respect to the stability and longitudinal strength criteria.
- The stability and longitudinal strength assessment is based on direct calculations.
- Progressive flooding due to non-waterproof connections between tanks is considered in the equilibrium and stability calculations.
- The calculations are performed for intact and damage scenarios. The damage scenarios include final and intermediate flooding stages.
- Reports can be produced based on the current load case, in PDF format.
- Load cases can be saved for later use.



Results

The following results are available for a specified load case:

- The ship weight and gravity center;
- The intact tanks hydrostatics;
- The damaged tanks hydrostatics, for final and intermediate stages of flooding;
- The equilibrium of the ship;
- The large angle stability data: trim angle, buoyancy centre, righting lever, area under the righting lever;
- The longitudinal strength diagrams.
- Unrelated to a specified load case, the tank sounding tables are also available.



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