

Subsea Well Intervention Equipment

The SubSeaLink Connection System enhances safety and reduces cost of riser intervention over subsea wells



SubSeaLink

www.subsealink.com

The SubSeaLink pipe connection system makes riser installation safer, simpler and much faster



TS-LINK

A rugged connector eliminating offshore pipe flanging operations

- Eliminates strength and fatigue limitations typical of API flanges, providing a connection stronger than the pipe
- Eliminates dropped objects risk as no handling of bolts, seals and torque wrenches is required
- Reliable metal to metal sealing system
- Fast and safe riser assembly assisted by self-aligning of downfacing Pin end in to upfacing Box end
- Fast actuation by means of hand carried torque too



CT-LINK

A rugged connector allowing quick coupling of Coiled Tubing Injector Heads

- Same tough mechanical design as the TS-LINK connector
- Redundant elastomeric seal barrier
- Eliminates flooding the riser at every CT run as the sealing system can be externally tested to full pressure rating
- Easy stabbing and self alignment of the two mating ends
- Fast operation by hand carried torque tool
- Eliminates risk of hydraulic failures, as the device is fully mechanical

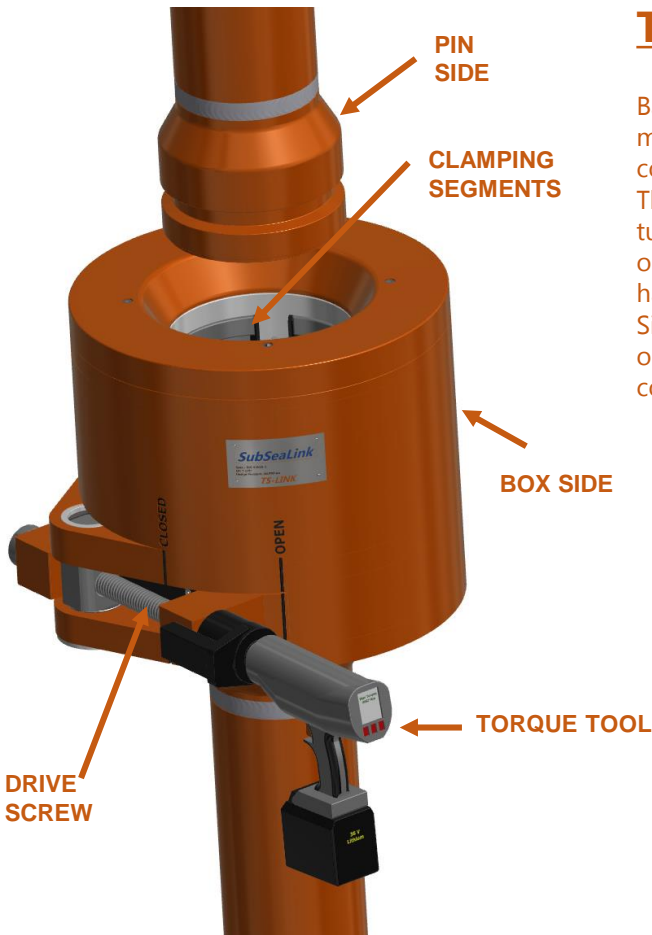


WOR-LINK

A rugged subsea riser connector eliminating threads and make up spreads

- Eliminates threads with associated risk of cracks and fatigue capacity limitations
- Eliminates any proprietary riser make-up tools so reducing cost and deck space to absolute minimum
- Metal to metal internal and external sealing
- Minimum riser weight by using very high strength steel tubular material
- Hub profiles directly machined to the pipe ends eliminating welding and fatigue issues
- Easy integration to existing vessel elevators and gimbals enables fully automated riser installation

