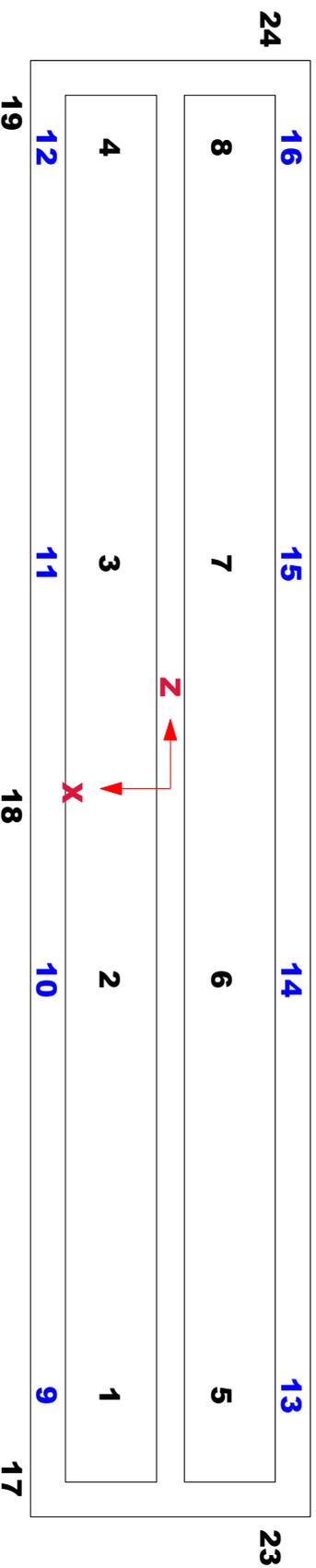


.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 9	430.201	-0.117	-1488.755
TB 10	430.109	-0.018	-523.724
TB 11	430.129	-0.217	524.895
TB 12	430.206	-0.253	1489.685
TB 13	-430.224	0.134	-1489.739
TB 14	-430.187	-0.002	-524.446
TB 15	-430.736	0.231	524.047
TB 16	-430.796	-0.057	1489.354

1.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 1	98.602	136.155	-1665.713
TB 2	98.356	136.151	-555.646
TB 3	98.766	136.121	556.441
TB 4	98.633	136.088	1666.408
TB 5	-98.814	136.144	-1666.143
TB 6	-98.665	136.182	-556.001
TB 7	-98.729	136.212	555.684
TB 8	-98.580	136.205	1665.904
TB 17	472.072	-226.512	-1583.120
TB 18	472.443	-227.800	85.321
TB 19	472.293	-227.995	1579.746
TB 23	-405.372	-228.763	-1710.368
TB 24	-404.692	-225.866	1708.362



Gridler centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Fiducialization at 9mm Gap, Tooling Balls

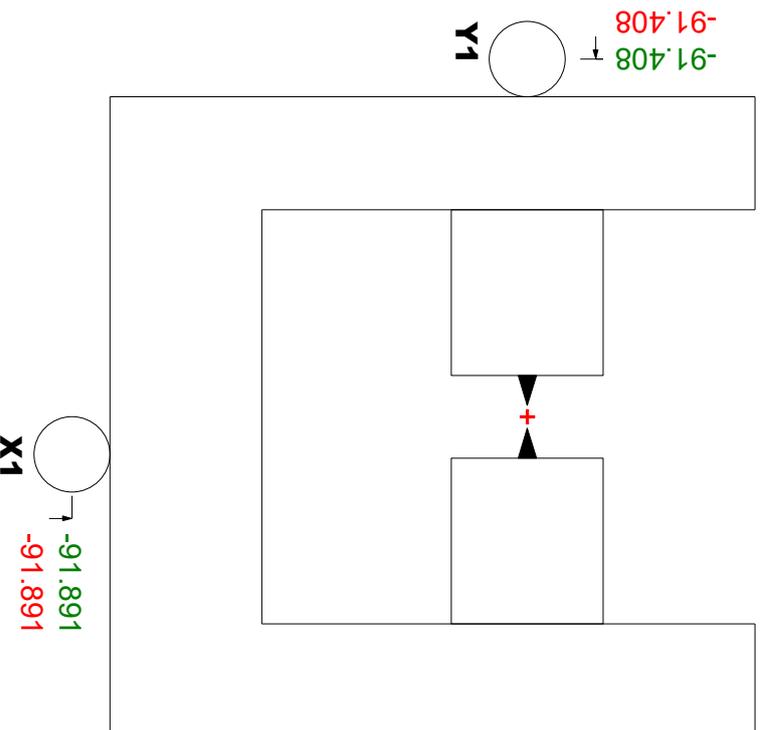
Nominal Gap :	9.000	US Full :	9.000	DS Full :	8.9998
Nom. Taper :	0.000	US Wall Half :	4.4946	DS Wall Half :	4.4937
		US Aisle Half :	4.5032	DS Aisle Half :	4.4980

