Drill Pipe Data & Performance Sheet

4.500" 16.60 ppf R-2 S-135 Double Shoulder DS-42

TUBE BODY DATA

Tube OD	4.500 in.	
Wall Thickness	.337 in.	
Tube ID	3.826 in.	
Tensile Yield Strength	468,297 lbs.	(API Premium 80% Inspection Class)
Torsional Yield Strength	43,450 ft./ lbs.	(API Premium 80% Inspection Class)
Upset Type	IEU	
Upset OD (max)	4.688 in.	
Tube Burst	16,176 psi.	(API Premium 80% Inspection Class)
Tube Collapse	10,964 psi.	(API Premium 80% Inspection Class)

CONNECTION DATA

Connection	Double Shoulder DS-42
Tool Joint OD	5.250 in.
Tool Joint ID	2.813 in.
Tool Joint SMYS	135 KSI

CONNECTION PERFORMANCE

¹ Make Up Torque (Max.)	30,000 ft./ lbs.
Connection Tensile Yield (@ Max. M/U TQ)	683,000 lbs.
Connection Torsional Yield	42,190 ft./ lbs.

ENGINEERING DATA

Drift Diameter	2.688 in.
Adj. Weight	18.26 lbs./ ft.
Displacement	0.0066 bbls./ ft.
Capacity	0.0136 bbls./ ft.

Item No. DP412SHS135WDS42

Notes:

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. The information provided for various inspection classes and for various wear conditions (remaining body wall) is for information only and does not represent or imply acceptable operation limits. 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.



¹ Maximum Make Up Torque based on 62% of Connection Torsional Yield including the use of a 1.15 (FF) Friction Factor Thread Compound.