

Pipe Size:	4.750 in	Grade:	S135	Range:	3
Pipe Weight:	17.50 lb/ft	Upset:	IEU	Connection:	480 DUO

Pipe

		NEW	API PREMIUM	
Pipe size	<i>in</i>	4.750	OD	<i>in</i>
		4.750		4.615
Pipe weight	<i>lb/ft</i>	17.50	Thickness	<i>in</i>
				0.337
Upset Type		IEU	X-Sec Area	<i>in²</i>
				4.672
Tube grade		S135	Section Modulus	<i>in³</i>
				4.817
Range		3	Polar Section Modulus	<i>in³</i>
				9.633
Tube Yield	<i>ksi</i>	135	Tensile Yield	<i>lbs</i>
				631,000
ID	<i>in</i>	4.076	Torsional Yield	<i>ft-lbs</i>
				49,100
			80% Torsional Yield	<i>ft-lbs</i>
				50,000
			Internal Pressure Yield	<i>psi</i>
				16,800
			Collapse Yield	<i>psi</i>
				15,000
			D/t	
				14.09
			Connection/Tube Torsional Ratio	
				0.679

*See Elevator Capacity

Tool Joint

		NEW	REC MIN OD		
Connection Type	480 DUO	OD	<i>in</i>		
		5.625	5.625		
Material Yield Strength	<i>ksi</i>	130	Tensile Yield Strength	<i>lbs</i>	
				824,400	
	OD	<i>in</i>	5.625	Torsional Yield Strength	<i>ft-lbs</i>
				42,400	
	ID	<i>in</i>	3.750	Recommended Makeup Torque	<i>ft-lbs</i>
				25,500	
Pin Shoulder Angle	<i>deg</i>	18	Maximum Makeup Torque	<i>ft-lbs</i>	
				27,600	
Pin Tool Joint Length	<i>in</i>	14.0			
Box Tool Joint Length	<i>in</i>	14.0			

Drill Pipe Assembly

Shoulder-Shoulder Length	<i>ft</i>	45	
Adjusted Weight	<i>lbs/ft</i>	17.77	
Closed End Displacement	<i>gal/ft</i>	0.941	<i>bbl/ft</i> 0.0224
Open End Displacement	<i>gal/ft</i>	0.271	<i>bbl/ft</i> 0.0065
Fluid Capacity	<i>gal/ft</i>	0.670	<i>bbl/ft</i> 0.0159
Drift Size	<i>in</i>	3.625	

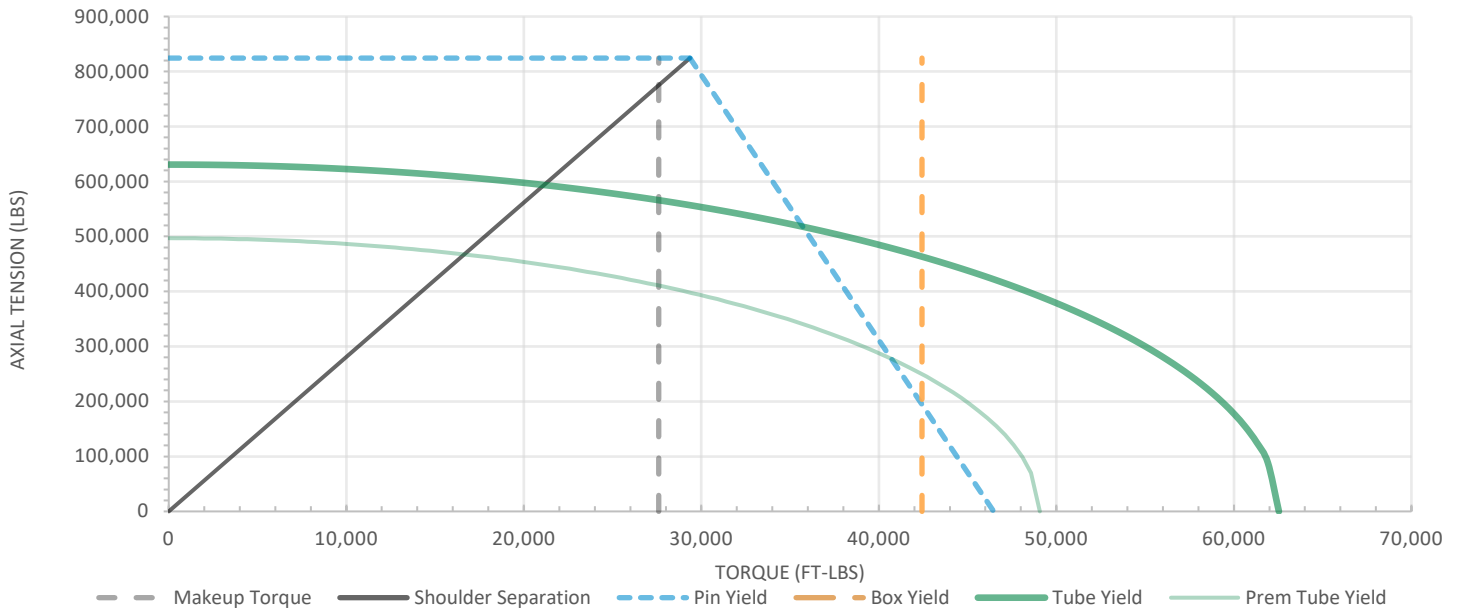
The information contained in this data sheet and other attached documentation is for reference use only. It is not intended to imply any explicit recommendation regarding processes, procedures, or performance of the end product. It is the responsibility of the end user to verify and determine the appropriate use of the technical information - no expressed or implied warranty by Complete Group is intended.

