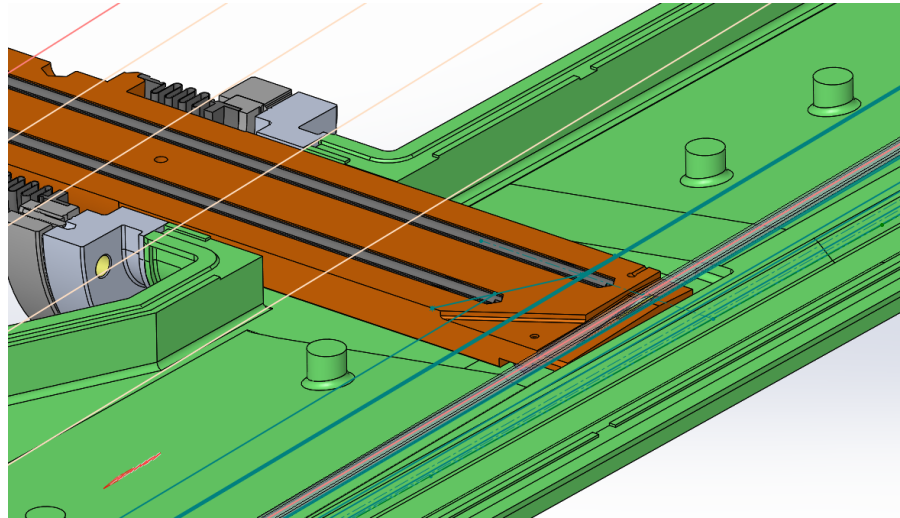


SRTU ABSORBERS SAFETY MARGINS

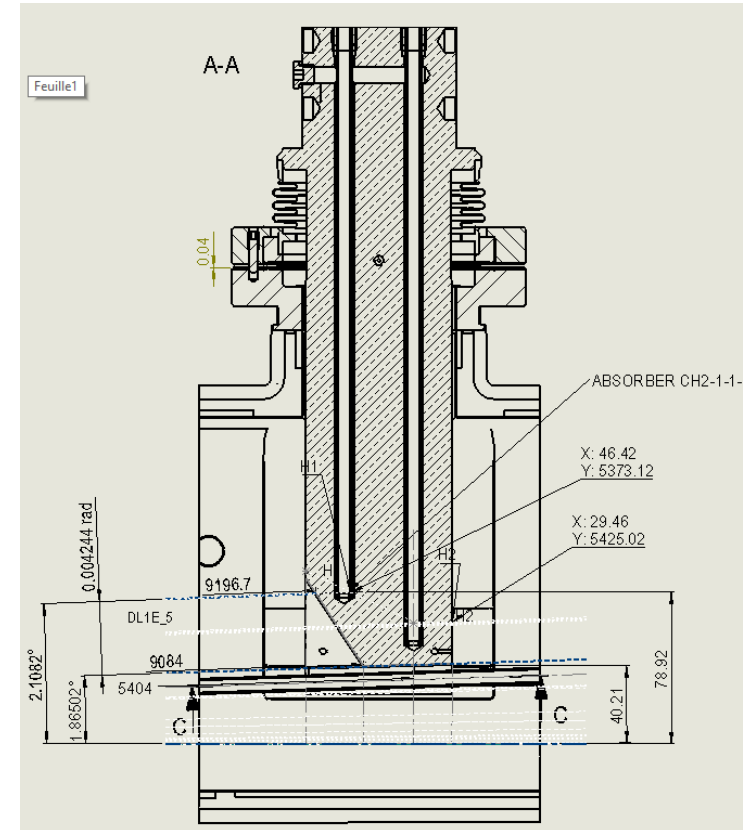
Th. Brochard

On behalf of the EBS Accelerator Team



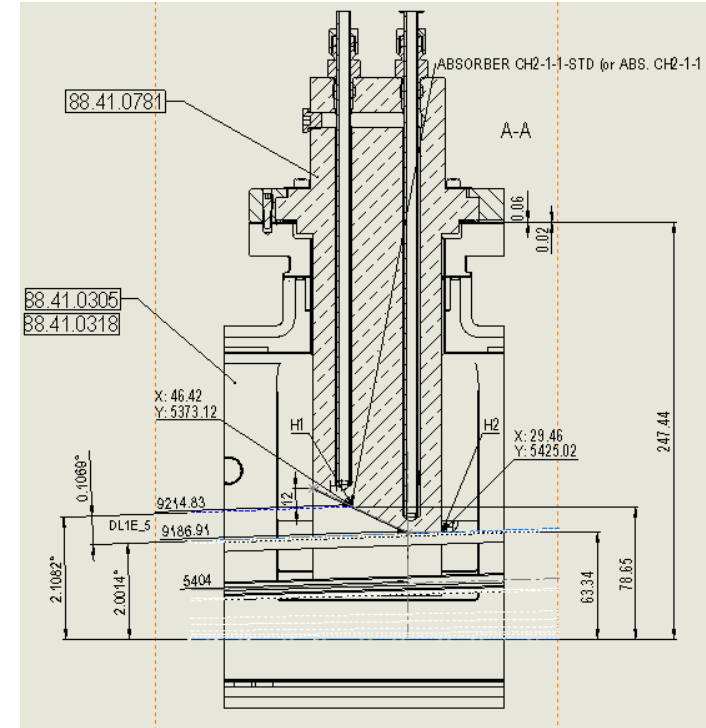
ABS – CH2 HELICAL

	On energy	Off energy
Source	DL1E_5	DL1E_5
Distance [mm]	9196	9196
Beam Pos. [μm]	0	-23
Beam angle [μrad]	0	112
Beam displacement [mm]	0	1.0
Abs. margin [mm]	5	4
