

ICON ARTP TENSION FRAMES

ICON Advanced Riser Tension Protector

Equipment Range

Functionality & Safety for Subsea Well
Completions & Interventions

The Offshore Oil and Gas Industry is continually pushing into new frontiers where deeper water and harsher environments place ever increasing demands and technological challenges on equipment and operating systems...

Welcome the ICON ARTP Tension Frames

The ICON ARTP Tension Frames are a step change beyond traditional coiled tubing lift frames (CTLFs). The equipment range combines proven technology with advanced innovative design to provide the ultimate in functionality and safety for subsea well completions and interventions from floating rigs (i.e. "locked-to-bottom" operations).

While employing unique innovative design features, the ICON ARTP Tension Frames are still founded on ICON's principles of simple, reliable, practical solutions.



Primary Benefits & Functions



Industry Best Practice

Setting new standards in safety and functionality for subsea well completions and interventions, compliant with industry codes (ISO 13628-7 / API 17G, DNV-OS-E101, API 8C).

Heave Compensation

Provides passive heave compensation during locked-to-bottom operations, either as the primary compensator or as back-up to the rig's drill string compensator.

Full Service Partner

To support our specialty equipment, ICON provides a comprehensive range of support services from equipment specification, design and supply, right through to rig interface engineering, offshore installation, operations and maintenance.

C/WO Riser Tension Frame

Supports the completions / workover (C/WO) riser in tension beneath the rig's top drive (a.k.a. surface-tree tension frame / coiled tubing lift frame).

C/WO Riser Tension Protection

Protects the C/WO riser against hazards associated with accidental lock-up of the rig's drill string compensator while locked-to-bottom.

PCE Operating Window

Provides a fixed working window to rig-up surface pressure control equipment (PCE) and provides safe access for operating personnel. Suitable for both coiled tubing or wireline operations.

Series Overview

Every subsea well completions / intervention project has unique requirements depending on a number of factors including water depth, metocean conditions, rig motion compensation and the C/WO riser configuration.

The ICON ARTP Tension Frames consists of 5 models with varying degrees of riser tension protection and heave compensation capacity, resulting in an efficient and practical solution for every individual project.



	TLF	B Series	C Series	D Series	E Series
Description	Simple, practical, rigid C/WO riser tension frame.	C/WO riser tension frame with over tension protection.	C/WO riser tension frame with over and under tension protection.	C/WO riser tension frame with integrated passive compensation system (up to 20ft stroke) incorporating ICON's unique control valve arrangement for advanced riser protection.	C/WO riser tension frame with integrated passive compensation system (up to 33ft stroke) incorporating ICON's unique control valve arrangement for advanced riser protection.
Application	Best suited for low risk operations where there is no risk of exposure to wellbore pressures at the surface.	Best suited for use with risers which can free-stand without buckling or exceeding compression limits of subsea equipment.	Best suited for most applications to provide advanced riser protection while utilising the rig's compensator for primary heave compensation.	Best suited for well completions and interventions in normal operating sea states. Capable of providing primary or back-up heave compensation with vessel heaves up to 10ft.	Best suited for well completions and interventions in harsh operating sea states. Capable of providing primary or back-up heave compensation with vessel heaves up to 16.5ft.
C/WO Riser Tension Frame	✓	✓	✓	✓	✓
PCE Operating Window	✓	✓	✓	✓	✓
C/WO Riser Over Tension Protection	✗	✓	✓	✓	✓
C/WO Riser Under Tension Protection	✗	✗	✓	✓	✓
Back-up Heave Compensation	✗	✓	✓	✓	✓
Primary Heave Compensation	✗	✗	✗	✓	✓

Legendary Innovations.
Practical Solutions.