



Weatherford®

REAL RESULTS

Safety-Tension-Adapter System Reduces Installation Time of Drilling Blowout Preventer by Three Hours, Improves Safety

Objectives

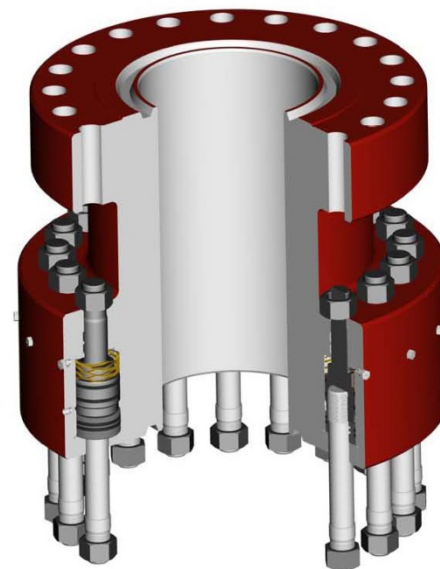
- Improve safe working conditions during installation of a drilling blowout preventer (BOP) to the wellhead.
- Reduce BOP installation time in two separate operator shale gas fields.

Results

- Weatherford personnel installed Safety-Tensioning-Adapter hydraulic bolt-tensioning assemblies on a series of wells over a six-month period in two different operator field trials. One trial was in Conway, Arkansas, and the other was in Towanda, Pennsylvania.
- Both field trials were conducted under the close supervision of a product qualified technician, who submitted weekly reports.
- The Safety-Tensioning-Adapter system required only a hydraulic hand pump and fluid to make the connections, which limited exposure of rig personnel to hazardous conditions.
- The system was integrated into both operators' drillstrings without a proprietary BOP interface, enabling the operators to use their conventional API 6A-rated flanged wellhead equipment while ensuring that connections met API 6A requirements for proper flange makeup and bolt torque.
- The connections were installed to the correct API 6A-specified bolt tension requirements, and the connection maintained a full working pressure test throughout the drilling process.

Value to Client

- Using the Weatherford Safety-Tensioning-Adapter system enabled the operators to reduce downtime for the BOP drilling system installation by at least 3 hours.
- The built-in safety capabilities of the Safety-Tensioning-Adapter assemblies resulted in zero safety incidents during the BOP installation in each field trial, enhancing rig site safety.



Weatherford Safety-Tensioning-Adapter system provided a safer, more efficient alternative to all flange connections commonly used during drilling, fracturing, and production operations, and enhanced operational flexibility in two separate field trials.

Location

- Conway, Arkansas, USA
- Towanda, Pennsylvania, USA

Well Type

Onshore shale gas producers

Average Days Drilling/Well

- Conway: 7 days
- Towanda: 15 days

Equipment Pressure

5,000 psi (345 bar)

Flange Size

11 in. (27.9 cm) nominal

Products/Services

Safety-Tensioning-Adapter system