Further details

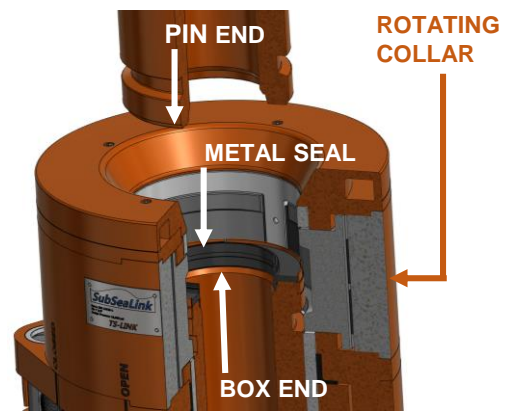


TS-LINK

Based on the SubSeaLink's patented locking mechanism, provides an extremely robust pipe connection.

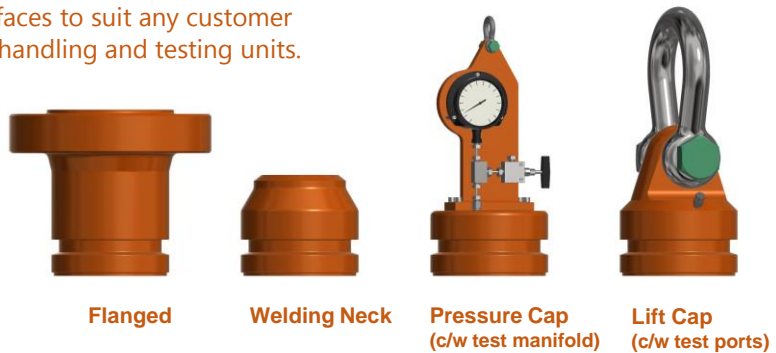
The internal clamping segments are operated by turning a single drive screw. No special equipment or pipe guiding provisions are needed, just a std hand carried torque tool.

Simply stab the Pin end in to the Box receptacle; operating the connector directly aligns and couples together the two pipe ends.

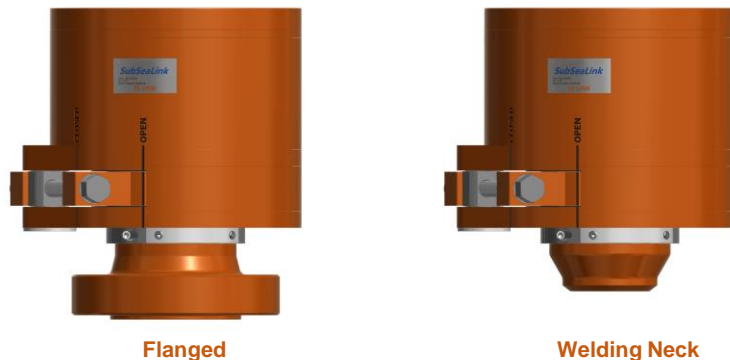


Available with different interfaces to suit any customer requirement. Equipped with handling and testing units.

