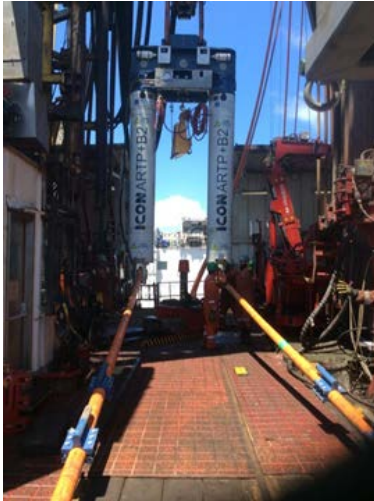


ENSCO Timor Sea LNG well completions

ARTP B-Series Tension Lift Frame

ICON Engineering Pty Ltd (ICON) was contracted by an LNG operator to supply an ARTP B-Series Tension Lift Frame for use on the Ensco 5006 semi-submersible drilling rig while conducting work on the Timor Sea gas field.



The client had 20 development wells to complete with an average 200m water depth. ICON offered a rental package with full onboard operational and maintenance support during this time.

The ICON ARTP B-Series is a simple, practical, tension frame designed to support the completions / workover (CWO) riser,

with the addition of an advanced over tension relief function, compliant with ISO 13628-7, to protect the riser against over-stress on an up heave.

Like all models in the range of ARTP Tension Frames, the B-Series also facilitates safely rigging up of surface pressure control equipment (PCE).

Purpose

The ICON ARTP B-series was deployed to provide over tension protection and back up compensation for well testing and flowbacks. Risk assessment and failure mode analysis indicated potential single point failures in the rig's passive crown mounted heave compensator.

The ICON ARTP B was implemented as a backup compensator, giving the rig full system redundancy.

Scope

The scope included design, manufacturing, assembly, onshore FAT, operations and maintenance during the project. ICON provided comprehensive, round the clock on board crew giving 24/7 service.

The ICON ARTP B-Series is available as an in line single cylinder module for use with the ICON tension frame, or as a dual cylinder, single integrated unit.



The ICON ARTP B-Series pictured during rig up.

It has a basic drill floor mounted control unit, pressure & load gauges, stroke assessment and over tension relief valves. A continuous air supply is not required as the system is pre-charged in advance and only requires adjustment during operation if the hanging weight changes. The system is pre-charged from the rig supply.

The ARTP B interfaces directly with the surface flow tree for minimum stack-up height. It is lightweight and easy to install, utilising standard drilling connections for minimum rig-up time.

Basic specifications

- 1000 KIP static/compensating load rating
- 910 KIP back up compensator mode load rating
- 3m stroke

The ICON ARTP B-Series Tension Lift Frame is available for long or short term rental.

