

Geometry updates

- update cgem_model_5_default.txt :
 - makeup
 - update R_Layer1 and R_Layer3
 - update Gap_D

```

File Edit Options Buffers Tools Help
***** Layer *****
N_CgemLayer N_GemFoil_perLayer
3 3
***** CgemLayer (mm)(Baseline:R_in_Cathode)***** Drift gap (mm) **
R_Layer L_Layer N_Sheet W_Sheet A_Stero W_Pitch_X W_Pitch_V W_Strip_X W_Strip_V N_Channel_Phi N_Channel_V Phi_start1 Phi_start2 dX_Strip_start1 dX_Strip_start2 dV_start1 dV_start2 Gap_D (mm)
76.915 532 1 565.32 46.6877 0.660 0.660 0.580 0.130 856 1173 -3.14159265 0. 0.407 0 0.559 0 5.149
119.415 690 2 416.06 -31.0337 0.660 0.660 0.580 0.130 1260 2154 -3.14159265 0. 0.32 0.32 0.34 0.34 4.945
161.915 847 2 549.56 32.9244 0.660 0.660 0.580 0.130 1664 2790 -3.14159265 0. 0.415 0.415 0.694 0.694 5.132
***** Thickness of Cathode1-3 1.936[1.883+0.053](mm)2.140[2.085+0.055](mm)1.953[1.9+0.053](mm) ***** // [inside -> outside]
N_materials Cu1 Kapton1 Carbonf Epoxy1 Honeycomb Rohacell1 Epoxy2 Kapton2 Epoxy3 Rohacell2 Epoxy4 Kapton3
7 0.003 0.050 0 0.015 1.8 0 0.015 0.050 0 0 0 0
10 0 0.0125 0 0.015 0 1 0.015 0.0125 0.015 1 0.015 0.050
6 0 0 0.070 0.015 1.8 0 0.015 0.050 0 0 0 0
***** Thickness of Other Gaps1-3 (mm)*****
Gap_T1 Gap_T2 Gap_I
1.940 1.940 1.940
1.940 1.940 1.940
1.940 1.940 1.940
***** GemFoil1-3 0.06 (mm)*****
N_materials Cu1 Kapton Cu2
3 0.005 0.05 0.005
3 0.005 0.05 0.005
3 0.005 0.05 0.005
***** Anode1-3 4.165 [0.06+4.105](mm)/4.2375[0.06+4.1775](mm)/4.168 [0.06+4.108](mm)***** use strip description? // [inside -> outside]
N_materials Cu1 Kapton1 Cu2 Epoxy1 Kapton2 Epoxy2 Rohacell1 Carbonf1 Epoxy3 Honeycomb Kapton3 Epoxy4
14 0.005 0.050 0.005 0.025 0.025 0.015 0 0.070 0.015 3.8 0 0.015
14 0.005 0.050 0.005 0.025 0.025 0.015 2 0 0.015 0 0.0125 0.015
15 0.005 0.050 0.005 0.025 0.025 0.015 0 0.070 0.015 3.8 0 0.015
***** cable density (g/cm3)*****

```

R_i_hole	R_o_hole	L_hole
0.035	0.03	0.14
0.035	0.03	0.14
0.035	0.03	0.14

see Yingrui presentation

Geometry updates

- New function on CgemGeomSvc (update ICgemGeomSvc)

```
double getThicknessOfGapD(int i)          const {return m_T_Gap_D[i] ;}
double getThicknessOfCathode(int i)       const {return m_T_Cathode[i] ;}
double getThicknessOfAnode(int i)         const {return m_T_Anode[i] ;}
```

- Function called in CgemDigitizerSvc packages
 - Checks when (and if) these functions are used
- Update of CgemGeomSvc will be done asap
 - CgemGeomSvc-00-00-33 —> CgemGeomSvc-00-00-34
 - update cgem_model_5_default.txt
 - Report any problem related on the cgem geometry update