The Weatherford 30-100 high-torque casing tong provides 100,000 ft-lb (135,600 N•m) of torque capacity for running and pulling 16- to 30-in. casing. At the heart of the tong is a unique gated rotary that completely encircles the casing, providing greater circumferential coverage, a smaller footprint, and lighter overall weight than conventional tong designs. For added safety, the hydraulic door interlock prevents tong operation while the doors are open or unlatched. The 30-100 tong is capable of fully mechanized remote operation or semimechanized operation, and it is fully compatible with all Weatherford automated tong-positioning systems, including the patented* PowerFrame® and PowerScope® systems.

Applications

- Running and pulling 16- to 30-in. casing
- Making up and breaking out connections with high-torque requirements
- Performing offline or moonpool casing makeup operations

Features, Advantages, and Benefits

- The gated rotary completely encloses the casing to distribute gripping forces over a greater area and ensure a positive grip without pipe deformation or pipe marking problems.
- The integral hydraulic backup grips pipe and couplings without crushing.
- The tong design eliminates the use of large manual rig tongs as backup when running casing, thereby enhancing safety.
- The patented free-floating integral backup design virtually eliminates shearing and bending when making up or breaking out connections. This design reduces casing deformation, which can affect long-term wellbore integrity.
- Compatibility with JAMPro™ torque control systems enables real-time monitoring of torque, turns, and speed for increased efficiency.
- The tong design allows running of casing in the moonpool or offline on rigs that can accommodate these activities.

*U.S. Patent No. 6412553 and 7114235