

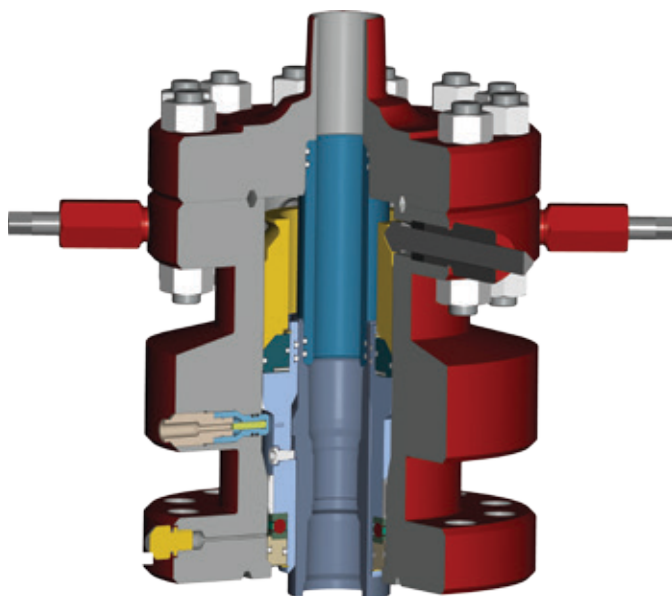
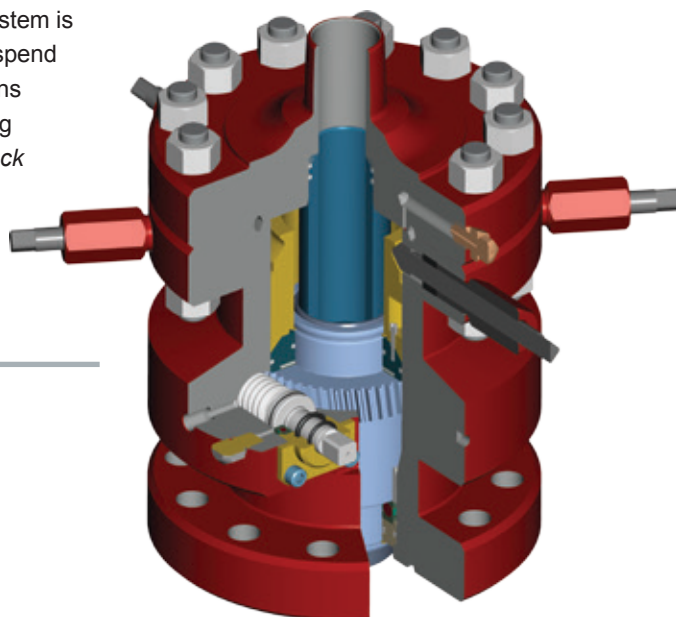


Rotating Breech-Lock™ Tubing-Hanger System

Weatherford's *Rotating Breech-Lock* tubing-hanger system is designed to provide a safe and efficient solution to suspend tubing strings in moderate to extreme tension conditions through a blowout-preventer (BOP) stack during drilling and/or production operations. The *Rotating Breech-Lock* system is ideal for use in tension applications that require the use of production tubing strings.

Applications

- Onshore and offshore operations
- Sucker-rod/pump-jack systems
- Reciprocating-rod and artificial-lift systems
- Progressing-cavity-pumping systems



Rotating Breech-Lock™ Tubing-Hanger System

Features, Advantages and Benefits

- The inner mandrel rotates, enabling manipulation of the tubing string while maintaining tubing tension to the predetermined calculation, maximizing the tubing lifespan and enhancing productivity.
- Breech-lock mandrel locks into the rotating intermediate mandrel, allowing the entire tubing string to be rotated incrementally during rod-pump operations, maximizing tubing-string efficiency throughout the life of the well.
- The *Rotating Breech-Lock* system reduces tubing wear from reciprocating-rod-lift or progressing-cavity-pumping systems, reducing potential costly replacement of the original production strings.
- The *Rotating Breech-Lock* tension-tubing hanger distributes the wear on tubing by as much as 360°, significantly increasing the life of the tubing string.
- The *Rotating Breech-Lock* system saves an estimated 2 hours per installation while maintaining BOP control, reducing rig time and associated costs.
- An optional rotation sensor permits direct interface with Weatherford's WellPilot™ instrumentation, enabling close monitoring of real-time conditions of the production and wellhead equipment, enhancing manageability of such costly components of the well.

Specifications

The *Rotating Breech-Lock* tubing-hanger system is available with nominal bowl sizes ranging from 7 1/16- to 11-in., with outside diameter (OD) tubing ranging from 2 3/8- to 4 1/2-in., and is designed to suspend and rotate a tubing load of up to 75,000 lb (34 019 kg).

Patent pending