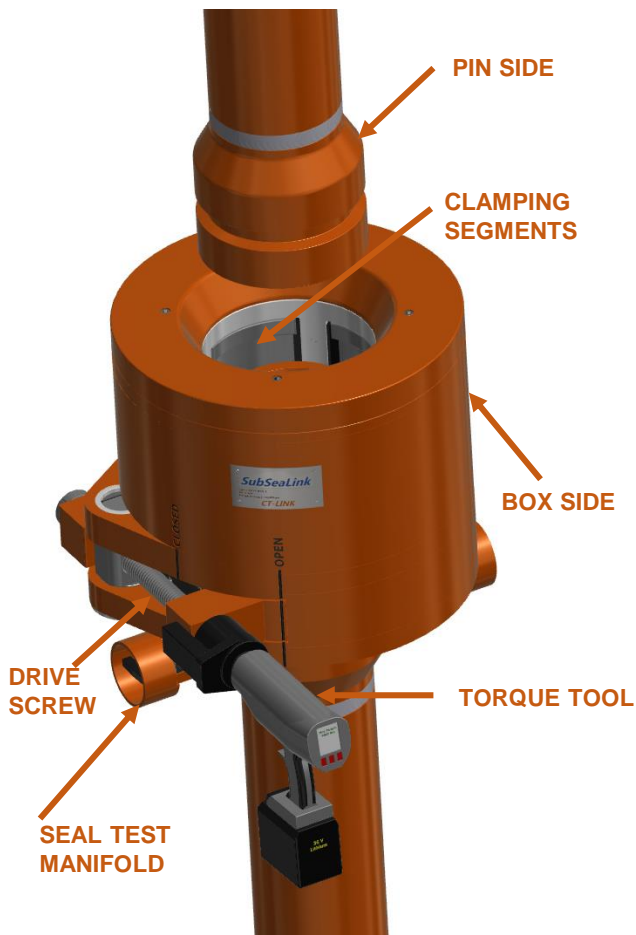
PIN OPTIONS



BOX OPTIONS

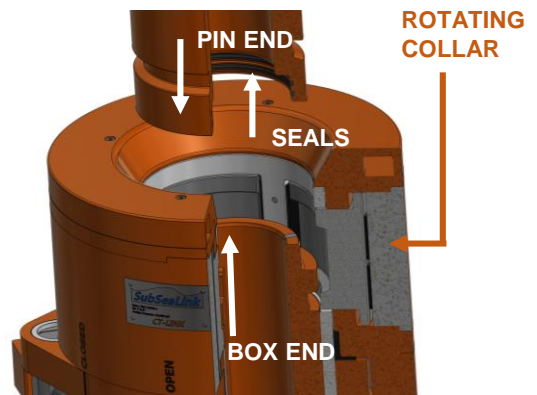


Further details



CT-LINK

Same design and sizing as the TS-LINK but featuring a double elastomeric seal arrangement c/w external leak test manifold. The CT-LINK is specifically designed for connections that are frequently made and broken and have to be re-pressured tested every time. This is typically the case when reconnecting the Topside Injector Head at any new downhole intervention run. By means of the CT-LINK, dis-assembly and re-assembly are carried out very fast and in a controlled manner. The sealing system can be externally tested to full pressure rating, thus eliminating time consuming water filling operations



Available with different interfaces to suit any customer requirement. Equipped with handling and testing units.

PIN OPTIONS



Flanged



Welding Neck



Lift Cap
(c/w test ports)

