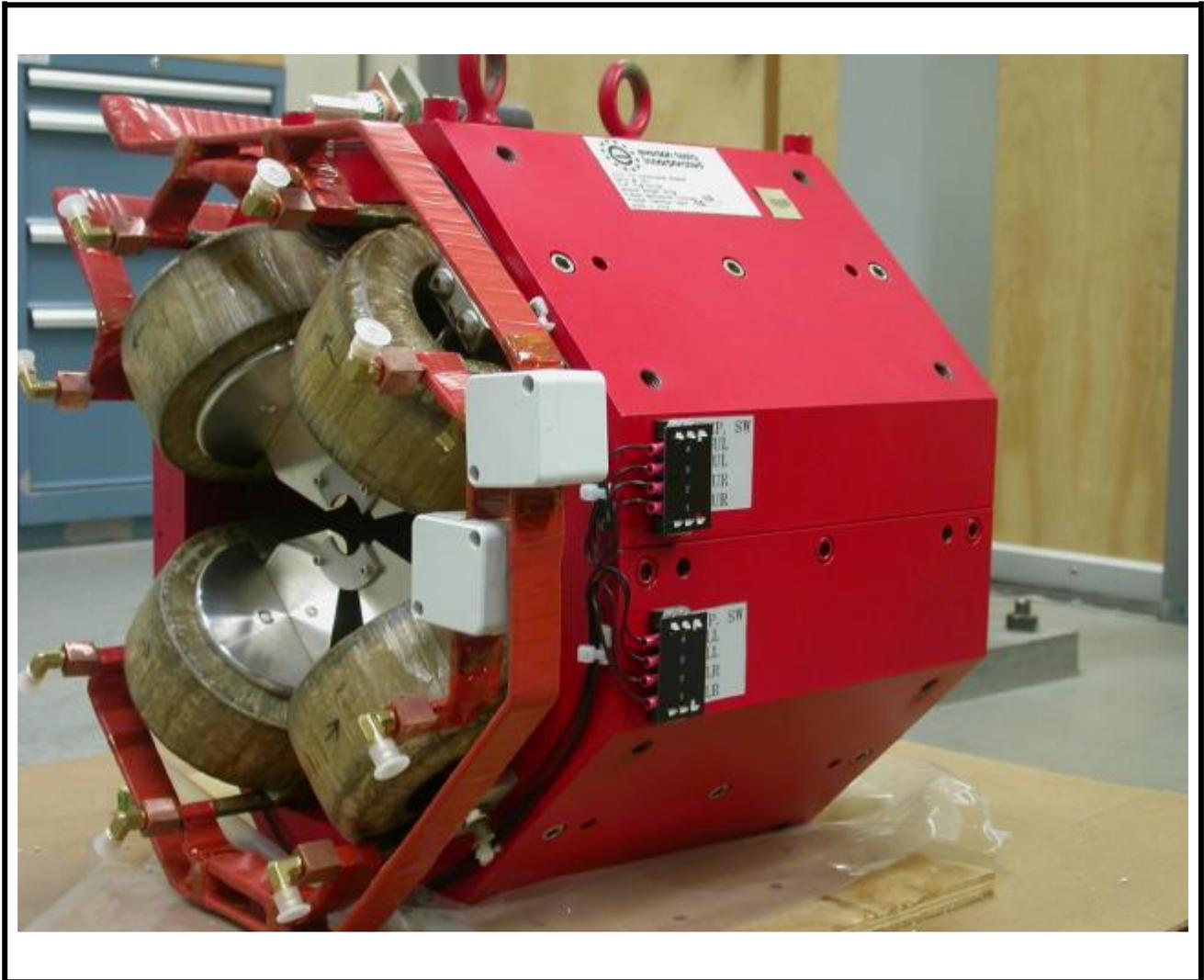


LCLS 'Q150kG' LTU QUADRUPOLE MAGNET FIDUCIALIZATION REPORT



Inspector:	Keith Caban
Responsible Engineer:	Carl Rago
Date:	Wednesday, January 16, 2008
Work Order/Charge No.:	9242609
Serial Number:	SLAC – 002000/ SN 012
URL of Fiducial Report:	\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU Q150kG QUADS\002000.pdf

Part Set-up – Coordinate System Set-up

Spatial Alignment

- Geometric axis of the poles of the magnet.