Mechanical margins [mm]	2	2
Remain margin [mm]	3	2

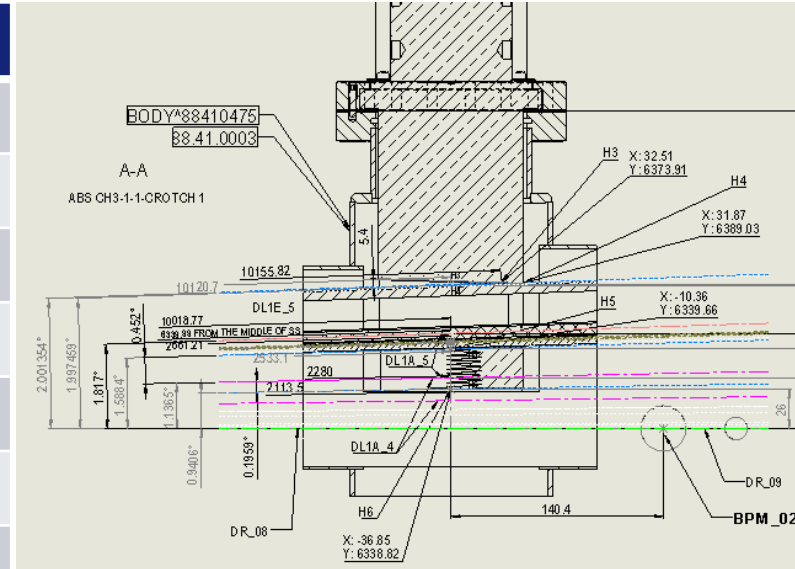


ABS – CH2 1/1 STANDARD

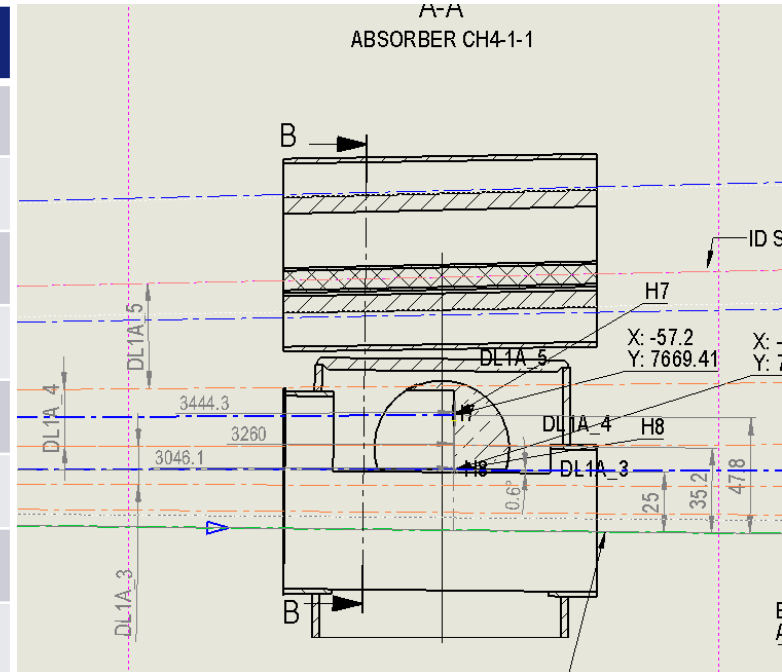
	On energy	Off energy
Source	DL1E_5	DL1E_5
Distance [mm]	9215	9215
Beam Pos. [μm]	0	-23
Beam angle [μrad]	0	112
Beam displacement [mm]	0	1.0
Abs. margin [mm]	5	4
Mechanical margins [mm]	2	2
Remain margin [mm]	3	2