BOX OPTIONS



Flanged



Welding Neck

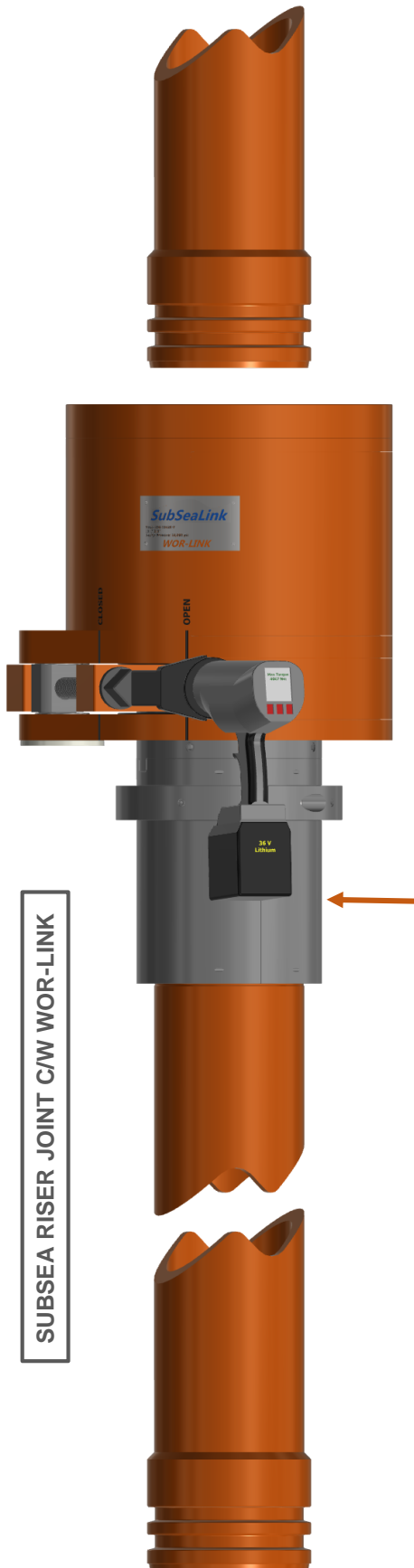
Further details

WOR-LINK

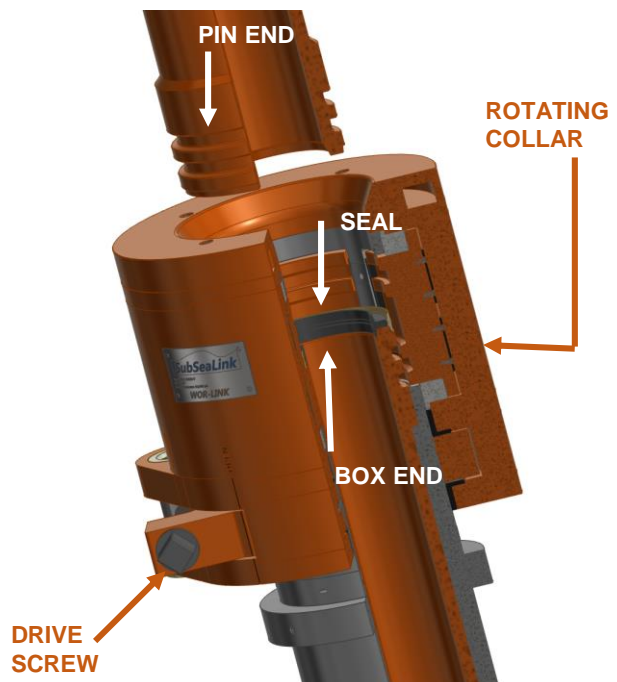
An innovative design, cutting installation cost and fatigue problems affecting open water intervention risers.

Most of existing WOR 's (WorkOver Risers) are made up of drill (or casing) pipe-like strings, a technology requiring large torquing spreads normally found on board of offshore Rigs. Rig's mobilization and high dayrates are the driving factors for the total intervention cost, as the purchase price of drill-pipe-like riser joints is relatively low. However, threaded joints feature high stress concentrations thus increasing internal cycling stresses originated by wave loads and vessel movements. As fatigue damage adds to that accumulated at every joint make and break, riser inspection, threads recut and eventually pipe replacement lead to high through life cycle cost.

The WOR-LINK eliminates threaded joints in favour of a mechanical connection designed to be as strong as the riser pipe. By eliminating the weak point, strength and fatigue life remain that of the riser pipe itself. The connector does not require expensive maintenance or repair but just periodic inspection and seal replacement. The result is minimum through life cycle cost. Unlike existing systems, the WOR-LINK does not require any heavy duty make-up device thus eliminating expensive tooling packages and extra deck space occupation. The effect stretches beyond the mere hardware saving as the largest benefit is the possibility of using smaller vessels thus cutting well intervention costs to the root.

