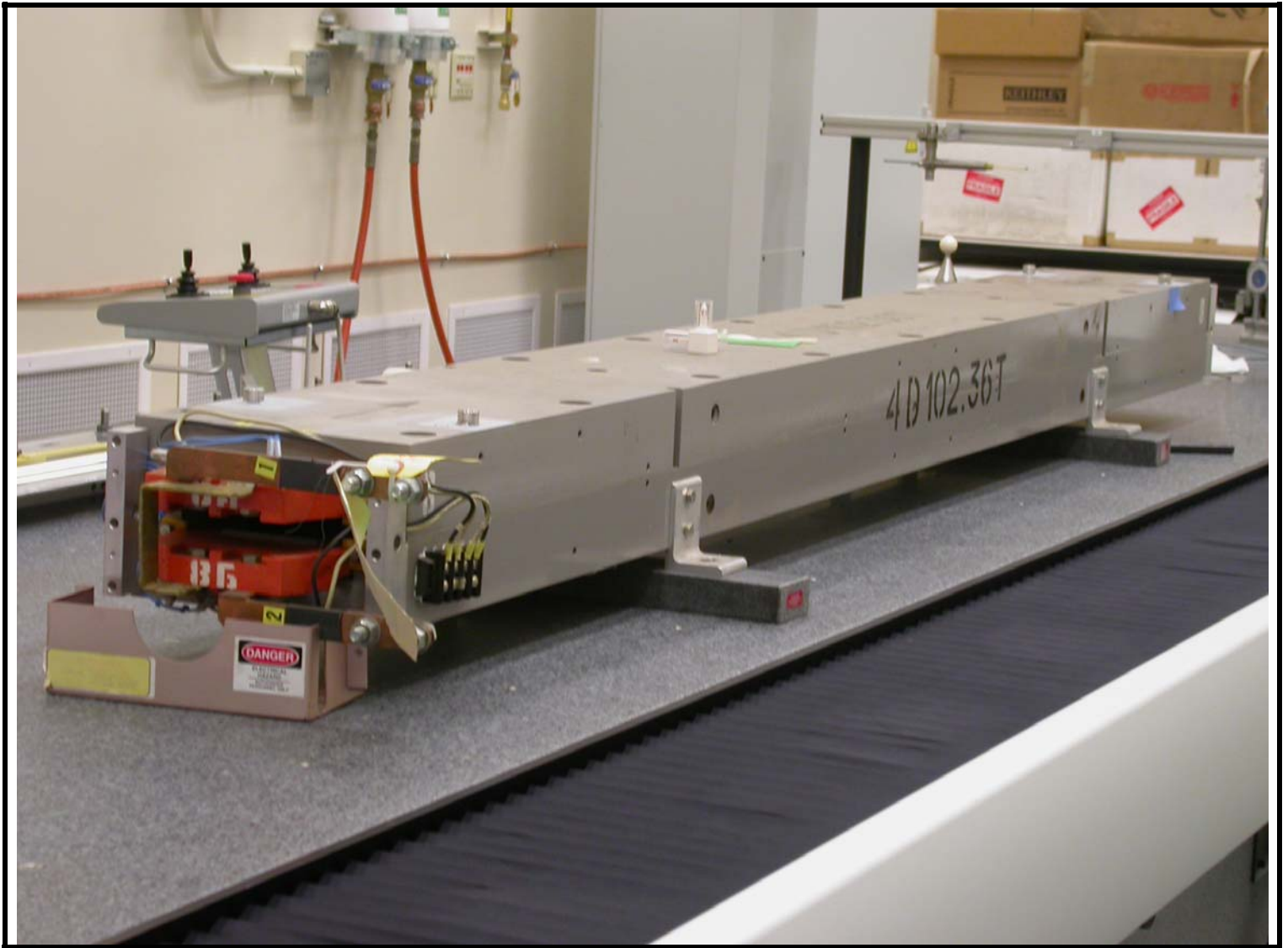


LCLS BX3 DIPOLE MAGNET FIDUCIALIZATION REPORT



Inspector: Ed Reese

Responsible Engineer: Carl Rago

Date: Wednesday, February 28, 2007

Work Order/Charge No.: 21698-1

Serial Number 000324

URL of Fiducial Report: <\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS BX3 DIPOLE\000324.PDF>

Part Set-up – Coordinate System Set-up

Planar Alignment

- Symmetry Axis between inner side plates of housing

Spatial Alignment

- Symmetry Plane between upper and lower poles

“Z” Zero

- Symmetry Point between faces perpendicular to beam

“X” Zero

- Symmetry Axis between Inner side plate of housing

“Y” Zero

- Symmetry Plane between upper and lower poles



Tooling Ball Measurements/Locations



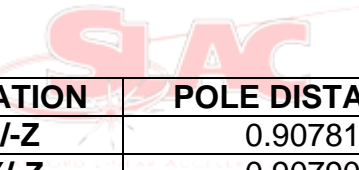
Top Tooling Ball Sockets

Tooling Ball	FORM	DIAMETER	X	Y	Z
TB 1	0.00004	0.49716	4.31466	4.64516	-45.16716
TB 2	0.00001	0.49620	-4.32652	4.64494	-45.18730
TB 3	0.00004	0.49503	4.29690	4.64534	45.14764
TB 4	0.00004	0.49667	-4.11248	4.64778	45.16518

Side Optical/Magnetic Precision Sphere Holder

Tooling Ball	FORM	DIAMETER	X	Y	Z
A	0.00004	1.50015	6.62089	2.14091	-31.39265
B	0.00006	1.50013	6.61203	2.15606	31.31260
C	0.00005	1.50014	6.63972	-2.17013	-31.37837
D	0.00007	1.50018	6.62863	-2.15091	31.30864

Additional Requested Measurements



LOCATION	POLE DISTANCE
-X/-Z	0.90781
+X/-Z	0.90790
-X/+Z	0.90641
+X/+Z	0.90647