

# Contemporary Ship Design with the Aid of Computers

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Kleijweg, R. & Koelman, H.J. (1993)

## ABSTRACT

The computer plays an important role in contemporary shipdesign. With the aid of the computer the designer is able to execute state of the art naval architectural calculations in the early design stage. SARC has designed a software package called PIAS for the computer aided shipdesign. PIAS contains a large variety of modules for hull generation, hull definition, stability calculations in intact and damaged condition. Modules for resistance, propeller calculations and weight calculations are also available. All calculations are according to the most recent regulations from the International Maritime Organization. The recent regulations concerning the probabilistic damage stability (IMO MSC(19)58) have brought many designers into difficulties. SARC has designed the tools which enable the modern designer to continue his work in a relatively easy manner. The use of a computer has proved to be inevitable ability.