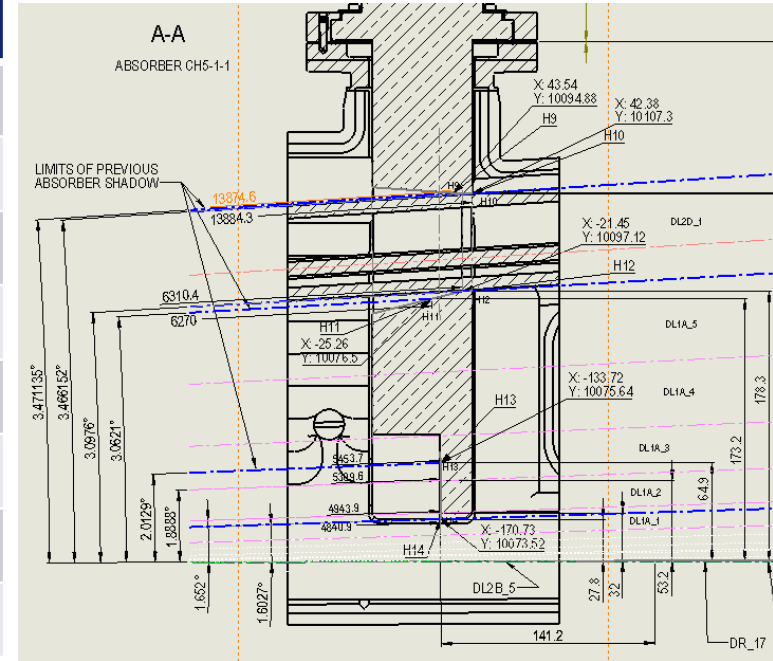
	On energy	Off energy
Source	DL1E_5	DL1E_5
Distance [mm]	10155	10155
Beam Pos. [μm]	0	-23
Beam angle [μrad]	0	112
Beam displacement [mm]	0	1.1
Abs. margin [mm]	5.4	4.3
Mechanical margins [mm]	2	2
Remain margin [mm]	3.4	2.3



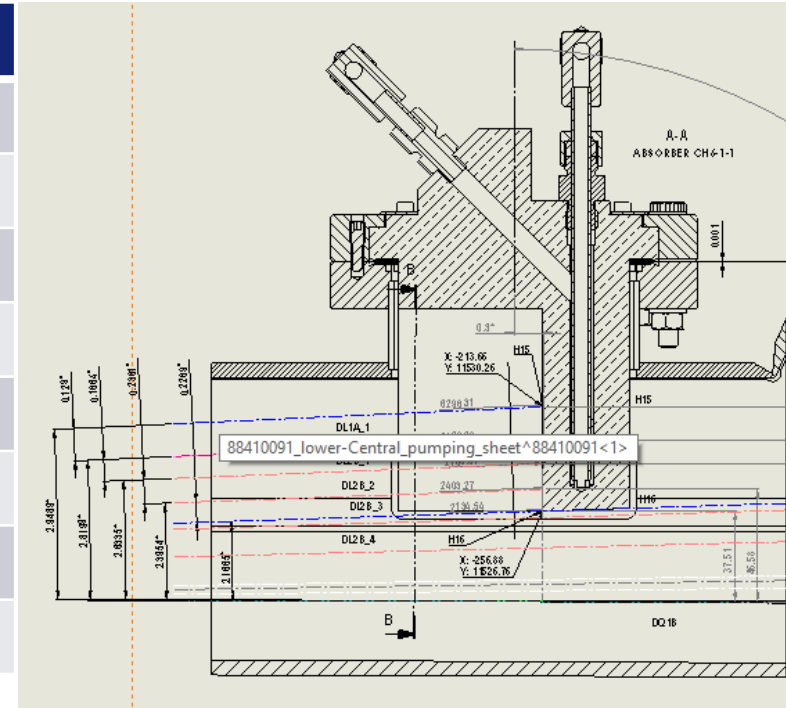
	On energy	Off energy
Source	DL1A_4	DL1A_4
Distance [mm]	3444	3444
Beam Pos. [μm]	0	-24
Beam angle [μrad]	0	-106
Beam displacement [mm]	0	-0.4
Abs. margin [mm]	6	6
Mechanical margins [mm]	2	2
Remain margin [mm]	4	4



