

Drill Pipe Data & Performance Sheet

4-1/2" 16.60# S-135 R2 DS-42

TUBE BODY DATA

Tube OD	4.500	in.
Wall Thickness	0.337	in.
Tube ID	3.826	in.
Tensile Yield Strength	468,300	lbs. (API Premium 80% Inspection Class)
Torsional Yield Strength	43,500	ft-lbs. (API Premium 80% Inspection Class)
Upset Type Upset OD (max)	IEU	4.600 in.
Elevator Capacity	478,297	lbs.
Tube Burst	16,176	psi. (API Premium 80% Inspection Class)
Tube Collapse	10,964	psi. (API Premium 80% Inspection Class)
Slip-Crush Capacity (16.5" gripper contact length)	431,600	lbs.

CONNECTION DATA

Connection	DS-42
Tool Joint OD	5.250 in.
Tool Joint ID	2.813 in.
Tool Joint SMYS	135,000 psi.

CONNECTION PERFORMANCE

Make Up Torque (Max.) ¹	25,310	ft-lbs. (1.0 FF)
	29,107	ft-lbs. (1.15 FF)
Connection Tensile Yield (@ Max. M/U TQ)	627,000	lbs.
Connection Torsional Yield	42,190	ft-lbs.

ENGINEERING DATA

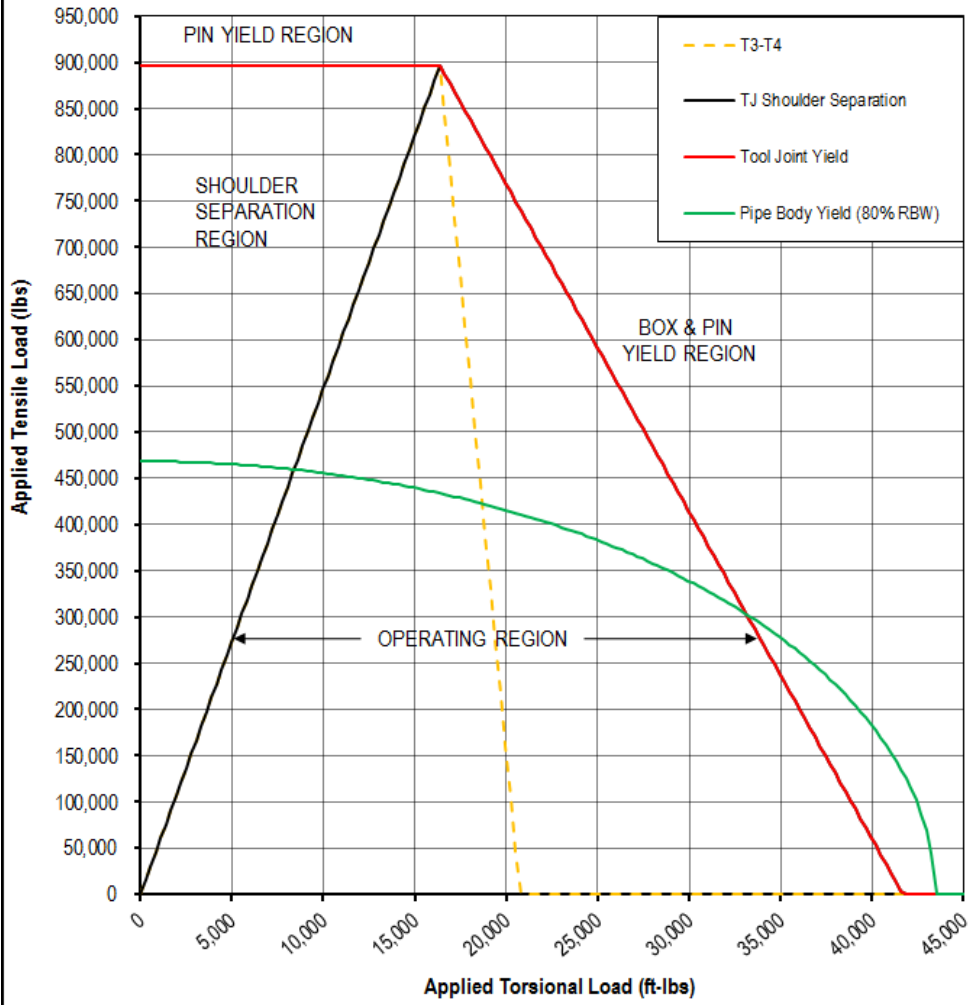
Approximate Length	31	ft.		
Drift Diameter	2.688	in.		
Adj. Weight	18.07	lbs. / ft.		
Displacement	0.2761	gal. / ft.	0.0066	bbls. / ft.
Capacity	0.5688	gal. / ft.	0.0135	bbls. / ft.

Notes:

¹Max MUT 1.0 FF is 60% of connection torsional strength. As required, adjust MUT according to applied thread compound friction factor, not exceeding 1.15. Rec MUT for most applications is that shown for 1.0 FF, regardless of dope used. Higher MUT should only be applied where rotary torque exceeds 80% of MUT 1.0 FF or when downhole torque and/or backoff is a concern.

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Torque Tension Curve: 4-1/2" 16.60# IEU S-135 Drill Pipe with 5.250 X 2.813 DS-42 Tool Joint. Curve Based on Calculation Method in API RP7G. Safety Factor =1.0



4-1/2" 16.60# IEU S-135 Drill Pipe Tube Body Collapse Pressure Under Axial Stress - API 5C3

