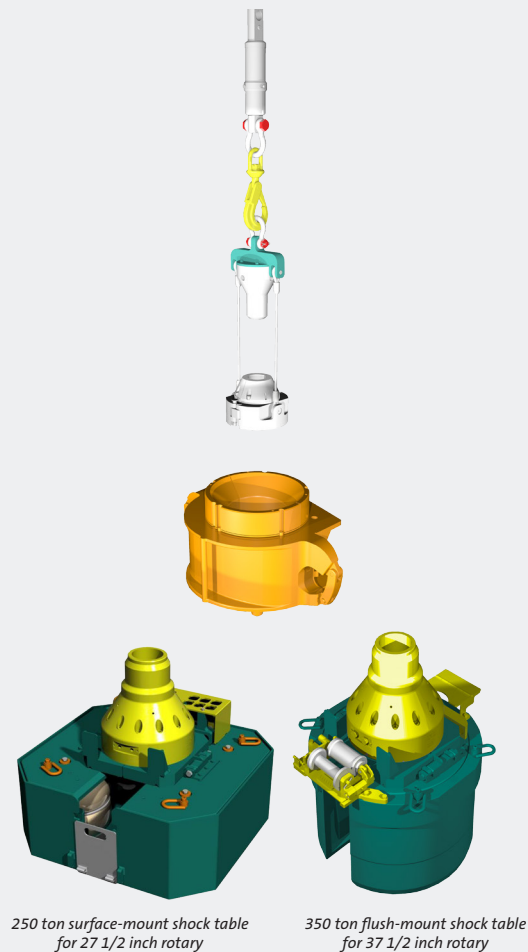


Collar Load Support (CLS™) System

Key Benefits and Features

- Allows for both surface-mount and flush-mount shock table configurations, dependent on rotary size
- Accommodates multiple control lines or large umbilicals typically encountered on high-tech completions
- Eliminates the potential for corrosion cracking as a result of stress concentrations induced by conventional handling equipment as the CLS™ system imparts no penetration impressions to the tubular
- Allows the running of threaded and coupled tubulars without inflicting damaging die penetration marks caused by typical slip-type elevators or spiders
- Minimizes the risk of slip crush or iron transfer as the tubular is supported by the load face, and not penetration, to avoid the slippage issues prevalent on certain alloys with conventional inserts
- Reduces the potential for shock loading of the coupling during load transfer by the elastic compliance of the built-in shock table
- The shock table provides gentle deceleration of the joint and string during load transfer operations between the load transfer sleeve and landing spear



250 ton surface-mount shock table
for 27 1/2 inch rotary

350 ton flush-mount shock table
for 37 1/2 inch rotary

Use in the following applications: **Deepwater and ultra-deepwater** **Shelf** **Land**

Specifications

Size	Safe Working Load Rating
3 1/2 inches - 4 1/2 inches	150 tons*
5 inches - 7 inches	250 tons (27 1/2 inch and smaller rotary surface-mount)
	350 tons (37 1/2 inch rotary flush-mount)

*Due to reducer bushings required of these smaller sizes

When coupled with Frank's International's FLUID GRIP® system, this patented procedure provides the only non-marking/zero-mechanical-damage system in the industry for make-up and handling of completion tubulars.

For completions that include control and injection lines running downhole, Frank's International's COBRA™ Control Line Manipulator Arm can be coupled to the CLS™ system.