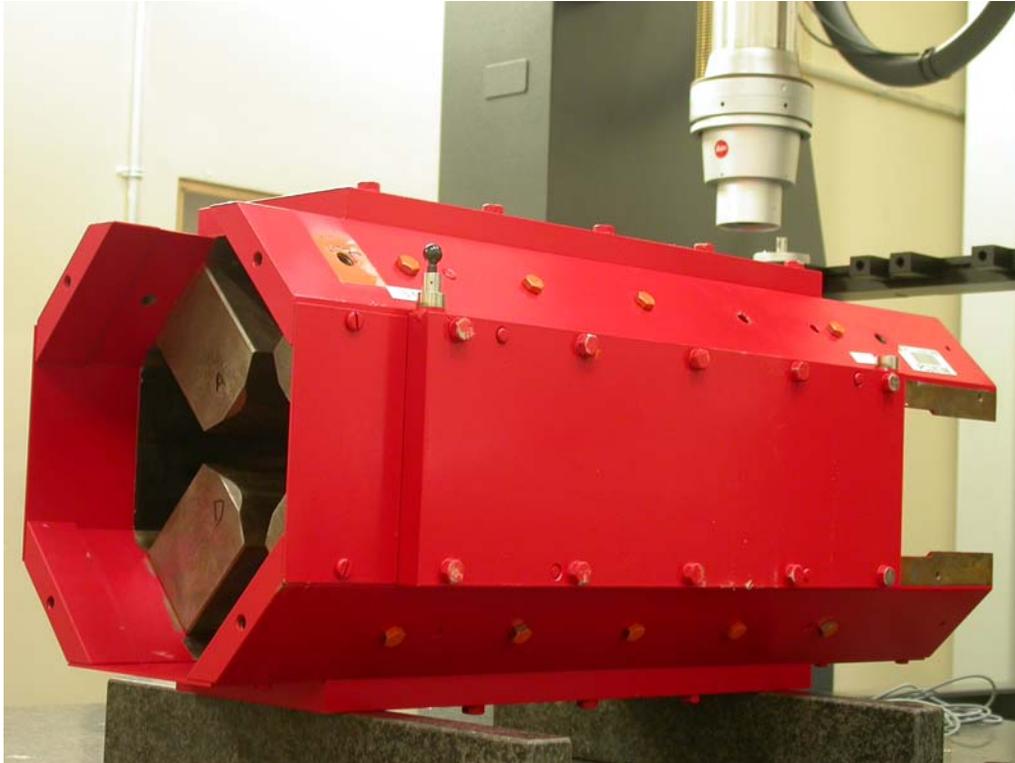


PEP II QDMP#1 Quadrupole Refurbishment FIDUCIALIZATION REPORT



Inspector:	Keith Caban
Responsible Engineer:	Roger Carr
Date:	Wednesday, August 09, 2006
Work Order/Charge No.:	92-4261-0
Serial Number	QDMP#1

Part Set-up – Coordinate System Set-up

Planar Alignment

- Mid-Plane of the magnet (Outer Most Planes)

Spatial Alignment

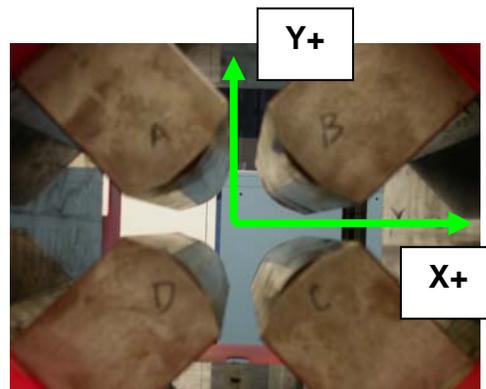
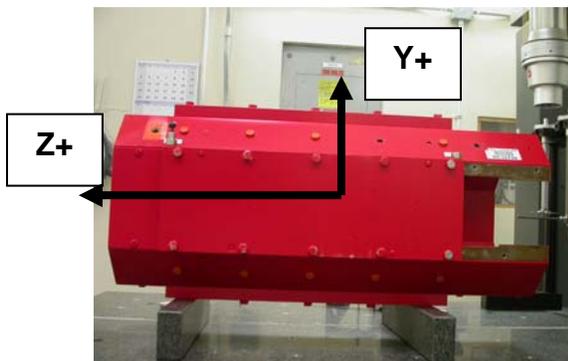
- A line on the top part of the magnet
 - +X goes opposite stamped SA-344-913-01

“Z” Zero

- Mid-Plane of the magnet

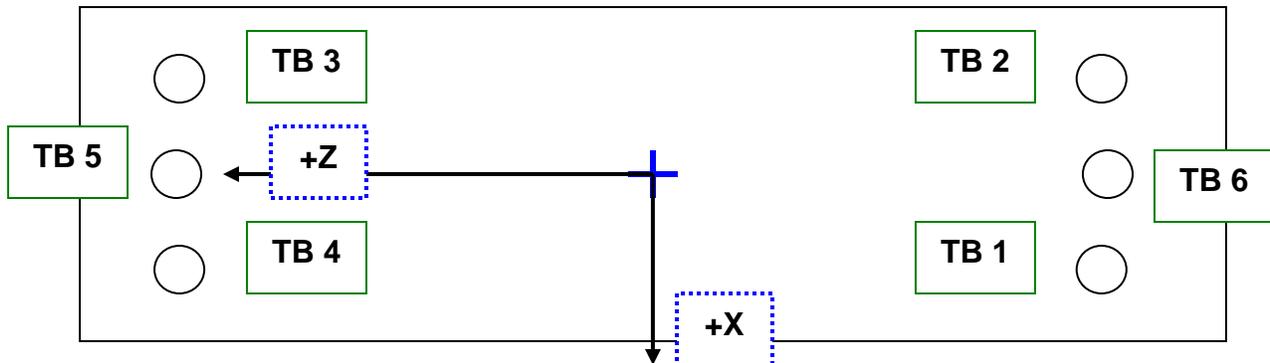
“X” & “Y” Zero

- On both ends
 - Tangent point of each radii (4 on each end, 8 total).
 - Create a line between diagonal tangent points creates 2 lines.
 - Intersect the lines.
 - Creates a point on each end.
- Create a line of these 2 end points
 - This is the “X” & “Y” Zero, and Beamline or “Z” Axis.



Tooling Ball Measurements/Locations

Top of magnet; view from "+Y" (see photographs for more clarity above)



Tooling Ball	Form	Diameter	X	Y	Z
TB 1	0.00065	0.49778	6.37708	4.86134	-7.88055
TB 2	0.00045	0.49663	-6.35666	4.88955	-8.00748
TB 3	0.00039	0.49763	-6.36165	4.89092	11.00850
TB 4	0.00037	0.49660	6.35963	4.85991	11.00168
TB 5	0.00038	0.49777	0.00337	8.30121	11.04370
TB 6	0.00018	0.49894	-0.00057	8.30042	-8.01525

Additional Requested Measurements

View From +Z

Pole Tip Dist A-C $Z+= 3.24986$

Pole Tip Dist A-C $Z-= 3.25075$

Pole Tip Dist B-D $Z+= 3.25093$

Pole Tip Dist B-D $Z-= 3.25250$

$Z+$ Side $\Delta = 0.0011$

$Z-$ Side $\Delta = 0.0017$

Along A-C $\Delta = -0.0009$ $+Z$ to $-Z$

Along B-D $\Delta = -0.0015$ $+Z$ to $-Z$

