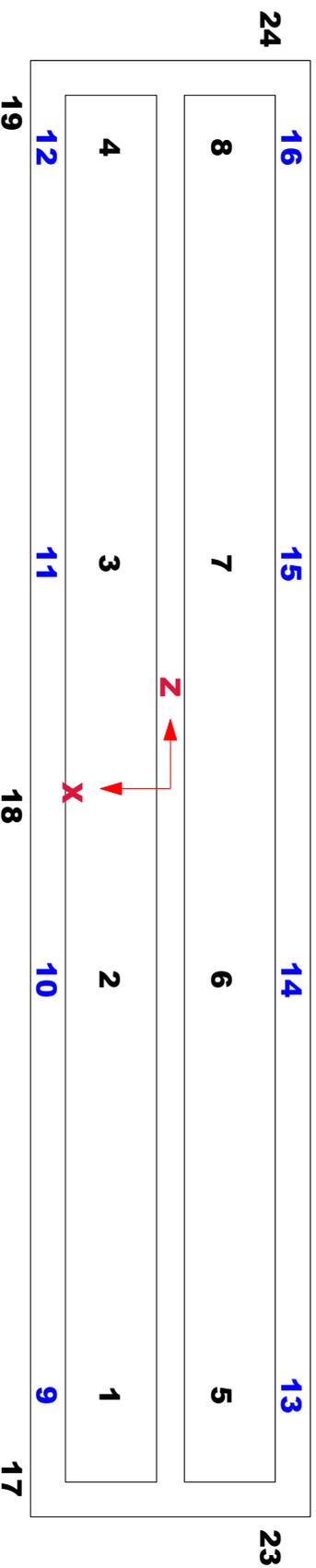


.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 9	430.171	-0.410	-1489.173
TB 10	430.126	-0.218	-524.090
TB 11	430.100	-0.313	524.012
TB 12	430.133	0.137	1489.431
TB 13	-430.042	0.330	-1489.584
TB 14	-430.062	-0.095	-524.157
TB 15	-430.048	0.160	523.745
TB 16	-430.065	0.195	1489.274

1.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 1	98.723	136.001	-1665.398
TB 2	98.732	136.018	-555.823
TB 3	98.630	136.051	556.544
TB 4	98.712	136.128	1666.519
TB 5	-98.542	136.186	-1666.223
TB 6	-98.224	136.230	-556.050
TB 7	-98.650	136.263	555.709
TB 8	-98.618	136.299	1665.702
TB 17	471.862	-230.448	-1578.775
TB 18	471.686	-230.705	88.639
TB 19	471.584	-229.896	1580.834
TB 23	-405.095	-228.996	-1706.701
TB 24	-404.532	-232.212	1708.158



Grid centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Fiducialization at 9mm Gap, Tooling Balls

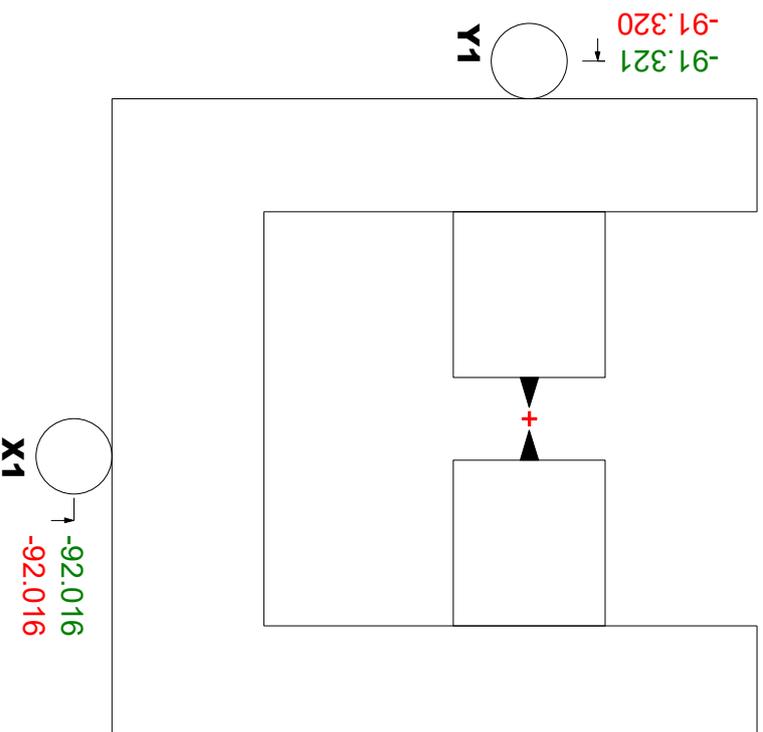
Nominal Gap :	9.000	US Full :	9.000	DS Full :	9.0003
Nom. Taper :	0.000	US Wall Half :	4.4989	DS Wall Half :	4.4991
		US Aisle Half :	4.4996	DS Aisle Half :	4.5002

