

Well Construction

Frank's Tubular Running Services (TRS)

ArticuLock®

Extend your operational or emergency weather window

Expro's ArticuLock technology provides Open-water, Riser, Casing or Landing String articulation, even in extreme storm conditions to:

- Expand the weather window for deployment of subsea trees, flow-bases, dual-bore risers, casing strings etc. by >400%
- Eliminate low cycle fatigue (remove stiffness) associated with hang-off or suspending loads during riserless or open-water operations
- Provide a contingency to allow subsea deployment or intervention operations to continue even in high significant wave height, sea-swell or loop current conditions
- Reduce waiting on weather time

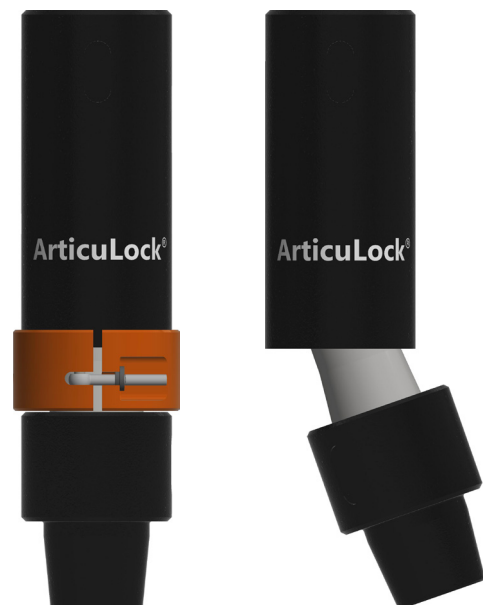


Features

- 400 tonne axial capacity
- 30 Degrees of allowable articulation
- Articulation – Lockable option
- Torque through capability
- Pump through capability
- 5000 psi rating

Benefits

- Capacity to deploy subsea Trees, Flow Bases, Casing Strings etc
- Enable emergency hang-off operations in severe weather or loop current conditions
- Enables safe deployment in extreme storm weather conditions
- Facilitates Tree-Cap install / removal in mis-aligned Trees
- 30,000 ft / lbs torque rating facilitates structure orientation
- Deploy, Secure, Flush and Test capability, pressure and function test post installation
- Simple to install and operate



Well Construction

Frank's Tubular Running Services (TRS)

ArticuLock®

Specifications

Max. OD	8.5"	
Min. OD	3"	
Max. articulation	± 15°	
Recommended drift diameter	2 7/8"	
Max. length (threads off)	2.43 ft	0.74 m
Weight	397 lbs	180 kg

Connection specification

Connection	API 6 5/8" Regular	
Recommended make-up torque	30 kft-lbs	40.67 kNm
Max. make-up torque	60 kft-lbs	81.34 kNm

Operational limits

Max. tensile load	880 klbs	399 tonne
Max. torque through	30 kft-lbs	40.67 kNm
Burst pressure (lame's)	5000 psi	345 bar
Burst pressure (API)	5000 psi	345 bar
Collapse pressure (API)	5000 psi	345 bar
Max. operating temperature	204 °C	399 °F
Min. operating temperature	-29 °C	-20 °F
Max. flow through (sea water)	30 bpm	4770 lpm
Max. flow through (all other fluids)	20 bpm	3180 lpm
Internal volume	0.021 bbls	0.0033 m ³

Connection specification

Grade	4330V Alloy Steel	
Min. yield strength	155 ksi	1069 MPa

