

# DSTR™

## Drill String Torque Reducer

### Key Benefits and Features

- 5 inch, 5 1/2 inch and 6 5/8 inch sizes
- Reduces friction factor
- Can withstand 14,000 lbf side force
- One piece mandrel with mechanical properties exceeds the specification of the drillpipe
- Overall dimensions permits use within standard drilling stand and average derrick height
- Durable design allows for optimization in the harshest of well profiles and environments
- Dual sleeve retention mechanism for downhole reliability



Use in the following applications:

Deepwater and ultra-deepwater

Shelf

Land

Frank's Drill String Torque Reducer (DSTR™) is a drill string tool intended for use in deviated wells where excessive rotary torque causes drilling and casing wear problems. This tool is an integral component consisting of a short mandrel fitted with a bearing supported non-rotating sleeve. It is designed to be positioned between the connections of the drillpipe at the well radius section of the hole. Achieving an international award for innovation at the Houston oil show in 1996, the tool is now acknowledged as the industry standard.

Another benefit seen with the tool is the reduction of casing wear. For a given deviation profile, the applications program assists in maximizing the tools performance by determining the deployment in the critical sections of the borehole. However, for most extended reach drilling applications, the tools are used in the build sections of the borehole, helping to extend the envelope of rotary drilling.