



Jefferson Lab Alignment Group

Data Transmittal

TO: D. Kashy

DATE: 02 Sep 2015

FROM: Kelly Tremblay

Checked: (cwg)

: B1667

DETAILS:

data : inspection\hallb\torus12g\150826A

The Torus magnet was surveyed on August 25th and 26th. Planes were established on the vertical ends of the vacuum jacket closest to the hub. Additionally, lines were projected to the edge of the created plane using an edge fixture. The picture below shows an upstream line edge and projected line:



The grid below shows the line end coordinates for the upstream and downstream projected lines. Additionally, a point on the center hub line was formed using the intersection of the hub line and the plane for each vacuum jacket is shown (_hub). Finally, a perpendicular point formed from the hub point to the projected line is shown (_perp). The coordinates are based on the hub center line as outlined in memo B1664. All units are millimeters.

Note that the upstream end of coil D upstream, was not surveyed at this time.

Upstream Projected Line ends					Downstream Projected Line ends					Dist*
Points	x[mm]	y[mm]	z[mm]	perp dist	Points	x	y	z	perp dist	
A_end1	-13.8	192.0	412.4		A_end1	-16.1	194.8	2538.5		
A_end2	24.6	192.2	411.0		A_end2	32.0	195.2	2538.8		
A_hub	0.0	0.0	410.2		A_hub	0.0	0.0	2540.1		
A_perp	-0.5	192.1	411.9	192.1	A_perp	-1.5	194.9	2538.6	194.9	2126.7

Upstream Projected Line ends					Downstream Projected Line ends					Dist*
Points	x[mm]	y[mm]	z[mm]	perp dist	Points	x	y	z	perp dist	
B_end1	-160.4	110.5	409.5		B_end1	-176.2	80.8	2537.2		
B_end2	-179.4	77.4	409.8		B_end2	-155.6	116.1	2537.9		
B_hub	0.0	0.0	408.2		B_hub	0.0	0.0	2537.8		
B_perp	-168.2	96.9	409.6	194.1	B_perp	-166.8	96.9	2537.5	192.9	2127.9
C_end1	-182.1	-73.7	410.0		C_end1	-179.1	-79.9	2538.9		
C_end2	-161.9	-107.9	411.1		C_end2	-156.7	-118.6	2538.5		
C_hub	0.0	0.0	408.2		C_hub	0.0	0.0	2540.1		
C_perp	-167.3	-98.7	410.8	194.3	C_perp	-168.9	-97.4	2538.7	195.3	2127.9
D_end	n/a				D_end1	-26.9	-197.9	2538.7		
D_end	n/a				D_end2	2.0	-197.8	2538.5		
D_hub	n/a				D_hub	0.0	0.0	2540.1		
D_perp	n/a				D_Perp	0.8	-197.8	2538.5	197.8	
E_end1	186.0	-73.1	411.7		E_end1	149.9	-134.9	2538.5		
E_end2	164.4	-109.9	411.4		E_end2	173.1	-95.3	2537.6		
E_hub	0.0	0.0	404.3		E_hub	0.0	0.0	2539.5		
E_perp	170.3	-99.9	411.5	197.5	E_perp	170.5	-99.9	2537.7	197.6	2126.2
F_end1	158.1	115.5	411.7		F_end1	189.7	66.7	2539.1		
F_end2	178.3	80.1	410.7		F_end2	175.9	90.7	2539.2		
F_hub	0.0	0.0	408.5		F_hub	0.0	0.0	2540.8		
F_perp	168.9	96.6	411.2	194.6	F_perp	171.4	98.6	2539.2	197.7	2128.1

Dist* is the distance between downstream and upstream perpendicular points.