



DOC TITLE: DRILL PIPE PERFORMANCE DATA SHEET

DOC. NO. TAS-RT-DP-015

REV: NA

Page 1 of 1

DRILL PIPE PERFORMANCE DATA SHEET

IMPERIAL UNIT

Pipe Size & Weight: 4.00_14.00_lb/ft IU
Pipe Grade: S135
Range: 2
Tool Joint: 5" x 2.4375" DPM-DS38

DRILL PIPE DIMENSIONS & MATERIALS				DRILL PIPE WEAR & MECHANICAL PERFORMANCES			
<u>PIPE</u>		New (Nominal)		<u>PIPE</u>		New (Nominal)	API Premium
Pipe Size	in	4_14.00 lb/ft IU		OD	in	4.000	3.868
Pipe Grade		S135		Wall Thickness	in	0.330	0.264
Pipe Length Range 2 or 3		2		Cross Sectional Area Pipe Body	in Sq.	3.805	2.989
ID	in	3.340		Section Modulus	in Cu	3.229	2.523
Calculated Plain End Weight	Lbs/ft	12.935		Polar Section Modulus	in Cu	6.458	5.046
Cross Sectional Area OD	In Sq.	12.566		Tensile Strength	lbs	513,646	403,527
Cross Sectional Area ID	In Sq.	8.762		Torsional Strength	ft lbs	41,918	32,752
			API Premium	80% Torsional Strength	ft lbs	33,534	26,202
Tensile Strength	lbs	751,508	751,508	Internal Pressure Capacity	psi	19,491	17,820
Torsional Strength	ft-lbs	31,693	26,167	Collapse Capacity	psi	20,141	13,836
80% Torsional Strength	ft-lbs	33,534	26,202	Tool Joint/Pipe Body/Torsional Ratio		0.756	0.799
<u>TOOL JOINT</u>		New (Nominal)		<u>DRILL PIPE ASSEMBLY</u>		New (Nominal)	
Connection Type		DPM-DS38		Approx. Length	ft	31.00	
Material Yield Strength	ksi	130		Adjusted Weight	lbs/ft	15.80	
Outside Diameter (OD)	in	5.000		Drift Size	in	2.313	
Inside Diameter (ID)	in	2.438		Maximum Upset OD	in	4.188	
Pin Tong Length	in	10.000		Fluid Displacement	gal/ft	0.241	
Box Tong Length	in	14.000		Fluid Capacity	gal/ft	0.436	
Pin shoulder Angle	deg	35					
Tensile Strength	lbs	751,508					
Torsional Strength	ft-lbs	31,693					
Max. Make-Up Torque	ft-lbs	22,200					
Min. Make-up Torque	ft-lbs	15,800					
Balanced OD	in	4.844					

Premium properties are calculated based on uniform Outside Diameter and Wall Thickness

Torque performances are calculated with coefficient of friction factor, 0.08.

API recommends a torsional ratio of 0.8 or greater

The use of the information is based on the readers discretion. No warranty is implied or expressed by Tasman Oil Tools with the use of information contained herein.

The information contained in this Performance Data Sheet is subject to revision without notice.