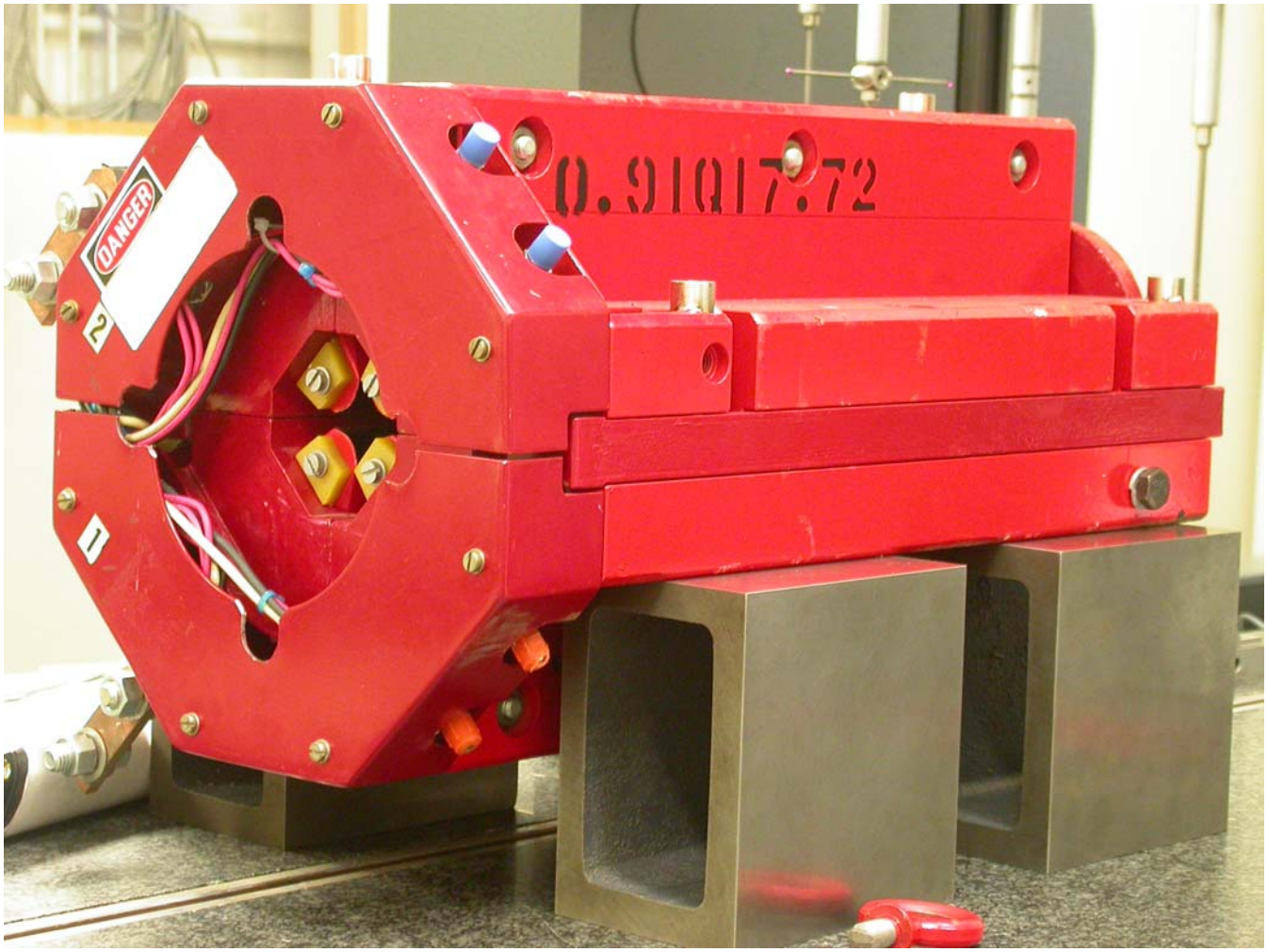
Linac Coherent Light Source
Stanford Linear Accelerator Center
Stanford Synchrotron Radiation Laboratory

LCLS '0.91Q17.72' LTU Quadrupole Magnet FIDUCIALIZATION REPORT



Inspector:	Keith Caban
Responsible Engineer:	Carl Rago
Date:	Monday, February 27, 2007
Work Order/Charge No.:	21699-1
Serial Number:	000307
URL of Fiducial Report:	\\Web002\www-group\met\Quality\FIDUCIAL REPORTS\LCLS LTU QUAD\000307.pdf

Part Set-up – Coordinate System Set-up

Spatial Alignment

- Geometric axis of the poles of the magnet.

