

Topdrive casing alignment tool (T-CAT)

Run tubulars without hazardous stabbing board operations

Applications

- Tubular stabilization where stabbing arms are not practical
- Running and pulling tubular operations

Features and Benefits

- Controls the operation from the rig floor
- Improves running speeds
 - Capable of performing pipe compensation when running or pulling tubulars
- Stabilizes tubulars from 2.875 to 20 in.
- Positions single joint elevator (SJE) directly below stinger for optimal stabbing
- Adapts to fill-and-circulate (FAC) tools
- Creates a safer operation
 - Remote operator can be positioned outside the red zone
 - Eliminates the need for a stabber and the associated HSE risks

With its patented topdrive casing alignment tool, Baker Hughes offers a simpler and safer approach to running tubulars. The T-CAT system enables running tubulars without the need for 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 without 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.

Components and equipment

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 (SJE). Once the joint is picked up from the V-door, the T-CAT is activated, pulling the casing around the stinger of the fill-and-circulate (FAC) tool.

The T-CAT controls the top of the joint to be made up, throughout the makeup removing the need for any other stabbing method. Because the tubular is controlled, connections make up in a more consistent and integral manner.

Safety and handling

Before handling, transporting, or use, review the Owner's Manual for guidance.

Technical specifications

Pipe size compatibility

2.875 to 20 in.



Figure 1: 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.