Planar Alignment

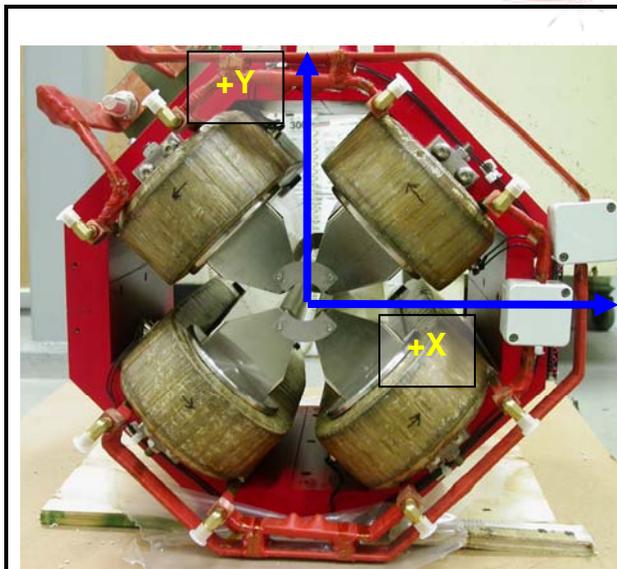
- Plane on top of magnet where tooling ball sockets are welded to.

“Z” Zero

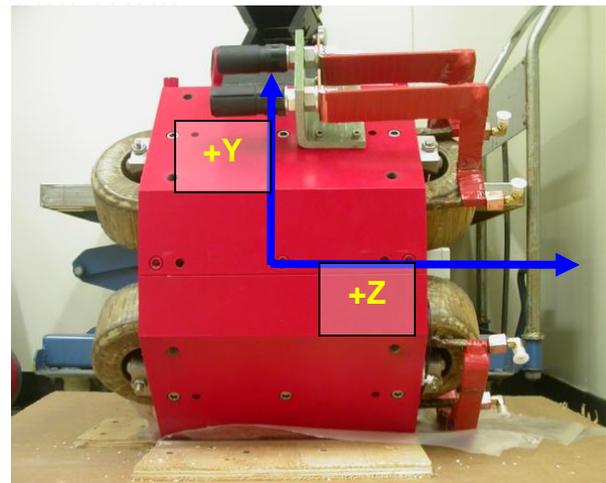
- Mid-plane of the magnet (middle of upstream and downstream ends).

“X” & “Y” Zero

- Geometric axis of the poles of the magnet.

