Drill Pipe Data & Performance Sheet

4-1/2" 20.00# S-135 R2 XT-M43™

TUBE BODY DATA

CONNECTION DATA

Tube OD	4.500 in.	Connection	XT-M43™
		Tool Joint OD	5.250 in.
Wall Thickness	0.430 in.	Tool Joint ID	3.000 in.
Tube ID	3.640 in.	Tool Joint SMYS	120,000 psi.
Tensile Yield Strength	581,200 Ibs. (API Premium 80% Inspection Class)	CONNECTION PERFORMANCE	
Torsional Yield Strength	51,600 ft-lbs. (API Premium 80% Inspection Class)	Make Up Torque (Max.) ¹	23,500 ft-lbs. (1.0 FF) 27,025 ft-lbs. (1.15 FF)
Upset Type Upset OD (max)	IEU 4.600 in.	Connection Tensile Yield (@ Max. M/U TQ)	671,300 lbs.
Elevator Capacity	478,297 Ibs. Elevator carrying capacity limited	Connection Torsional Yield	39,200 ft-lbs.
Tube Burst	20,640 psi. (API Premium 80% Inspection Class)	ENGINEERING DATA	
Tube Collapse	18,806 psi. (API Premium 80% Inspection Class)	Approximate Length	31 ft.
Slip-Crush Capacity	538,400 lbs.	Drift Diameter	2.875 in.
(16.5" gripper contact length)		Adj. Weight	21.09 lbs. / ft.
		Displacement	0.3222 gal. / ft. 0.0077 bbls. / ft.
		Capacity	0.5226 gal. / ft. 0.0124 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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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.



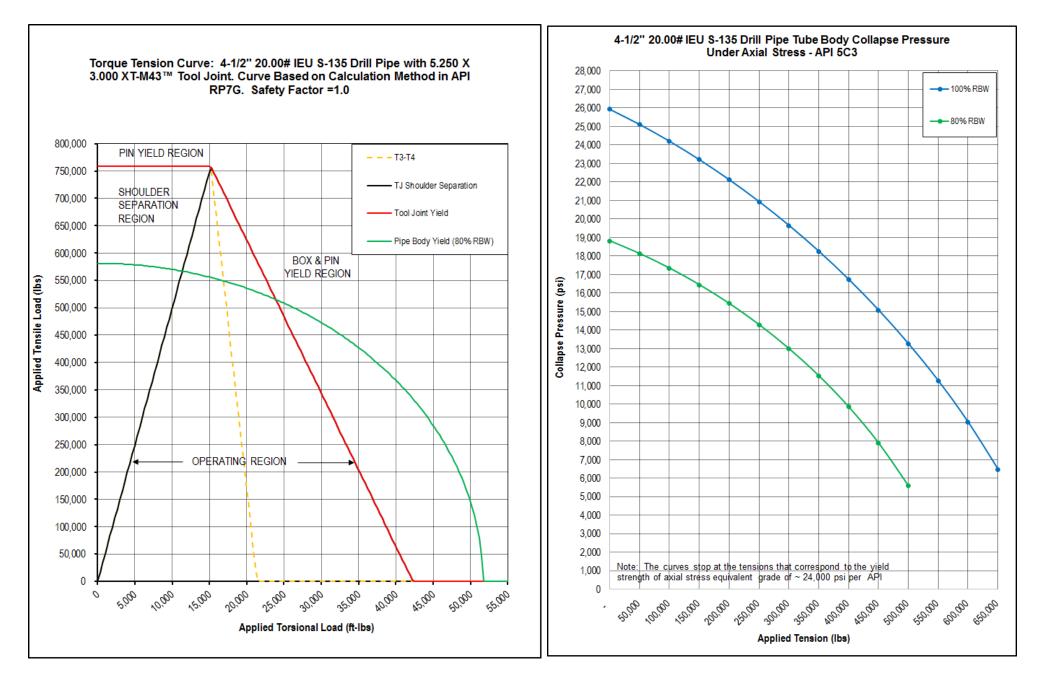
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