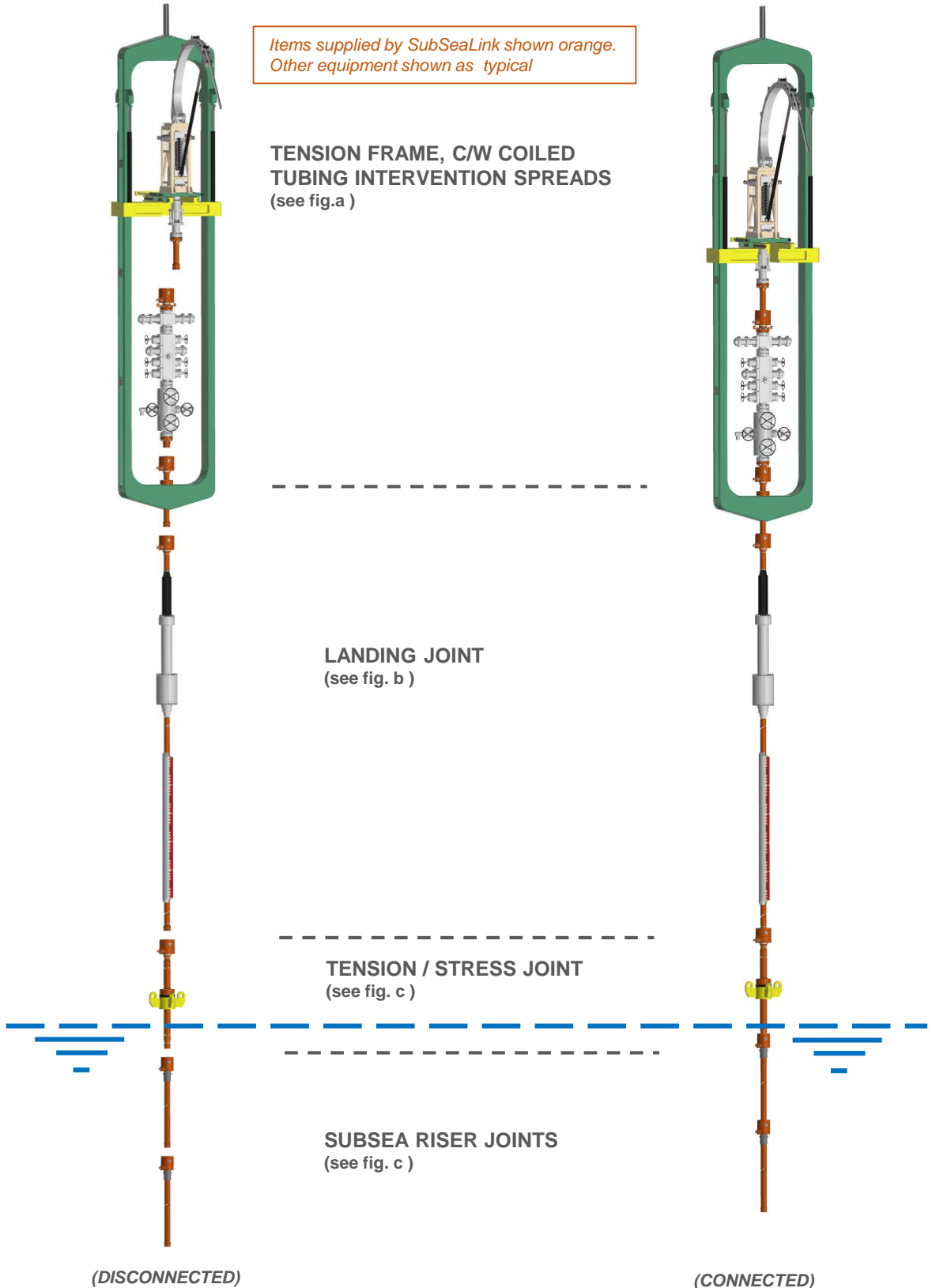


INTERFACE TO VESSEL
ELEVATOR AND GIMBAL



Optimized assembly cuts well intervention costs

By cutting assembly time, tooling and deck area, the SubSeaLink riser connection system allows running subsea well interventions faster and from smaller class vessels. Furthermore, our connectors are designed to be stronger than the pipe thus removing strength and fatigue limitations typical of flanged and threaded connections. The system suits any riser configuration, the following figures show just one example.



