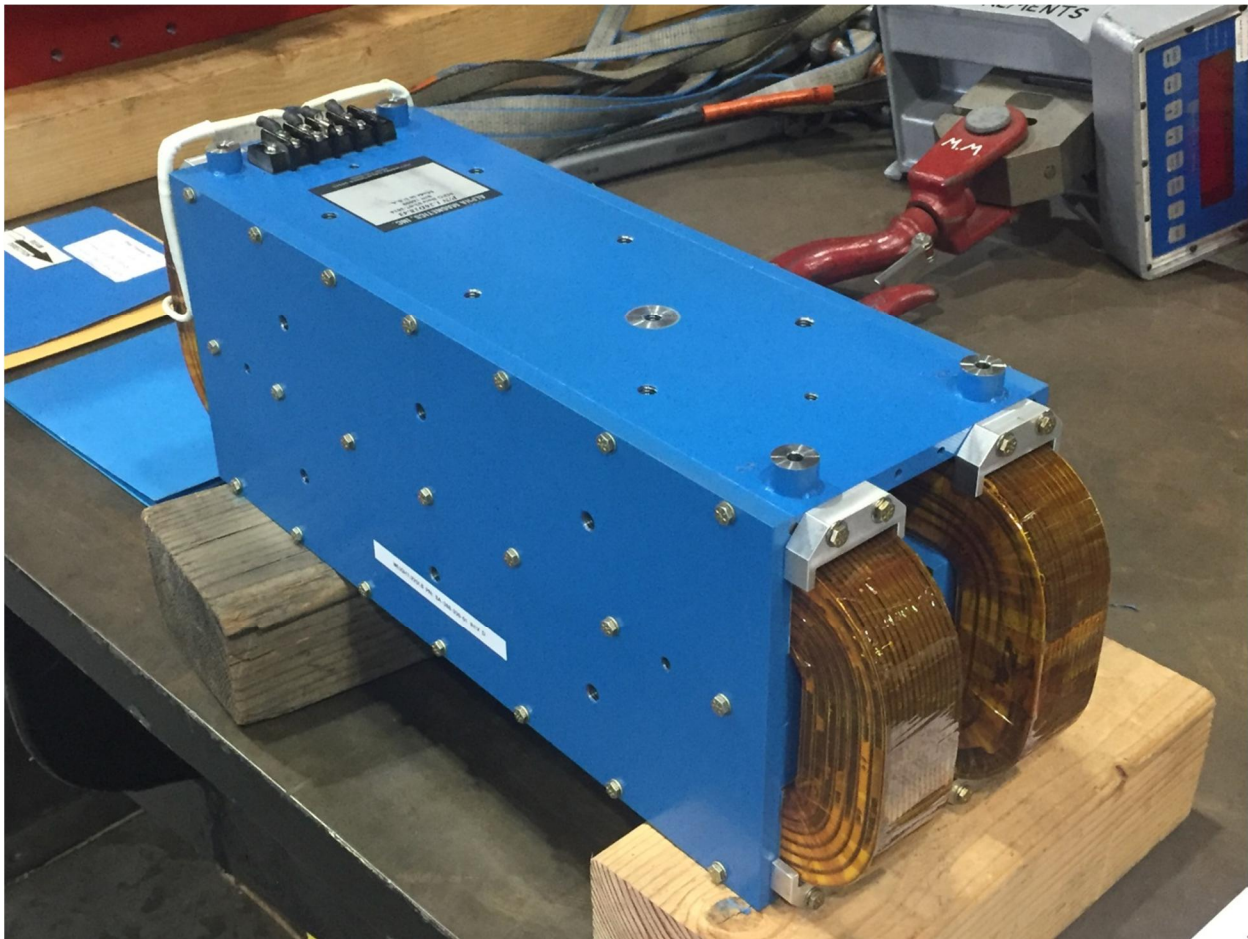


# LCLS II Magnet Fiducialization Report

## 1.26D18.43 Dipole Magnets



Inspector : AEG  
Engineer : J. Amann  
Drawing No. : SA-388-330-01  
Barcode # : 4508  
Mfg. S/N : 16090

## Coordinate System Setup

Measured 6 planes:

Left and Right pole faces, Upstream and Downstream of both poles combined, Top and Bottom of both poles combined.

