

Drill Pipe Performance Characteristics Sheet

PTECH Drilling Tubulars, LLC

Pipe Size and Weight: 2 3/8 5.80 EU

Pipe Grade: S-135

Range: 2

Tool Joint: 3.062 X 1.805 PTECH24+

13618 Poplar Circle


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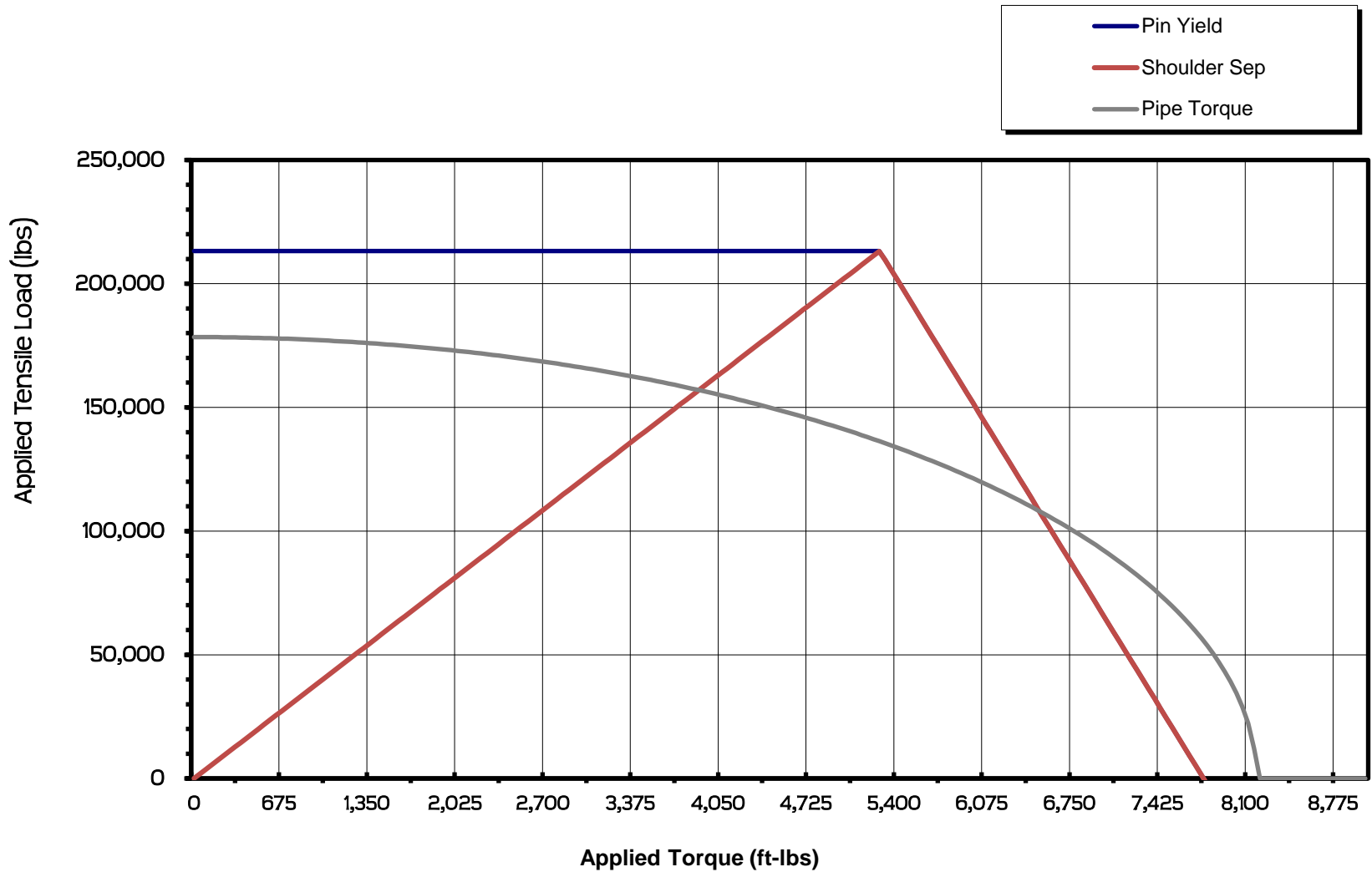
Fax: (936) 521-5130

Revision 2

Pipe Body																											
	New-API		Premium																								
OD (in)	2.375		2.273																								
Wall Thickness (in)	0.254		0.203																								
ID (in)	1.867		1.867																								
Calculated Plain End weights (lbs/ft)	5.751		4.491																								
Note: Premium properties are calculated based on uniform OD and wall thickness.																											
Cross sectional area pipe body (in ²)	1.692		1.322																								
Cross sectional area OD (in ²)	4.430		4.059																								
Cross sectional area ID (in ²)	2.738		2.738																								
Section Modulus (in ³)	0.813		0.629																								
Polar Section Modulus (in ³)	1.626		1.258																								
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Tool Joint																											
		PTECH24+ OD (in) 3.062 ID (in) 1.805 Tool Joint with a Material Yield Strength of 135000 psi Pin Tong length (in) 10 Box Tong length (in) 13 Torsional Strength (ft-lbs) 7,760 Recommended Make-up Torque (ft-lbs) 4,700 Min Recommended Make-up Torque (ft-lbs) 3,900 Balance OD (in) 3.060 Tensile Strength (lbs) 217,600 Tool joint/Drill pipe torsional ratio (New pipe) 0.73 Tool joint/Drill pipe torsional ratio (Prem pipe) 0.95 Min OD for premium class (in) 2.984																									
Drill Pipe Assembly with PTECH+ Tool Joint		Drill Pipe Bend Radius																									
API Adjusted weight (lbs/ft) 6.58 Approximate length (ft) 32.00 API Fluid Displacement (gal/ft) 0.101 Fluid Capacity (gal/ft) 0.139 Drift Size 1.711	* These calculations are based on new pipe with nominal wall Based on Bending Stress (psi) at Pipe OD 15,000 Radius of Curvature (R) (ft.) (@ OD of pipe) 197.9 BUR (dogleg) deg/100 ft. 29.0																										

TORQUE TENSION COMBINED LOAD CURVE

For PTECH24+ 3 1/16 X 1.805 Tool Joint with a Material Strength of 135000 psi, using a Coefficient of Friction factor of 0.08 and a Safety Factor of 1.0. On Pipe: 2.375 5.80 S-135 Premium Class.



PTECH24+ 3 1/16 X 1.805 TOOL JOINT OD WEAR CURVE

