DRILL PIPE PERFORMANCE DATA SHEET

IMPERIAL UNIT

Pipe Size & Weight: 5.000_19.50 LB/FT IEU
Pipe Grade: S135
Range: 2
Tool Joint: 6.625 X 3.25 NC50

DRILL PIPE DIMENSIONS & MATERIALS

PIPE		New (Nominal)
Pipe Size	in	5_19.50 LB/FT IEU
Pipe Grade		S135
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
Tensile Strength	lbs	712,070
Torsional Strength	ft-lbs	74,100
80% Torsional Strength	ft-lbs	59,280

DRILL PIPE WEAR & MECHANICAL PERFORMANCES

PIPE		New (Nominal)	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	712,070	560,764
Torsional Strength	ft lbs	74,100	58,114
80% Torsional Strength	ft lbs	59,280	46,491
Internal Pressure Capacity	psi	17,105	15,638
Collapse Capacity	psi	15,672	10,029
Tool Joint/Pipe Body/Torsional Ratio		0.698	0.800

TOOL JOINT

		New (Nominal)
Connection Type		NC50
Material Yield Strength	ksi	120
Outside Diameter (OD)	in	6.625
Inside Diameter (ID)	in	3.250
Pin Tong Length	in	11.000
Box Tong Length	in	14.000
Pin shoulder Angle	deg	35
Tensile Strength	lbs	1,249,755
Torsional Strength	ft-lbs	51,708
Max. Make-Up Torque	ft-lbs	36,200
Min. Make-up Torque	ft-lbs	25,900
Balanced OD	in	6.389

DRILL PIPE ASSEMBLY

		New (Nominal)
Approx. Length	ft	31.00
Adjusted Weight	lbs/ft	23.70
Drift Size	in	3.125
Maximum Upset OD	in	
Fluid Displacement	gal/ft	1.072
Fluid Capacity	gal/ft	0.710

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

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