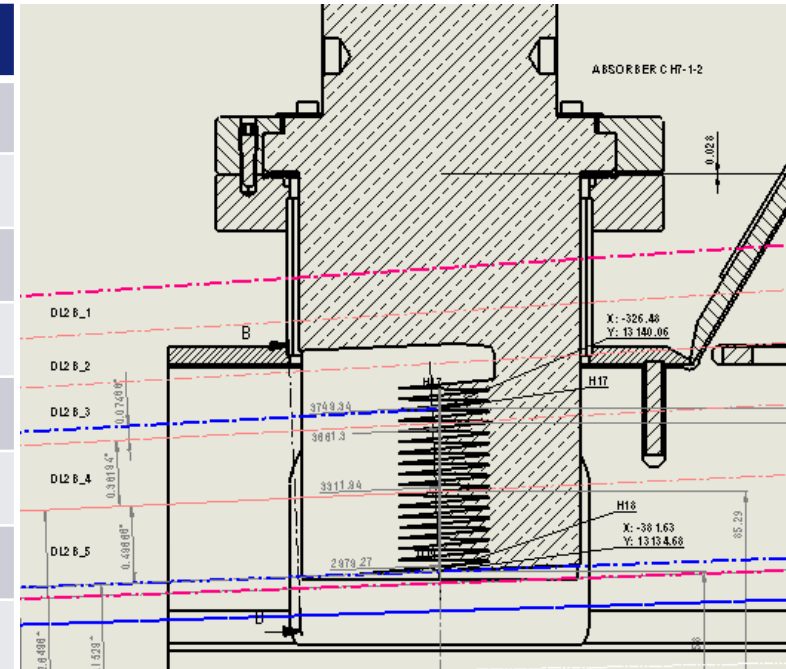
	On energy	Off energy
Source	DL1A_3	DL1A_3
Distance [mm]	5454	5454
Beam Pos. [μm]	0	-74
Beam angle [μrad]	0	-176
Beam displacement [mm]	0	-0.9
Abs. margin [mm]	7	7
Mechanical margins [mm]	2	2
Remain margin [mm]	5	5



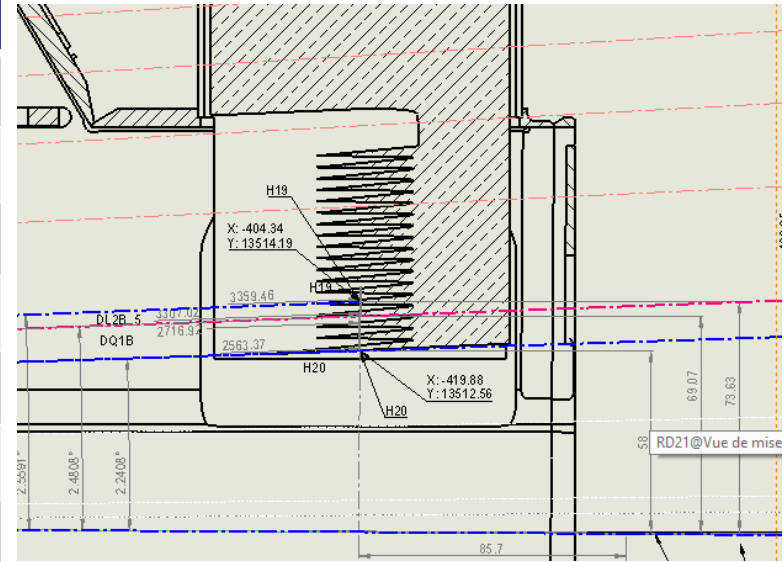
	On energy	Off energy
Source	DL1A_1	DL1A_1
Distance [mm]	6298	6298
Beam Pos. [μm]	0	-239
Beam angle [μrad]	0	-267
Beam displacement [mm]	0	-1.7
Abs. margin [mm]	7	7
Mechanical margins [mm]	2	2
Remain margin [mm]	5	5