Planar Alignment

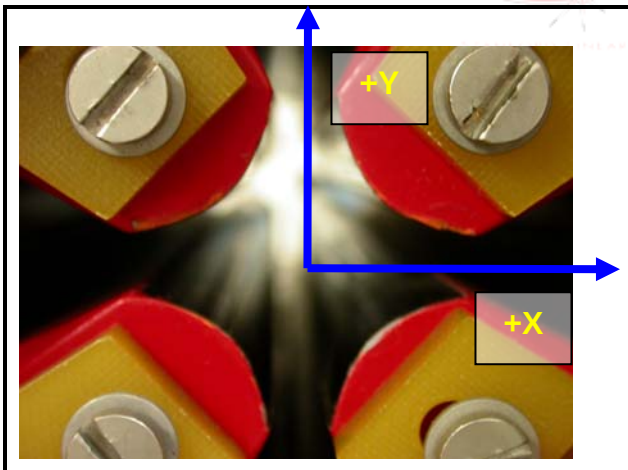
- Clocking plane where TB A,C, D, & E reside.

“Z” Zero

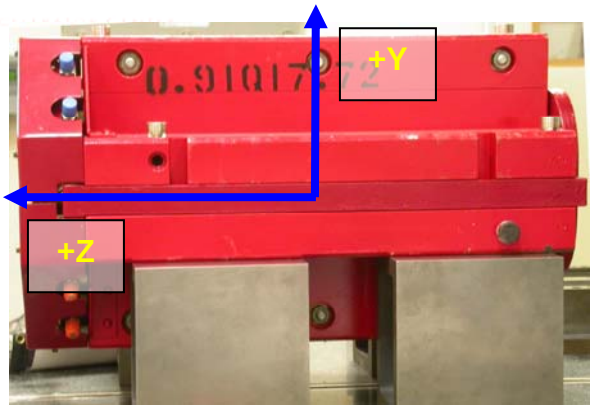
- Mid-plane of the magnet (pole planes on each end).

“X” & “Y” Zero

- Geometric axis of the poles of the magnet.



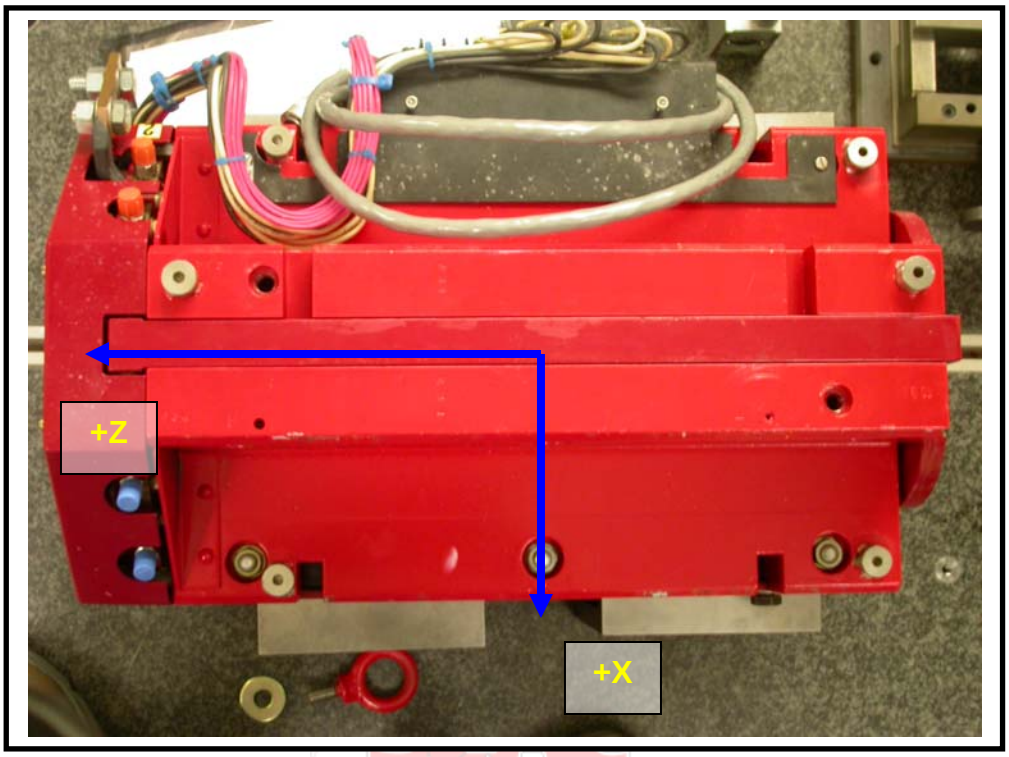
Front View



Side View

Tooling Ball Measurements/Locations

Top of magnet; view from “+Y”



Tooling Ball	FORM	DIAMETER	X	Y	Z
TB A	0.00009	0.49961	4.99935	3.68876	-8.02399
TB B	0.00016	0.49871	-1.38033	7.31820	-8.01561
TB C	0.00033	0.49710	-4.98823	3.68789	-7.99925
TB D	0.00014	0.49979	-5.22091	3.68710	6.28801
TB E	0.00027	0.49732	-1.35342	7.31943	8.00644
TB F	0.00003	0.49974	5.24865	3.69258	6.29752

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Pole Distances

Pole	-Z side	+Z side	Δ
A-C	0.91084	0.90455	0.00629
B-D	0.90625	0.90622	0.00003