

Topdrive casing alignment tool

Run tubulars without carrying out hazardous stabbing board operations

Applications

- Onshore and offshore oil and gas drilling

Features and Benefits

- Rig floor operation control
- Adaptable; flexible, maintains and improves running speeds
- Fit-for-purpose design allows stabilization of tubulars ranging in size for 27/8 to 20-in.
- Hydraulic positioning of single joint elevators relative to stinger
- Can be used as a single-joint compensator when running or pulling any joints of casing or tubing
- T-CAT system operates remotely from the rig floor with one technician, improving safety of operation
- No stabber required
- Can be rigged up and down on completion of individual casing operations with no special rig up requirements
- Can be used to run all casing and tubing sizes

With its patent-pending topdrive casing alignment tool (T-CAT system), Baker Hughes offers a simple and safer approach to running tubulars. The T-CAT system is a state-of-the-art tool that enables running tubulars without carrying out hazardous stabbing board operations.

It allows the tubular to be made up with complete control from the rig floor. Using the T-CAT system, tubulars can be picked up from the V-door, positioned and made up in the rotary. Casing and tubing can be run from the drill floor with the T-CAT system minimizing manual handling.

The T-CAT system is easily rigged up and down, unlike other costly systems that must be permanently installed on the rig's derrick.

The T-CAT comprises two hydraulic cylinders positioned below the topdrive. Extra long slings are guided past the main elevator to the double-hinged, single-joint elevator. As the joint is picked up from the V-door, the T-CAT is activated, pulling the stinger of the fill-and-circulate (FAC) tool inside the casing. In this way the joint is vertical before the pin is stabbed into the box and remains so while the connection is made up by the power tong.

Typical properties

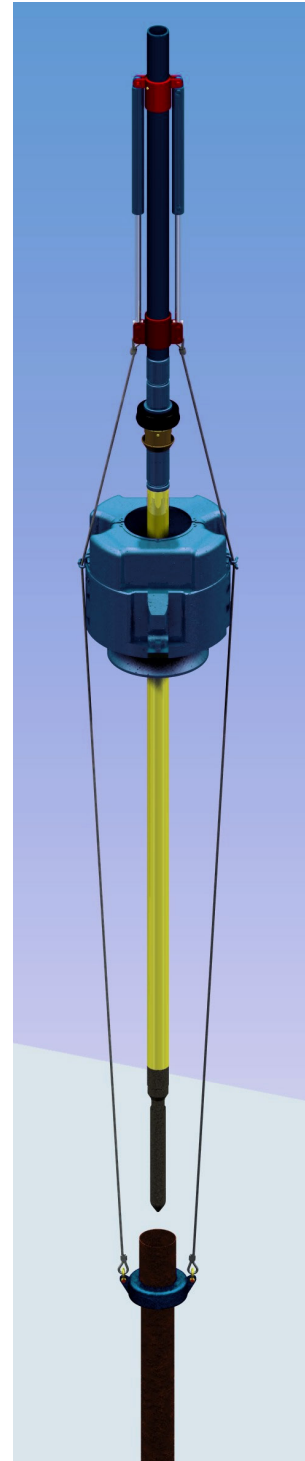
Rig-specific space out

Size capabilities	2 7/8, 3 1/2, 4 1/2, 5 1/2, 7, 9 5/8, 10 3/4, 11 3/4, 13 3/8, 16, 18 5/8, and 20-in.
-------------------	--





T-CAT tool showing the FAC tool partially inside the casing ready for fill-up operations, and the main elevator.



T-CAT tool showing how the slings are attached to the cylinders and to the single joint elevator, as well as the position of the FAC tool stinger before it is pulled into the casing.