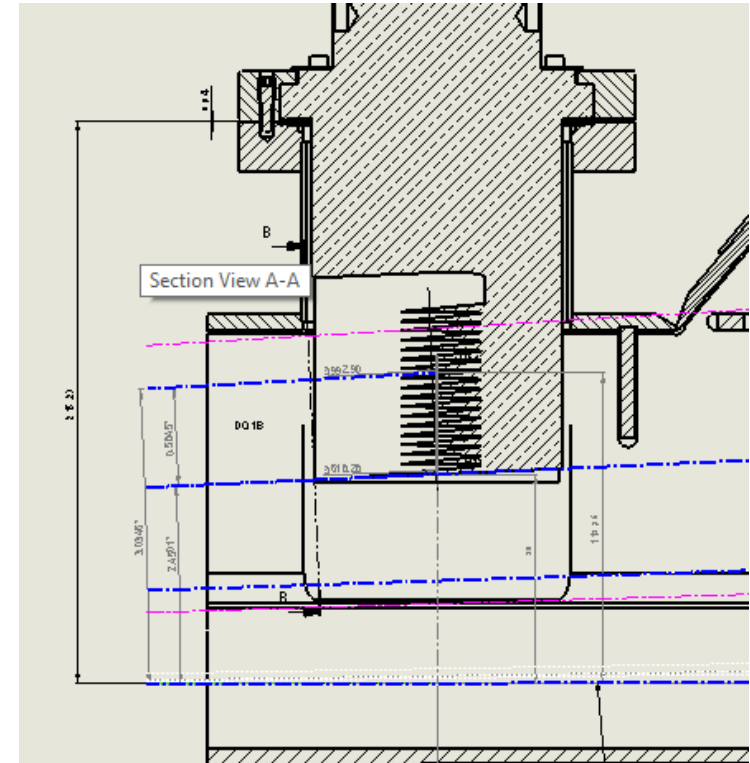
	On energy	Off energy
Source	DL2B_3	DL2B_3
Distance [mm]	3750	3750
Beam Pos. [μm]	0	-175
Beam angle [μrad]	0	172
Beam displacement [mm]	0	0.6
Abs. margin [mm]	5	5
Mechanical margins [mm]	2	2
Remain margin [mm]	3	2.4



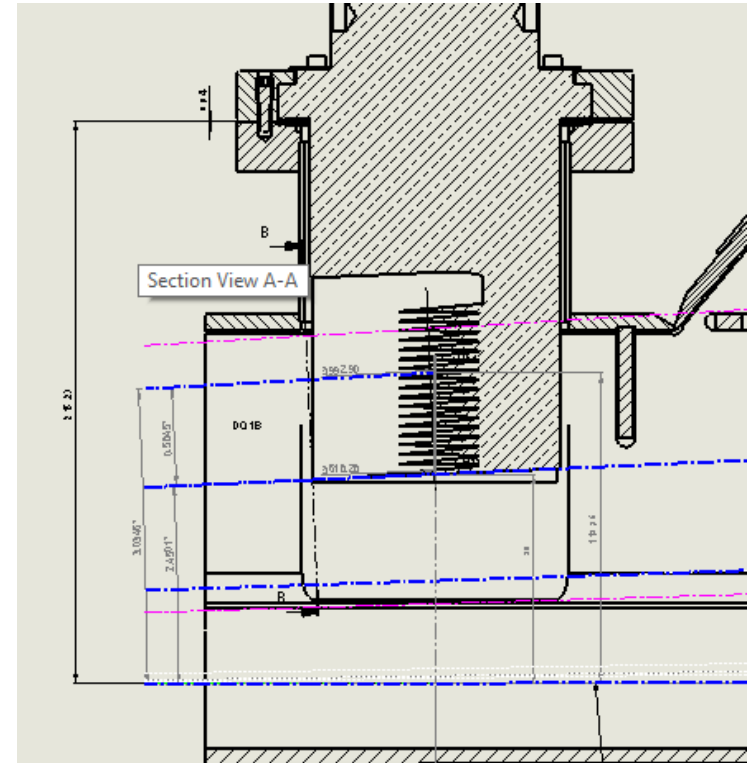
	On energy	Off energy
Source	DL2B_5	DL2B_5
Distance [mm]	3360	3360
Beam Pos. [μm]	0	-91
Beam angle [μrad]	0	57
Beam displacement [mm]	0	0.2
Abs. margin [mm]	7	7
Mechanical margins [mm]	2	2
Remain margin [mm]	5	4.8



