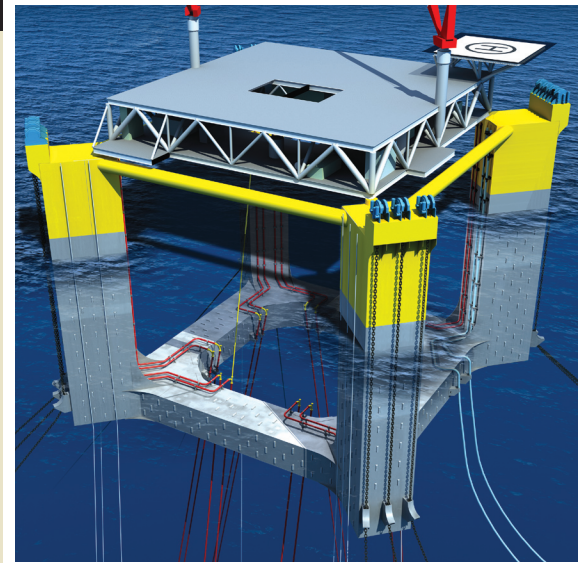


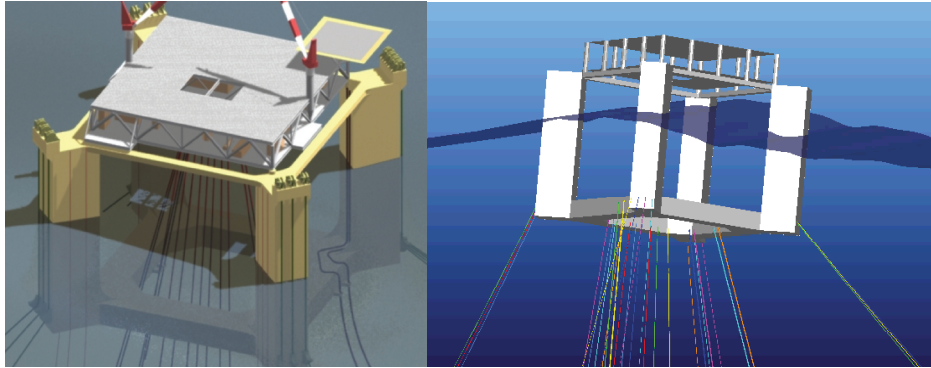
The **MODEC CP Semi** is an efficient new generation design for deep and ultra deepwater oil and gas developments



The MODEC CP Semi is an efficient new generation design for deep and ultra deepwater oil and gas developments. This low-cost, highly-efficient platform is designed to operate in hurricane, cyclonic or mild environments. It consists of an octagonal continuous central pontoon structure and four radially oriented columns outboard of the pontoon. A box girder system at the top connects the four columns, which in turn support a conventional truss deck. Topsides are integrated quayside and the platform is stable at all times.

WHY MODEC?

- **HSEQ FOCUS:** MODEC is the first floating production facilities company to have its Corporate HSE Management System obtain integrated certification against all three international codes: ISM Code, ISO 14001:2004, and OHSAS 18001:1999. Certification was received for corporate office environments in Tokyo, Houston and Macaé and also for the *FPSO Cidade do Rio de Janeiro MV14*, a working vessel. All future facilities will comply with these international HSE standards.
- **FLEXIBILITY:** MODEC's extremely efficient design allows flexibility in scaling of payload as well as flexibility in scheduling in the design process.
- **PROVEN TECHNOLOGY:** MODEC was named a winner of the OTC.07 Spotlight on New Technology competition for its MOSES Self Stabilizing Integrated Platform TLP. The first applications of the MOSES SSIP TLP technology were the Oveng TLP and the Okume/Ebano TLP - both installed offshore Equatorial Guinea.
- **PEOPLE AND CONTINUITY OF EXPERTISE:** MODEC has available resources with experience and expertise developed over five TLP projects.
- **RELATIONSHIPS:** MODEC has established long-term international relationships with clients, engineering companies and fabricators.



Hull Advantages

- **Optimal displacement/payload ratio:** For the same payload, the CP Semi requires less displacement than conventional production semis
- **Optimal mooring design:** For the same payload and environment, the CP Semi requires smaller-sized moorings
- **Cost savings:** The CP Semi is less expensive than comparable conventional designs due to efficient displacement/steel weight ratio and optimal mooring. The pontoon structure is inboard of the columns, which makes the compartmentation requirement less onerous, thereby resulting in a substantial reduction of lower hull steel weight
- **Optimal stability:** The radial orientation of the columns enhances the stability of the platform during quayside integration of the topsides while minimizing the displacement needed
- **High SCR fatigue lives:** The deep draft during operation provides for Steel Catenary Risers (SCR) friendly motions

Topsides Advantages

- **Efficient deck structure:** Optimal deck supports minimize deck steel weight
- **Efficient design process:** The deck and hull designs can be performed independently of each other resulting in a more efficient design process. This is due to a box girder system employed at the top of the columns which sustains the pry and squeeze loads
- **Deck design:** Can be modular or integrated

Schedule/Construction Advantages

Construction-friendly design: maximizes schedule efficiencies

- **Flexibility:** Payload changes can occur during the project without impacting hull design/topsides design and ultimately, the construction schedule. Talk to us about the unique advantages that the CP Semi design has in this area.
- **Flat panel fabrication:** Ideal for the shipyard panel line and results in better quality/faster construction schedule
- **Conventional truss deck**

Installation/Operation Advantages

- **Flexibility:** Topsides can be mated to column tops by lifting or float-over methods
- **Inboard or outboard:** SCR's or flexible risers can be supported inboard or outboard of the pontoon structure
- **Central moonpool:** Allows for SCR pull-in and CT interface
- **Wet trees and/or dry trees:** The CP Semi can be used with either or both
- **No seachests:** This eliminates the possibility of inadvertent and uncontrolled flooding
- **Constant draft:** The CP Semi constant draft provides sufficient air gap and eliminates the need for de-ballasting to a storm draft

Profit from our experience