



Jefferson Lab Alignment Group

Data Transmittal

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Checked:

: A1163

DETAILS:

Data: Step2b\HallA\Targetcan\080327A, Hall A fiducial data book.

Below are the results from the survey performed on the Hall A superharp girder. The DX and DY values represent the difference in millimeters from the ideal position of each fiducial, except for the calorimeter which represents the centerline.

Prior to this survey, a coupler on the downstream superharp (SH1H02) was changed out and a verification of the fiducial data was performed. The ideal caliper distance between the drive flanges was set back to 107.32 mm and it was confirmed that at this distance, the vertical wire was directly on line with SH1H02B tooling ball. The encoder value was reset to 118407. As indicated from the survey data below, when the encoder value is set at 118407, the tooling ball "B" and the vertical wire is 0.52 millimeters to the beam right. A complete list of encoder values from the original fiducial data is listed below. (Please note that the values for the middle and outside wires on SH1H02 are based on differences measured in 1999 and applied to the 2000 vertical wire value.)

	DX	DY
Superharps		
SH1H01A	0.17	0.02
SH1H01B	0.24	0.02
SH1H01C	0.28	0.08
SH1H02A	-0.57	-0.02
SH1H02B	-0.52	-0.02
SH1H02C	-0.54	0.03
Cavity BPMs		
BCM1H1B	0.20	-0.29
BCM1H1C	0.28	-0.13
BCM1H2A	-0.64	-0.15
BCM1H2D	-0.14	-0.22
Calorimeter		
MBC1H04	-0.22	-0.16

ENCODER VALUES

SH1H01

Vertical wire: 118510
Middle wire: 81272
Outside wire: 39247

SH1H02

Vertical wire: 118407
Middle wire: 81127
Outside wire: 39153