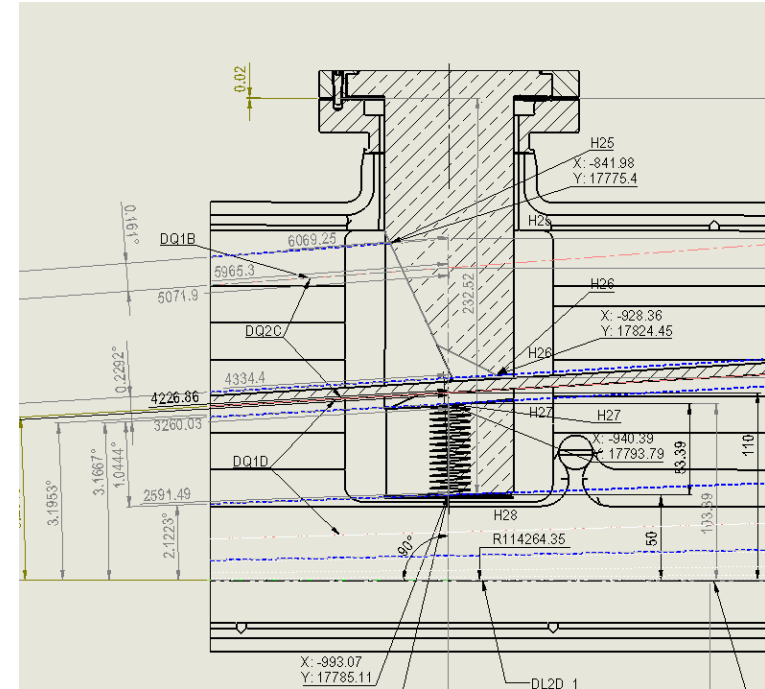
	On energy	Off energy
Source	DQ1B	DQ1B
Distance [mm]	3993	3993
Beam Pos. [μm]	0	-67
Beam angle [μrad]	0	117
Beam displacement [mm]	0	0.5
Abs. margin [mm]	5	5
Mechanical margins [mm]	2	2
Remain margin [mm]	3	2.5



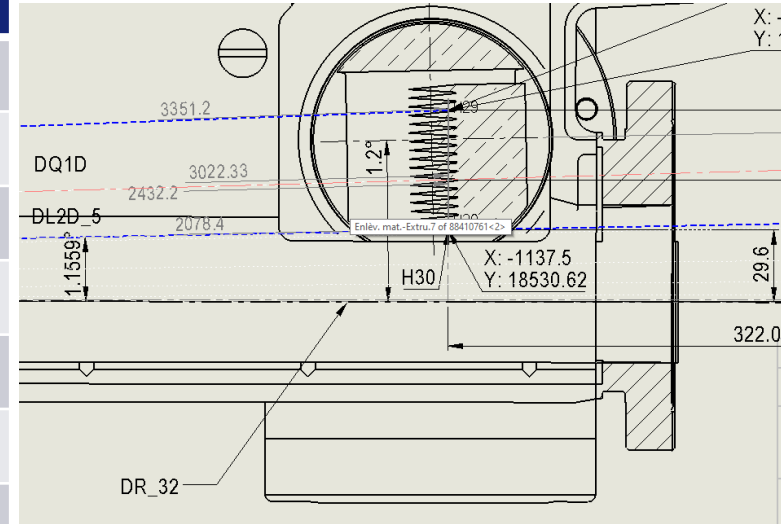
	On energy	Off energy
Source	DQ1B	DQ1B
Distance [mm]	4120	4120
Beam Pos. [μm]	0	-67
Beam angle [μrad]	0	117
Beam displacement [mm]	0	0.5
Abs. margin [mm]	7	7
Mechanical margins [mm]	2	2
Remain margin [mm]	5	4.5



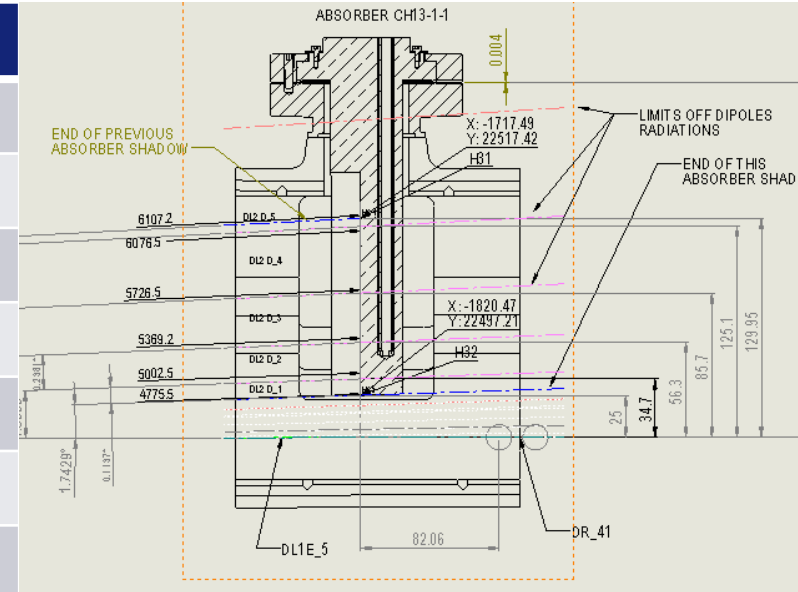
	On energy	Off energy
Source	DQ1B	DQ1B
Distance [mm]	6069	6069
Beam Pos. [μm]	0	-67
Beam angle [μrad]	0	117
Beam displacement [mm]	0	0.7
Abs. margin [mm]	5	5
Mechanical margins [mm]	2	2
Remain margin [mm]	3	2.3



