

# Hydrodynamic / Mooring Engineer

**Place:** La Ciotat (South east), France

**Contract:** Open-ended contract

## Company profile:

Principia is an independent scientific and conceptual engineering company delivering innovative solutions to the oil & gas companies, renewable energy sector, the naval sector and to research centers.

Principia, founded in 1981, consist of more than 120 highly-skilled employees located in France (La Ciotat and Nantes), Houston, Singapore, Kuala Lumpur and Svendborg.

For more information, look at our webpage on [www.principia.fr](http://www.principia.fr)

## Job profile:

We are looking for Senior Hydrodynamic / Mooring Engineers to satisfy the growing demands from our customers, especially within hydrodynamic and structural analysis for marine renewable energies and oil & gas floating system units : FPSO, FSRU, FLNG, CALM Buoys .

Our scope of services for floating facilities global performance includes:

- Conceptual, FEED and detailed design of mooring and station-keeping systems,
- Mooring equipment design and specification,
- Sea-keeping and stability analysis from feasibility studies to detail design,
- Operability analysis of terminals,
- Marine operation dynamic simulations (float-over, side-by-side or tandem offloading),
- 3rd Party verification of mooring and hydrodynamic analysis,
- Model test specification, follow-up and analysis,
- Global hydro-structure analysis,
- Advanced hydrodynamic analysis such as slamming loads calculations, multi-body systems, hydro-elasticity analysis,
- Research and development projects and JIP.

## Responsibilities:

- Modeling of structures in hydrodynamics software (DeepLines, Diodore, AQWA, MOSES, Hydrostar, Ariane)
- Analysis according oil & gas standards: Api,ABS, Dnv, Bv, Gl, Eurocode, etc.
- Write and check calculation notes, analysis reports, specification of materials
- Supplier's Follow-up, technical assistance to customers during the study phase
- Support to the commercial department: writing of offers

## Skills and experience:

- Bachelor Degree in engineering (Naval architecture, Ocean, Mechanical or Marine)
- two – three years of experience with design and engineering of offshore floating structures (FPSO, Semi-submersibles, TLPs, FLNG, mooring terminals)
- Experience with some of the following software: DIODOE, DEEPLINES, AQWA, MOSES Hydrostar, Ariane)
- Good communication skills. Fluency in English (written and spoken) and French is a clear asset
- A good team player. Self-motivated with a drive for results, improvement and innovation

**Additional information and applications:**

Please feel free to contact Eric ZARA at Principia , phone: + 33 4 42 98 11 84, e-mail: [job@principia.fr](mailto:job@principia.fr)