



Galley News You Can Use

CFD Wind Flow for Ship Design

CFD (Computational Fluid Dynamics) analysis is a synergistic part of EBDG's overall design toolkit – serving as an alternative and complement to physical model testing. EBDG uses CFD for a wide variety of applications: from consultancy in an early design stage to high-end calculations to accurately determine the ship's performance.

We have used CFD analysis to guide the physical design as well as the operating conditions of vessels to obtain improved fuel economy for operators. When used to compute the wind field around structures and the wind loads on structures or objects, CFD helps our Naval Architects and Marine Engineers to understand the flow physics and make vital improvements to our ship designs both above and below the waterline.

Wind flow is an important design consideration for predicting the environmental loads on vessels. It is a critical factor in mooring analysis, powering analysis and the positioning of offshore structures. Wind Flow CFD is also a valuable tool when designing internal ventilation systems as well as gaining insight into the wind behavior as it interacts with the vessel superstructure.

Our CFD Wind Flow Experience

**ONGC Well Stimulation Vessel
Dynamic Positioning CFD Analysis**
Client: Oil and Natural Gas Corporation
Limited of India

**ALASKA CLASS FERRY Vehicle
Deck Ventilation CFD Analysis**
Client: Alaska Marine Highway System

**LNG Tug Gas Vent Dispersion CFD
Analysis**
Client: Internal EBDG Research &
Development

To learn more about how EBDG can assist you with comprehensive CFD Analysis services, contact us today.