

5. STABILITY STUDIES AND CALCULATIONS

Looking for a new vessel configuration to meet the highest stability standards? Need to optimise compartmentation? Need to minimise number of tanks onboard?

Do you need a well-balanced design with the highest stability standard and good seakeeping performance?

Need stability upgrading and improvement in an existing ship?

Stability calculations are carried out for all design phases from outline project work to delivery documents and plans. Stability studies are carried out for existing vessels as well. Typical services are:

- Tank and compartment arrangement
- Loading conditions
- Intact stability
- Damage stability
- Damage Control Plan, either simple or extensive
- Sounding tables
- Information for any onboard system, loading computer
- Coordination of Water on Deck Model Tests (Stockholm agreement)
- Inclining experiments
- Lightweight surveys
- Stability upgrading and improvement studies
- Authority approvals

Damage stability is calculated as required by relevant authorities, including SOLAS 90/95, water on deck (Stockholm agreement), probabilistic methods (A/A_{MAX} , Res. A.265, etc., SOLAS Reg. 25, etc.). Damage stability calculations for ro-pax and ro-ro vessels with large lower cargo hold are based on extensive experience and knowledge of interpretations of several authorities.

All stability calculations are carried out with NAPA software.

Selected References:

- ✓ More than 50 ro-ro passenger ferries
- ✓ More than 30 passenger cruise ships
- ✓ More than 40 cargo and special vessels

Selected Customers:

Color Line, Viking Line, EstLine, Tallink, Stena, Brittany Ferries, Sea France, SNCM, TT-Line, P&O Stena, Strintzis Lines, RCI, Star Cruises, Silja Line, Stolt Parcel Tankers, Finbeta, Finnlines/FGA Shipping, Finnish Navy, Costa Crociere, C.N. Mario Morini, C.N. Fratelli Orlando, Nuovi Cantieri Apuania