

Solutions for deepwater

Deliver unbiased floating production solutions to the deepwater market. That is the vision of FloaTEC, LLC, the 50/50 JV between Keppel FELS and J. Ray McDermott. The company boasts an unmatched portfolio of multiple floating production systems (FPS) solutions for its clients, represented by the SemiTEC™, SparTEC® and TlpTEC™ product lines. *OffshoreMarine* introduces one of the designs in the SemiTEC™ suite of products, the DeepDraft™ Semi technology.

The SemiTEC™ suite of designs was developed for FloaTEC, LLC based on DTG's proprietary DeepDraft™ Semi technology.

The DeepDraft™ Semi is a steel catenary riser (SCR) friendly deep draft semisubmersible production platform concept that is ideally suited for wet tree applications. Its hull design was built on Keppel FELS' diverse experience with drilling semi design and has been adapted from the KFELS 8000 ring pontoon concept.

FloaTEC, LLC provided market data and important applications criteria, and worked with DTG to develop competitive design specifications that will position the DeepDraft™ Semi as the preferred solution in the growing market segment for deepwater semi production floaters.

Some of the benefits of the DeepDraft™ Semi solution are listed below.

- Both the vertical (heave) and angular (pitch and roll) motions of the SemiTEC™ semi are significantly lower than that of other deep draft semi designs because of the increased draft. This reduces the stresses in the riser at the hang-off location as well as the touch down point, making it SCR friendly.
- The scalability of the design enables it to accommodate a diverse range of payloads.

DeepDraft™ semi features

Hull length	: 62 m
Hull breadth	: 62 m
Pontoon width	: 10 m
Pontoon depth	: 9 m
Column	: 12 m x 12 m
Topside weight	: 10,000+ mt
Operational draft	: 40 m
Air gap	: 15.5 m

FloaTEC, LLC's portfolio of production semisubmersible hull designs are derived from DTG's experience and extensive knowledge of the industry.

DTG's semi designs comprises both multi-purpose exploration and development drilling units as well as specialised units for production operations. Some of its designs include:

- **SSDT™** – Semisubmersible drilling tender
- **SSAU™** – Semisubmersible accommodation support unit
- **DSS™ 20** – Semisubmersible drilling rig for operations in the deepest water of the Caspian Sea in water depths of 1,000 m or 3,280 ft
- **DSS™ 38** – Semisubmersible drilling rig for the deep water of Offshore Brazil in water depths of 2,740 m or 9,000 ft
- **DSS™ 51** – Semisubmersible drilling rig designed for deep waters of Offshore Brazil, Gulf of Mexico, West Africa and South East Asia in water depths of 3,000 m or 9,843 ft
- **KFELS 8000 series** – Semisubmersible drilling rig characterised by its ring pontoon design
- **Production semi series** – KFELS 8000 and DeepDraft™ Semi production units designed for deep and ultra-deepwater wet tree applications. On top of that, Keppel FELS has proven construction and delivery experience with deepwater production semis including P-18, P-51 and the P-52.



DeepDraft™ Semi technology