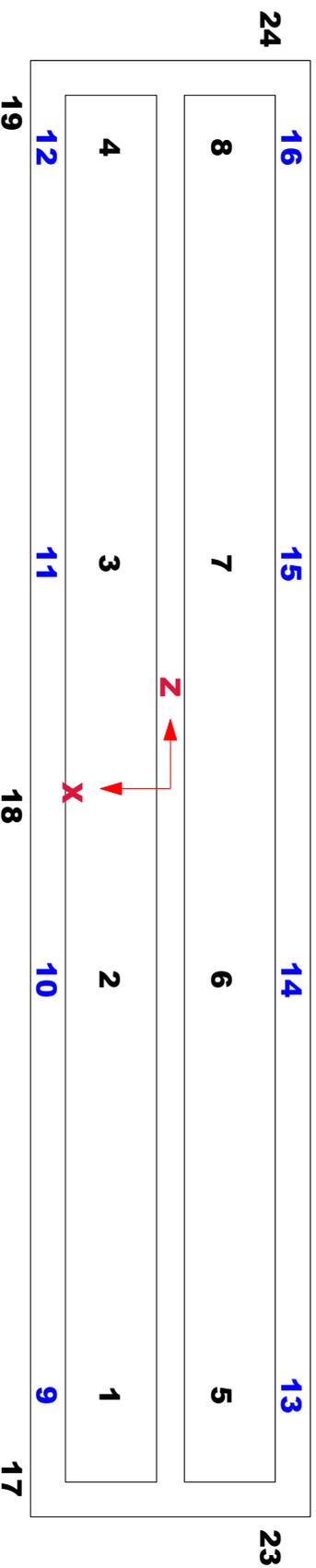


.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 9	430.145	-0.090	-1489.433
TB 10	430.259	0.273	-523.916
TB 11	430.263	0.348	524.159
TB 12	430.232	0.493	1489.552
TB 13	-430.055	0.393	-1489.688
TB 14	-430.106	-0.061	-524.278
TB 15	-430.062	-0.003	524.001
TB 16	-429.967	0.152	1489.509

1.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 1	98.741	136.760	-1666.035
TB 2	98.529	135.993	-556.085
TB 3	98.760	136.147	556.012
TB 4	98.319	136.332	1665.937
TB 5	-98.363	136.824	-1665.946
TB 6	-98.198	136.059	-555.964
TB 7	-98.263	135.982	556.006
TB 8	-98.406	135.784	1665.765
TB 17	471.955	-228.345	-1582.694
TB 18	471.237	-228.459	84.147
TB 19	469.153	-228.350	1579.282
TB 23	-405.071	-229.826	-1709.033
TB 24	-407.185	-230.173	1704.742



Gridler centerline in reference to Pointed Magnets

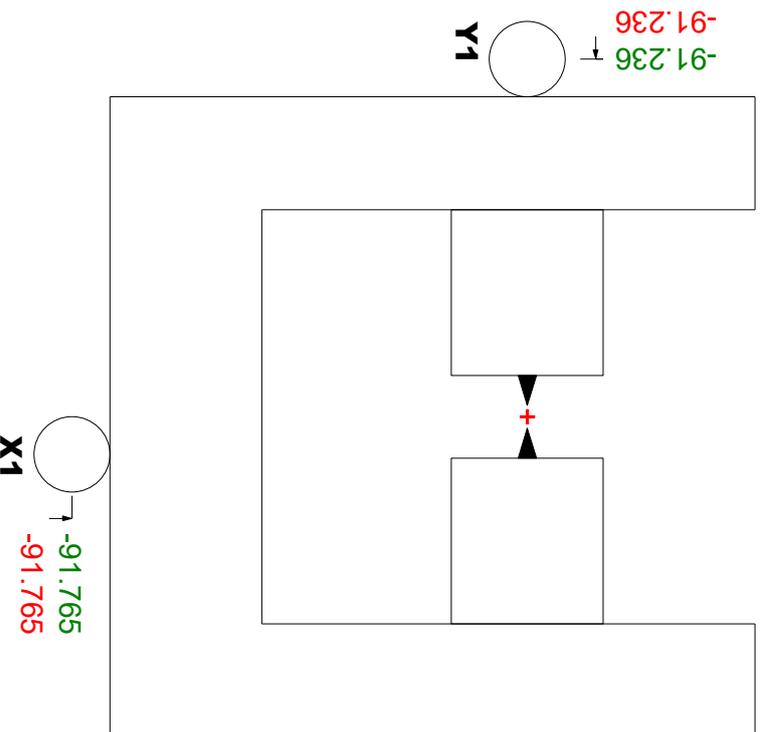
Dimensions in MM, Angles in Milliradians

