



# Jefferson Lab Alignment Group

## Data Transmittal

TO: O.PASTOR

DATE: 17 Nov 2014

FROM: Steve Hardisty

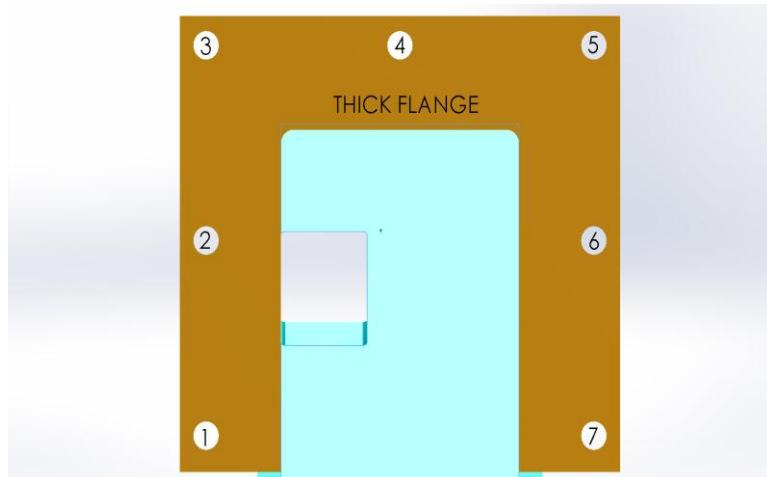
Checked: CWG

# : B1591

**DETAILS:**

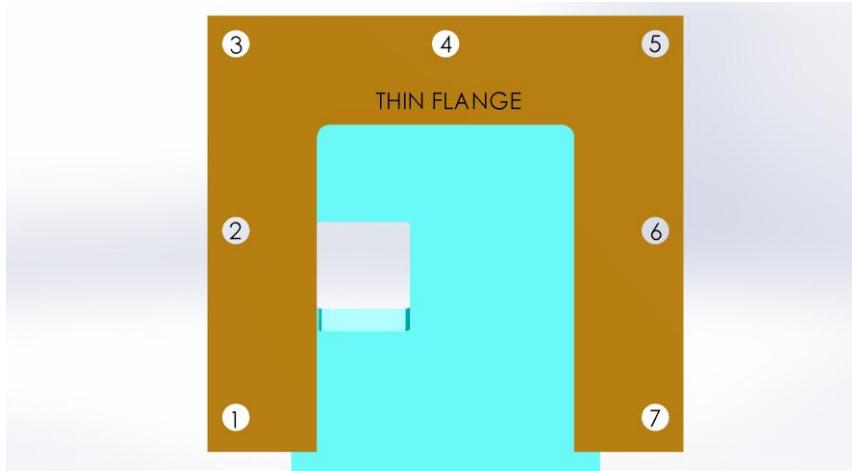
DATA\Inspection\HallB\Cold Bars\141118A

The following data is for the upstream cold bar. All data is given in millimeters.



