

Drill Pipe Performance Characteristics Sheet



Pipe Size & Weight: 4" 14.00# IU
Pipe Grade: S-135
Range: 1
Tool Joint Dimensions: 5" OD x 2-7/16" ID
Connection: NC38 or 3-1/2 IF

THIS TECHNICAL INFORMATION IS FOR REFERENCE ONLY

| Pipe Body Information | | |
|--|---|----------------|
| | <u>New-API</u> | <u>Premium</u> |
| OD (in) | 4.000 | |
| Wall Thickness (in) | .330 | |
| ID (in) | 3.340 | |
| Calculated Plain End weights (lbs./ft) | | |
| <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 ²) | | |
| Cross Sectional area OD (in ²) | | |
| Cross Sectional area ID (in ²) | | |
| Section Modulus (in ²) | | |
| Polar Section Modulus (in ²) | | |
| | <u>New-API</u> | <u>Premium</u> |
| Torsional Strength (ft-lbs.) | 41,918 | |
| Tensile Strength (lbs.) | 513,646 | |
| 80% Torsional Strength (ft-lbs.) | | |
| Pressure Capacity (psi) | 19,491 | |
| Collapse Capacity (psi) | 20,437 | |
| Tool Joint Information | | |
| NC38 or 3-1/2 IF | | |
| | OD (in) | 5" |
| | ID (in) | 2-7/16" |
| <i>* Tool Joint with a Material Yield Strength of 120,000 psi</i> | | |
| | Pin Tong length (in) | |
| | Box Tong length (in) | |
| | Torsional Strength (ft-lbs.) | 22,200 |
| | Max Recommended Make-up Torque (ft-lbs.) | 11,700 |
| | Min Recommended Make-up Torque (ft-lbs.) | 10,500 |
| | Balance OD (in) | |
| | Tensile Strength (lbs.) | 708,100 |
| | Tool Joint / Drill Pipe torsional ratio (New Pipe) | |
| | Tool Joint / Drill Pipe torsional ratio (Premium Pipe) | |
| | Min OD for Premium Class (in) | |
| Drill Pipe Assembly w/ NC38 Tool Joint | Drill Pipe Bend Radius | |
| API Adjusted Weight (lbs./ft.) | <i>* These calculations are based on new pipe with nominal wall</i> | |
| Approximate Length (ft.) | Based on Bending Stress (psi) at Pipe OD | |
| API Fluid Displacement (gal./ft.) | Radius of Curvature ® (ft.) (@ OD of pipe) | |
| Fluid Capacity (gal./ft.) | BUR (dogleg) deg/100 ft. | |
| Drift Size (in) | | |