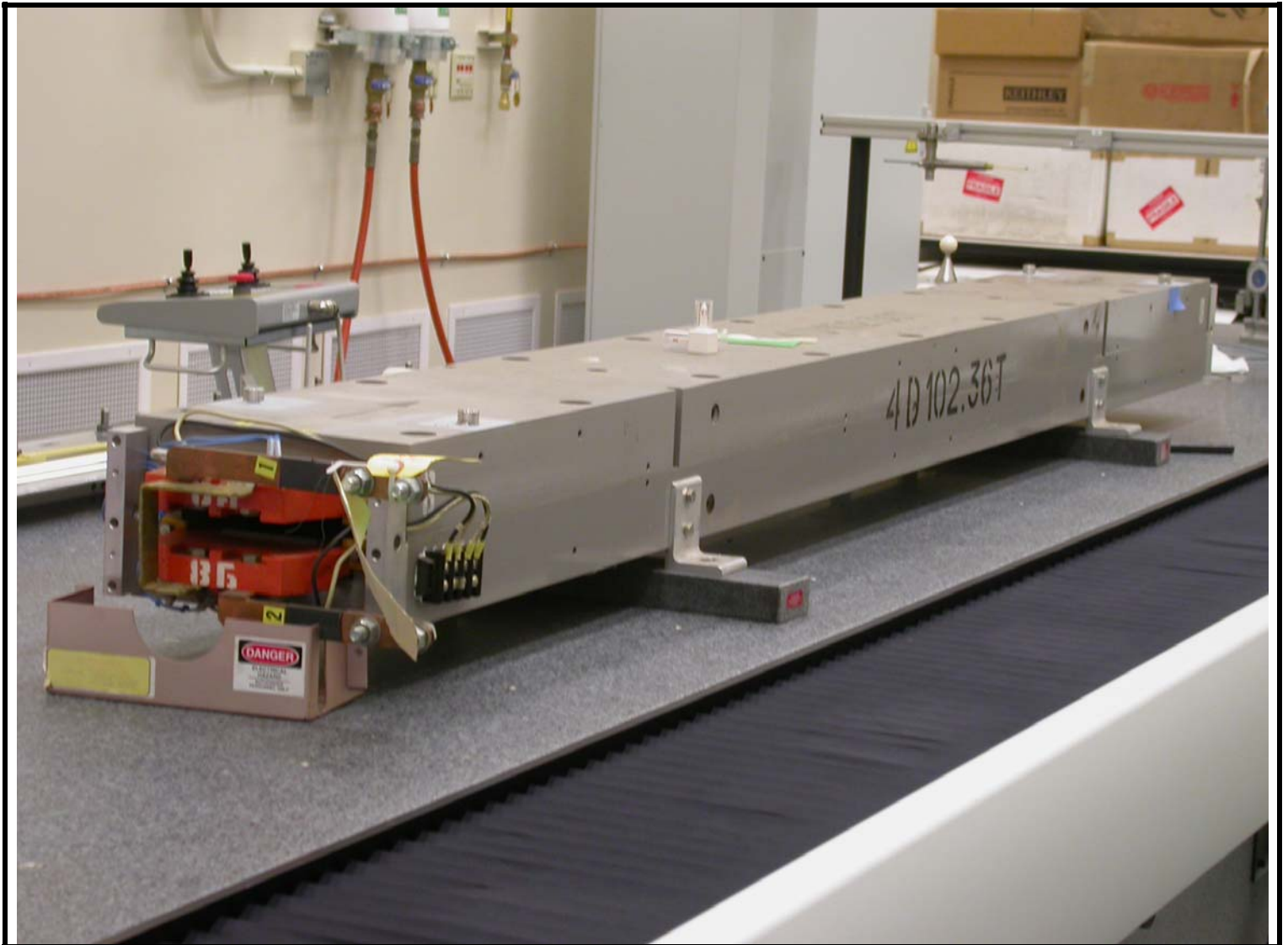


LCLS BX3 DIPOLE MAGNET FIDUCIALIZATION REPORT



Inspector:	Ed Reese
Responsible Engineer:	Carl Rago
Date:	Thursday, March 1, 2007
Work Order/Charge No.:	21698-1
Serial Number	000309
URL of Fiducial Report:	\\Web002\www-group\met\Quality\FIDUCIAL_REPORTS\LCLS BX3 DIPOLE\000309.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	0.00072	0.49762	4.24567	4.64831	-45.15880
TB 2	0.00032	0.49794	-4.29794	4.64282	-45.18815
TB 3	0.00023	0.49803	4.29070	4.65325	45.12867
TB 4	0.00016	0.49696	-4.31244	4.64931	45.14202

Side Optical/Magnetic Precision Sphere Holder

Tooling Ball	FORM	DIAMETER	X	Y	Z
A	0.00001	1.50003	6.62589	2.16619	-31.47583
B	0.00005	1.50005	6.66370	-2.08982	-31.48549
C	0.00002	1.50009	6.62173	2.15660	31.31972
D	0.00001	1.50006	6.61656	-2.14863	31.30905

Additional Requested Measurements

LOCATION	POLE DISTANCE
-X/-Z	0.93418
+X/-Z	0.91705
-X/+Z	0.90417
+X/+Z	0.90415