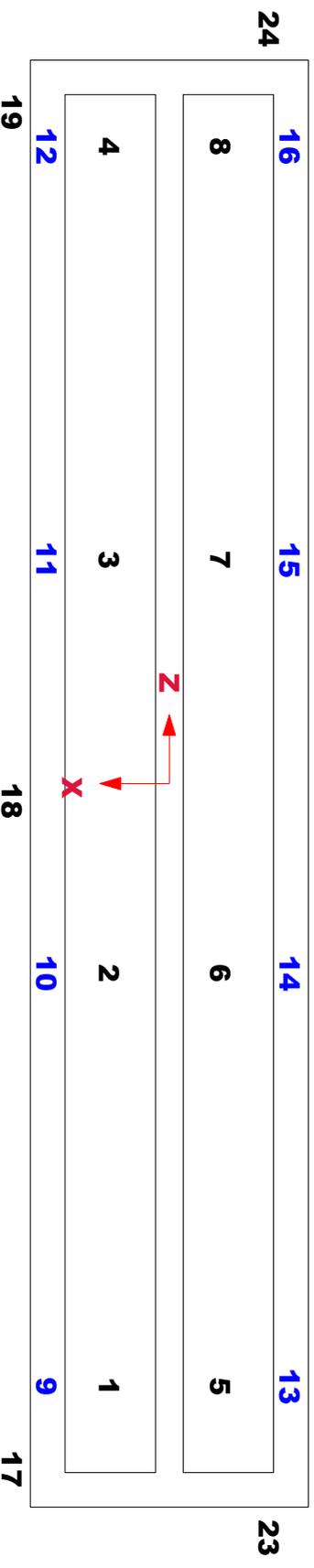


.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 9	430.238	-0.086	-1488.583
TB 10	430.287	-0.047	-523.116
TB 11	430.325	-0.046	524.239
TB 12	430.280	-0.258	1489.789
TB 13	-431.006	0.080	-1488.716
TB 14	-430.174	0.013	-524.739
TB 15	-430.167	0.141	523.596
TB 16	-430.085	0.219	1489.605

1.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 1	98.253	136.073	-1665.694
TB 2	98.736	136.039	-555.663
TB 3	98.811	135.958	556.230
TB 4	98.747	135.813	1666.282
TB 5	-98.684	136.122	-1666.167
TB 6	-98.599	136.167	-556.614
TB 7	-98.768	136.174	555.642
TB 8	-98.545	136.141	1665.382
TB 17	474.229	-230.401	-1582.927
TB 18	474.347	-227.839	85.175
TB 19	472.726	-231.388	1579.294
TB 23	-402.507	-229.740	-1711.124
TB 24	-404.456	-231.517	1707.523



Grid centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Fiducialization at 9mm Gap, Tooling Balls

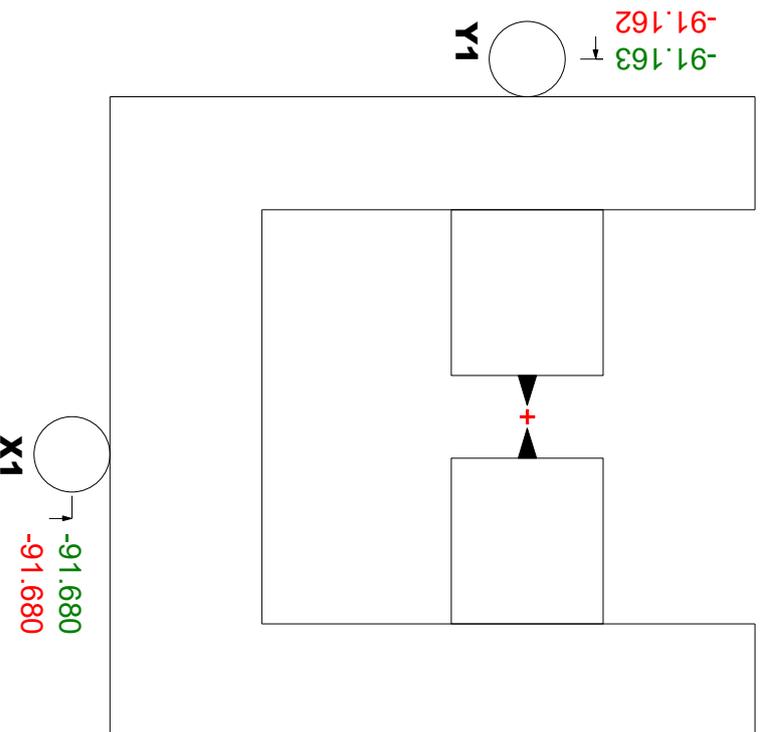
Nominal Gap :	9.000	US Full :	9.000	DS Full :	8.9999
Nom. Taper :	0.000	US Wall Half :	4.5020	DS Wall Half :	4.4979
		US Aisle Half :	4.4980	DS Aisle Half :	4.5014

