

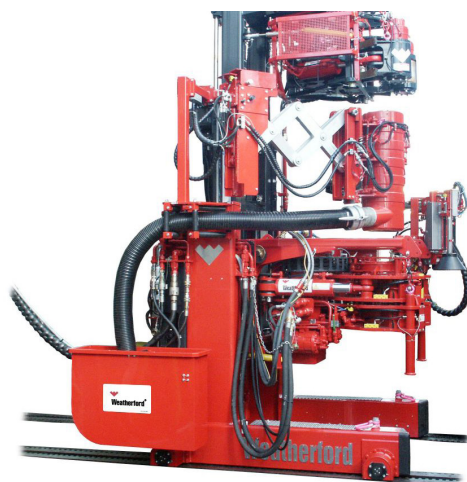


TorkWrench™ 10-100 All-in-One System

The TorkWrench 10-100 all-in-one modular iron roughneck system facilitates hands-off tubular makeup and breakout operations and includes an automated stabbing guide, tool-joint finder, thread cleaning and doping system, and automated mud bucket.

The Weatherford TorkWrench drillpipe tong module and the ancillary all-in-one components are operated inside the patented* PowerFrame® II tong-positioning system, a rail-mounted tong carrier. The tong carrier enables the easy exchange of tong modules as required to run casing, tubing, and/or threaded riser connections. A single operator controls the system from the drill floor through the HiPer™ control system panel or through the driller's cabin when the controls are integrated into the rig control system.

The ability to interchange tong modules and/or working mechanisms offline, on the rig, or in the workshop makes the TorkWrench 10-100 modular iron roughneck system the perfect all-in-one solution for safe and efficient operations.



Applications

- Tripping standard- or premium-connection drillpipe, offline stand building, and bit breaking
- Running drillpipe, casing, tubing, and production risers (with specific power tong)
- Bottomhole assembly makeup and installation
- Controlling mechanized tong-positioning systems and casing, tubing, riser, and drillpipe tongs

Features, Advantages, and Benefits

- Remote control enables running of drillpipe, tubing, casing, and riser pipe by a single operator for safer operations.
- The automatic tool-joint finder determines the correct positioning height for the TorkWrench wrenching tong, increasing operational efficiency of the makeup/breakout process.
- Automated stabbing guides guide pipe into the correct position during the makeup process and enable easier lifting of the pipe during breakout operations, reducing thread wear.

*U.S. Patent No. 7114235





TorkWrench™ 10-100 All-in-One System

Features, Advantages, and Benefits (continued)

- While closed, the automated mud bucket positioned between spinner and wrench allows pipe rotation, optimizing mud capture.
- The cleaning and doping system performs thread cleaning with air and box doping automatically, which enhances safety by removing personnel from the drop zone.
- Integration with the JAMPro™ system enables optimal makeup monitoring, testing, and control for increased operational efficiency.

Specifications

Approximate weight (ton)	6.5
Maximum pressure (psi, MPa)	3,000 20.7
Maximum oil flow (gal/min, L/min)	40 to 79 151 to 299
Wrenching cylinders	2
Clamping range (in., mm)	2-7/8 to 10 73 to 254
Maximum makeup/breakout torque* (ft-lb, kN•m)	100,000 135.56
Wrenching angle per stroke	40°
Power supply	Open/close center
Controls	Onboard or various remote
Independent spinner	BHA and thread travel compensation

*Optional torque of 145,000 ft-lb (196.59 kN•m) is possible.

Options

- Mud bucket, thread cleaning, and doping systems
- Stabbing guide
- Mechanized 5.5-15 tubing tong
- Mechanized 7.6-30 tubing tong
- Mechanized 14-50 casing tong
- Mechanized 14-100 casing tong
- Mechanized 24-50 casing tong
- Mechanized 30-100 casing tong
- Mechanized 21-300 riser tong, only with servo frame
- Mechanized TorkWrench 10-145 drill pipe tong
- Other modules upon request

Additional Information

sales-germany@weatherford.com