

## DRILL PIPE PERFORMANCE DATA SHEET

Pipe Size & Weight: Pipe Grade: Range: Tool Joint:

**IMPERIAL UNIT** 

.

DRILL PIPE DIMENSIONS & MATERIALS				DRILL PIPE WEAR & MECHANICAL PERFORMANCES		
		New	API		NEW	API
PIPE		(Nominal)	Premium	PIPE	(Nominal)	Premium
Pipe Outside Diameter (OD)	in	3.500	3.320	Internal Pressure Capacity psi	30,308	27,710
Pipe Inside Diameter (ID)	in	2.602	2.602	Collapse Capacity psi	30,194	26,049
Wall Thickness	in	0.449	0.359	Cross Sectional Area Pipe Body in Sq	4.304	3.342
Calculated Plain End Weight	lbs/ft	14.631	11.355	Section Modulus in Cu	2.923	2.239
Pipe Body Min Yield Strength	psi	135,000	135,000	Polar Section Modulus in Cu	5.847	4.477
Tensile Strength	lbs	580,955	451,115	Tool Joint / Pipe Body Torsional Ratio	0.506	0.661
Torsional Strength	ft-lbs	37,954	29,063	Cross Sectional Area OD in Sq	9.621	8.659
80% Torsional Strength	ft-lbs	30,363	23,250	Cross Sectional Area ID in Sq	5.317	5.317
		New	API		New	
TOOL JOINT		(Nominal)	Premium	DRILL PIPE ASSEMBLY	(Nominal)	
Connection Type		NC38	NC38	Approx. Length ft	31.50	
Material Yield Strength	ksi	120	120	Adjusted Weight Ibs/ft	16.60	
Outside Diameter (OD)	in	4.750	4.660			
Inside Diameter (ID)	in	2.563	2.563	Drift Size in	2.438	
Pin Tong Length	in	10.500	10.500	Maximum Upset OD in	3.875	
Box Tong Length	in	12.500	12.500			
Pin shoulder Angle	deg	35	35	Fluid Displacement gal/ft	0.254	
Tensile Strength	lbs	634,795	634,795	Fluid Capacity gal/ft	0.275	
Torsional Strength	ft-lbs	19,186	19,186			
Max. Make-Up Torque	ft-lbs	13,400	13,400			
Min. Make-up Torque	ft-lbs	9,600	9,600			
Balanced OD	in	4.781	4.781			

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

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

API recommends a torstional ratio of 0.8 or greater

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

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