TENSION FRAME, CW COILED TUBING INTERVENTION SPREADS

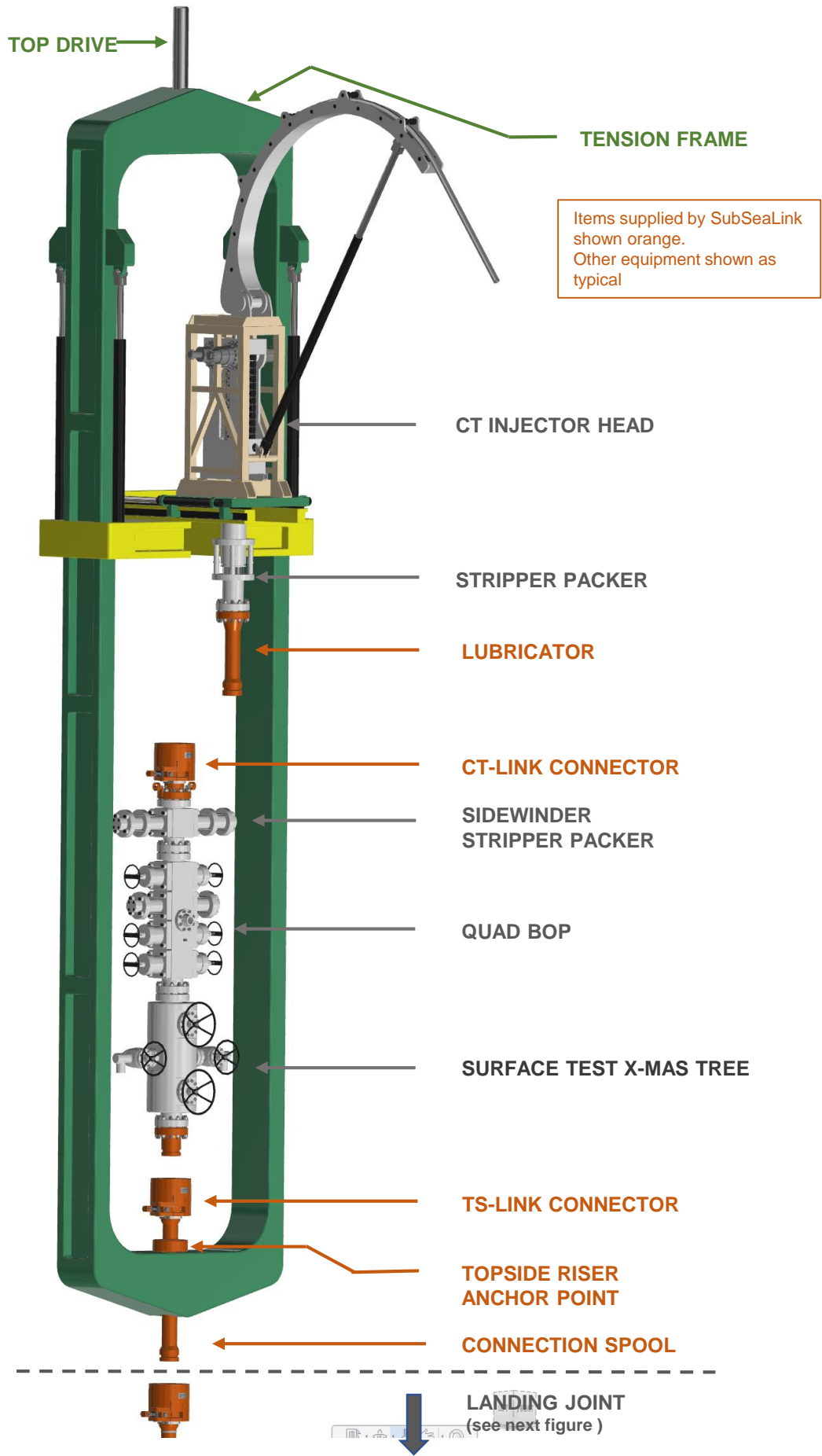


