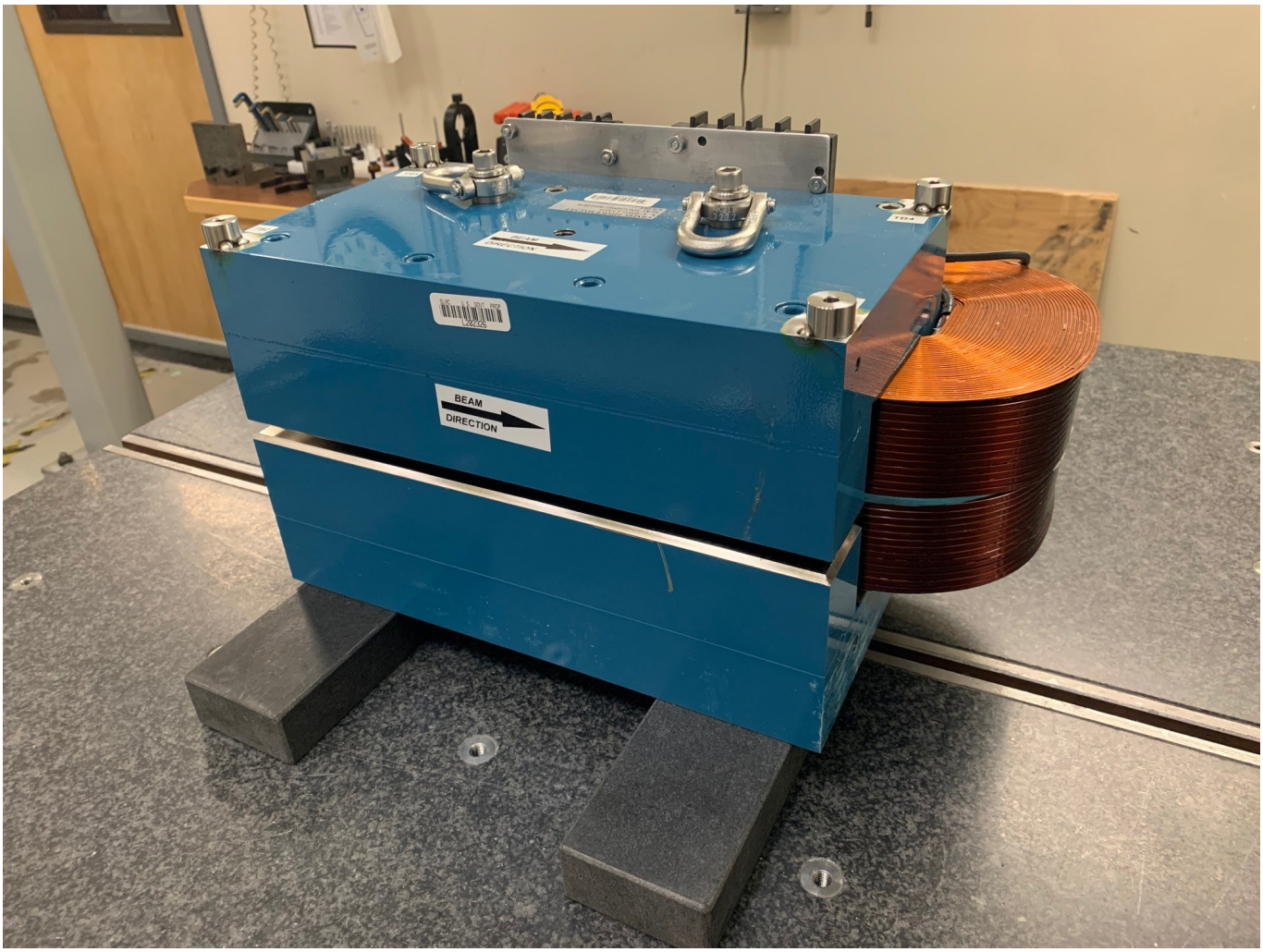
CBXFEL Magnet Fiducialization Report
C-MAGNET DIPOLE ASSEMBLY



Inspector : K. Caban
Engineer :T. TAN
Drawing No. : DSG-000014858 R00
Barcode # : 2321
Mfg. S/N : 006

Coordinate System Setup

Spatial Alignment

Constructed using the Midplane of Upper (+Y) and Lower (-Y) Pole with the Midplane of the 2 Poles sets Y Zero and the Y+ Direction points towards the Tooling Balls/Terminal Strip.

Planar Alignment

Constructed using the Upstream (-Z) and Downstream (+Z) Ends of the poles. The Midplane from both ends sets Z Zero and +Z points towards TB 3/4 Side.