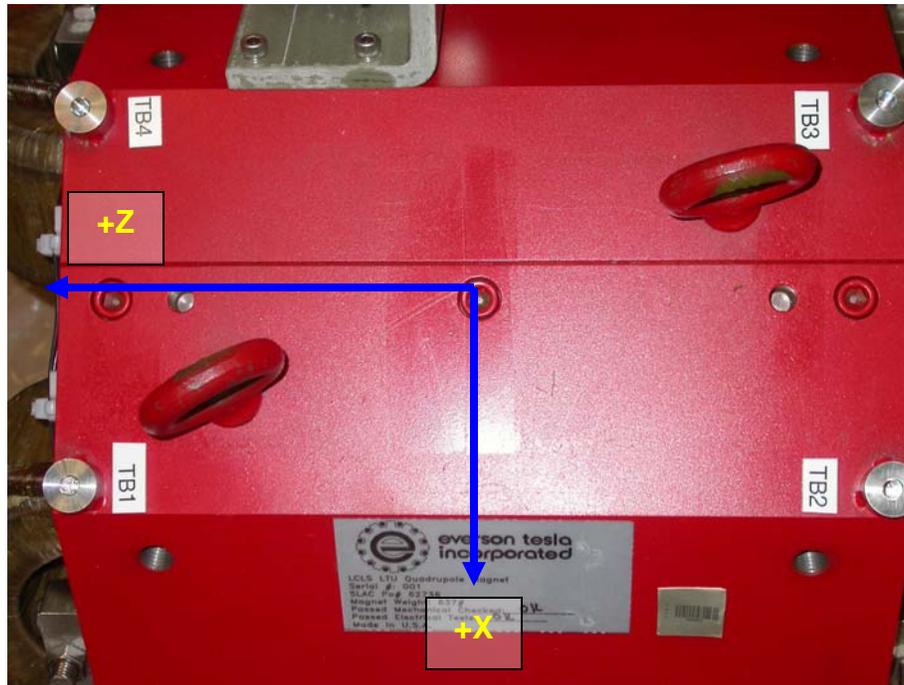


Front View



Side View

Tooling Ball Measurements/Locations

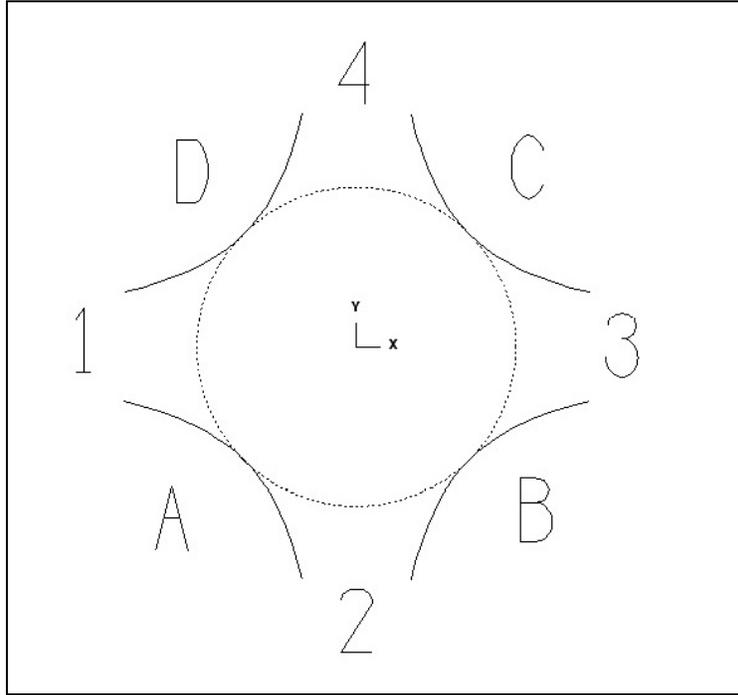


Tooling Ball Adapter Cylinder Projected 1" Offset to the Tooling Ball Adapter Plane

Tooling Ball	Form	Cyl. Dia.	X	Y	Z	⊥
Proj. TB 1	0.00060	0.24991	2.66246	10.21306	5.60046	0.00018
Proj. TB 2	0.00035	0.24989	2.66283	10.21341	-5.60748	0.00024
Proj. TB 3	0.00024	0.24994	-2.63121	10.21339	-5.60820	0.00025
Proj. TB 4	0.00018	0.25000	-2.64995	10.21239	5.61376	0.00012

Pole Data

*Data looking from Downstream End



SLAC

Side	Pole Dist A-C	Pole Dist B-D	Gap 1	Gap 2	Gap 3	Gap 4
Downstream End (+Z)	1.25928	1.25853	0.43615	0.42697	0.43751	0.43318
Upstream End (-Z)	1.25908	1.25766	0.43655	0.42791	0.43431	0.43254