

Pipe

CDN

						NEW	API PREMIUM
Pipe size	<i>in</i>	4.500	<i>mm</i>	114.3	OD <i>mm</i>	114.3	110.9
Pipe weight	<i>lb/ft</i>	16.60	<i>kg/m</i>	24.70	Thickness <i>mm</i>	8.6	6.8
Upset Type		IEU			X-Sec Area <i>cm²</i>	28.4	22.4
Tube grade		S135			Section Modulus <i>cm³</i>	70.0	54.8
Range		3			Polar Section Modulus <i>cm³</i>	140.0	109.7
Tube Yield	<i>MPa</i>	931			Tensile Yield <i>kdaN</i>	265	208
ID	<i>mm</i>	97.2			Torsional Yield <i>ft-lbs</i>	55,500	43,500
					80% Torsional Yield <i>ft-lbs</i>	44,400	34,800
					Internal Pressure Yield <i>MPa</i>	122.0	111.7
					Collapse Yield <i>MPa</i>	115.8	75.8
					D/t	13.35	16.19
					Connection/Tube Torsional Ratio	0.977	

Tool Joint

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					NEW	REC MIN OD		
Connection Type		450 DUO		OD	mm	139.7	133.4	
Material Yield Strength	MPa	896		Tensile Yield Strength	kdaN	439	439	
	OD	mm	139.7		Torsional Yield Strength	ft-lbs	54,200	43,800
	ID	mm	76.2		Recommended Makeup Torque	ft-lbs	32,500	26,300
Pin Shoulder Angle	deg	18			Maximum Makeup Torque	ft-lbs	35,200	28,500
Pin Tool Joint Length	mm	356						
Box Tool Joint Length	mm	356						

Drill Pipe Assembly

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Shoulder-Shoulder Length	m	13.72
Adjusted Weight	kg/m	26.36
Closed End Displacement	L/m	10.55
Open End Displacement	L/m	3.36
Fluid Capacity	L/m	7.19
Drift Size	mm	73.0

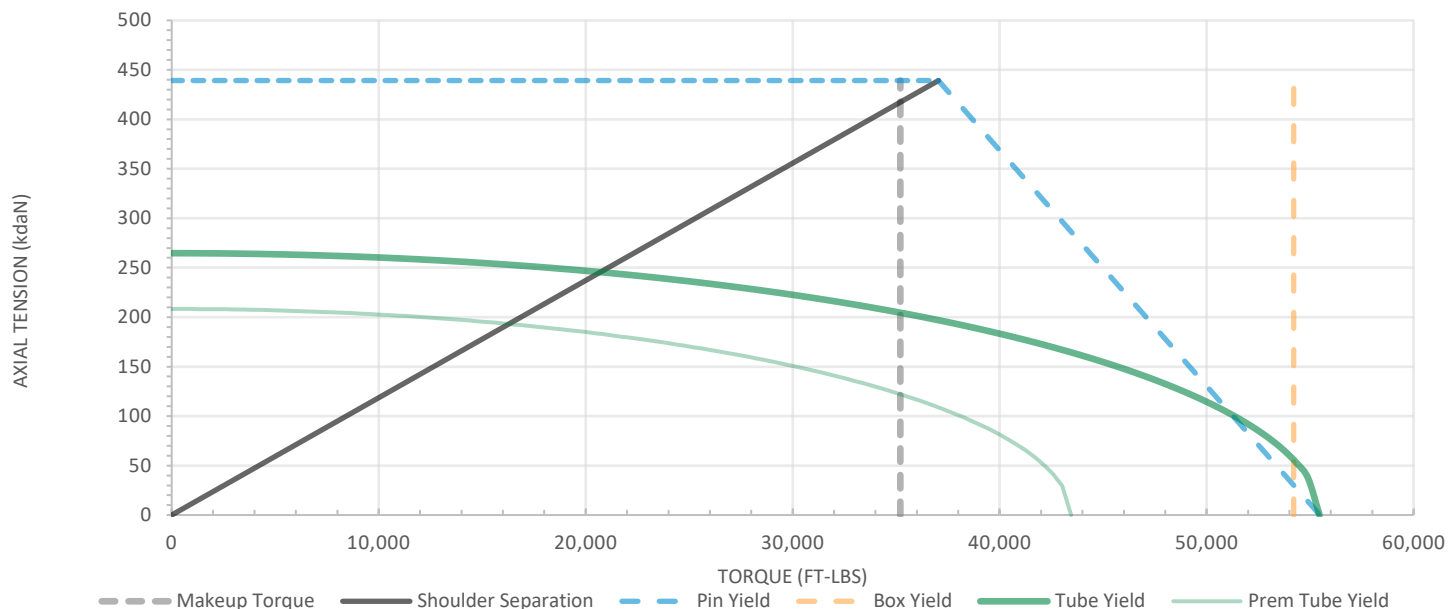
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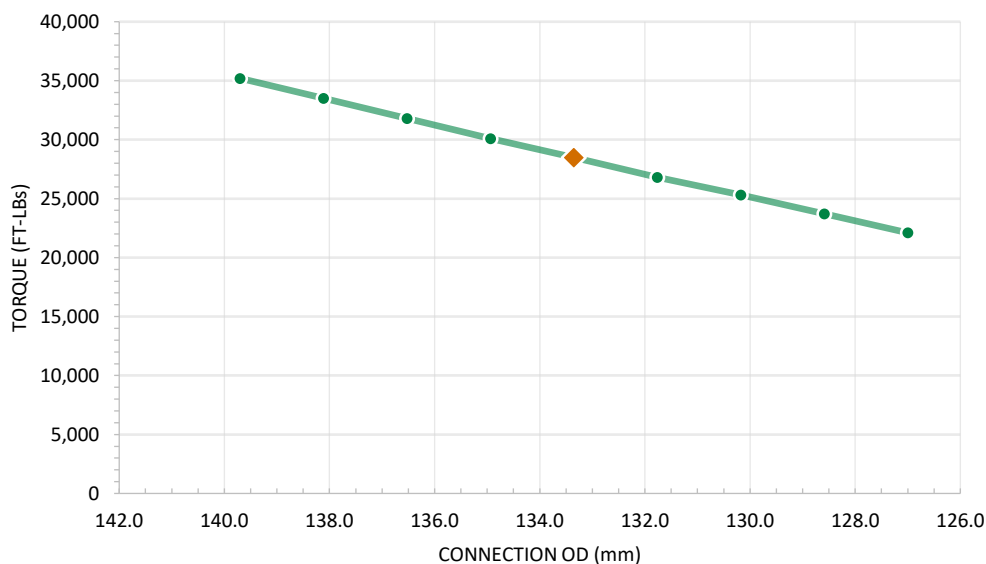
Makeup Torque Then Tension Chart

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Connection Wear Chart

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CONNECTION OD (mm)	MAXIMUM MAKEUP TORQUE (ft-lbs)
139.7	35,200
138.1	33,500
136.5	31,800
134.9	30,100
133.4	28,500
131.8	26,800
130.2	25,300
128.6	23,700
127.0	22,100
MIN REC OD (mm)	
133.4	28,500

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