

Research on Ship Design and Optimization Based on Simulation-Based Design (SBD) Technique

Bao-Ji Zhang, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920520218&lokasi=lokal>

Abstrak

Ship optimization design is critical to the preliminary design of a ship. With the rapid development of computer technology, the simulation-based design (SBD) technique has been introduced into the field of ship design. Typical SBD consists of three parts: geometric reconstruction; CFD numerical simulation; and optimization. In the context of ship design, these are used to alter the shape of the ship, evaluate the objective function and to assess the hull form space respectively. As such, the SBD technique opens up new opportunities and paves the way for a new method for optimal ship design.

This book discusses the problem of optimizing ship's hulls, highlighting the key technologies of ship optimization design and presenting a series of hull-form optimization platforms. It includes several improved approaches and novel ideas with significant potential in this field