

CT TComp

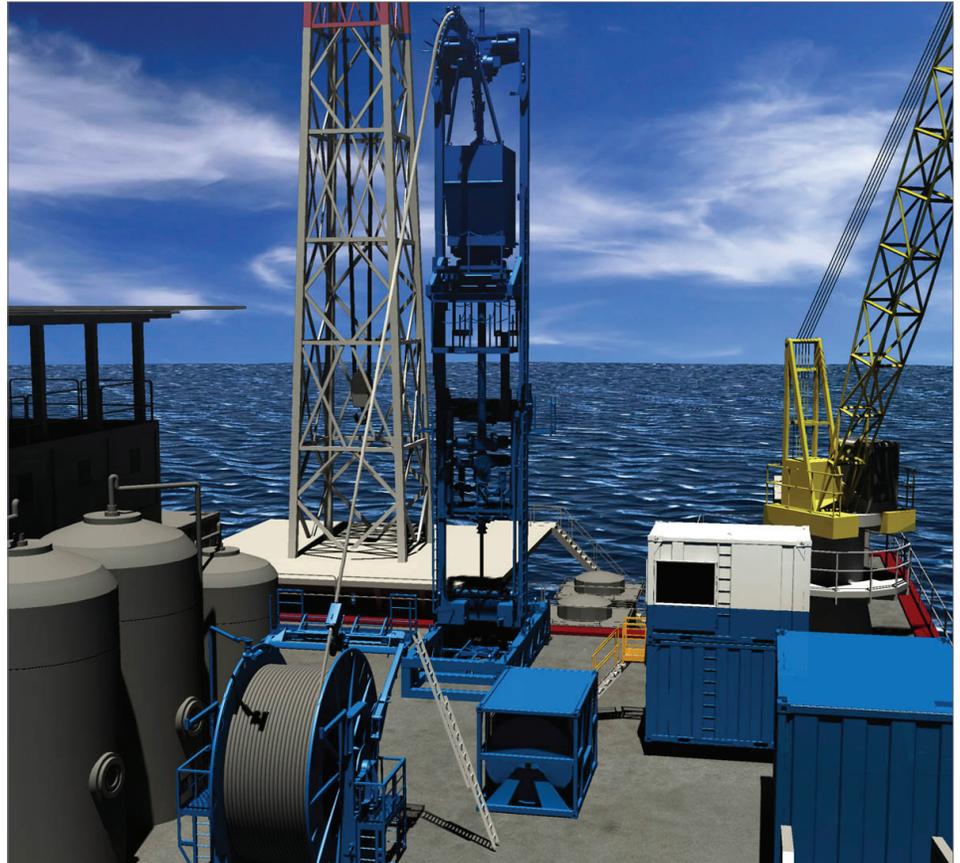
CT offshore motion compensation system

APPLICATIONS

- Functions as a heave-compensated jacking frame
- Serves as a tension-lift frame on semisubmersibles and drillships
- Allows simultaneous wireline or slickline operations without rigging down the CT equipment
- Performs heave compensation when blocks are not compensated in the derrick
- Provides compensation on spars after the rig is demobilized

ADVANTAGES

- Preassembly onto three skids
- Compensation for 7 ft of vertical heave
- Efficient single-bolt clamp connections for BOPs and risers
- Class I, Division II–certified electrical system
- Automatic wellhead monitoring and maintenance within acceptable stress envelope
- Two fall arrestors and handrails on all walkways



The CT TComp system's passive design keeps wellhead load within an acceptable range by constantly monitoring the load and adjusting the passive accumulator hydraulic pressure.

Safer, more efficient heave compensation and wellhead stress management

The CT TComp* CT offshore motion compensation system has three versatile operating modes. Its 15-ft titanium stress joint allows movement during operations and relieves stress on the wellhead. The CT TComp system automatically maintains riser load and stress joint flexibility at optimum levels.

Jacking frame mode

The vertical structure of the jacking frame is made up of the base of the BOP crash frame, which also acts as the base for the CT mast system. The jacking frame base is designed to sit on 12-ft centers with center loading up to 160,000 lbf [711,700 N], allowing it to span large well-bay slots or sit across skid beams on spars, distributing load across the platform deck.

CT TComp

Thoughtful design elements add safety and save time

- Connection time reduced to 5 minutes from 45 minutes per connection by using a 15,000-psi riser and BOP Grayloc® single screw connector
- Hydraulic connections are reduced to 4 from 25
- Stabbing winch saves up to 2 hours and eliminates a major HSE hazard
- Hydraulically actuated gooseneck saves up to 90 minutes during rig up
- Hydraulic connections are frame mounted to reduce the number of connections during module assembly
- Guy wire winches and hydraulic hose and cable reels reduce deployment time and increase safety

Tension-lift frame mode

Assembled in one or two pieces, the CT TComp system can also act as a 350-ton tension-lift frame that transmits riser load from the blocks around the CT equipment. Conventional frames require all CT equipment to be assembled after the frame is raised, requiring valuable time and risking injury to personnel. The modular CT TComp system can be assembled and swung into place with one lift.

Internally compensated tension-lift mode

Since spars do not usually have compensated blocks, the driller is forced to monitor and adjust for load on the blocks during the entire CT operation. However, the CT TComp system monitors load and adjusts automatically. A 15-ft titanium flex joint absorbs any stress caused by horizontal misalignment, eliminating undue stress on the riser or wellhead.

Specifications

Injector pull	100,000 lbf [444,800 N] continuous 110,000 lbf [489,300 N] intermittent
HPU/accumulator skid rating	85 dB at 1 m [3.3 ft]
Electrical system certification	Class I, Division II hazardous service
Tension-lift frame capacity	350 metric tons
BOP size and capacity	5½ in [13.02 cm], 15,000 psi [103.42 MPa]
Riser size, capacity, and type	5½ in [13.02 cm], 15,000 psi [103.42 MPa], XG-52 seal ring hub
Hydraulic fluid	EnviroLogic® biodegradable lubricant

slb.com/CoiledTubing

Schlumberger