

# Drill Pipe Performance Characteristics Sheet



**Pipe Size & Weight:** 6-5/8 25.20# XLT  
**Pipe Grade:** S-135  
**Range:** 2  
**Tool Joint Dimensions:** 8-1/2" OD x 4-1/4" ID  
**Connection:** 6-5/8 FH

THIS TECHNICAL INFORMATION IS FOR REFERENCE ONLY

Pipe Body Information		
	<u>New-API</u>	<u>Premium</u>
OD (in)	6.625	6.493
Wall Thickness (in)	.330	.264
ID (in)	5.965	5.965
Calculated Plain End weights (lbs./ft)	22.163	17.544
<i>* Note: Premium Properties are calculated based on uniform OD and wall thickness.</i>		
	<u>New-API</u>	<u>Premium</u>
Cross Sectional area pipe body (in <sup>2</sup> )	6.526	5.166
Cross Sectional area OD (in <sup>2</sup> )	34.472	33.112
Cross Sectional area ID (in <sup>2</sup> )	27.945	27.945
Section Modulus (in <sup>2</sup> )	9.786	7.732
Polar Section Modulus (in <sup>2</sup> )	19.572	15.464
	<u>New-API</u>	<u>Premium</u>
Torsional Strength (ft-lbs.)	127,000	100,400
Tensile Strength (lbs.)	881,000	697,400
80% Torsional Strength (ft-lbs.)	101,600	80,300
Pressure Capacity (psi)	11,768	10,759
Collapse Capacity (psi)	6,036	3,429
Tool Joint Information		
<b>6-5/8 FH</b>		
	OD (in)	8-1/2"
	ID (in)	4-1/4"
<i>* Tool Joint with a Material Yield Strength of 120,000 psi</i>		
	Pin Tong length (in)	9"
	Box Tong length (in)	12"
	<b>Torsional Strength (ft-lbs.)</b>	<b>109,200</b>
	<b>Max Recommended Make-up Torque (ft-lbs.)</b>	<b>56,000</b>
	<b>Min Recommended Make-up Torque (ft-lbs.)</b>	<b>54,500</b>
	Balance OD (in)	8.248
	<b>Tensile Strength (lbs.)</b>	<b>2,102,300</b>
	Tool Joint / Drill Pipe torsional ratio (New Pipe)	0.86
	Tool Joint / Drill Pipe torsional ratio (Premium Pipe)	1.09
	Min OD for Premium Class (in)	7.906
Drill Pipe Assembly w/ 6-5/8 FH Conventional Connection		Drill Pipe Bend Radius
Adjusted Weight (lbs./ft.)	31.06	<i>* These calculations are based on new pipe with nominal wall</i>
Approximate Length (ft.)	31.47	
Fluid Displacement (gal./ft.)	0.475	
Fluid Capacity (gal./ft.)	1.388	
Drift Size (in)	4.125	
		Based on Bending Stress (psi) at Pipe OD
		Radius of Curvature ® (ft.) (@ OD of pipe)
		BUR (dogleg) deg/100 ft.