	HGVPU - Fiducialization at 9mm Gap, Tooling Balls				S/N : HXU_017
	Nominal Gap : 9.000	US Wall Half : 4.5005	DS Wall Half : 4.4992	US Full : 9.000	Date : 02-OCT-2020
Nom. Taper : 0.000	US Aisle Half : 4.4994	DS Aisle Half : 4.5006	DS Full : 8.9998	Data Set : 0001	Run : FINAL
				Cam Pos. : B	

PM 2

Up Stream

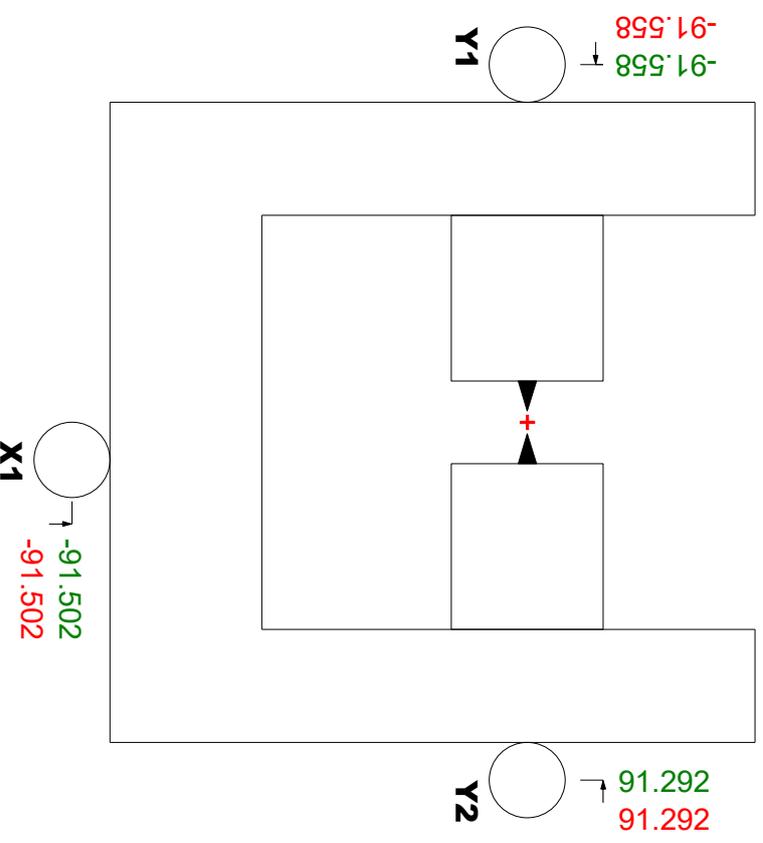
Z Center = -1842.540



PM 3

Down Stream

Z Center = 1842.027



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 :	8.9998
Nom. Taper :	0.000	US Wall Half :	4.5005	DS Wall Half :	4.4992
		US Aisle Half :	4.4994	DS Aisle Half :	4.5006

S/N	: HXU_017
Date	: 02-OCT-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B