Calculations are based on uniform wall thickness and outside diameter – no safety factor has been applied. The information provided for inspection classes is based on uniform wear and is not intended to recommend or confirm operational limits of any used product. It is recommended that drilling torque not exceed 80% of the makeup torque, however it is the responsibility of the end user to determine the acceptable use of the end product including appropriate performance ratings and safety factors where applicable. All connection torque calculations have been performed using a thread compound friction factor of 1.0. Complete Group does not endorse any specific thread compound and waives all responsibility in determining appropriate makeup torque values for any specific drilling circumstance. Modifying makeup torque values for any reason shall be done at the end users discretion and risk.

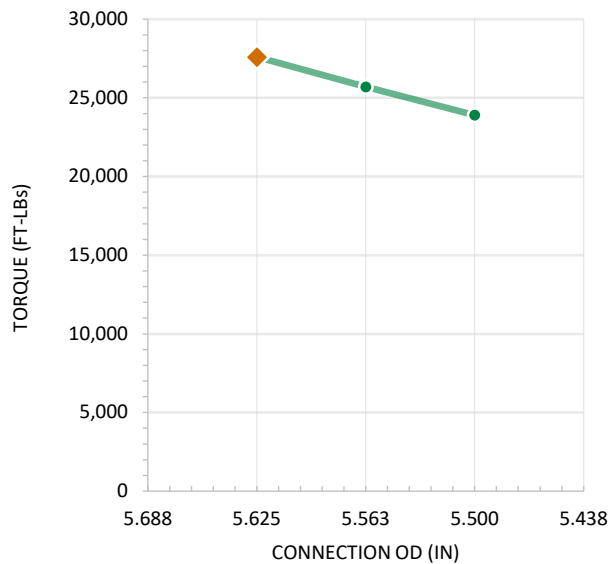
The information in this publication is subject to change without notice, please contact Complete Group for the latest publication

Pipe Size: 4.750 in Grade: S135 Range: 3
 Pipe Weight: 17.50 lb/ft Upset: IEU Connection: 480 DUO

Makeup Torque Then Tension Chart



Connection Wear Chart



CONNECTION OD (in)	MAXIMUM MAKEUP TORQUE (ft-lbs)
5.625	27,600
5.563	25,700
5.500	23,900
MIN REC OD (in)	
5.625	27,600

Elevator Capacity

ELEVATOR BORE (in)

5.1250

BOX OD ELEVATOR CAPACITY

BOX OD (in)	ELEVATOR CAPACITY NEW (lbs)
5.625	548,800
5.563	477,400
5.500	406,800

Elevator capacity based on assumed elevator bore, with no wear factor, and a contact stress of 130,000 psi. It is provided as reference only and shall not be interpreted as an engineered safe lifting load.

The information contained in this data sheet and other attached documentation is for reference use only. It is not intended to imply any explicit recommendation regarding processes, procedures, or performance of the end product. It is the responsibility of the end user to verify and determine the appropriate use of the technical information - no expressed or implied warranty by Complete Group is intended.

Calculations are based on uniform wall thickness and outside diameter – no safety factor has been applied. The information provided for inspection classes is based on uniform wear and is not intended to recommend or confirm operational limits of any used product. It is recommended that drilling torque not exceed 80% of the makeup torque, however it is the responsibility of the end user to determine the acceptable use of the end product including appropriate performance ratings and safety factors where applicable. All connection torque calculations have been performed using a thread compound friction factor of 1.0. Complete Group does not endorse any specific thread compound and waives all responsibility in determining appropriate makeup torque values for any specific drilling circumstance. Modifying makeup torque values for any reason shall be done at the end users discretion and risk.

The information in this publication is subject to change without notice, please contact Complete Group for the latest publication