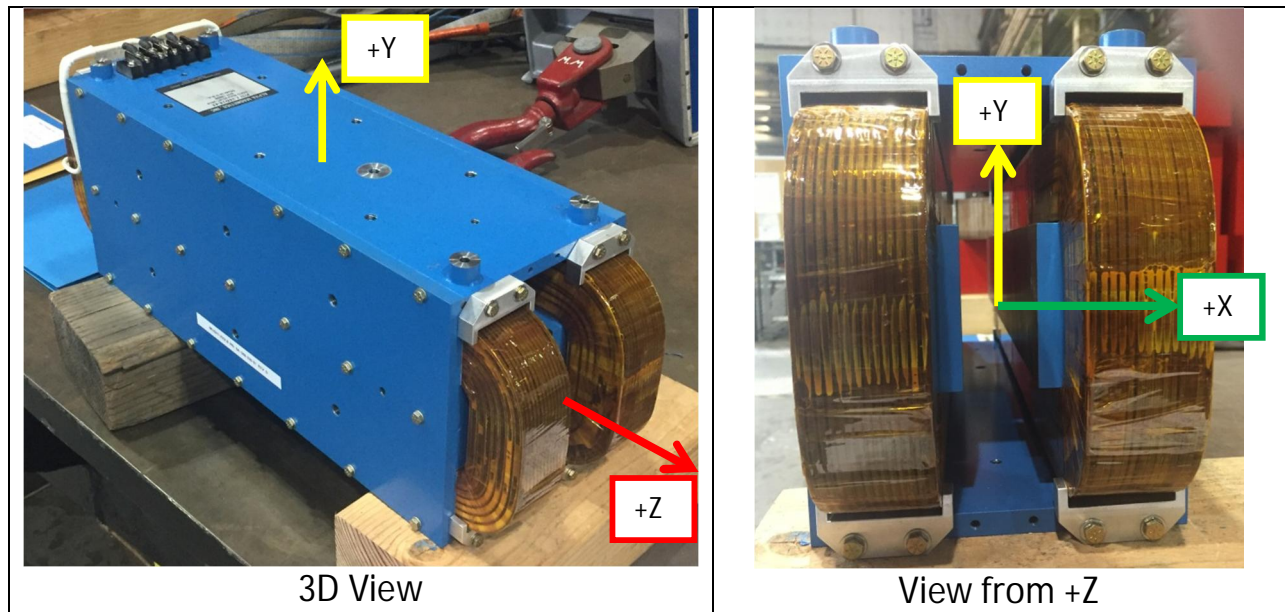
Constructed 3 mid planes from:

Left and Right, US and DS, Top and Bottom

Intersected the 3 mid planes to construct the Origin.

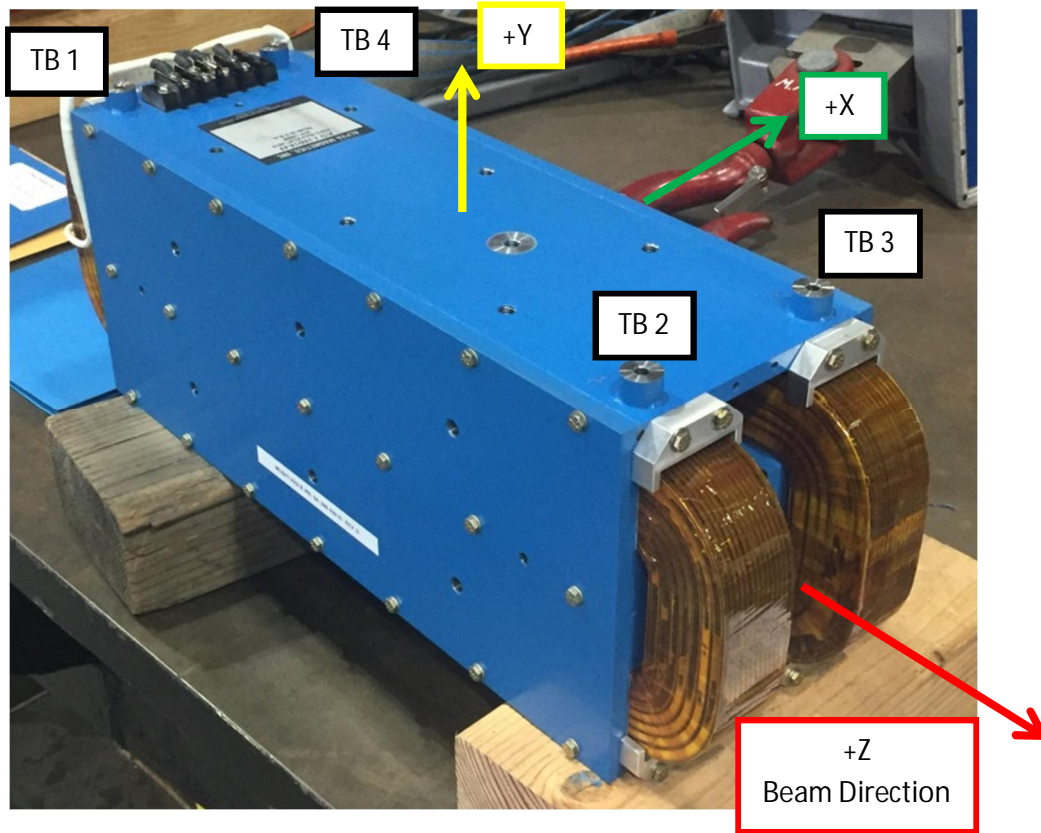
Primary axis is vector of Left/Right(Roll and Yaw).

