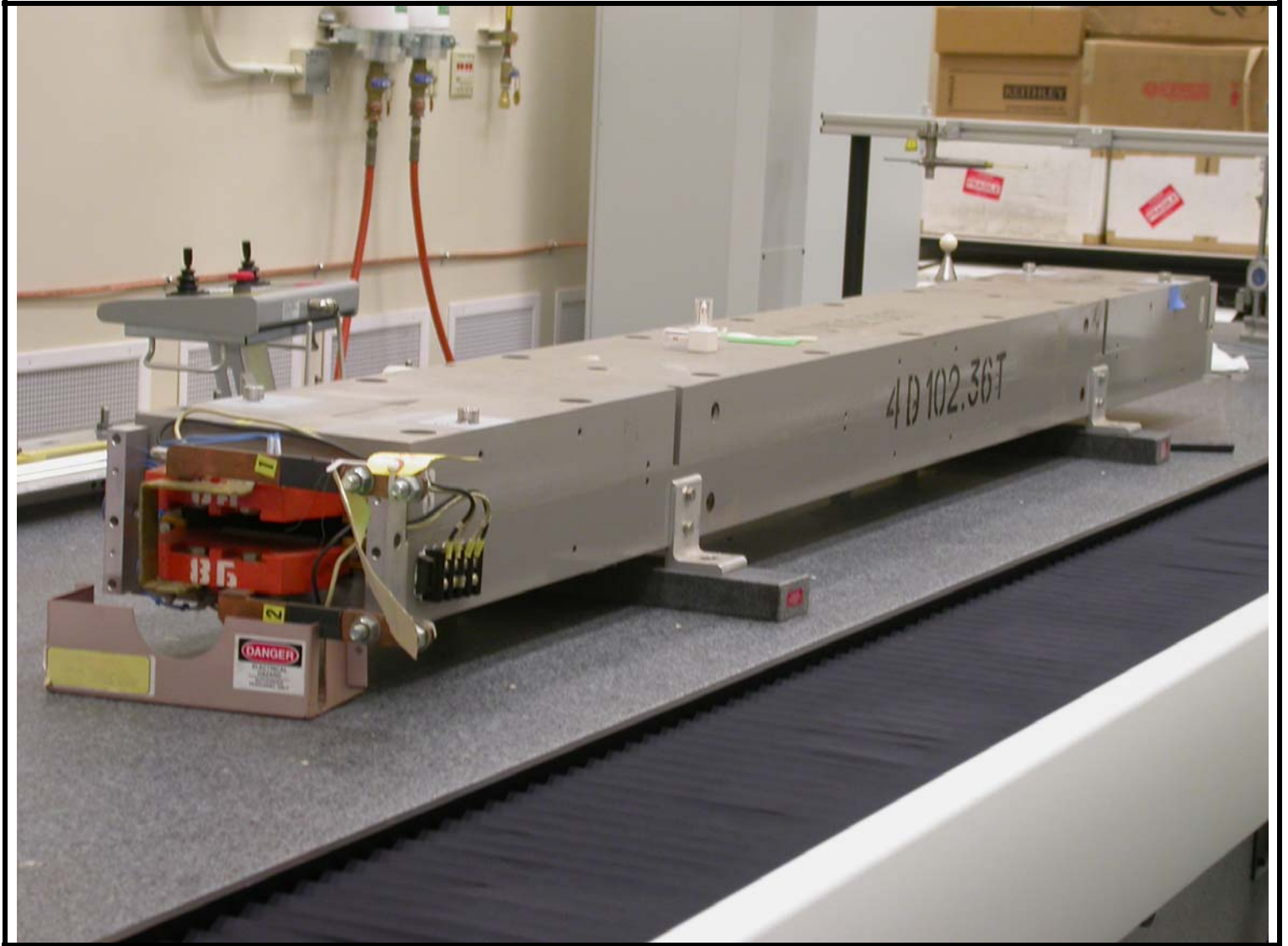


LCLS BX3 DIPOLE MAGNET FIDUCIALIZATION REPORT



Inspector: Ed Reese
Responsible Engineer: Carl Rago
Date: Wednesday, February 14, 2007
Work Order/Charge No.: 21698-1
Serial Number 000241
URL of Fiducial Report: [\\Web002\www-group\met\Quality\FIDUCIAL_REPORTS\LCLS BX3 DIPOLE\000241.PDF](http://Web002/www-group/met/Quality/FIDUCIAL_REPORTS/LCLS_BX3_DIPOLE/000241.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	0.00036	0.49763	4.30566	4.63857	-45.15252
TB 2	0.00044	0.49661	-4.33228	4.63909	-45.17474
TB 3	0.00030	0.49682	4.40152	4.63892	45.14911
TB 4	0.00097	0.49764	-4.31995	4.64642	45.15378

Side Optical/Magnetic Precision Sphere Holder

Tooling Ball	FORM	DIAMETER	X	Y	Z
A	0.00001	1.50003	6.63787	2.09729	-31.36457
B	0.00001	1.50000	6.63426	2.12659	31.36137
C	0.00003	1.50001	6.63735	-1.85395	-31.37030
D	0.00003	1.50004	6.62845	-2.09760	31.37185

Additional Requested Measurements

LOCATION	POLE DISTANCE
-X/-Z	0.90647
+X/-Z	0.90565
-X/+Z	0.91433
+X/+Z	0.91102