



Galley News You Can Use

The Vital Role of Seakeeping Analysis

The motion of a ship in waves produces dynamic loading on ship systems, secured cargo and structural elements. Excessive motions can interfere with a vessel's vital mission or cause passengers to suffer from seasickness.

As an essential aspect of vessel design, seakeeping analysis can affect a ship's principal dimensions. At EBDG, our naval architects and marine engineers apply computer models during concept design to gauge the response of a vessel to its environmental conditions.

Using state-of-the-art tools, we use seakeeping analysis to predict ship motions and responses including bending and shear loads, relative motions and speed. We can predict displacement, velocities and accelerations within regular waves, irregular seas, wind and current.

Probabilities and frequencies of submergence, emergence, and/or slamming can be predicted as well; and hydrodynamic loads can be transferred to space frame and/or finite element models for structural analysis.

Our Seakeeping Analysis Experience

Alaska Class Day Boat
Client: Alaska Marine Highway System

Research Vessel Seakeeping Study
Client: Bermuda Institute of Ocean Sciences

SEAFAC Barge Seakeeping Re-analysis
Client: Nautronix MariPro, Inc.

And many more...

To learn more about the vital role seakeeping analysis and how EBDG uses it to create designs that are better to build and better to operate, contact us today.