

PRODUCT PERFORMANCE SHEET
NEW HEAVY WEIGHT DRILL PIPE, WELDED
5-1/2" OD by 3-3/8" ID by 31.0' OAL (55 ksi SMYS)
TOOL JOINT: 6-5/8" OD by 3-1/2" ID by PTECH+™55 (with 4.250" ID Bevel) by 135 ksi SMYS

TUBE DATA, NEW (100% RBW)	
OD, Tube (in)	5.500
ID, Tube (in)	3.375
Nominal Wall Thickness, Tube (in)	1.063
Center Upset OD (in)	6.000
Elevator Upset OD (in)	5.625
Cross Sectional Area, Tube (in ²)	14.812
Polar Section Modulus, Tube, I/c (in ³)	28.036
Section Modulus, Tube, I/c (in ³)	14.018

Above data based on New Heavy Weight drill pipe nominal dimensions.

TUBE PERFORMANCE PROPERTIES, NEW (100% RBW)	
Tensile Yield (lb)	814,660
Torsional Yield (ft-lb)	74,140
Collapse Pressure (psi)	17,130
Internal Yield Pressure (psi)	18,590
Material Yield Strength (psi)	55,000

Above data based on New Heavy Weight pipe body nominal dimensions and no safety factor. Internal yield pressure based on 87.5% of New Heavy Weight pipe body nominal wall thickness.

TOOL JOINT DATA (NEW)		
Connection Size	PTECH+™55 (See Note 3)	
OD (in)	6.625	
ID (in)	3.500	
Box Tool Joint OAL, Ref. (in)	27.0	
Pin Tool Joint OAL, Ref. (in)	30.0	
Material Yield Strength (psi)	135,000	
Thread Compound Friction Factor	1.0 (a)	1.15 (b)
Recommended Make-Up Torque (ft-lb)	52,600	60,500
Torsional Yield (ft-lb)	87,700	
Approximate Tension to Yield Pin at Recommended Make-Up Torque (lb)	1,492,700	
Tool Joint Tensile Yield (lb)	1,763,000	
Balanced OD (in)	7.031	

(a) The Make-Up Torque value shown under column 1.0 is based on using a 1.0 friction factor thread compound (0.08 coefficient of friction) and 60% of torsional yield.

(b) The Make-Up Torque value shown under column 1.15 has been adjusted based on using a 1.15 friction factor thread compound. The make-up torque value is only applicable when using a thread compound rated by the manufacturer to have a 1.15 friction factor.

ASSEMBLY DATA (NEW)						
Weight (Approx.)		Capacity (Approx.)		Displacement Open Ends (Approx.)		Overall Length (Approx.)
(lb/joint)	(lb/ft)	(US Gal/ft)	(BBL/ft)	(US Gal/ft)	(BBL/ft)	(ft)
1,723	56.26	0.4696	0.0112	0.8596	0.0205	3.125
						31.0

Assembly data based on New Heavy Weight drill pipe nominal dimensions and no internal plastic coating.

Conversion Factor: 1 BBL = 42 US Gallons

Notes:

1. All data is based on New Heavy Weight drill pipe nominal dimensions and no safety factor.
2. Drawing is for illustration purposes only, not to scale, and based on New Heavy Weight drill pipe nominal dimensions, units of inches unless otherwise indicated.
3. Box and pin connection machined with a 4.250" ID bevel on the secondary shoulder (box internal shoulder and pin nose face).

The technical information contained herein is for reference purposes only. TSC Drill Pipe does not assume responsibility for results obtained through the use of the technical information, no warranty is expressed or implied. User is fully responsible for the accuracy and suitability of use of the technical information and for application of appropriate safety factor.