S/N	: HXU 012
Date	: 11-MAR-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

PM 2

Up Stream

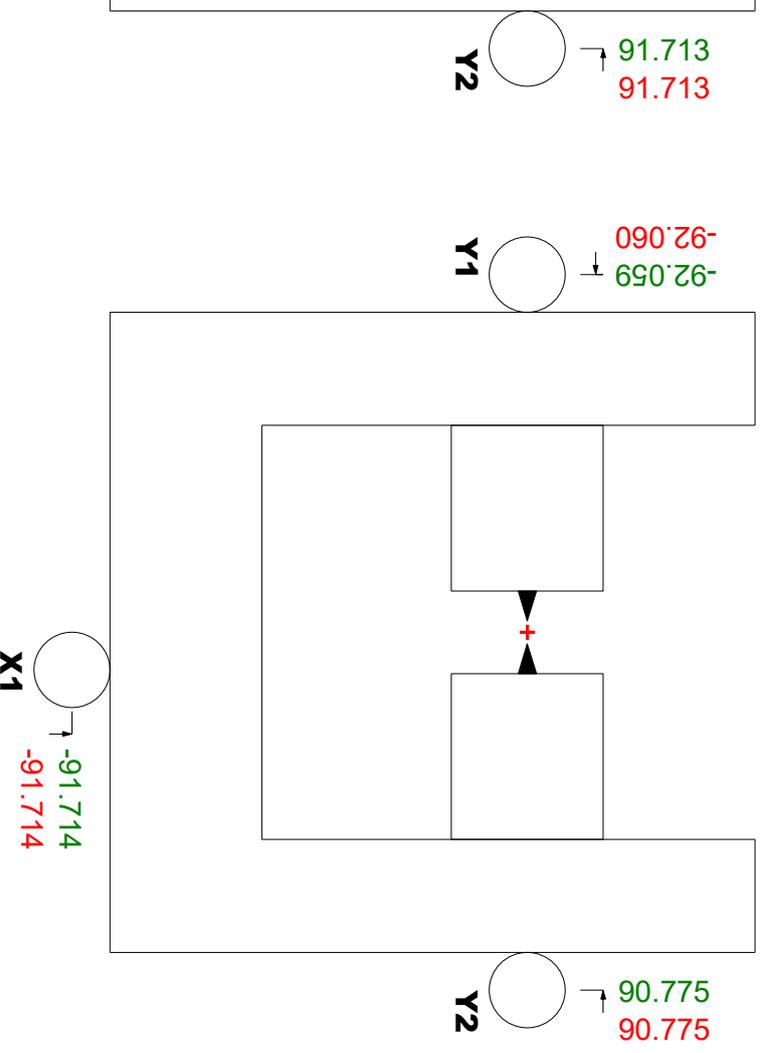
Z Center = -1842.391



PM 3

Down Stream

Z Center = 1842.298



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 :	8.9999
Nom. Taper :	0.000	US Wall Half :	4.5020	DS Wall Half :	4.4979
		US Aisle Half :	4.4980	DS Aisle Half :	4.5014

S/N	: HXU_012
Date	: 11-MAR-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B