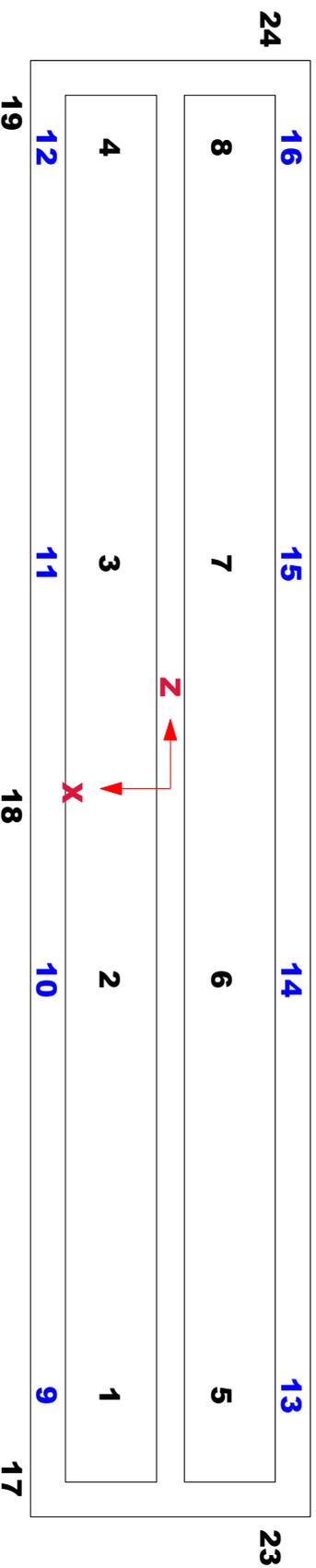


.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 9	430.038	0.106	-1489.013
TB 10	430.160	-0.057	-523.806
TB 11	430.118	-0.191	524.195
TB 12	430.091	0.072	1489.819
TB 13	-430.160	0.160	-1489.637
TB 14	-430.109	-0.169	-524.179
TB 15	-430.093	-0.083	523.652
TB 16	-430.144	-0.363	1489.348

1.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 1	98.535	136.085	-1665.872
TB 2	98.398	136.102	-555.474
TB 3	98.626	136.092	556.497
TB 4	98.459	136.009	1666.092
TB 5	-98.409	136.056	-1666.160
TB 6	-98.592	136.078	-556.268
TB 7	-98.552	136.093	555.930
TB 8	-98.475	136.048	1665.710
TB 17	474.847	-231.030	-1581.009
TB 18	474.262	-229.760	86.447
TB 19	472.849	-230.101	1579.895
TB 23	-405.180	-232.018	-1708.086
TB 24	-406.603	-231.950	1707.361



Gridler centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Fiducialization at 9mm Gap, Tooling Balls

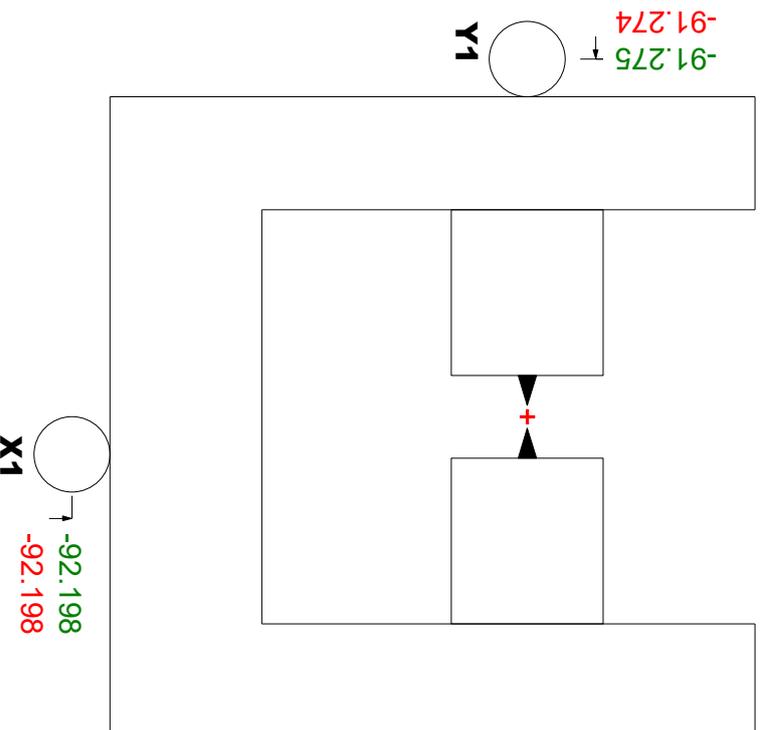
Nominal Gap :	9.000	US Full :	9.000	DS Full :	9.0000
Nom. Taper :	0.000	US Wall Half :	4.4981	DS Wall Half :	4.4978
		US Aisle Half :	4.4981	DS Aisle Half :	4.4966

S/N	: HXU_033
Date	: 20-JUL-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

PM 2

Up Stream

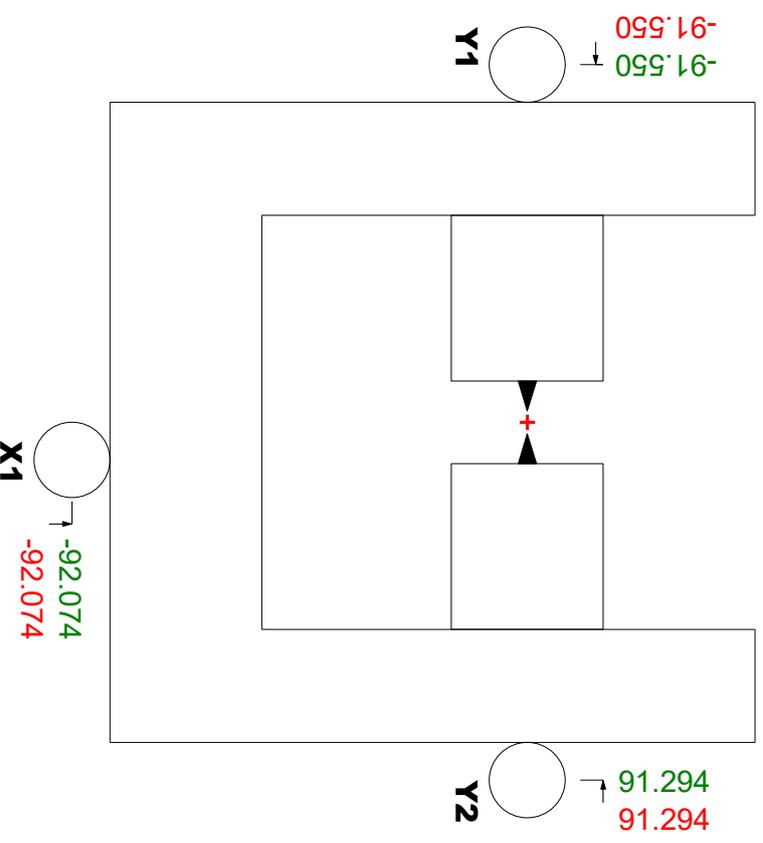
Z Center = -1841.994



PM 3

Down Stream

Z Center = 1842.521



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 :	4.4981	DS Wall Half :	4.4978
		US Aisle Half :	4.4981	DS Aisle Half :	4.4966

S/N	: HXU_033
Date	: 20-JUL-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B