

Pipe

METRIC

						NEW	API PREMIUM	
Pipe size	in	4.750	mm	120.7	OD	mm	120.7	117.2
Pipe weight	kg/m	26.04			Thickness	mm	8.6	6.8
Upset Type		IEU			X-Sec Area	cm ²	30.1	23.7
Tube grade		S135			Section Modulus	cm ³	78.9	61.9
Range		3			Polar Section Modulus	cm ³	157.9	123.9
Tube Yield	MPa	931			Tensile Yield	kdaN	281	221
ID	mm	103.5			Torsional Yield	N-m	84,700	66,600
					80% Torsional Yield	N-m	67,800	53,300
					Internal Pressure Yield	MPa	115.8	105.5
					Collapse Yield	MPa	103.4	65.5
					D/t		14.09	17.12
					Connection/Tube Torsional Ratio		0.679	

*See Elevator Capacity

Tool Joint

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						NEW	REC MIN OD
Connection Type		480 DUO			OD	mm	142.9
Material Yield Strength	MPa	896			Tensile Yield Strength	kdaN	367
OD	mm	142.88			Torsional Yield Strength	N-m	57,530
ID	mm	95.25			Recommended Makeup Torque	N-m	34,600
Pin Shoulder Angle	deg	18			Maximum Makeup Torque	N-m	37,400
Pin Tool Joint Length	mm	356					
Box Tool Joint Length	mm	356					

Drill Pipe Assembly

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Shoulder-Shoulder Length	m	13.716
Adjusted Weight	kg/m	26.44
Closed End Displacement	L/m	11.69
Open End Displacement	L/m	3.37
Fluid Capacity	L/m	8.32
Drift Size	mm	92.1

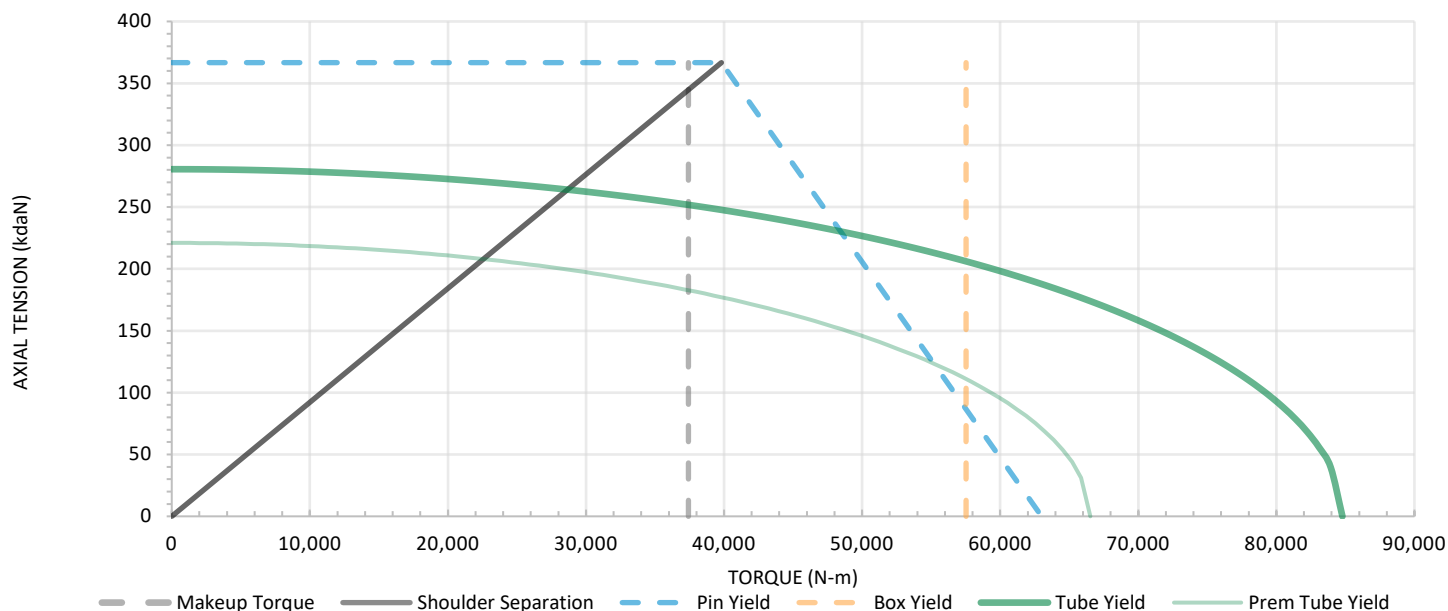
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Makeup Torque Then Tension Chart

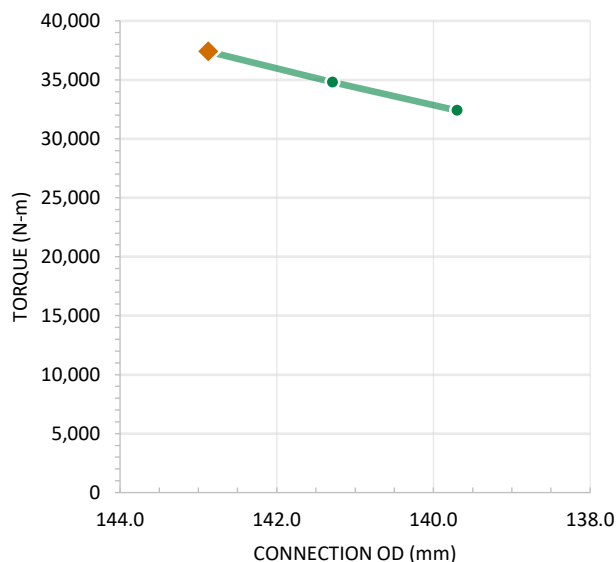
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Connection Wear Chart

Elevator Capacity

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CONNECTION OD (mm)	MAXIMUM MAKEUP TORQUE (N-m)
142.9	37,400
141.3	34,800
139.7	32,400
MIN REC OD (mm)	
142.9	37,400

ELEVATOR BORE (mm)

130.2

BOX OD ELEVATOR CAPACITY NEW (kdaN)

142.9	244
141.3	212
139.7	181

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.

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