Figure a

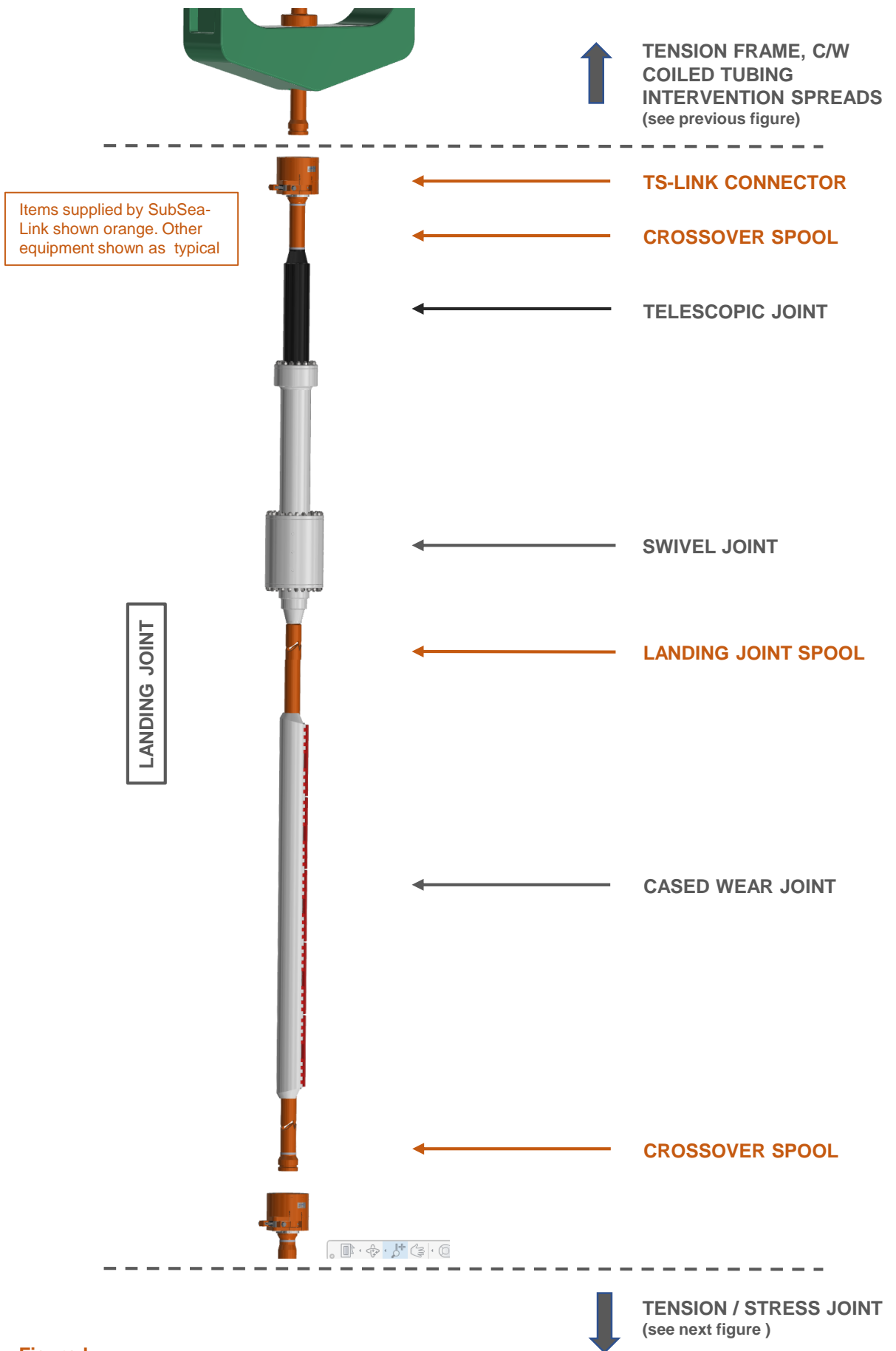
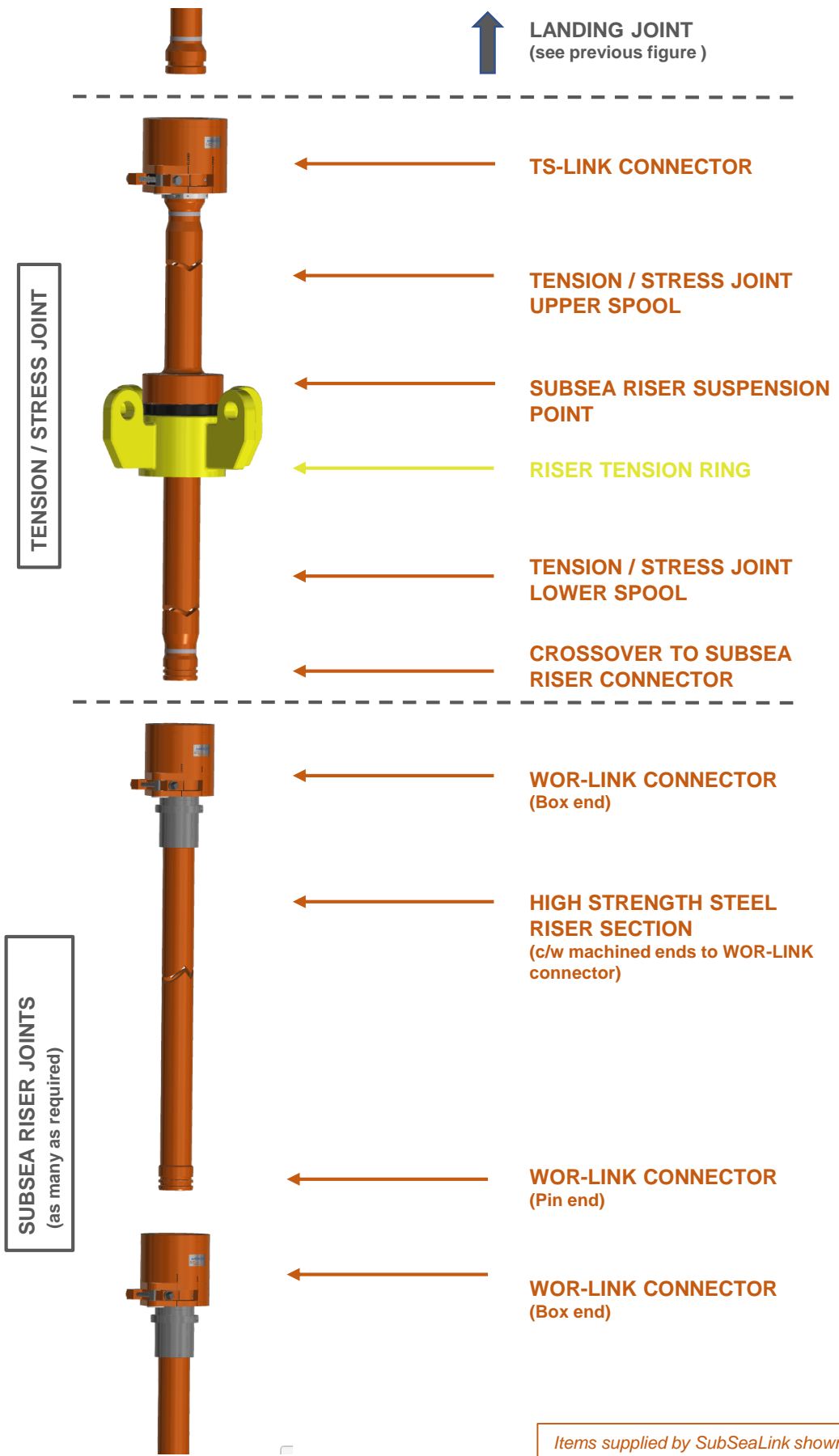


Figure b



Items supplied by SubSeaLink shown orange.
Other equipment shown as typical

Figure c