



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Fischer

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Checked: cwg

: B1536

DETAILS:

data: inspection\hallb\torus lifting frame\140103A & 140117A

Below are the results from the inspection of the Hall B torus coil lifting fixtures 3, and 4. For each frame, a right-handed coordinate system was established centered on the bisected plane between planes formed by the top and bottom holes (using points BH1, BH2, BH3, and BH4 respectively). The bisected planes formed the Y plane. The rotation about the vertical axis was set using an average line between the top and bottom holes BH1. For Frame 3, a Z axis was established using the mid-point of the BH1 top bottom line and the mid-point of the BH2 top to bottom line. For Frame 4, a Z axis was established using the mid-point of the BH3 top bottom line and the mid-point of the BH4 top to bottom line. Values are in inches. Point names are labeled on the frame for reference.

Frame 3				
Top	Flatness : 0.019 Passed Flatness Requirement			
Point Name	X	Y	Z	Delta to plane
BH1_TOP	0.024	3.483	-0.030	
BH2_TOP	0.027	3.501	134.330	
BH3_TOP	71.996	3.489	114.684	
BH4_TOP	76.365	3.502	11.162	
BH5_TOP	50.274	3.074	47.014	-0.409
BH6_TOP	20.863	3.096	80.038	-0.387
Bottom	Flatness : 0.034 Passed Flatness Requirement			
Point Name	X	Y	Z	Delta to plane
BH1_BOT	-0.024	-3.500	0.030	
BH2_BOT	-0.027	-3.482	134.308	
BH3_BOT	71.779	-3.513	114.669	
BH4_BOT	76.317	-3.479	11.215	
BH5_BOT	50.351	-2.924	47.090	-0.576
BH6_BOT	20.949	-2.902	80.061	-0.598

Frame 4				
Top	Flatness: 0.016 Passed Flatness Requirement			
Point Name	X	Y	Z	Delta to plane
BH1_TOP	-0.039	3.485	-0.045	
BH2_TOP	5.787	3.492	134.295	
BH3_TOP	76.848	3.482	111.597	
BH4_TOP	76.865	3.499	7.918	
BH5_TOP	52.264	3.046	44.868	-0.443
BH6_TOP	24.460	3.064	79.242	-0.425
Bottom	Flatness: 0.013 Passed Flatness Requirement			
Point Name	X	Y	Z	Delta to plane
BH1_BOT	0.039	-3.494	0.045	
BH2_BOT	5.802	-3.482	134.208	
BH3_BOT	76.729	-3.495	111.612	
BH4_BOT	76.712	-3.487	8.001	
BH5_BOT	52.301	-2.936	44.876	-0.553
BH6_BOT	24.326	-2.930	79.143	-0.560