	On energy	Off energy
Source	DQ1D	DQ1D
Distance [mm]	3351	3351
Beam Pos. [μm]	0	-145
Beam angle [μrad]	0	294
Beam displacement [mm]	0	1.0
Abs. margin [mm]	10	10
Mechanical margins [mm]	2	2
Remain margin [mm]	8	7

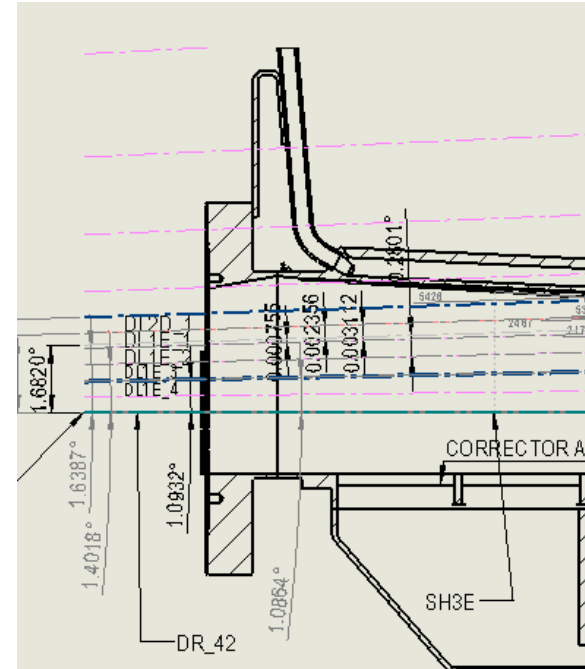


	On energy	Off energy
Source	DL2D_5	DL2D_5
Distance [mm]	6107	6107
Beam Pos. [μm]	0	-86
Beam angle [μrad]	0	35
Beam displacement [mm]	0	0.2
Abs. margin [mm]	5	5
Mechanical margins [mm]	2	2
Remain margin [mm]	3	2.8

