

## Appendix I

**Table 1.** Detailed process plan of Case-1

Layers	LS (mm)	LE (mm)	LL (mm)	Roll		Layers	LS (mm)	LE (mm)	LL (mm)	Roll
1	300	49500	49200	1		22	5500	38350	32850	7
2	400	49000	48600	1		23	5800	37850	32050	7
3	500	48000	47500	1		24	6150	37300	31150	7
4	600	47200	46600	2		25	6450	36700	30250	7
5	700	46500	45800	2		26	6600	36450	29850	2
6	800	45900	45100	2		27	6950	35900	28950	8
7	1000	45300	44300	3		28	7250	35300	28050	6
8	1150	45000	43850	3		29	7550	34600	27050	8
9	1450	44450	43000	3		30	7900	33900	26000	8
10	1800	43950	42150	4		31	8200	33000	24800	8
11	2300	43450	41150	4		32	8550	32150	23600	4
12	2700	42900	40200	5		33	8700	31800	23100	7
13	3100	42300	39200	4		34	9000	31100	22100	1
14	3250	42100	38850	5		35	9350	30200	20850	4
15	3550	41600	38050	5		36	9650	29250	19600	8
16	3850	41150	37300	5		37	9950	28300	18350	8
17	4100	40650	36550	6		38	10600	27400	16800	7
18	4400	40100	35700	3		39	11050	26900	15850	8
19	4700	39500	34800	6		40	12950	25500	12550	5
20	4850	39300	34450	6		41	17150	22700	5550	8
21	5150	38800	33650	6						
<b>LS:</b> Layer Starts		<b>LE:</b> Layer Ends		<b>LL:</b> Layer Length		<b>Roll:</b> Type of the fiberglass				

## Appendix II

**Table 2.** Detailed process plan of Case-2

Layers	LS (mm)	LE (mm)	LL (mm)	Roll		Layers	LS (mm)	LE (mm)	LL (mm)	Roll
1	2200	55000	52800	1		31	7600	48350	40750	5
2	2380	54800	52420	2		32	7780	48000	40220	6
3	2560	54600	52040	1		33	7960	47650	39690	5
4	2740	54400	51660	2		34	8140	47300	39160	6
5	2920	54250	51330	1		35	8320	46950	38630	5
6	3100	54100	51000	2		36	8500	46600	38100	6
7	3280	53950	50670	1		37	9000	46250	37250	5
8	3460	53800	50340	2		38	9500	45800	36300	6
9	3640	53650	50010	1		39	10000	45350	35350	5
10	3820	53500	49680	2		40	10500	44900	34400	6
11	4000	53350	49350	1		41	11000	44450	33450	5
12	4180	53200	49020	2		42	11500	44000	32500	6
13	4360	53050	48690	1		43	12000	43550	31550	5
14	4540	52900	48360	2		44	12500	43100	30600	6
15	4720	52750	48030	1		45	13000	42650	29650	5
16	4900	52600	47700	2		46	13500	42200	28700	6
17	5080	52450	47370	3		47	14000	41750	27750	5
18	5260	52300	47040	4		48	14500	41300	26800	6
19	5440	52150	46710	3		49	15000	40850	25850	5
20	5620	52000	46380	4		50	15500	40400	24900	6
21	5800	51850	46050	3		51	16000	39950	23950	5
22	5980	51500	45520	4		52	16500	39500	23000	6
23	6160	51150	44990	3		53	17000	39050	22050	5
24	6340	50800	44460	4		54	17500	38600	21100	6
25	6520	50450	43930	3		55	18000	38150	20150	5
26	6700	50100	43400	4		56	18500	37700	19200	6
27	6880	49750	42870	3		57	19000	37250	18250	3
28	7060	49400	42340	4		58	19500	36800	17300	4
29	7240	49050	41810	3		59	20000	36350	16350	3
30	7420	48700	41280	4		60	20500	35900	15400	4
<b>LS:</b> Layer Starts		<b>LE:</b> Layer Ends		<b>LL:</b> Layer Length			<b>Roll:</b> Type of the fiberglass			