

# Dual String Tong

Make Your Drilling Investment More Productive...

US Patent 5,482,390



This distinctive power tong is designed with safety in mind as with all equipment designed and manufactured by Frank's. During the design phase, Frank's engineering staff had the unique opportunity to meet with in-house safety engineers and operation personnel to incorporate safety features not found in other dual string power tongs.

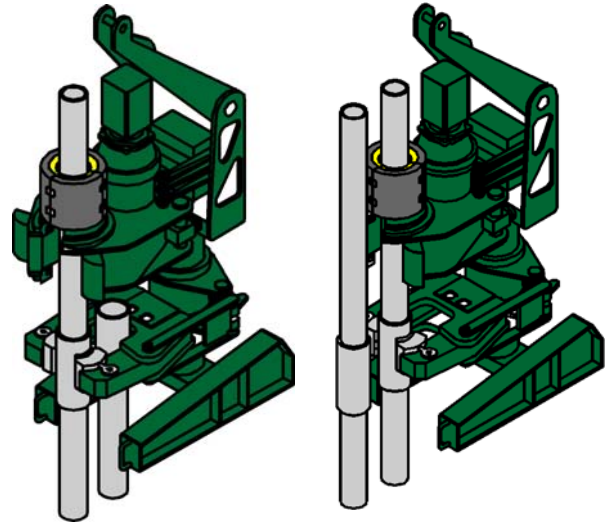
This lightweight Dual String Tong can be configured with either conventional inserts or with Frank's Fluid Grip™ technology. The grip systems design can make-up a range of tubulars sized from 2<sup>1</sup>/<sub>16</sub>" through 3.5". A high efficiency axial piston motor insures consistent high torque capabilities and facilitates a hydraulic speed control that eliminates the need to shift gears.

As required, the Dual String Tong can be easily interfaced with Frank's Data Trek Advantage data acquisition system and all of its components.

Both the conventional and Fluid Grip models of the Dual String Tong incorporate two unique features not found in other dual string tongs: Frank's patented Zero Side Load™ back-up technology and the Deep Throat™ capability.

FEATURE	ENGLISH	METRIC
Pipe Size Range	2 1/16" - 3.5 "	52.39 mm - 88.90 mm
Tong Dimensions	16" x 19"	406 mm x 482 mm
Tong Weight, including Backup	900 lbs.	408 kg
Maximum Torque (constant)	7,500 ft lbs	101 70 Nm
Operating Pressure	3,000 psi	207 bar
Flow	24 - 30 gpm	95-114 lpm
Low Speed	1 rpm	
High Speed	30 rpm at 30 gpm	

**Deep Throat™** design allows the make-up operation of both joints to be performed without the necessity of rotating the power tong 180°, which results in a reduction of crew fatigue, establishes a safer environment and saves substantial rig time. (US Patent 5,482,390)



**Zero Side Load™** Integral Back-up completely eliminates all bending and shear forces induced by conventional power tongs during make-up. (US Patent 5,099,725)

When configured with conventional inserts, the Frank's Dual String Tong is designed with a three-jaw gripping system. This greatly increases the contact area resulting in a reduction of die penetration and reduces pipe crushing.

