Jefferson Lab Alignment Group

Data Transmittal

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DETAILS:

data : step2b\halla\g2p\120420A

The G2P components were surveyed in run position 1 on April 19th. The results are shown below. The column labeled 'run' indicates the components were set to the appropriate run number as per Yves Roblin's optim data. 'Name' is the component name. The columns labeled 'Coordinates WRT G2p target' are the found coordinates based on a system with the origin at the ideal G2P target, and looking upstream towards the accelerator. +Z is along beam towards the accelerator, +x is transverse, to the left looking upstream, and +y is up vertically from the beam. Deltas in beam following system, indicate the location from ideal, based on the optim coordinates. A +x is beam left looking downstream, +y is up in the vertical plane and +z is downstream along beam. The delta angular components are relative to Yves optim data and are the component centers. The ideal yaw and pitch are given for reference. Roll should be 0°. Units are millimeters and degrees.

Additionally MFZ1H5A was located and shown. This magnet is part of the chicane but does not move between runs.

		Coordinates WRT G2P target (mm)			Deltas in beam following system (mm)			Angular components from Optim Data (degrees)				
run	name	x	y	z	dx	dy	dz	d yaw	d pitch	d roll	ideal yaw	ideal pitch
1	MFZ1H05A	0.2	-72.6	6158.9	-0.2	-0.1	0.4	0.0041	-0.0017	-0.0032	142.500	-1.14599
1	ITV1H05	-0.2	-278.5	4409.5	0.2	-0.3	-11.5	0.0795	0.7345	0.2848	142.500	-8.97736
1	MFZ1H05B	-0.1	-436.3	2660.0	0.1	0.0	-1.1	0.0287	0.0197	-0.0123	142.500	1.60003
1	IPM1H05A	-1.0	-196.1	964.1	1.0	0.8	9.8	0.1526	-0.3777	-0.0874	142.500	11.93859
1	IHA1H05A	-1.1	-167.7	824.4	1.1	-0.2	10.1	0.0787	-0.4943	-0.0043	142.500	11.93859
1	IPM1H05B	-1.2	-143.4	703.8	1.2	-1.4	10.3	0.1585	-0.6670	-12.1980	142.500	11.93859