

# Well Construction

## Frank's Tubular Running Services (TRS) - Casing Technologies

### Torque Activated Wedge Grip (TAWG® Tool)

#### Features and Benefits

- Enhances rig floor safety and efficiency by eliminating the need for a power tong, hydraulic power unit, and umbilical hoses
- Requires a minimal amount of personnel to run the casing string when combined with Frank's rotary spiders
- Combines the functions of a power tong, fill-up tool, and elevator into one complete package
- Fill-up provisions are integral to the tool
- Provides ability to rotate, circulate, and reciprocate pipe through tight spots in the well bore and improve the cementation process
- Has a high capacity for set down load capacity
- Fast, safe and easy rig-up and removal
- In standard configuration, the tool is capable of Casing-while-Drilling (CwD) operations





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Specifications				
	4 ½ inches	5 ½ inches	7 inch - 9 ⅝ inches	9 ⅝ inch - 24 inches
Maximum hoist rating (tons)	125	200	250	500
Maximum torque rating @ 0 hoist (ft-lbs)	12,500	22,000	27,000	45,000
Maximum torque rating @ full hoist (ft-lbs)	5,000	9,000	18,000	27,500
Set-down load capacity (tons)	70	100	110	110
Continuous operating speed	Unlimited			
Length minimum	69 ½ inches	74 ½ inches	91 inches	90 ½ inches
Length maximum	72 ¾ inches	77 ¾ inches	94 ¼ inches	94 inches
Maximum OD of tool	14 ¼ inches	14 ¼ inches	14 ¼ inches	23 inches
Weight of tool	625 pounds	650 pounds	800 pounds	1,200 pounds <i>(3,600 pounds for 18 ⅝ inches and up)</i>
Available thread compensation	3 ¼ inches	3 ¼ inches	3 ¼ inches	3 ½ inches
Top drive connection	NC50	NC50	NC50	6 ⅝ REG
Circulation rate maximum (BBL/min) (with valve removed)	4 ½ inches - 5 ½ inches 10		7 inches - 13 ⅝ inches 15	
Temperature (°F)	200			
Pressure rating (psi) (may be limited by the packer cup)	5,000			

#### 4 ½ Inch - 9 ⅝ Inch Specifications

Nominal OD	Weight per foot (lb/ft)	Hoist rating	Hoist rating @1,000 psi circ. press.
4.500	11.60	125	119
	13.50	125	119
5.500	17.00	200	191
	20.00	200	192
	23.00	200	192
7.000	23.00	250	235
	26.00	250	236
	29.00	250	236
7.625	29.70	250	233
8.625	24.00	250	225
	32.00	250	227
9.625	36.00	250	220

#### 9 ⅝ Inch - 13 ⅝ Inch Specifications

Nominal OD	Weight per foot (lb/ft)	Hoist rating	Hoist rating @1,000 psi circ. press.
9.625	36.0	500	469
	40.0	500	469
	43.5	500	470
	47.0	500	470
	53.5	500	471
10.750	45.5	500	461
	51.0	500	462
	55.5	500	463
11.750	47.0	500	452
	54.0	500	454
	60.0	500	454
13.375	54.5	500	438
	61.0	500	438
	68.0	500	439
	72.0	500	440

#### 16 Inch - 24 Inch Specifications

Nominal OD	Weight per foot (lb/ft)	Hoist rating	Hoist rating @1,000 psi circ. press.
16.00	65.0	500	410
	75.0	500	411
	84.0	500	413
18.625	87.5	500	376
	115.0	500	381
20.000	136.0	500	383
	94.0	500	358
24.000	106.4	500	360
	133.0	500	364
24.000	176.0	500	299