S/N	: HXU_032
Date	: 18-AUG-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

PM 2

Up Stream

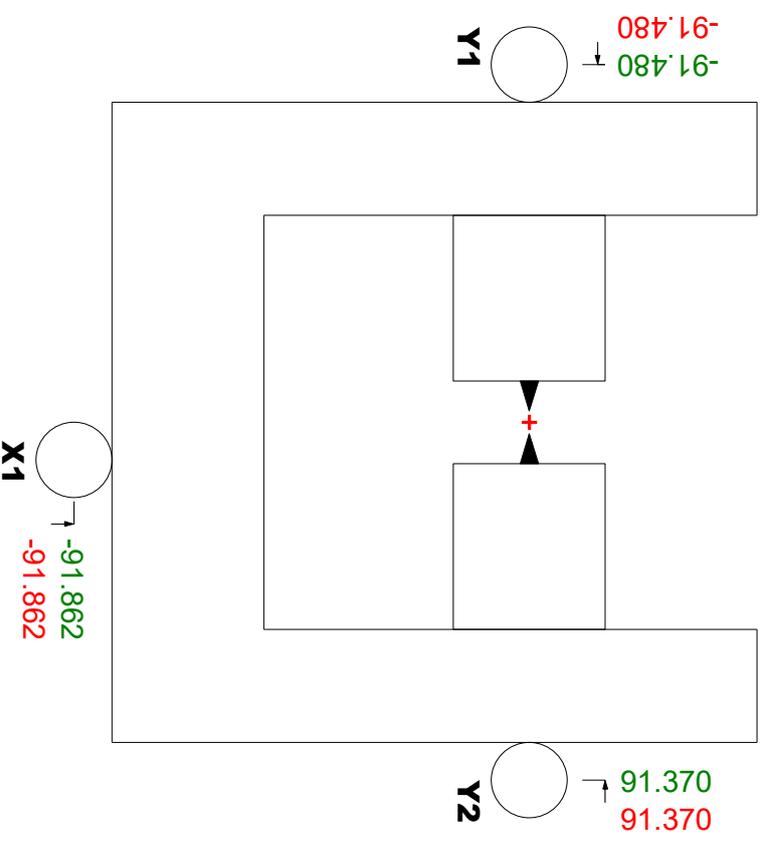
Z Center = -1841.896



PM 3

Down Stream

Z Center = 1842.539



Red values are in Girder Coordinate System, includes Roll component from Girder
Green values are in End Magnet Coordinate System
Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Fiducialization, Pointed End Magnet Values

Nominal Gap :	9.000	US Full :	9.000	DS Full :	9.0003
Nom. Taper :	0.000	US Wall Half :	4.4989	DS Wall Half :	4.4991
		US Aisle Half :	4.4996	DS Aisle Half :	4.5002

S/N	: HXU_032
Date	: 18-AUG-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B