Drill Pipe Data & Performance Sheet

3-1/2" 13.30# S-135 R2 NC38 (3-1/2 IF)

TUBE BODY DATA

CONNECTION DATA

Tube OD	3.500	in.		Connection	NC	NC38 (3-1/2 IF)				
				Tool Joint OD	4.87	75	in.			
Wall Thickness	0.368	in.		Tool Joint ID	2.56	563 in.				
Tube ID	2.764	in.		Tool Joint SMYS	120	120,000 psi.				
Tensile Yield Strength	381,900 lbs. (API Premium 80% Inspection Class)									
Torsional Yield Strength	25,900	25,900 ft-lbs. (API Premium 80% Inspection Class)		Make Up Torque (Max.) ¹	12,1 13,9		ft-lbs. (1.0 FF) ft-lbs. (1.15 FF)			
Upset Type Upset OD (max)		EU	3.875 in.	Connection Tensile Yield (@ Max. M/U TQ)	538	,600	lbs.			
Elevator Capacity	693,045	lbs.		Connection Torsional Yield	20,7	100	ft-lbs.			
Tube Burst	22,711	psi. (API Pr	emium 80% Inspection Class)	ENGINEERING DATA						
Tube Collapse	21,626	626 psi. (API Premium 80% Inspection Class)		Approximate Length	31		ft.			
Slip-Crush Capacity	381,300	lbs.		Drift Diameter	2.43	38	in.			
(16.5" gripper contact length)	001,000			Adj. Weight	14.6	62	lbs. / ft.			
				Displacement	0.22	235	gal. / ft.	0.0053	bbls. / ft.	
				Capacity	0.30)74	gal. / ft.	0.0073	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.

The technical information contained herein, including the product performance sheet and other attached documents, has been extracted from information available from the manufacturer and is for reference only and not a recommendation. The user is fully responsible for the accuracy and suitability of use of the technical information. Patterson Servicers, Inc. cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended. Drill pipe assembly properties are calculated based on uniform OD and wall thickness. No safety factor is applied. Weight, displacement, and capacity are approximate and can vary by ± 10% (or more) depending on OD, specified wall, wall tolerance, and internal coating options. It is the responsibility of the customer and the end user to determine the appropriate performance ratings, acceptable use of the product, maintain safe operational practices, and to apply a prudent safety factor suitable for the application. For API connections that have different pin and box IDs, tool joint ID refers to the pin ID. Per Chapter B, Section 4 VII of the IADC drilling manual, it is recommended that drilling torque should not exceed 80% of MUT.



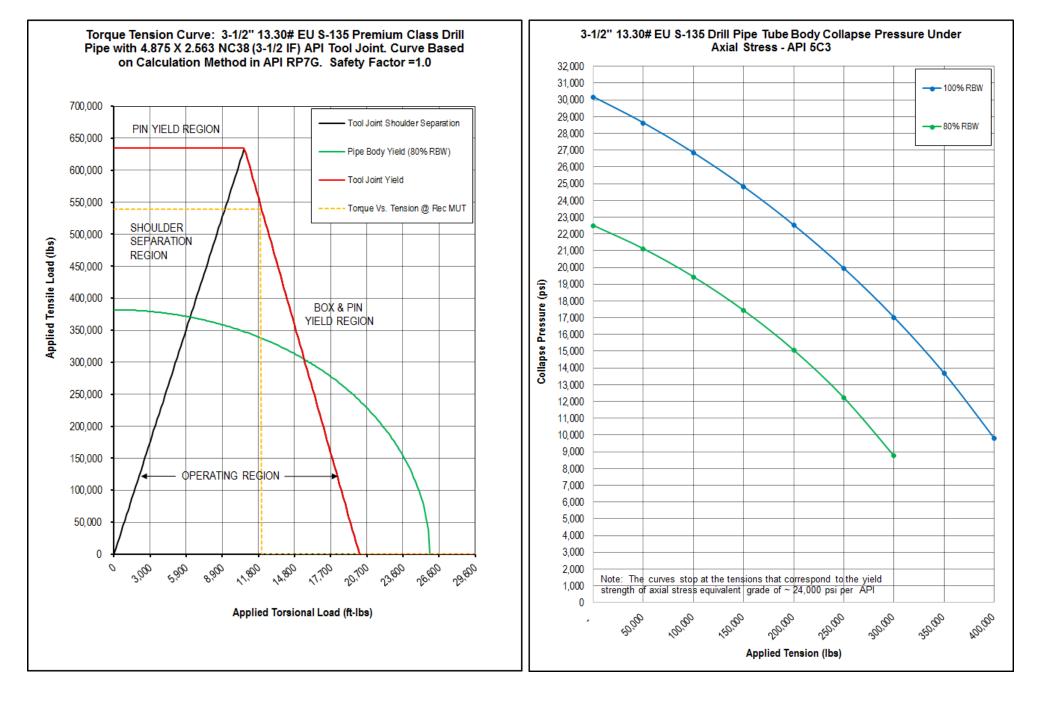
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