Coordinate Origins

X Origin - Symmetry Plane between side poles planes (planes parallel to the Coils)

Y Origin - Symmetry Plane between the Poles (7mm/0.2756" Gap Symmetry)

Z Origin - Symmetry plane between Up Stream and Down Stream end surfaces

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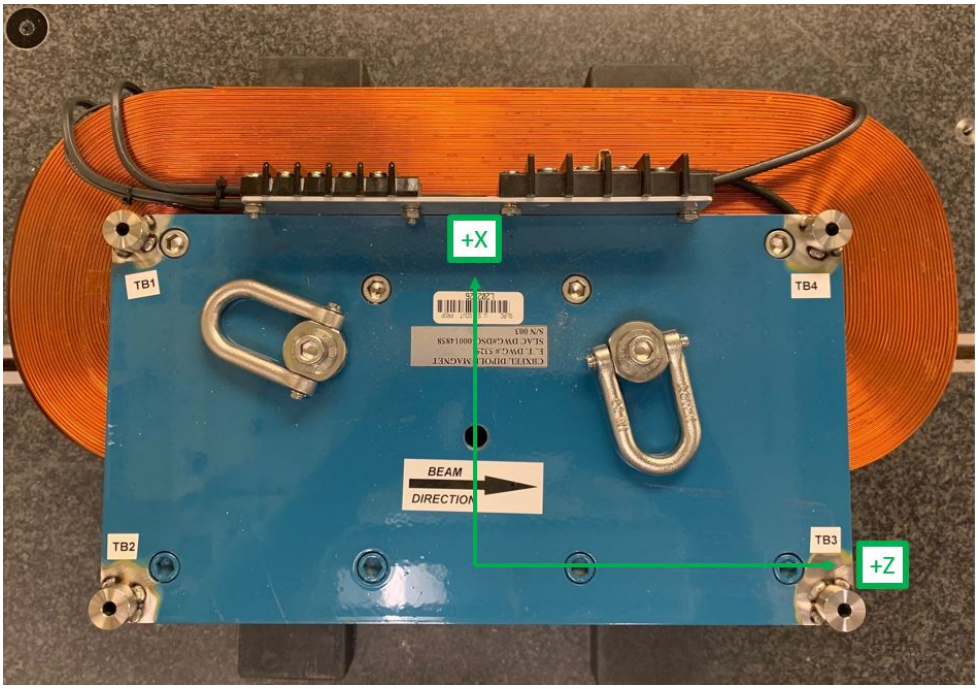
Tooling Ball Locations



Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	6.2782	5.8898	-6.6164
TB 2	-0.6209	5.8870	-6.6165
TB 3	-0.6167	5.8878	6.6207
TB 4	6.2984	5.8868	6.6242
TB A	6.2859	5.2023	-6.6176
TB B	-0.6210	5.1996	-6.6172
TB C	-0.6193	5.2004	6.6232
TB D	6.2982	5.1993	6.6252

Tooling Ball Locations (1-4) are 1 inch above Tooling Ball Plane
Tooling Ball Locations (A-D) are 5/16 inch above Tooling Ball Plane
Dimensions in Inch

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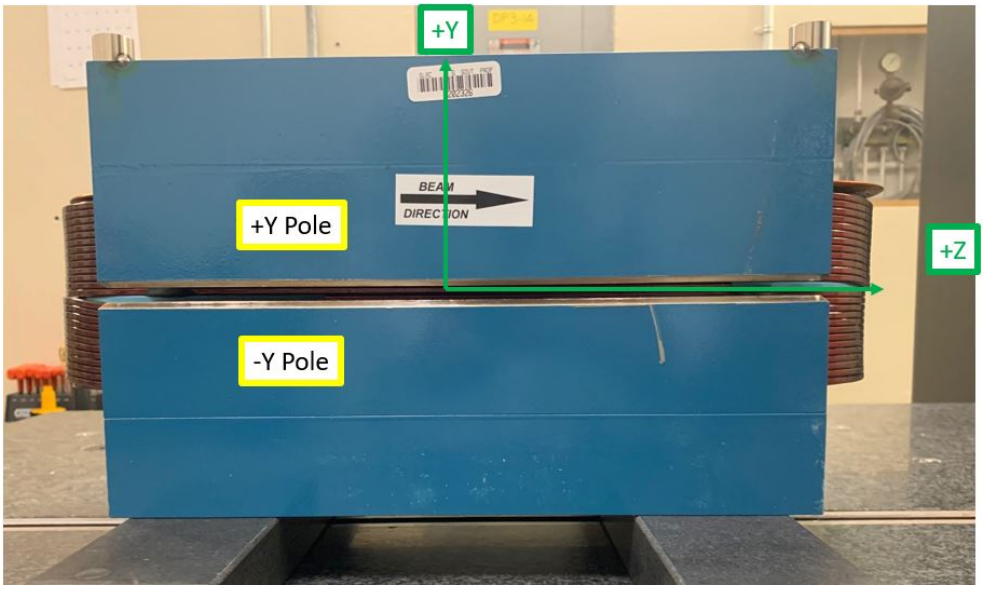
Pole Gap Measurements, Flatness & Parallelism



	-Y Pole Fltns	+Y Pole Fltns	Pole Parallel	Avg. Gap	Min. Gap	Max. Gap
POLE DATA	0.0002	0.0003	0.0005	0.2759	0.2755	0.2761

Dimensions in Inch

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