



Unit Specifications: Mast coil tubing unit



Titanium's Mast Coiled Tubing Units are fully integrated units that are mounted on Peerless tri-axle trailers, and pulled with a single steer, tri-axle tractor. These Units have applications for intermediate and shallow horizontal completions and workovers, and have the advantage of carrying large diameter tubulars, while maintaining a smaller footprint on location. The advantage to Titanium's Mast Coiled Tubing Units is their efficient rig ups and rig downs, as the need for a crane to hoist the injector is eliminated by the mast structure. Titanium's Mast Coiled Tubing Units are designed for reliability and meet all Standards for Highway vehicles. All Units have the ability to work on Class I, II, or III wells and are equipped to intervene on wells up to 500F



Equipment

The Mast Coil Tubing Unit has a variety of equipment included with the package such as built in control cabin, an injector, a coil tubing reel, a picker, and a blowout preventer.

Control Cabin

Mounted in the rear of the tractor contains operator's station. It is stationary, but one can get a clear view of the injector and wellhead, with the use of class II div. I cameras. It is temperature controlled so the unit can be operated comfortably in temperatures from -40C to +40C.

There is a control panel in the operator's station and is fitted with the following:

- Full PLC control Controls
- Full Medco Data Acquisition System
- Hydraulic Controls
- Electronic Gauge Cluster
- Electronic BOP controls

Injector

This unit uses an S&S 80K injector

- Pull 80,000lb, Snub/40,000lb
- Rate in Low Gear 40 m/minute
- Injector weight 9200 lbs
- Chain Tension Hydraulically Adjusted
- Skate Pressure Hydraulically Automatically Adjusted
- Tubing Stripper NOV Quick-Strip 10K
- Blow Out Preventer 10K Quad BOP

Coil Tubing Reel

The reel uses an NOV Drop In Drum (DID) system for quick installation and removal of drums. The 110" core consists of a rolled steel tube and lateral cross support beams for maximum coil tubing life. The tubing reel is mounted on heavy duty roller bearings in a steel frame that is complete with level line to spool the tubing evenly. The reel is driven by a chain and sprocket assembly powered by a Danfoss hydraulic motor. Reel braking is accomplished through a self-aligning air operated brake caliper and a flange Mounted disk. The coiled tubing is connected to



the reel shaft inside the reel core area. The reel is dual ported with a 10K Rotating Joint and has a three Valve manifold for easy, and safe rig up.

Reel Capacity

- 44.5mm diameter coiled tubing 4500 meters
- 50.8mm diameter coiled tubing 3500meters
- 60.3mm diameter coiled tubing 2800 meters
- 73mm 1500 meters

Mast

The Mast supports the hydraulic movement of the coiled tubing injector and eliminates the need for injector crane support. The Mast stand vertically, but can also perform well intervention operations at 45 degrees, for slant well application.

BOP

This unit uses a 5" 10k Quad Hydraulic BOP system, which has Quick Lock Hydraulic Actuators, And complete with fire retardant hose package. Comes with a 20G Accumulator Skid with Nitrogen Backup and Remote Panel.