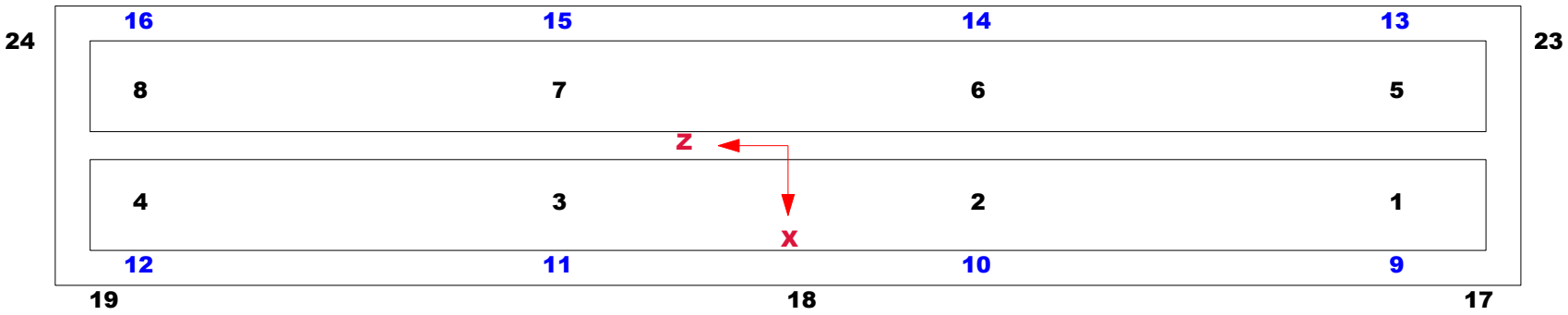
.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 9	430.286	-0.565	-1489.275
TB 10	430.325	-0.294	-523.857
TB 11	430.259	-0.336	524.314
TB 12	430.290	-0.599	1489.618
TB 13	-430.099	-0.341	-1489.404
TB 14	-430.141	-0.310	-524.344
TB 15	-430.156	0.074	523.698
TB 16	-430.136	-0.639	1489.093

1.5in Tooling Ball Center Coordinates

Name	X Corr.	Y Corr.	Z Corr.
TB 1	98.896	135.746	-1665.615
TB 2	98.828	135.737	-555.454
TB 3	98.616	135.723	556.080
TB 4	98.892	135.699	1666.442
TB 5	-98.455	135.778	-1666.551
TB 6	-98.609	135.805	-555.993
TB 7	-98.784	135.736	555.589
TB 8	-98.619	135.640	1665.992
TB 17	472.747	-231.303	-1581.484
TB 18	473.579	-228.512	86.911
TB 19	472.288	-229.188	1579.093
TB 23	-404.391	-229.979	-1709.460
TB 24	-404.203	-231.284	1707.550



