

SoLID Heavy Gas Cherenkov Detector Drawing Tree			2022/02/24					
Copies of all drawings can be downloaded from			http://lichen.phys.uregina.ca/~huberg/solid/cfi2023_sms/					
Description	Assy	Sub-Assy #	Part #	Qty	Mat'l Size Estimate - Inches -			Tot Vol
					L	W	Thk.	Inches^3
Vessel								
	Bottom Center		SP-10-01-01	10	29.0	10.0	1.25	3625.0
	Bottom Right		SP-10-01-02	10	29.0	8.0	1.25	2900.0
	Bottom Left		SP-10-01-03	10	29.0	8.0	1.25	2900.0
	Side Plate-Right		SP-10-01-05	2	60.5	39.0	1.00	4719.0
	Side Plate-Left		SP-10-01-06	2	60.5	39.0	1.00	4719.0
	Rib-Mid		SP-10-01-07	8	60.5	39.0	2.00	37752.0
	Rib-Top		SP-10-01-08	20	37.0	16.0	2.00	23680.0
	Front Plate		SP-10-01-09	10	51.0	50.0	1.00	25500.0
	Front-Top Plate PMT Mount		SP-10-01-11	30	Not yet designed, it will replace SP-10-01-12 Top Plate Blank with similar size and same quantity			
	Front-Top Plate Blank		SP-10-01-12	30	21.0	24.5	1.00	15435.0
	Top Plate		SP-10-01-13B	30	27.5	20.0	1.00	16500.0
	Back Plate		SP-10-01-14	10	61.0	22.0	2.00	26840.0
	Back Plate Extension		SP-10-01-15	0	21.0	18.0	2.00	0.0
	Back Window		SP-10-01-16	10	53.0	51.5	0.25	6823.8
	Mount Side		SP-10-01-18	20	26.0	4.5	1.00	2340.0
	Mount Top		SP-10-01-19	10	23.0	4.5	1.00	1035.0
	Top Brace		SP-10-01-21	TBD				
	Bolt Strip - Back Win Top		SP-10-01-22	TBD				
	Bolt Strip- Back Win Side		SP-10-01-23	TBD				
	Bolt Strip- Back Win Bottom		SP-10-01-24	TBD				
	Bolt Strip- Bk Win Ext Top		SP-10-01-25	TBD				
	Bolt Strip- Bk Win Ext Side		SP-10-01-26	TBD				
	Bolt Strip- Bk Win Ext Bottom		SP-10-01-27	TBD				
Front Window	Thin Aluminum Window	SP-10-02-00		14	Material to be 2024-T4 aerospace-grade Aluminum, as described in Background note			
	Front Window Frame		SP-10-02-01	10	43.0	45.0	0.75	14512.5
Material Note:	6061-T651 Aluminum Rolled Plate (min 40ksi yield strength)							-----
						Vol Alum		189281.3
						#/In^3		0.0975

					For Parts Listed:	Weight # =		18454.9
The following are small parts that are not yet designed, and not part of this order								
	PMT Cap	SP-10-03-00		TBD				
	Shield-Cone	SP-10-04-00		TBD				
	PMT Assy	SP-10-05-00		TBD				