

SimFlex4 Desktop engineering studies



Simulation offers a very cost-effective approach during the evaluation of the port layout as well as when placing navigational aids. FORCE Technology has developed a desktop simulator for engineering consultants with expertise in development of port design.

Constructing or changing a port facility has wide-ranging impact on economy as well as on surrounding environment.

Therefore, beforehand knowledge on the effects of a given change can save resource, for example by determining the appropriate level of dredging. Further, a desktop simulator can provide assurance regarding the possibility to enter a new harbour or channel with a certain ship type.

FORCE Technology are specialised within developing and manufacturing of simulators for training and/or engineering studies.

Advanced maritime engineering

When conducting advanced maritime engineering assignments, simulators

provide the user with accurate data on the consequences of a given design. With our SimFlex4 software it is possible to make very accurate and realistic simulations of how a given change will affect vessels and facilities in practice. Thereby, you get certainty concerning the sustainability of your decisions and at the same time you save resources by gaining knowledge on how to do the port and channel modelling perfectly right the first time.

A SimFlex4 desktop simulator solution offers you knowledge in the engineering phase within

- Evaluation of breakwater layout and alignment, including width and alignment of approach channels

- Evaluation of arrival/departure conditions for existing or new port facilities
- Ship motions in both frequency and time domains giving the accurate assessments of e.g. risk of grounding
- Ship motions of moored vessels along an open or a closed structure
- Placement of navigational aids
- Controllability of vessels at limited water depth
- Operational guidelines including determination of tug assistance
- Exercise assessment and documentation
- Risk analysis



Turnkey solution

A SimFlex4 desktop solution is delivered by FORCE Technology as a ready-to-go turnkey solution. Further, we offer extensive training in using your desktop simulator. Thereby, we ensure that you are able to utilise your desktop simulator fully.

The SimFlex4 software

The core of our product is the SimFlex4 software, which is based on the most accurate mathematical ship manoeuvring model on the market, DEN-Mark1.

The SimFlex4 software enables us to offer you the market's most realistic and flexible professional maritime ship simulator and with a desktop solution, the you will receive tools to solve your specific challenges without compromising the quality of your data.

Extra tools for specific challenges

SimFlex4 and FORCE Technology offer a world of opportunities for you to utilise. As an example it is of course possible to enhance your simulator with ship models and environmental areas either from our extended database or by using our different tools in form of SimFlex4 AreaEngineer, SimFlex4 ShipYard or SimFlex4 FastTime. With these tools you can create you own exercise areas, ship models and simulation runs.

When you acquire one of these tools, FORCE Technology provides you with a thorough training course in how to use the tool in order for you to gain maximum effect of the tools from day 1.

For further information on our different tools, we kindly refer to our product sheets.

Flexible modularity

The keywords for our SimFlex4 simulators are flexibility and modularity. Our simulators are scalable meaning you can go from desktop solution to part-task or full-mission solution whenever necessary. The software, however, remains the same regardless of which solution you choose. This offers you the flexibility to choose the best solution for today and then enhance your possibilities according to your requirements at a later stage.

Certificates

FORCE Technology's SimFlex4 software has been certified in accordance to DNV 2.14 to comply with the Class A standard for Bridge Operation Simulators. Further, SimFlex4 is certified by the Danish Maritime Authority for use for certification of mariners.

Further, the SimFlex4 desktop solution is capable of simulating a realistic environment for following STCW'95 competence requirements:

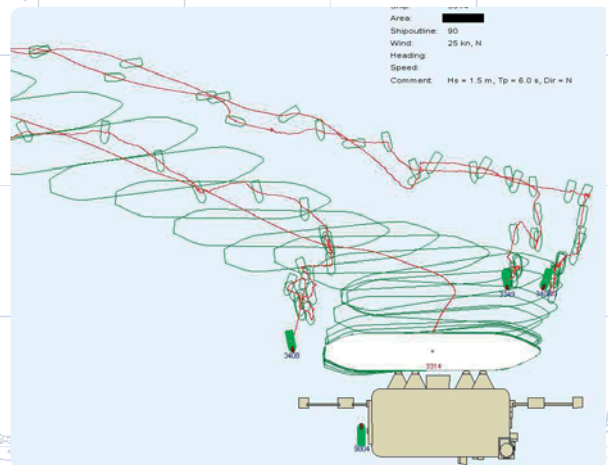
- Table A II/1.1 Plan and conduct a passage and determine position
- Table A II/1.8 Manoeuvre the ship
- Table A II/12.1 Plan a voyage and conduct navigation
- Table A II/2.2 Determine position and the accuracy of resultant position fix by any means
- Table A II/2.5 Establish watchkeeping arrangements and procedures
- Table A II/2.9 Manoeuvre and handle a ship in all conditions

World wide assistance

FORCE Technology offers an extended support by phone and for personal assistance, FORCE Technology has skilled staff that will assist you world wide. You will only have a single point of contact but you will be serviced until the request has been addressed to your satisfaction.



Engineering study performed on a SimFlex4 desktop solution



Further information

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