## DRILL PIPE PERFORMANCE DATA SHEET Pipe Size: 4.750 in Grade: **S135** Range: 2 480 DUO Pipe Weight: 17.50 lb/ft Upset: IEU Connection: **Pipe NEW API PREMIUM** 4.750 OD 4.750 Pipe size in 4.615 in 17.50 0.337 0.270 Pipe weight lb/ft **Thickness** in IEU X-Sec Area 4.672 3.681 **Upset Type** in<sup>3</sup> Tube grade Section Modulus 4.817 3.780 S135 in<sup>3</sup> 2 Polar Section Modulus Range 9.633 7.559 **Tube Yield** 135 497,000 Tensile Yield lbs 631,000 ksi 49,100 ID 4.076 Torsional Yield ft-lbs 62,500 in 80% Torsional Yield ft-lbs 50,000 39,280 Internal Pressure Yield psi 16,800 15,300 Collapse Yield 15,000 9,500 psi D/t 14.09 17.12 Connection/Tube Torsional Ratio 0.824 **Tool Joint** NEW 5.750 **Connection Type** 480 DUO OD in Material Yield Strength ksi 130 Tensile Yield Strength lbs 918,500 OD 5.750 Torsional Yield Strength ft-lbs 51,500 in Recommended Makeup Torque ft-lbs 30,900 ID in 3.625 Maximum Makeup Torque ft-lbs 33,500 Pin Shoulder Angle 18 deg Pin Tool Joint Length 14.0 in **Box Tool Joint Length** 14.0 in **Drill Pipe Assembly** Shoulder-Shoulder Length 31.50 ft Adjusted Weight Ibs/ft 19.17 Closed End Displacement gal/ft 0.955 bbl/ft 0.0227 Open End Displacement gal/ft 0.293 bbl/ft 0.0070 Fluid Capacity gal/ft 0.662 bbl/ft 0.0158 **Drift Size** in 3.5

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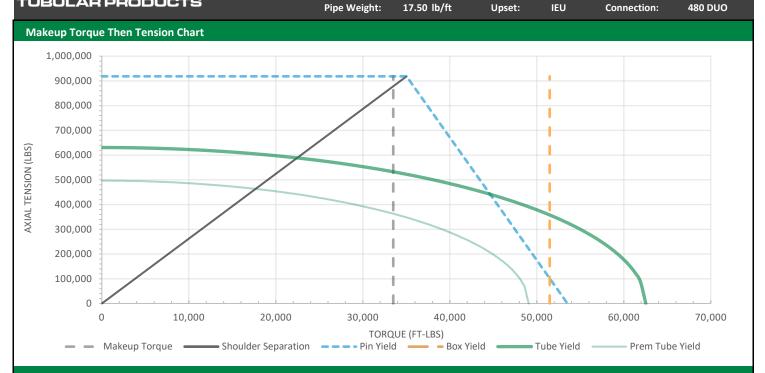
Calculations are based on uniform wall thickness and outside diameter – no safety factor has been applied. The information provided for inspection classes is based on uniform wear and is not intended to recommend or confirm operational limits of any used product. It is recommended that drilling torque not exceed 80% of the makeup torque, however it is the responsibility of the end user to determine the acceptable use of the end product including appropriate performance ratings and safety factors where applicable. All connection torque calculations have been performed using a thread compound friction factor of 1.0. Complete Tubular Products does not endorse any specific thread compound and waives all responsibility in determining appropriate makeup torque values for any specific drilling circumstance. Modifying makeup torque values for any reason shall be done at the end users discretion and risk.

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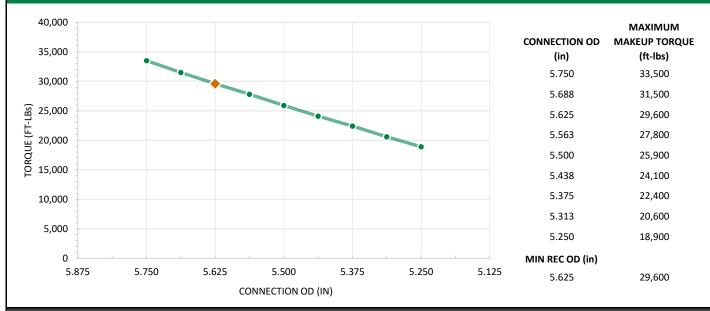
## COMPLETE TUBULAR PRODUCTS

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## **Connection Wear Chart**



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