



WSI 152.2553-RD-4042-6 – Stiffness Table

Flowline - WSI 152.2553-RD-4042-6 R0				
Load Case Number	WD [m]	Axial Stiffness [kN]	Torsional Stiffness [kNm^2]	Equivalent Bend Stiffness [kNm^2]
GI / GM Cases	0-500	508765	5300	68
GJ Cases	0-500	508765	5300	68
GK Cases	0-500	511880	5510	267
GL Cases	0-500	508765	5300	68
GI / GM Cases	500-1000	507986	5481	306
GJ Cases	500-1000	509152	5480	291
GK Cases	500-1000	509591	5503	509
GL Cases	500-1000	480025	5294	74
GI / GM Cases	1000-1500	507188	5473	542
GJ Cases	1000-1500	509436	5471	514
GK Cases	1000-1500	507195	5496	745
GL Cases	1000-1500	457160	5306	84
GI / GM Cases	1500-2000	506734	5465	770
GJ Cases	1500-2000	509774	5462	727
GK Cases	1500-2000	506988	5488	970
GL Cases	1500-2000	437756	5317	94
GI / GM Cases	2000-2500	506930	5457	991
GJ Cases	2000-2500	509916	5453	935
GK Cases	2000-2500	507131	5480	1190
GL Cases	2000-2500	420565	5329	104



Curvature [1/m]	Bending Moment [Nm]							
	Dry Annulus				Flooded Annulus			
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
0.0000	0	0	0	0	0	0	0	0
0.0030	11265	11265	11265	11265	4872	1322	9583	9865
0.0060	24978	24978	24978	24978	5233	1531	16080	16570
0.0090	41141	41141	41141	41141	5493	1775	19159	20630
0.0140	59752	59752	59752	59752	5779	2055	20068	21751
0.0190	80812	80812	80812	80812	6098	2372	20622	22384
0.0240	95366	99078	103148	103334	6453	2726	21087	22886
0.0300	101254	106474	117678	118536	6844	3116	21538	23353
0.0360	104610	110516	124559	125841	7271	3543	22001	23828
0.0440	106795	113081	128587	130055	7736	4007	22486	24320
0.0510	108380	114905	131279	132860	8237	4508	22998	24837
0.0590	109640	116314	133252	134899	8775	5046	23544	25385
0.0680	110709	117493	134803	136501	9350	5621	24125	25968
0.0780	111666	118527	136102	137830	9961	6232	24742	26586
0.0870	112568	119478	137254	139007	10609	6880	25395	27239
0.0980	113447	120393	138306	140077	11295	7565	26084	27929
0.1090	114314	121292	139300	141084	12017	8287	26809	28655
0.1210	115182	122185	140273	142066	12775	9046	27571	29417
0.1330	116061	123085	141237	143037	13571	9841	28368	30215
0.1450	116956	123997	142205	144011	14403	10674	29203	31050
0.1590	117874	124926	143182	144993	15272	11543	30074	31921
0.1730	118821	125879	144172	145988	16178	12449	30981	32829
0.1870	119798	126861	145179	147000	17121	13391	31926	33774
0.2020	120807	127874	146208	148032	18101	14371	32906	34755
0.2170	121849	128920	147265	149090	19117	15388	33924	35772
0.2120	99319	106391	124736	126561	9291	12743	14233	15370
0.2060	71892	78963	97309	99134	8651	12326	1758	2624
0.1980	39567	46638	64984	66809	8130	11838	-4409	-5504
0.1900	2344	9416	27761	29586	7559	11277	-6213	-7732
0.1800	-39776	-32705	-14360	-12534	6921	10644	-7321	-8995
0.1690	-68908	-69339	-59132	-57656	6212	9936	-8251	-10000
0.1580	-80702	-84062	-88251	-88154	5430	9155	-9152	-10934
0.1440	-87379	-92114	-101865	-102597	4574	8301	-10078	-11883
0.1300	-91748	-97244	-109911	-111023	3646	7373	-11048	-12868
0.1150	-94913	-100896	-115299	-116633	2643	6371	-12072	-13902
0.0990	-97433	-103709	-119240	-120712	1567	5295	-13164	-14997
0.0810	-99570	-106067	-122343	-123915	418	4146	-14327	-16163
0.0620	-101484	-108135	-124939	-126571	-805	2924	-15561	-17399
0.0430	-103288	-110036	-127244	-128924	-2102	1627	-16866	-18706
0.0220	-105044	-111866	-129346	-131064	-3472	257	-18244	-20085
0.0000	-106779	-113663	-131335	-133078	-4916	-1187	-19694	-21537
-0.0240	-108515	-115450	-133280	-135041	-6433	-2704	-21217	-23061
-0.0480	-110273	-117250	-135208	-136983	-8024	-4295	-22813	-24658
-0.0730	-112063	-119075	-137144	-138932	-9689	-5959	-24482	-26327
-0.1000	-113900	-120933	-139098	-140897	-11427	-7698	-26224	-28070
-0.1280	-115792	-122837	-141079	-142887	-13239	-9510	-28039	-29886
-0.1560	-117746	-124801	-143093	-144909	-15125	-11395	-29927	-31775
-0.1860	-119765	-126828	-145151	-146973	-17084	-13355	-31889	-33737
-0.2170	-121849	-128920	-147265	-149090	-19117	-15388	-33924	-35772
-0.2120	-99319	-106391	-124736	-126561	-9291	-12743	-14233	-15370
-0.2060	-71892	-78963	-97309	-99134	-8651	-12326	-1758	-2624
-0.1980	-39567	-46638	-64984	-66809	-8130	-11838	4409	5504
-0.1900	-2344	-9416	-27761	-29586	-7559	-11277	6213	7732
-0.1800	39776	32705	14360	12534	-6921	-10644	7321	8995
-0.1690	68908	69339	59132	57656	-6212	-9936	8251	10000
-0.1580	80702	84062	88251	88154	-5430	-9155	9152	10934
-0.1440	87379	92114	101865	102597	-4574	-8301	10078	11883
-0.1300	91748	97244	109911	111023	-3646	-7373	11048	12868
-0.1150	94913	100896	115299	116633	-2643	-6371	12072	13902
-0.0990	97433	103709	119240	120712	-1567	-5295	13164	14997
-0.0810	99570	106067	122343	123915	-418	-4146	14327	16163
-0.0620	101484	108135	124939	126571	805	-2924	15561	17399
-0.0430	103288	110036	127244	128924	2102	-1627	16866	18706
-0.0220	105044	111866	129346	131064	3472	-257	18244	20085
0.0000	106779	113663	131335	133078	4916	1187	19694	21537
0.0240	108515	115450	133280	135041	6433	2704	21217	23061
0.0480	110273	117250	135208	136983	8024	4295	22813	24658
0.0730	112063	119075	137144	138932	9689	5959	24482	26327
0.1000	113900	120933	139098	140897	11427	7698	26224	28070
0.1280	115792	122837	141079	142887	13239	9510	28039	29886
0.1560	117746	124801	143093	144909	15125	11395	29927	31775
0.1860	119765	126828	145151	146973	17084	13355	31889	33737
0.2170	121849	128920	147265	149090	19117	15388	33924	35772



WSI 152.2553-RD-4042-6 – Curvature x Bending Moment

HYSTERETIC CURVES
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