S/N	: HXU 015
Date	: 05-NOV-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

PM 2

Up Stream

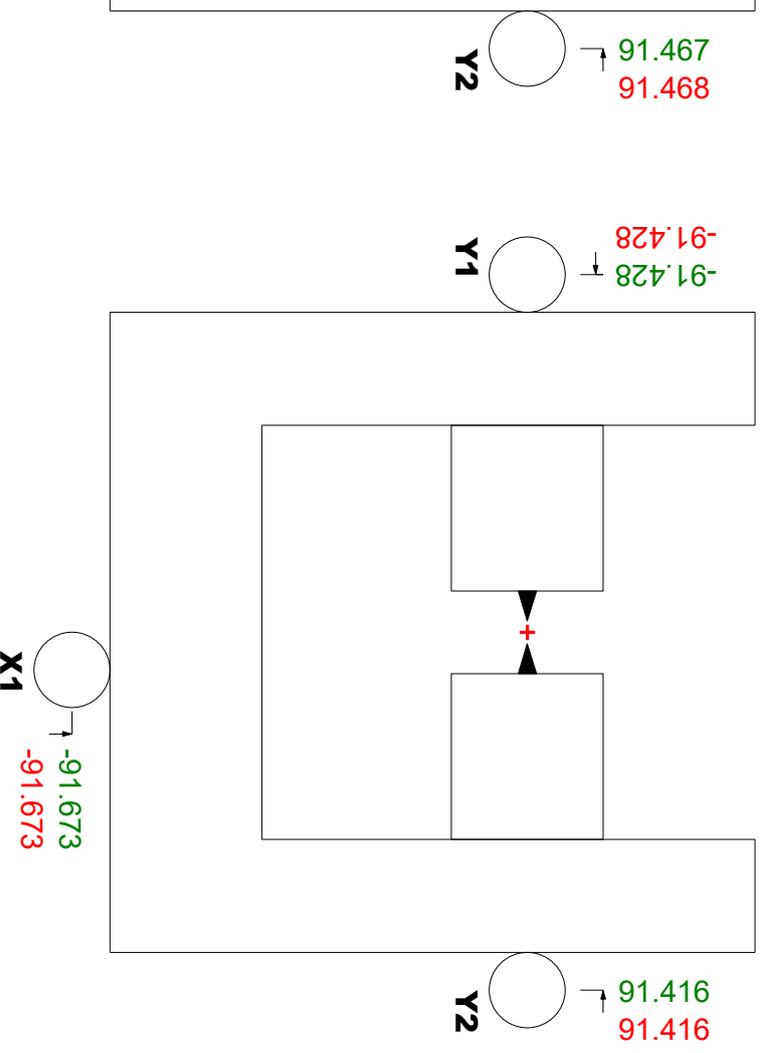
Z Center = -1842.452



PM 3

Down Stream

Z Center = 1842.326



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



HGVPV - Fiducialization, Pointed End Magnet Values

Nominal Gap :	9.000	US Full :	9.000	DS Full :	8.9998
Nom. Taper :	0.000	US Wall Half :	4.4946	DS Wall Half :	4.4937
		US Aisle Half :	4.5032	DS Aisle Half :	4.4980

S/N	: HXU_015
Date	: 05-NOV-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B