

# Jefferson Lab Alignment Group

## DATA TRANSMITTAL

**TO:** E. Daly, Brian Carpenter

**DATE:** March 13, 2002

**FROM:** Chris Gould

**Checked:**

**# :** Z747

### DETAILS:

Below are the results of the SNS cryomodule return end cap and bridging ring survey performed on March 12, 2002. A coordinate system was established with the central axis running through the aperture of the end plate. The bayonet box was used to control roll. The end plate sealing surface was used to define Z = 0. The bridging ring results are based on a best fit circle using points taken at every 45 degrees ("Overall Diameter"). A minimum circle was also constructed using three minimum points at the angles indicated. Values are in inches and decimal degrees.

Drawing Number : CRM9008020 -1115

<b>Description</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Primary Bayonet Pos.	20.23	13.85	7.87
Shield Return Bayonet	20.15	13.66	19.71
Relief Stack Position	15.05	34.74	15.72
Cool Down JT Position	20.00	37.32	29.53
Cool Down Outlet Flange	20.01	28.24	34.42

Drawing Number : CRM9008020 - 0000

Bayonet Box Offset            10.63

Drawing Number : CRM9008020 - 1028

End Plate Sealing            0.008  
Surface Flatness

Warm-to-Cold                0.003  
Beampipe Sealing  
Surface Flatness

Drawing Number : CRM9008010 – 1036 & CRM9008020 – 1100

Bridging Ring            0" from Vac. Tank    6" from Vac. Tank    12" from Vac. Tank

Overall Diameter	42.53	42.44	42.37
Roundness	0.26	0.14	0.06
Min. Diameter	42.32	42.33	42.31
Min. location points	45, 180, 315	45, 180, 315	0, 270, 180