

Naval Architect / Marine Engineer (80% to 100% Full-time)

Aktis Hydraulics BV

Aktis Hydraulics is an independent employee-owned company operating as an international specialist provider of maritime and climate information to the marine energy, shipping, ports, coastal engineering industries and acts as expert witness support in litigation. Aktis Hydraulics staff are Metocean Consultants, Mathematicians, Coastal Engineers and Naval Architects focusing on delivering information based on our expertise, simulations and in-house databases. Our client base is diverse and includes large engineering companies, contractors, dredging companies, government, port authorities and P&I clubs, who we support with forensic investigations to evaluate mooring failures and cargo loss incidents.

Our range of products and services includes:

- ✔ Mooring design and analysis including innovative moorings such as the ShoreTension® system;
- ✔ Supporting port (nautical) layout development and specialist port design;
- ✔ Vessel response analysis including access channel applications; severe (parametric) roll incidents and Green Fuel terminals, FSRU and FLNG operability assessments;
- ✔ Metocean design and operability studies;
- ✔ Coastal modelling including wave behaviour and seabed / structure interactions (pipelines/ cables / GBS's / monopiles).

Your role

We currently have a vacancy for a Naval Architect or Marine engineer to support our team carrying out analysis of the response of moored ships and mooring system and access channel design. You will work closely with our experts in the vessel dynamics team and frequently also interact with your colleagues in the metocean team. Initially the role focusses on undertaking numerical simulations for (moored) ship response studies allowing you to gradually develop into an (expert) consultant to advise clients. Over time you will be encouraged to engage with our clients, to write proposals translating the client's needs into a suitable approach and subsequently to execute the project as a (co-)project leader together with our dynamic team of experts and to deliver high quality reports and advice.

You will be working on a large variety of hydrodynamic and practical challenges which encompass amongst others: FSRUs and LNGCs operating in Ship-to-Ship mooring configurations; passing ship analyses; mooring line failure investigations; floating solar panels; submerged and floating tunnel elements; harbour layout optimisations for terminal upgrades and greenfield port developments as well as transport assessments for energy converter stations and container vessels.

The Aktis culture is that our doors are always open and that we can learn from each other. We strive to take on most (or all) of the challenges set-out by our clients. In doing so, we will appreciate your contribution and challenge you to develop a full and deep understanding of the model results. This will require you to work independently while knowing when to ask for support. In the first years of your employment we will therefore require you to work from our office in Zwolle for at least 3 days a week.



You will be:

- ♥ A qualified naval architect, marine engineer or mathematician up to M.Sc. or Ir. level or equivalent;
- ♥ Familiar with Fourier analysis, wave spectra and ship hydrodynamics, including added mass and damping and RAO's;
- ♥ Fluent in English. Another European language would be an advantage;
- ♥ Ability to have discussions with other members of the team and eventually clients;
- ♥ Eager to learn and motivated to develop both technical knowledge and the ability to advise clients;
- ♥ Experience with a potential diffraction code (such as ANSYS AQWA, Hydrostar, Nemoh, DIFFRAC or other); CFD codes (such as OpenFOAM or ANSYS Fluent); a mooring analysis package (such as Orcaflex, Ariane, Moses, OPTIMOOR or other) would be an advantage.
- ♥ Some experience of computer programming or scripting.

The benefits

Aktis Hydraulics offers a market conform benefits package that includes a competitive salary and a generous pension scheme. You will have the opportunity to work on very interesting projects and to develop your knowledge as part of a highly motivated and highly experienced team.

Process: All CV's detailing current remuneration should be sent to: Mr. Olger Koop via e-mail to: application@aktishydraulics.com