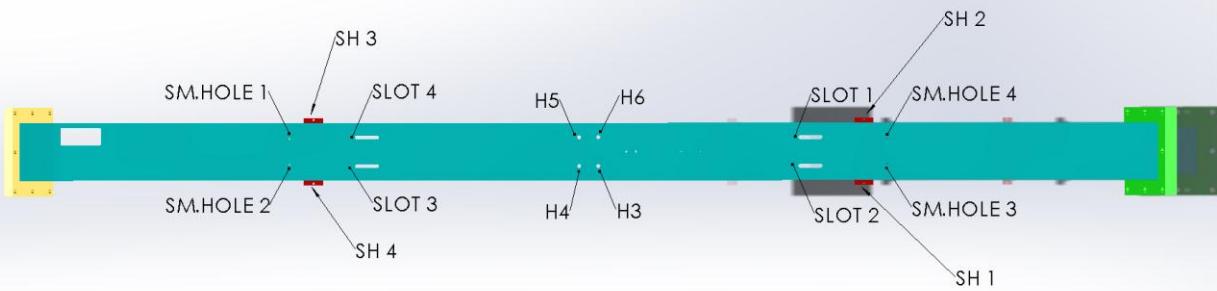
THICK FLANGE	IDEALS		MEASURED		DELTA'S	
	X	Y	X	Y	X	Y
H1	103.50	-95.90	103.70	-95.98	0.20	-0.08
H2	103.50	-3.50	103.85	-3.60	0.35	-0.10
H3	103.50	88.90	104.02	88.78	0.52	-0.12
H4	0.00	88.90	0.52	88.90	0.52	0.00
H5	-103.50	88.90	-103.03	89.04	0.47	0.14
H6	-103.50	-3.50	-103.20	-3.26	0.30	0.24
H7	-103.50	-95.90	-103.27	-95.68	0.23	0.22
TR CORNER	-117.50	102.80	-116.91	102.91	0.59	0.11
TL CORNER	117.50	102.80	118.04	102.59	0.54	-0.21
BR CORNER	-117.50	-113.10	-117.2	-112.22	0.34	0.88
BL CORNER	117.50	-113.10	117.71	-113.15	0.21	-0.05

The angle between the centerline of the square beam and the outer face of the thick flange is 59.99°. The flatness of the thick flange is 0.04mm.



THIN FLANGE	IDEALS		MEASURED		DELTA'S	
	X	Y	X	Y	X	Y
H1	-103.50	-89.00	-103.1	-88.07	0.37	0.93
H2	-103.50	3.50	-102.9	4.21	0.59	0.71
H3	-103.50	95.80	-102.6	96.47	0.89	0.67
H4	0.00	95.80	0.84	96.19	0.84	0.39
H5	103.50	95.80	104.36	95.71	0.86	-0.09
H6	103.50	3.50	103.98	3.31	0.48	-0.19
H7	103.50	-89.00	103.46	-89.12	-0.04	-0.12
TR CORNER	-117.50	109.8	-116.6	110.42	0.93	0.62
TL CORNER	117.50	109.8	118.43	109.47	0.93	-0.33
BR CORNER	-117.50	-106.1	-117.3	-105.3	0.19	0.80
BL CORNER	117.50	-106.1	117.39	-106.17	-0.11	-0.07

The angle between the centerline of the square beam and the outer face of the thin flange is  $59.98^\circ$ . The flatness of the thick flange is 0.03mm.



BOTTOM CLIP HOLES		IDEALS	MEASURED	DELTA	TOP SLOTS		IDEALS	MEASURED	DELTA
SH1	84.10	83.9	-0.20		SLOT 2 TO H3	592.10	591.94	-0.16	
SH4	84.1	84.28	0.18		SLOT 1	38.10	38.17	0.07	
SH1 TO SH2	168.3	167.57	-0.73		SLOT 2	38.10	38.02	-0.08	
SH3 TO SH4	168.3	168.09	-0.21		SLOT 3	38.10	37.98	-0.12	
SH1 TO SH4	1466.1	1466.2	0.10		SLOT 4	38.10	38.23	0.13	
SH2 TO SH3	1466.1	1466.18	0.08		SLOT 1 TO SLOT 2	76.20	76.20	0.00	
SH1 TO THK FLG	834.1	834.12	0.02		SLOT 3 TO SLOT 4	76.20	76.21	0.01	
SH2 TO THK FLG	834.1	834.16	0.06		SLOT2 TO SLOT 3	1181.10	1181.18	0.08	
TOP HOLES		IDEALS	MEASURED	DELTA					
H3	38.10	37.94	-0.16						
H4	38.10	37.88	-0.22						
H5	38.10	38.25	0.15						
H6	38.10	38.22	0.12						
H3 TO H6	76.20	76.16	-0.04						
H4 TO H5	76.20	76.14	-0.06						
H3 TO H4	50.80	50.80	0.00						
H5 TO H6	50.80	50.76	-0.04						
SM HOLE 1 TO 2	68.00	CALIPERED							
SM HOLE 3 TO 4	68.05	CALIPERED							