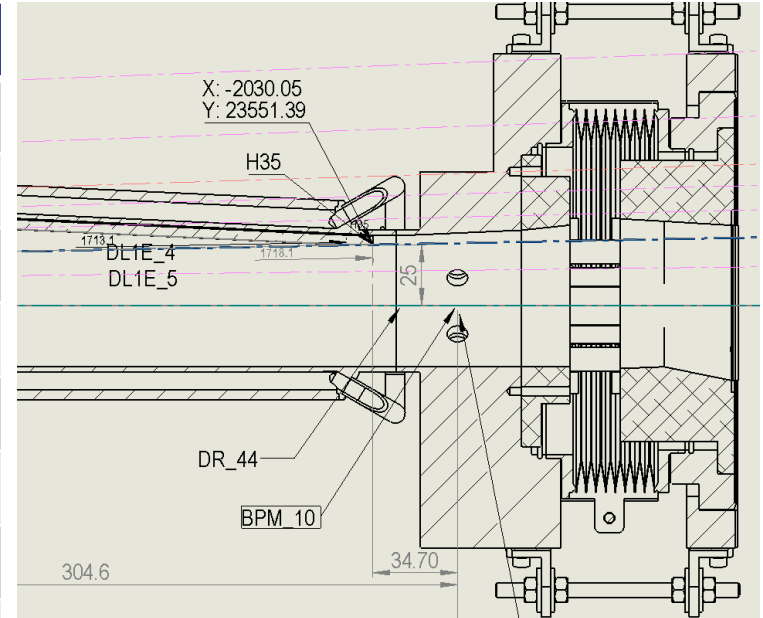


ABS – CH14 1/1 - ENTRY

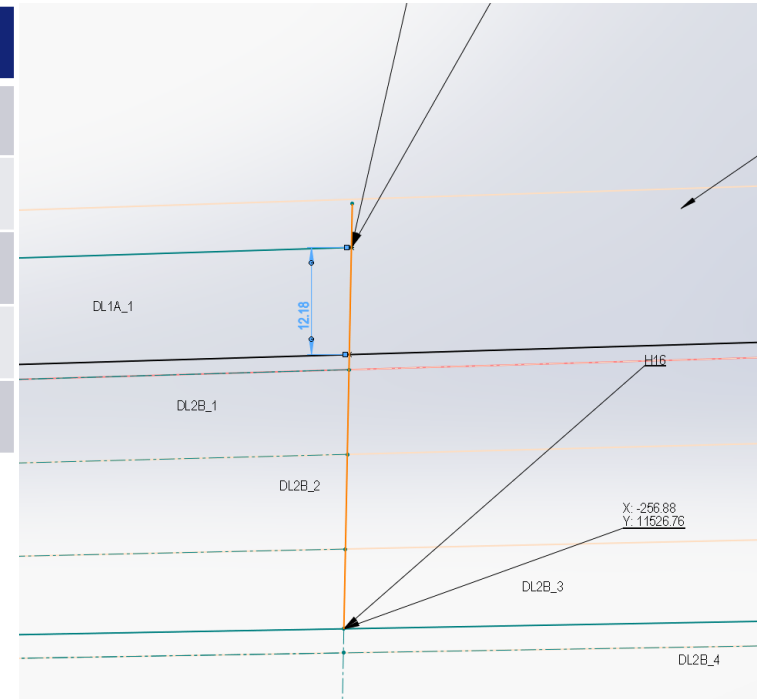
	On energy	Off energy
Source	DL2D_1	DL2D_1
Distance [mm]	5426	5426
Beam Pos. [μm]	0	-251
Beam angle [μrad]	0	-216
Beam displacement [mm]	0	+1.2
Abs. margin [mm]	5	5
Mechanical margins [mm]	2	2
Remain margin [mm]	3	3



	On energy	Off energy
Source	DL1E_4	DL1E_4
Distance [mm]	1713	1713
Beam Pos. [μm]	0	-75
Beam angle [μrad]	0	181
Beam displacement [mm]	0	0.03
Abs. margin [mm]	5	5
Mechanical margins [mm]	2	2
Remain margin [mm]	3	3

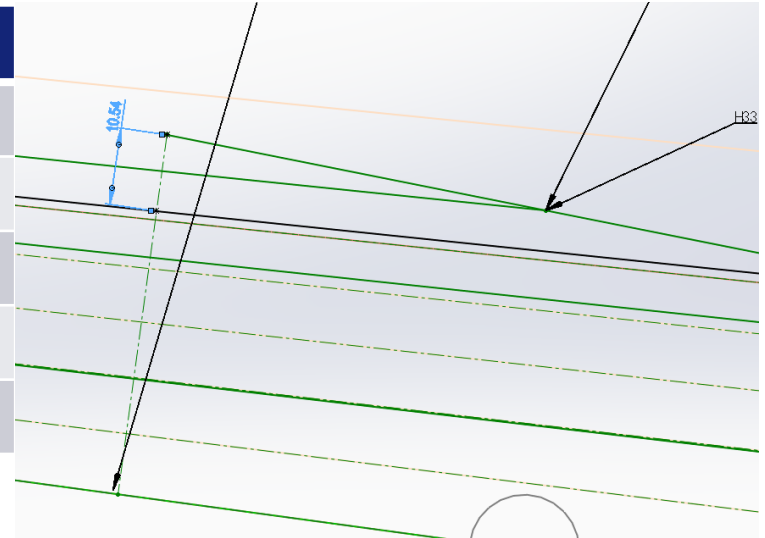


	On energy	Off energy
Source		QD5B
Distance [mm]	3625	3625
Beam Pos. [μm]	0	-418
Beam angle [μrad]	0	472
Remain margin [mm]		12



All radiations produced by QD5B
Absorbed by ABS CH6 1/1

	On energy	Off energy
Source		QD3E
Distance [mm]	3625	
Beam Pos. [μm]	0	-426
Beam angle [μrad]	0	475
Remain margin [mm]		10



All radiations produced by QD3E
Absorbed by ABS CH14

BEAM DEVIATIONS – OFF ENERGY

Cellule standard

