DRILL PIPE PERFORMANCE DATA SHEET

IMPERIAL UNIT

Pipe Size & Weight:	**5 19.50 lb/ft IEU**
Pipe Grade:	**G105**
Range:	**2**
Tool Joint:	**6.625 X 3.25 NC50**

DRILL PIPE DIMENSIONS & MATERIALS

PIPE		NEW
Pipe size	in	5_19.50_lb/ft_IEU
Pipe Grade		G105
Pipe Body Material Yield Strength	psi	105,000
Pipe Length Range 2 or 3		2
ID	in	4.276
Calculated Plain End Weight	lbs/ft	17.932
Cross Sectional Area OD	in Sq	19.635
Cross Sectional Area ID	in Sq	14.360

TOOL JOINT		
Connection Type		NC50
Material Yield Strength	ksi	120
OD	in	6.625
ID	in	3.250
Pin Tong Length	in	9.000
Box Tong Length	in	12.000
Pin shoulder Angle	deg	35

DRILL PIPE ASSEMBLY		
Shoulder-Shoulder Length	ft	31.00
Adjusted Weight	lbs/ft	22.93
Closed End Dsplacement	gal/ft	1.064
Open End Displacement	gal/ft	0.350
Fluid Capacity	gal/ft	0.714
Drift Size	in	3.125

DRILL PIPE WEAR & MECHANICAL PERFORMANCES

PIPE		NEW	PREMIUM
OD	in	5.000	4.855
Wall Thickness	in	0.362	0.290
Cross Sectional Area Pipe Body	in Sq	5.275	4.154
Section Modulus	in Cu	5.708	4.476
Polar Section Modulus	in Cu	11.415	8.953
Tensile Strength	lbs	553,833	436,150
Torsional Strength	ft-lbs	57,633	45,199
80% Torsional Strength	ft-lbs	46,107	36,160
Internal Pressure Capacity	psi	13,304	12,163
Collapse Capacity	psi	12,999	8,765
Tool Joint / Pipe Body Torsional Ratio		0.897	0.799

TOOL JOINT			
OD	in	6.625	6.094
ID	in	3.250	3.250
Tensile Strength	lbs	1,249,755	1,249,755
Torsional Strength	ft-lbs	51,708	36,124
Max Recommended Make-up Torque	ft-lbs	36,200	25,300
Recommended Make-up Torque	ft-lbs	31,000	21,700
Min Recommended Make-up Torque	ft-lbs	25,900	18,100
Balanced OD	in	6.389	6.094
Weak Connection		PIN WEAK	BOX WEAK

DP-MASTER MANUFACTURING CO., LTD. 質量部 QUALITY DEPARTMENT

Datasheet for Reference Only

All new and premium properties are calculated based on nominal in accordance to API.
Torque performances calculated with coefficient of friction 0.08.
API recommends a torsional ratio of 0.8 or greater.
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