



Command
Tubular Products

Size: 4 1/2"

Weight: 16.6 lbs/ft

Grade: S-135

Range: II (31.5')

Drill Pipe Specs

Connection: CET43

Tube

	New		Premium	
	in	mm	in	mm
OD	4.500	114.3	4.365	110.9
Wall thickness	0.337	8.6	0.270	6.8
ID	3.826	97.2	3.826	97.2
	ft-lbs	N-m	ft-lbs	N-m
Torsional strength	55,453	75,200	43,451	58,900
80% Torsional strength	44,362	60,200	34,761	47,100
	lbs	daN	lbs	daN
Tensile strength	595,004	265,300	468,297	208,800
	psi	kPa	psi	kPa
Internal Pressure capacity	17,693	121,985	16,176	111,530
Collapse capacity	16,769	115,615	10,959	75,561
	in ²	mm ²	in ²	mm ²
Cross sectional area body	4.407	2844	3.469	2238
Cross sectional area OD	15.904	10261	14.966	9655
Cross sectional area ID	11.497	7417	11.497	7417
	in ³	mm ³	in ³	mm ³
Section modulus	4.271	69995	3.347	54845
Polar section modulus	8.543	139989	6.694	109690

Tool Joint

	New		1.15 Friction Factor	
	psi	kPa	psi	kPa
Yield Strength	130,000	896,318	130,000	896,318
	in	mm	in	mm
OD	5.375	136.5	5.375	136.5
ID	3.000	76.2	3.000	76.2
Pin length	11.0	279.4	11.0	279.4
Box length	14.0	355.6	14.0	355.6
	ft-lbs	N-m	ft-lbs	N-m
Torsional Strength	48,800	66,200	56,200	76,200
Recommended Make-up Torque	31,700	43,000	36,500	49,500
Min Make-up Torque	28,100	38,100	32,400	44,000
	lbs	daN	lbs	daN
Tensile strength	817,300	364,400	817,300	364,400
Tool joint/Drill pipe torsional ratio	0.88		1.29	

Drill Pipe Assembly with Connection

	lbs/ft	kg/m
Adjusted weight	17.84	26.60
	ft	m
Approximate length	31.50	9.60
	gal/ft	m ³ /m
Fluid displacement	0.273	0.003389
Fluid capacity	0.582	0.007228
	in	mm
Drift size	2.8750	73

While every effort has been made to insure the accuracy of the tables herein, this material is presented as a reference guide only. Command Tubular Products cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended. All torques are based on a 1.0 friction factor.

Combined Load Curve for 4 1/2" S-135 16.6 lbs/ft Drill Pipe with CET43 connections

