DLC™ drill pipe

DRILL PIPE PERFORMANCE DATA SHEET

5.500'' X .361'' Wall, S135, IEU, R2

DLC™ 544 - 6.625'' X 4.000''

PIPE BODY SPECIFICATION		
OD	5.500	*in*
ID	4.778	*in*
Wall	0.361	*in*
Nominal Weight	21.90	*lb/ft*
Grade	S135	
Tube Yield	135	*ksi*
Range	2	
Upset Type	IEU	

PIPE BODY PERFORMANCE	NEW	PREMIUM	
OD	5.500	5.356	*in*
Thickness	0.361	0.289	*in*
X-Sec Area	5.828	4.597	*in²*
Tensile Yield	787,000	621,000	*lbs*
Torsional Yield	91,300	71,800	*ft-lbs*
Burst Capacity	16,800	14,200	*psi*
Collapse Capacity	12,700	7,500	*psi*

TUBULAR ASSEMBLY SPECIFICATION		
Shoulder Length	31.5	*ft*
Pin TJ Length	14	*in*
Box TJ Length	14	*in*
Adjusted Weight	24.89	*lbs/ft*
Fluid Capacity	0.899	*gal/ft*
	0.0214	*bbl/ft*
Closed End Displacement	1.280	*gal/ft*
	0.0305	*bbl/ft*
Open End Displacement	0.380	*gal/ft*
	0.0091	*bbl/ft*

All dimensions shown are presented as nominal unless otherwise stated - actual manufactured values may vary due to tolerancing. Calculations are based on uniform wall thickness and outside diameter with no safety factor applied. The information provided for inspection classes is based on uniform wear and is not intended to confirm operational limits of any specific used product.

CONNECTION SPECIFICATION		
DLC™ 544		
Yield Strength	130	*ksi*
OD	6.625	*in*
ID	4.000	*in*
Drift Size	3.875	*in*
Min OD	6.232	*in*

CONNECTION PERFORMANCE					
Thread Compound Friction Factor		1.0 FF	1.05 FF	1.10 FF	1.15 FF
Tensile Strength	*lbs*	1,211,500	1,211,500	1,211,500	1,211,500
Torsional Strength	*ft-lbs*	83,900	88,100	92,300	96,500
Minimum Makeup Torque	*ft-lbs*	41,900	44,000	46,100	48,200
Standard Makeup Torque	*ft-lbs*	50,300	52,800	55,300	57,800
Enhanced Makeup Torque	*ft-lbs*	58,700	61,600	64,600	67,500

Connection torque calculations are performed using a thread compound friction factor (FF) of 1.0; values of FF other than 1.0 are provided for reference use only. DLC™ drill pipe does not endorse specific thread compounds and waives all responsibility in appropriate thread compound selection and performance. It is recommended that drilling torque not exceed 80% of the makeup torque and it remains the responsibility of the end user to determine the acceptable use of the end product including the determination of appropriate performance ratings and safety factors where applicable. Modifying makeup torque values for any reason shall be done at the end users discretion and risk. Elevator capacity is provided for reference only and shall not be interpreted as an engineered safe lifting load. DLC™ is protected under one or more issued patents; see website for details.

CONNECTION WEAR PERFORMANCE

Tool Joint OD *in*	MAKEUP TORQUE *(ft-lbs)*				ELEVATOR CAPACITY *(lbs)*			
	1.0 Friction Factor		1.15 Friction Factor		Elevator Bore 5.813 *in*			
	Standard Makeup *ft-lbs*	Enhanced Makeup *ft-lbs*	Standard Makeup *ft-lbs*	Enhanced Makeup *ft-lbs*	110,100 psi Stress		130,000 psi Stress	
					New	1/32" Wear	New	1/32" Wear
6.625	50,300	58,700	57,800	67,500	873,300	841,800	1,031,200	994,000
6.560	49,500	57,800	56,900	66,500	798,700	767,200	943,000	905,800
6.494	47,100	55,000	54,200	63,300	724,700	693,200	855,700	818,500
6.429	44,800	52,300	51,500	60,100	651,500	620,000	769,300	732,100
6.363	42,500	49,600	48,900	57,000	579,100	547,600	683,800	646,600
6.298	40,200	46,900	46,200	53,900	507,400	475,900	599,100	561,900
6.232	37,900	44,300	43,600	50,900	436,400	404,900	515,300	478,100

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OPERATING CURVE: MAKEUP TORQUE THEN TENSION