

NOBLE DRILLING TOM PROSSER JACKUP RIG

Design, Build and Install Extendable Tension Deck

ICON was engaged to assist in the conceptual development, detailed design, fabrication, installation & commissioning of a 300Te capacity tension deck for the newly built Noble Tom Prosser jack-up rig.

Requirements:

1. Designed for simple deployment;
2. The riser and surface BOP to be able to remain deployed in the event of a cyclone;
3. Cantilever (with integral tensioning system) and tension deck needs the ability to be deployed during cyclonic seas;
4. Maximum overall length of 30ft when stowed but needing to achieve a 35ft cantilever when deployed;
5. Delivery in 12 weeks from initial contact.

By calling on ICON's previous experience in the design of tension decks, a new concept was developed that incorporated a sliding section that allowed the deck to extend to the required reach when deployed.

Tight time frame

The Noble Tom Prosser was due to depart Singapore on 1st September 2015. The entire project from development of concept, detailed design, fabrication, installation and commissioning was undertaken in 12 weeks. This included the fabrication and testing of a 300Te tension unit and range of ICON's gripper clamps.

Based on ICON's extensive experience in the operation of drilling rigs, ICON Engineers developed a means of deployment that utilised the existing capabilities of the rig and required no additional equipment or modification.

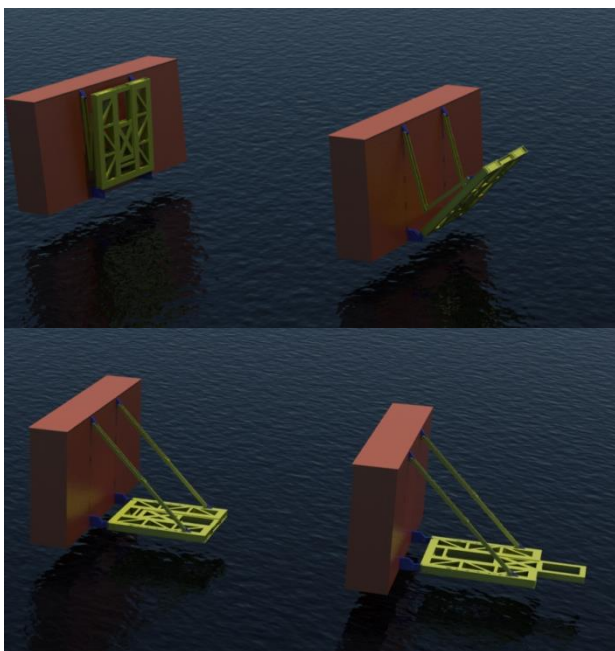
Coordinated crew culture

ICON deployed a team of engineers to Singapore to work closely with the rig's crew to familiarise them with the deployment procedure for the deck.

During operations offshore the deck was fully deployed in under 40 minutes. This crew interfacing is an essential feature of ICON's engagement with its clients, and lays behind its history of successful installation projects.



Tension Deck under 450Te load test



Conceptual Design for Tension Deck

Tension Deck Data

Required Deployed Reach	35 ft
Max allowed stowed height	30 ft
Deck Capacity	300 t
Load Test	450 t
Deployable by existing rig equipment in less than 1 hour	
Duration - Concept to installation in less than 12 weeks	