



DRILL PIPE PERFORMANCE DATA SHEET

IMPERIAL UNIT

Pipe Size & Weight: 5-1/2 21.90 lb/ft EU
 Pipe Grade: S135
 Range: 2
 Tool Joint: 7 X 4 DPM-DS55

DRILL PIPE DIMENSIONS & MATERIALS				DRILL PIPE WEAR & MECHANICAL PERFORMANCES			
PIPE		New (Nominal)	API Premium	PIPE		NEW (Nominal)	API Premium
Pipe Outside Diameter (OD)	in	5.500	5.356	Internal Pressure Capacity	psi	15,507	14,177
Pipe Inside Diameter (ID)	in	4.778	4.778	Collapse Capacity	psi	12,679	7,496
Wall Thickness	in	0.361	0.289	Cross Sectional Area Pipe Body	in Sq	5.828	4.597
Calculated Plain End Weight	lbs/ft	19.810	15.639	Section Modulus	in Cu	7.031	5.527
Pipe Body Min Yield Strength	psi	135,000	135,000	Polar Section Modulus	in Cu	14.062	11.054
Tensile Strength	lbs	786,800	620,604	Tool Joint / Pipe Body Torsional Ratio		0.866	0.800
Torsional Strength	ft-lbs	91,300	71,770	Cross Sectional Area OD	in Sq	23.758	22.527
80% Torsional Strength	ft-lbs	73,040	57,416	Cross Sectional Area ID	in Sq	17.930	17.930
TOOL JOINT		New (Nominal)	API Premium	DRILL PIPE ASSEMBLY			
Connection Type		DPM-DS55	DPM-DS55	Approx. Length	ft	32.00	
Material Yield Strength	ksi	130	130	Adjusted Weight	lbs/ft	24.83	
Outside Diameter (OD)	in	7.000	6.594	Drift Size	in	3.875	
Inside Diameter (ID)	in	4.000	4.000	Maximum Upset OD	in	5.688	
Pin Tong Length	in	12.000	12.000	Fluid Displacement	gal/ft	0.380	
Box Tong Length	in	14.000	14.000	Fluid Capacity	gal/ft	0.910	
Pin shoulder Angle	deg	35	35				
Tensile Strength	lbs	1,348,256	1,348,256				
Torsional Strength	ft-lbs	76,100	59,100				
Max. Make-Up Torque	ft-lbs	47,400	37,710				
Min. Make-up Torque	ft-lbs	43,700	33,630				
Balanced OD	in	6.872	5.779				

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.