

TITLE:
HYDRODYNAMIC ASPECTS AND TOOLS IN MOTOR YACHTS DESIGN

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ABSTRACT

The MARitime Research Institute of the Netherlands (MARIN) is involved in the study of the hydrodynamics of ships at different stages: from concept design to full scale measurements passing through optimization processes and model testing. The present paper reviews the major design items for motor yachts in terms of comfort, performance and safety and highlights the engineering opportunities.

A clear definition of the targets relating to safety, comfort and performance is the key for the determination of a successful project. Several tools can support the designer throughout the design; in this paper examples will be presented to show the value of state-of-the-art engineering tools and available hydromechanical and operational expertise.