



TOOL JOINT and MID BODY TUBE WEAR CHARTS

Drill Pipe – Heavy Weight – Collars - Subs

TOOL JOINT CONNECTIONS						
NCSO						
ID	Data	6.125	6.25	6.375	6.5	6.625
3-3/4"	Torque	37300	37500	37700	37900	38100
	Tension	939100	939100	939100	939100	939100
	Make-Up	19800	19800	19800	19800	19800
3-1/2"	Torque	38000	44200	44700	44900	45100
	Tension	1109900	1109900	1109900	1109900	1109900
	Make-Up	22800	23400	23400	23400	23400
3-1/4"	Torque	38000	44200	50500	51400	51700
	Tension	1269000	1269000	1269000	1269000	1269000
	Make-Up	22800	26500	26800	26800	26800
3"	Torque	38000	44200	50500	57000	57800
	Tension	1416200	1416200	1416200	1416200	1416200
	Make-Up	22800	26500	30000	30000	30000
2-3/4"	Torque	38000	44200	50500	57000	63400
	Tension	1551700	1551700	1551700	1551700	1551700
	Make-Up	22800	26500	30300	32900	32900

DSSO						
ID	Data	6.125	6.25	6.375	6.5	6.625
3-3/4"	Torque	454000	47100	47300	47500	47600
	Tension	939400	939400	939400	939400	939400
	Make-Up	27200	28200	22600	22700	22800
3-1/2"	Torque	51100	57200	60000	60200	60400
	Tension	1110000	1110000	1110000	1110000	1110000
	Make-Up	30700	34300	36000	36100	27000
3-1/4"	Torque	56300	62400	68700	71900	72200
	Tension	1269200	1269200	1269200	1269200	1269200
	Make-Up	21500	37400	41200	43100	43300
3"	Torque	60900	67100	73300	79800	82900
	Tension	1416500	1416500	1416500	1416500	1416500
	Make-Up	36600	40200	44000	47900	49700
2-3/4"	Torque	65100	71200	77500	84000	90600
	Tension	1522000	1522000	1522000	1522000	1522000
	Make-Up	39000	42700	46500	50400	54400

5-1/2 FH						
ID	Data	6.73	7	7.125	7.25	7.375
4-1/4"	Torque	46700	47200	47400	47600	47900
	Tension	1071400	1071400	1071400	1071400	1071400
	Make-Up	24600	24600	24600	24600	24600
4"	Torque	46700	56000	56000	56500	56500
	Tension	1265800	1265800	1265800	1265800	1265800
	Make-Up	28000	29200	29200	29200	29200
3-3/4"	Torque	46700	63000	64500	64500	65000
	Tension	1448400	1448400	1448400	1448400	1448400
	Make-Up	28000	33400	32200	33400	33400
3-1/2"	Torque	46700	63000	70500	72500	73000
	Tension	1619200	1619200	1619200	1619200	1619200
	Make-Up	28000	37400	37400	37400	37400
3-1/4"	Torque	46700	63000	70500	78500	80000
	Tension	1778300	1778300	1778300	1778300	1778300
	Make-Up	23400	37700	41200	41200	41200

5-1/2 FHDS						
ID	Data	6.844	7	7.125	7.25	7.375
4-1/4"	Torque	56800	57000	57300	57500	57700
	Tension	1071400	1071400	1071400	1071400	1071400
	Make-Up	34100	34200	34400	34500	34500
4"	Torque	67800	73000	73200	73500	73800
	Tension	1265800	1265800	1265800	1265800	1265800
	Make-Up	40700	43800	43900	44100	44300
3-3/4"	Torque	74400	83900	88100	88400	88700
	Tension	1569100	1569100	1569100	1569100	1569100
	Make-Up	44700	50300	52900	53000	53200
3-1/2"	Torque	80500	89900	97700	102100	102500
	Tension	1619200	1619200	1619200	1619200	1619200
	Make-Up	48300	53900	58600	61300	61500
3-1/4"	Torque	85900	95300	103100	111100	115200
	Tension	1778300	1778300	1778300	1778300	1778300
	Make-Up	51500	57200	61900	66700	69100

6-5/8 FH						
ID	Data	7.5	7.75	8	8.25	8.5
4.250"	Torque	49300	68000	88000	108500	109000
	Tension	2102300	2102300	2102300	2102300	2102300
	Make-Up	24600	40900	52500	56000	56000
4.5"	Torque	49300	68000	88000	97500	98500
	Tension	1896100	1896100	1896100	1896100	1896100
	Make-Up	29600	40900	50500	50500	50500
4.750"	Torque	49300	68000	85500	86000	87000
	Tension	1678100	1678100	1678100	1678100	1678100
	Make-Up	29600	40900	44600	44600	44600
5"	Torque	73000	73500	74000	74500	75000
	Tension	1448400	1448400	1448400	1448400	1448400
	Make-Up	38400	38400	38400	38400	38400

6-5/8 FHDS						
ID	Data	7.5	7.75	8	8.25	8.5
4.250"	Torque	94500	113300	133000	153700	158000
	Tension	2102700	2102700	2102700	2102700	2102700
	Make-Up	56700	68000	79800	92200	94800
4.5"	Torque	86000	104800	124500	137900	138700
	Tension	1896600	1896600	1896600	1896600	1896600
	Make-Up	51600	62900	74700	82700	83200
4.750"	Torque	76800	95600	115300	117300	118000
	Tension	1678600	1678600	1678600	1678600	1678600
	Make-Up	46100	57400	69200	70400	70800
5"	Torque	66900	85700	94900	95500	96100
	Tension	1448900	1448900	1448900	1448900	1448900
	Make-Up	40100	51400	56900	57300	57600

Drill Pipe Mid Body Tubes						
OD	Lbs. per ft.	Grade	Remaining body wall (RBW)	Torsional	Tensile	
5	19.5	S-135	95%	71194	679290	
5	19.5	S-135	90%	68214	646234	
5	19.5	S-135	85%	65159	612904	
5	19.5	S-135	80%	62027	579299	
5	25.6	S-135	95%	90738	911582	
5	25.6	S-135	90%	87288	868375	
5	25.6	S-135	85%	83709	824639	
5	25.6	S-135	80%	79999	780372	
6.625	27.7	S-135	95%	131586	916370	
6.625	27.7	S-135	90%	125736	870909	
6.625	27.7	S-135	85%	119788	825173	
6.625	27.7	S-135	80%	113713	779163	

OD	Lbs. per ft.	Grade	Remaining body wall (RBW)	Torsional	Tensile	
5.5	21.9	S-135	95%	87804	752238	
5.5	21.9	S-135	90%	84044	715365	
5.5	21.9	S-135	85%	80199	678218	
5.5	21.9	S-135	80%	76047	638708	
5.5	24.7	S-135	95%	97815	853219	
5.5	24.7	S-135	90%	93886	813081	
5.5	24.7	S-135	85%	89652	770571	
5.5	24.7	S-135	80%	85306	727686	
6.625	34.01	S-135	95%	176909	1289303	
6.625	34.01	S-135	90%	169657	1226901	
6.625	34.01	S-135	85%	162203	1163926	
6.625	34.01	S-135	80%	154543	1100377	