



DRILL PIPE PERFORMANCE DATA SHEET

IMPERIAL UNIT

Pipe Size & Weight: 3.50_13.30_lb/ft_EU
 Pipe Grade: S135
 Range: 2
 Tool Joint: 4.875 X 2.438 NC38

DRILL PIPE DIMENSIONS & MATERIALS				DRILL PIPE WEAR & MECHANICAL PERFORMANCES			
PIPE		New (Nominal)	API Premium	PIPE		NEW (Nominal)	API Premium
Pipe Outside Diameter (OD)	in	3.500	3.353	Internal Pressure Capacity	psi	24,840	22,710
Pipe Inside Diameter (ID)	in	2.764	2.764	Collapse Capacity	psi	25,400	21,620
Wall Thickness	in	0.368	0.295	Cross Sectional Area Pipe Body	in Sq	3.620	2.830
Calculated Plain End Weight	lbs/ft	12.310	9.616	Section Modulus	in Cu	2.572	1.990
Pipe Body Min Yield Strength	psi	135,000	135,000	Polar Section Modulus	in Cu	5.144	3.982
Tensile Strength	lbs	488,800	381,850	Tool Joint / Pipe Body Torsional Ratio		0.660	0.850
Torsional Strength	ft-lbs	33,400	25,900	Cross Sectional Area OD	in Sq	9.621	8.830
80% Torsional Strength	ft-lbs	26,720	20,720	Cross Sectional Area ID	in Sq	6.000	6.000
TOOL JOINT		New (Nominal)	API Premium	DRILL PIPE ASSEMBLY			
Connection Type		NC38	NC38	Approx. Length	ft	31.50	
Material Yield Strength	ksi	120	120	Adjusted Weight	lbs/ft	15.22	
Outside Diameter (OD)	in	4.875	4.719	Drift Size	in	2.313	
Inside Diameter (ID)	in	2.438	2.438	Maximum Upset OD	in	3.875	
Pin Tong Length	in	11.000	11.000	Fluid Displacement	gal/ft	0.230	
Box Tong Length	in	12.500	12.500	Fluid Capacity	gal/ft	0.290	
Pin shoulder Angle	deg	35	35				
Tensile Strength	lbs	568,100	568,100				
Torsional Strength	ft-lbs	22,000	18,270				
Max. Make-Up Torque	ft-lbs	13,100	11,000				
Min. Make-up Torque	ft-lbs	11,000	9,240				
Balanced OD	in	4.846	4.813				

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 obtained herein.

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