

ROBO-SPIDERTM

AUTOMATED
BOLTING
SYSTEM



Deepwater drilling demands a safer, faster, and more accurate bolt-tightening environment. The patented Robo-Spider's innovative and revolutionary design, which was developed with Cameron for the Load King series riser, delivers a flawless bolt-tightening performance that significantly reduces drilling costs in daily rig operations.

The Robo-Spider is the first fully-automated hydraulic torquing system designed to torque an entire riser flange at once, taking the place of single riser tools that currently do one bolt at a time. It was designed to meet deepwater drilling demands and exceed industry expectations.

There are six individual modules. Each module operates as a stand-alone unit, and at the same time, all the modules work in tandem to tighten each bolt with accurate and balanced preload with every turn.



PROVEN TECH

The Robo-Spider design is elaborate, but its core working parts are identical to the RT Series riser tools. The drive-train assembly is a design that has a lot of experience and success bolting and unbolting deepwater riser, making the Robo-Spider extremely reliable.

TOUCH SCREEN

The control panel is a portable, placeable, and a picnic to operate. The touch screen is easy to navigate and let's you completely control the tool with hands-free operation. It also stores data with a journaling feature, giving you the ability to know exactly what your torque values are.

SAFE

Being able to operate the Robo-Spider with the touch screen means your crew is away from the area, making the bolting process completely safe. It also frees them up to be working on another task, making the entire riser running and pulling processes more efficient.

FAST

Usually, you have two men working opposite each other on a bolted flange, doing two bolts with two different wrenches, then moving on to the next bolts. The Robo-Spider bolts all six bolts simultaneously with the push of a button, cutting chunks out of your bolting time.

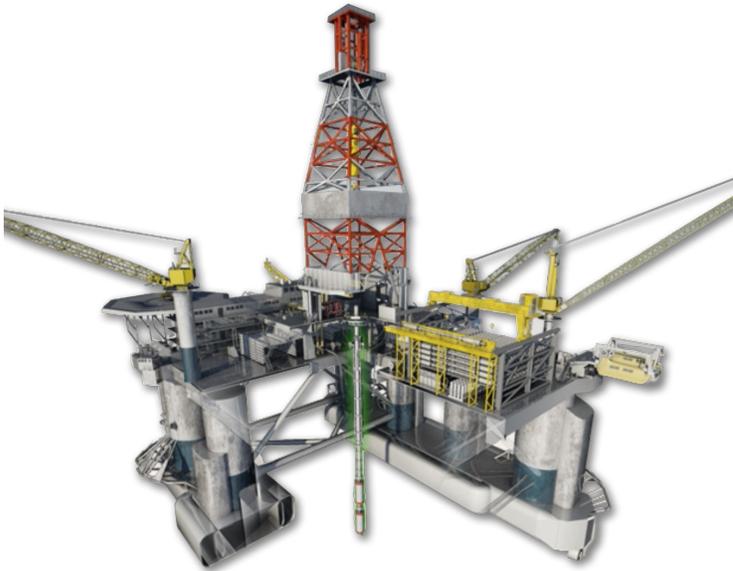
ACCURATE

Once the modules have run all the bolts down and shouldered them up, they wait on each other to begin the first stroke, giving you a perfect preload. After that, they torque all of your bolts up until the target is hit, giving you accuracy of +/- 1.85% on the bolt load.

DEPENDABLE

Weather conditions and rough seas mean nothing to the Robo-Spider. Hot or cold, rain or shine, the Robo-Spider gets your riser up or down safely and efficiently.

ROBO-SPIDER



A standard Riser Tool set can make up or break out a six-bolt flange in approximately 8 minutes. In comparison, the Robo-Spider can perform either function in a fraction of the time - roughly two minutes per flange, saving six minutes for every connection.

Using a 100-joint string as an example, estimating that a rig will run the BOP stack three times per year (which equals three runs and pulls), and that the average burn rate is roughly \$1.2 million per day, the Robo-Spider could potentially save you nearly \$3 million in a 12-month span.

NOTE: The sequence for breaking out riser flanges is several minutes longer than making up due to the fact that the riser bolts have to be stored manually by crew members. The Robo-Spider has built-in capability to automatically store riser bolts with no additional crew involvement, thus saving several additional minutes per flange.

