

TENSION FRAME ASSEMBLY

Innovative design suits coiled tubing and intervention operations on MODU's

The "ICON Tension Frame Assembly" enables the successful deployment of the down-hole completion tubing string and tubing hanger in the well head and coiled tubing operations in modu's. Our design has a proven track record, having been used in a number of successful well developments.

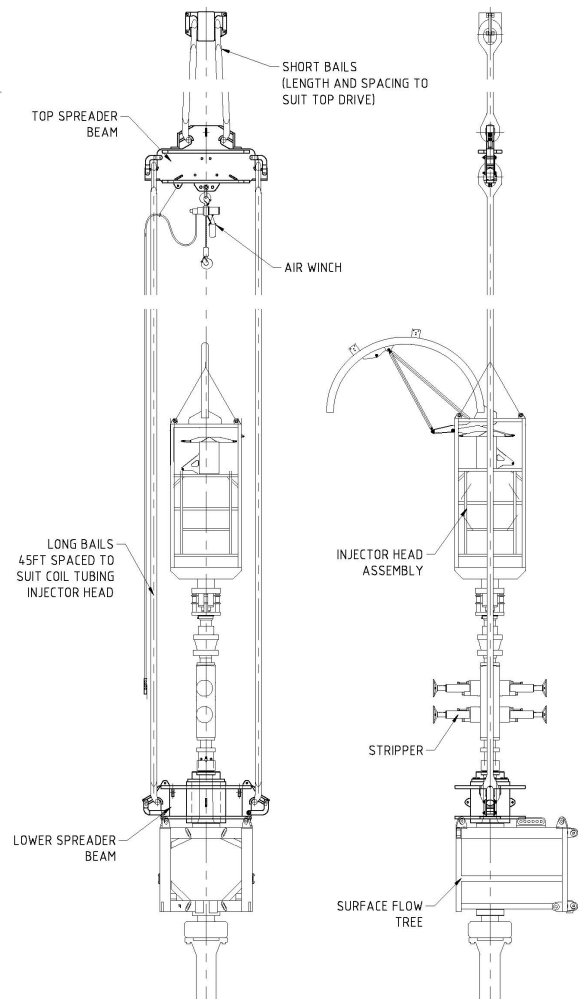
The Tension Frame Assembly consists of the Upper Spreader Beam, Lower Spreader Beam and 45ft bail arms. Other configurations are available.

Standard features

- Varied assemblies are available with capacities ranging from 250 to 750 short tons (227 to 680 MT)
- **The Upper Spreader Beam** is suspended from the drill rig Top Drive via two Short Bails. An air-operated winch is mounted to the underside of the Upper Spreader Beam to lift the wire line lubricators and a coiled tubing injector head package from the rig floor to their installed position between the Upper and Lower Spreader Beams.
- **The Lower Spreader Beam** is suspended from Upper Spreader beam via 45ft long Bails. The Lower Beam is designed such that it can interface with the adaptor sub on top of the Surface Flow Tree (SFT). The lower beam is designed to be assembled with the SFT on the pipe deck in its horizontal position.



ICON Tension Frame & Surface Flow Tree Assembly



Optional Features

ICON can tailor the Tension Frame Assembly to meet a Client's unique requirements. Some features include;

- **Sheave to Deflect Chain.** A simple device to deflect the hoist chain.
- **Chain Basket.** A basket can be provided to the underside of the Upper Spreader Beam to keep tidy any unused winch hoist chain
- **Winch Transport Basket.** A transport/storage basket will be provided for the air winch. The basket will accommodate access for maintenance of the winch.
- **Work Platform.** A work platform between the long bails to allow access to the lower end of the wire line lubricator and the BOP. The platform can be installed after rig up, is height adjustable and can accommodate 2 personnel.
- **Adapter** to accommodate different configurations of SFT adaptor subs.