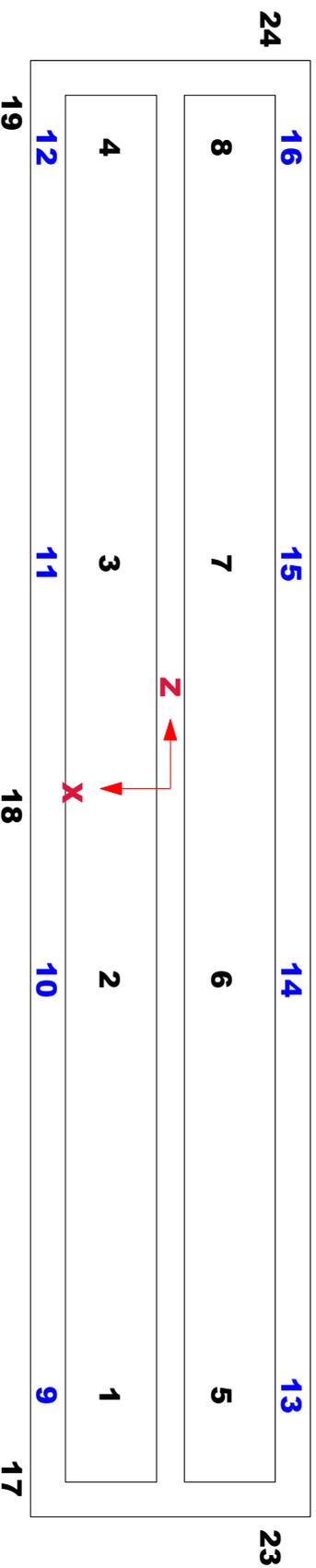


.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 9	430.117	-0.010	-1489.492
TB 10	430.181	0.017	-524.756
TB 11	430.218	0.020	523.985
TB 12	430.238	0.142	1489.917
TB 13	-430.106	0.536	-1489.048
TB 14	-430.130	0.249	-524.558
TB 15	-430.080	0.150	523.383
TB 16	-431.499	0.001	1491.464

1.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 1	98.432	135.135	-1665.824
TB 2	98.784	135.216	-555.920
TB 3	98.615	135.285	555.735
TB 4	98.820	135.272	1665.986
TB 5	-98.671	136.058	-1666.282
TB 6	-98.471	136.181	-556.081
TB 7	-98.568	136.198	555.821
TB 8	-98.584	136.205	1665.474
TB 17	475.198	-228.417	-1582.994
TB 18	474.881	-228.121	85.616
TB 19	474.229	-228.868	1579.564
TB 23	-403.108	-225.851	-1710.821
TB 24	-403.762	-227.423	1706.956



Grid centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Fiducialization at 9mm Gap, Tooling Balls

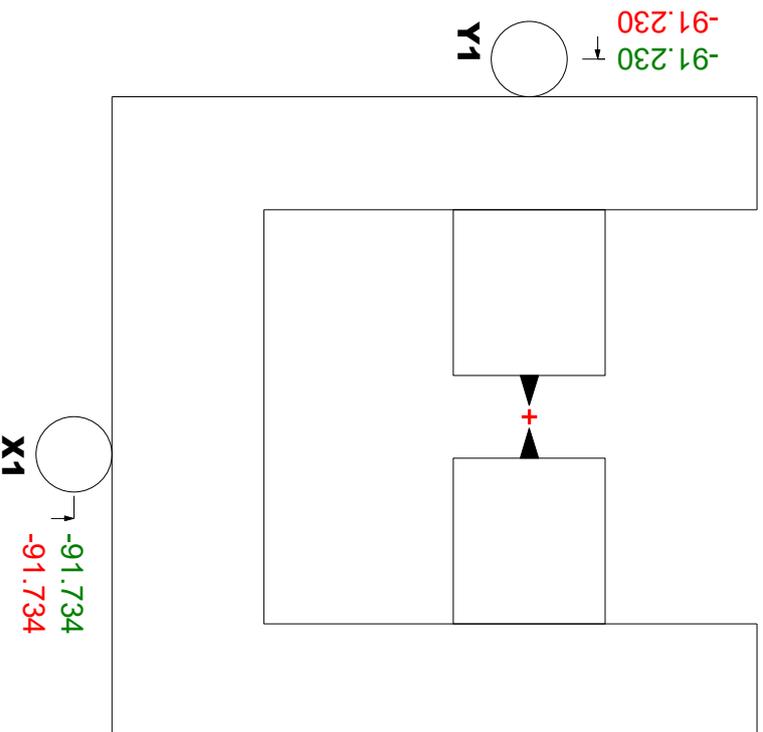
Nominal Gap :	9.000	US Full :	9.000	DS Full :	9.0000
Nom. Taper :	0.000	US Wall Half :	4.5011	DS Wall Half :	4.5006
		US Aisle Half :	4.5005	DS Aisle Half :	4.5011

S/N	: HXU 016
Date	: 22-JAN-2021
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B

PM 2

Up Stream

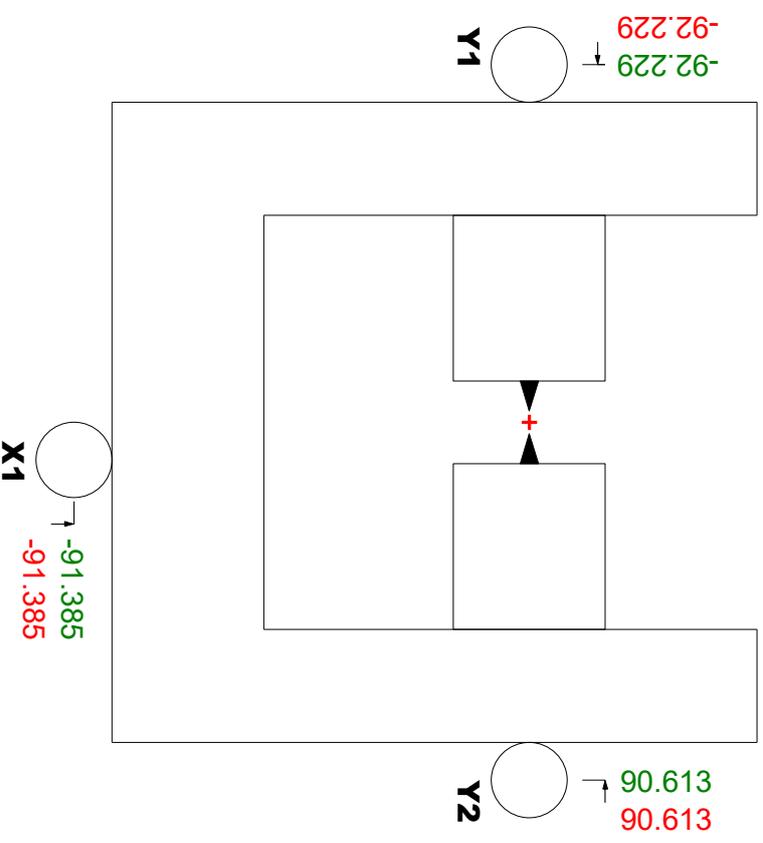
Z Center = -1842.294



PM 3

Down Stream

Z Center = 1842.100



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 :	9.0000
Nom. Taper :	0.000	US Wall Half :	4.5011	DS Wall Half :	4.5006
		US Aisle Half :	4.5005	DS Aisle Half :	4.5011

S/N	: HXU_016
Date	: 22-JAN-2021
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B