Secondary axis is vector of Top/Bottom (Pitch).



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## Tooling Ball Locations



Tooling Ball	Z(in)	X(in)	Y(in)
TB 1	-8.7388	-2.1880	5.4162
TB 2	8.7505	-2.1803	5.4191
TB 3	8.7483	2.1906	5.4186
TB 4	-8.7433	2.1855	5.4156
TB A	-8.7415	-2.1879	4.7289
TB B	8.7521	-2.1815	4.7318
TB C	8.7495	2.1919	4.7313
TB D	-8.7452	2.1839	4.7283

\*\* Tooling Ball Locations (1-4) are 1 inch above top surface TB Socket

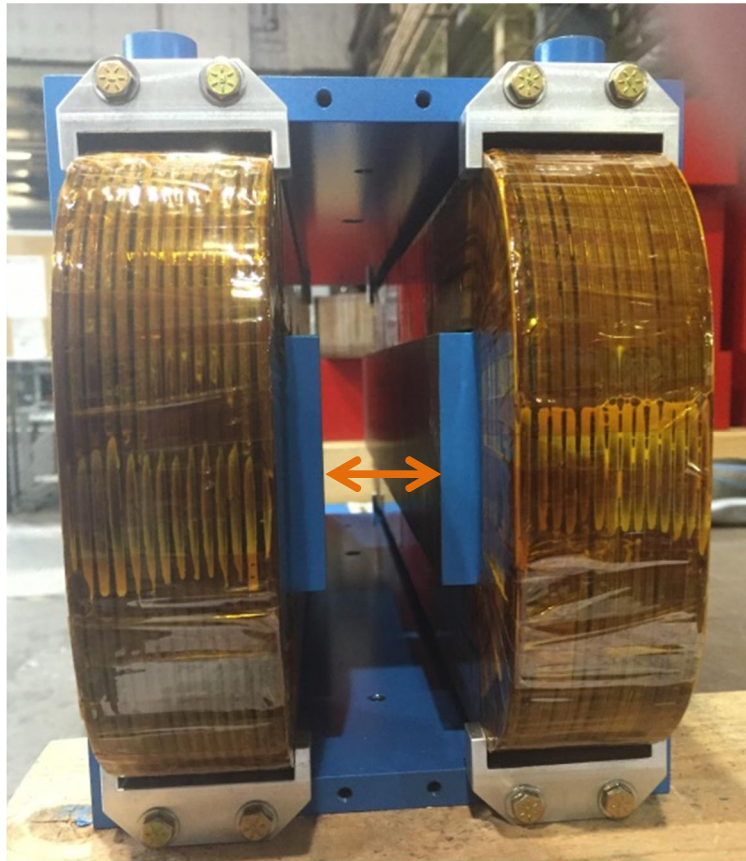
\*\* Tooling Ball Locations (A-D) are 5/16 inch above top surface TB Socket

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## Pole Tip Gap Measurements



Pole Tip view from +Z (Downstream End)

Location	Pole Tip Gap
Upstream End (1.260 Nom.)	1.2572
Downstream End (1.260 Nom.)	1.2573

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