Grider centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians

SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU -

Fiducialization at 9mm Gap, Tooling Balls

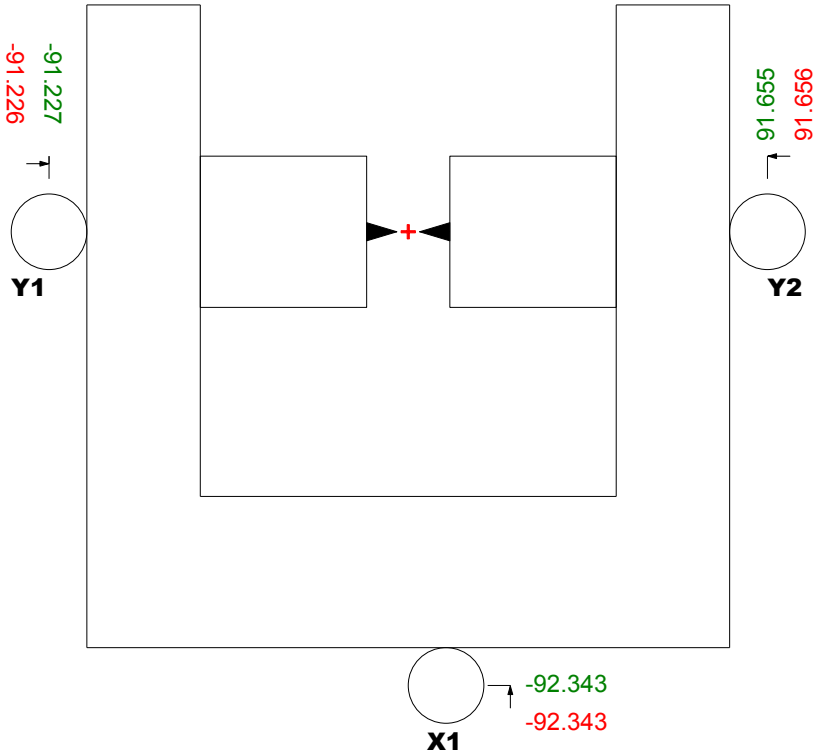
		US Full :	9.000	DS Full :	8.9995
Nominal Gap :	9.000	US Wall Half :	4.5014	DS Wall Half :	4.5009
Nom. Taper :	0.000	US Aisle Half :	4.5005	DS Aisle Half :	4.5006

S/N	: HXU_020
Date	: 20-MAY-2019
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

PM 2

Up Stream

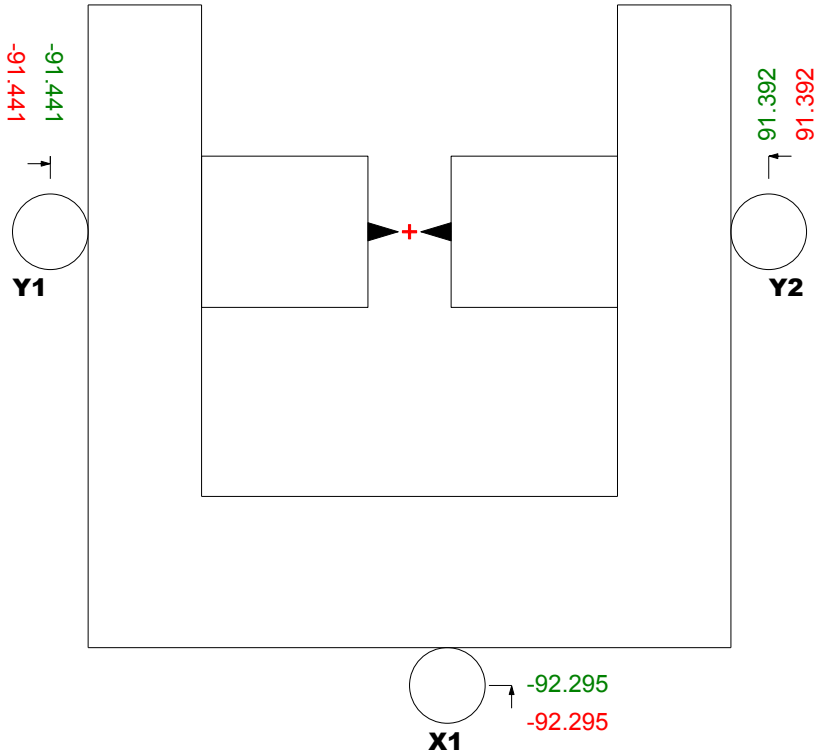
Z Center = -1842.027



PM 3

Down Stream

Z Center = 1842.694



Red values are in Girder Coordinate System, includes Roll component from Girder
Green values are in End Magnet Coordinate System
Grider centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians

SLAC NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU -

Fiducialization, Pointed End Magnet Values

		US Full :	9.000	DS Full :	8.9995
Nominal Gap :	9.000	US Wall Half :	4.5014	DS Wall Half :	4.5009
Nom. Taper :	0.000	US Aisle Half :	4.5005	DS Aisle Half :	4.5006

S/N	: HXU_020
Date	: 20-MAY-2019
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B