## Jefferson Lab Alignment Group Data Transmittal

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## DETAILS:

Below are the results of the Inspection and Fiducialization of the new 2 K Cold Box. The coordinate system was established by using the large blue vacuum vessel to define the primary axis $(\mathrm{Y})$. The origin is defined by intersecting the primary axis with a plane measured on the top surface of the I-beam support structure. The clocking orientation (Z Direction) is defined by bisecting two lines measured on the outside (north and south side) of the support structure. A positive $Z$ points to the West, a positive $X$ points South and a positive $Y$ is up. Values are in inches and degrees.



|  | X | Y | Z |
| :---: | :---: | :---: | :---: |
| Return Header Interface Port | 1.430 | 5.094 | 44.491 |


|  | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :---: | :---: | :---: |
| BOLT HOLE FLOOR |  |  |  |
| NE_BOLT_HOLE | -41.937 | -7.736 | -40.180 |
| NW_BOLT_HOLE | -42.123 | -7.531 | 41.626 |
| SE_BOLT_HOLE | 42.228 | -8.083 | -39.879 |
| SW_BOLT_HOLE | 42.129 | -7.551 | 41.621 |

Below are the flanges located on the top of the 2K Cold Box. Refer to the "Port Index" on page 2 of drawing 71220-1129 for naming convention.

| TOP FLANGES | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |  | PITCH (Rx) | ROLL (Ry) |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: |
| CC1 | 0.349 | 194.018 | 28.990 | -0.1326 | 0.0121 |  |
| CC2 | -4.609 | 192.963 | -37.987 |  | 0.0661 | -0.0457 |
| CC3 | 26.841 | 192.542 | -22.744 |  | 0.1889 | 0.0482 |
| CC4 | 45.107 | 189.569 | -2.469 |  | -0.0245 | 0.0632 |
| CC5 | -37.532 | 190.560 | 16.783 |  | -0.0518 | 0.0135 |



| PLATFORM TABS | X | Y | Z |
| :--- | :---: | :---: | ---: |
| TOP_NE | -48.176 | 166.807 | -47.309 |
| TOP_NW | -47.555 | 166.723 | 48.023 |
| TOP_SE | 47.248 | 166.785 | -48.186 |
| TOP_SW | 47.947 | 166.721 | 47.421 |
| CL BOLT HOLE CIRCLE | -0.065 | 166.759 | 0.006 |
|  |  |  |  |



|  | PITCH (Rx) | ROLL (Ry) |
| ---: | ---: | ---: |
| TOP OF IBEAM PLANE | -0.2454 | -0.0684 |

