

## **FPSO PL – TECHNICAL FRAMING – INTERNSHIP**

- Reports to: Naval Technical Expert
- Liaises internally with: Technical Authorities and Technical Experts, Technical Tender Manager, Group Engineering and Technical Director, Proposals department, Vessel Acquisition.

### **THE COMPANY:**

SBM Offshore provides floating production solutions to the offshore energy industry, over the full product life-cycle. The Company is market leading in leased floating production systems with multiple units currently in operation and has unrivalled operational experience in this field. The Company's main activities are the design, supply, installation, operation and the life extension of Floating Production, Storage and Offloading (FPSO) vessels. These are either owned and operated by SBM Offshore and leased to its clients or supplied on a turnkey sale basis.

### **THE DEPARTMENT:**

The Framing department is providing the necessary technical support to Business Development and Business Acquisition activities related to FPSO prospects. It has to deliver quick and accurate technical solutions at a very early stage. To do so, we rely on the experience gathered on past projects.

### **THE INTERNSHIP:**

**Title:** *Vessel tool development for FPSO conversion*

#### **Purpose of Training:**

*Define a methodology and develop a dedicated tool to quickly assess suitability of a tanker for FPSO conversion during bid phase and vessel acquisition phase. This tool should also allow comparison between potential solutions both technically and economically.*

#### **Main tasks:**

- 1. Structural check**
  - a. Define standard reinforcements, depending on hull loads, for longitudinal elements,
  - b. Investigate transverse structure and required reinforcements based on local topside loading,
  - c. Develop standard weight summary to implement into standard input form required by proposal department.
- 2. Steel renewal assessment**
  - a. Perform standard steel renewal calculation using SBM dedicated spreadsheet,
  - b. Check possibilities for reassessment and discuss alternative solutions,
  - c. Investigate proper balance between reassessment, reinforcement and full change-out,
  - d. Discuss findings in relation to cost and construction
- 3. Stability analysis and tool development**
  - a. Develop simplified floatability tools for the needs of Vessel Acquisition/Framing teams.
  - b. Implement, in the tool, main stability criteria (to be identified),
  - c. Retrieve from the tool the resulting hull loads to be retrofitted into mid ship calculation (Potential use of beam theory)
- 4. Optional work (if time allows)**
  - a. Increase oil storage capacity: Using developed tools, determine how to solve oil storage increase while remaining competitive
  - b. Investigate what would be the impact of converting a very old unit into an FPSO

#### **5. General Task preparation and Project management**

- a. Review and familiarization of existing tools and documents available,
- b. Develop scope and planning
- c. Get validation of scope of work and associated schedule by Manager
- d. Manage and follow-up activities based on agreed scope and schedule

**Note:**

- All above mentioned activities are interconnected and will need to be developed in parallel
- Above described scope of work is to be considered as a baseline which will evolve through the internship depending on findings and study progress.

#### **JOB REQUIREMENTS:**

- Third year of Engineering degree (Naval Architecture)
- Duration: 6 months, to start during Q2-2018
- Good Excel level and IT skills in general
- Knowledge of Naval architecture
- Knowledge of MARS200 and beam software is a plus
- Responsible, autonomous and highly motivated individual that is not afraid to take some initiative and think outside of the box.
- Good English level.

#### **REMUNERATION:**

- 1,420 euros / month gross.
- Lunch tickets benefits: 180 euros / month

#### **OTHER SPECIFICS:**

- Location: Monaco
- Must be EU citizen or own a valid EU residence permit.
- Contact person: Hervé Piacentino-Beaudoux (Naval Technical Expert)  
[herve.piacentino-beaudoux@sbmoffshore.com](mailto:herve.piacentino-beaudoux@sbmoffshore.com)