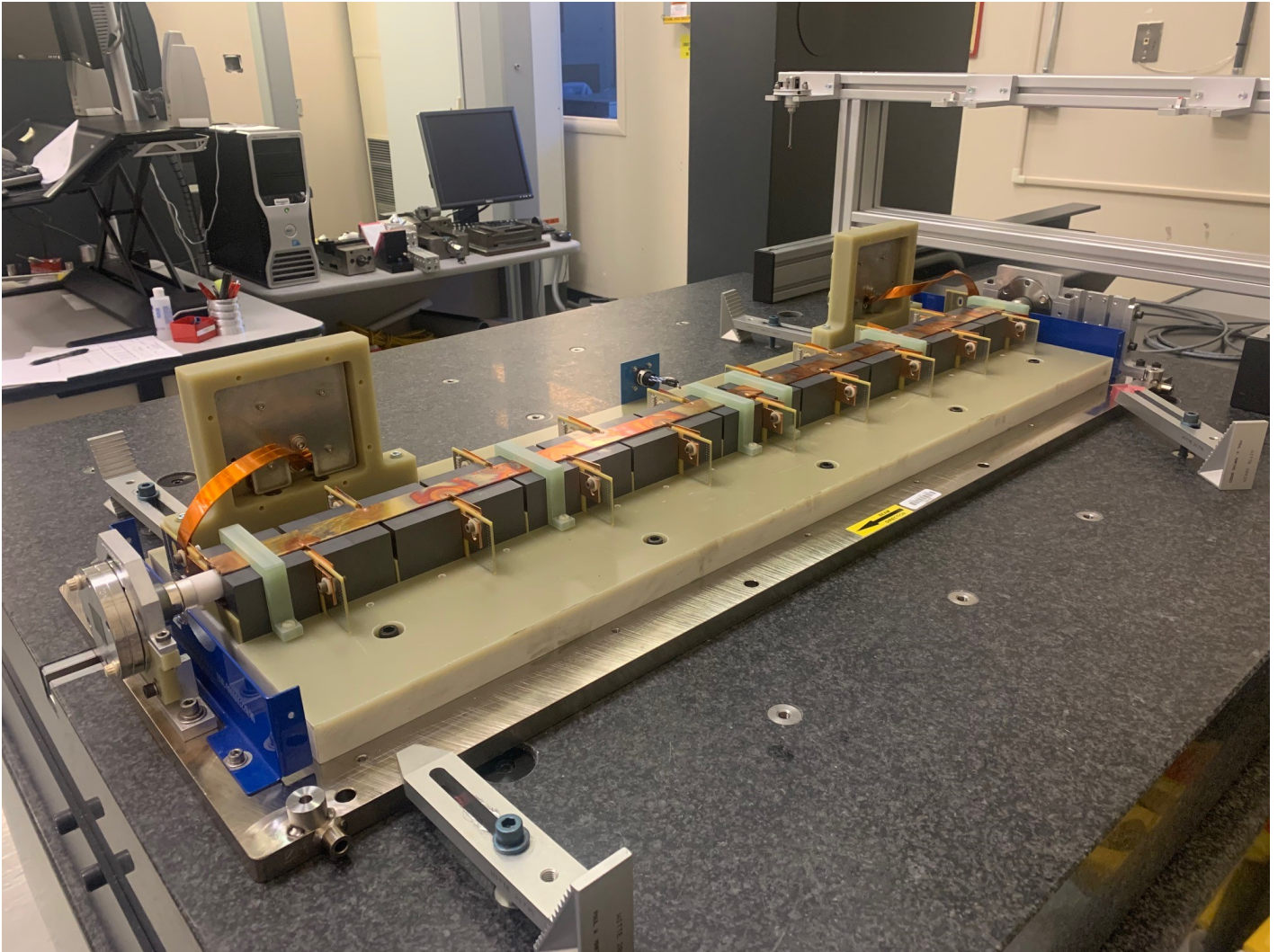


S30XL HIGH RATE KICKER MAG ASSY



Inspector : K. Caban
Engineer : T. Beukers
Drawing No. : SA-375-164-01 R1
Barcode # :4486

Coordinate System Setup

Spatial Alignment

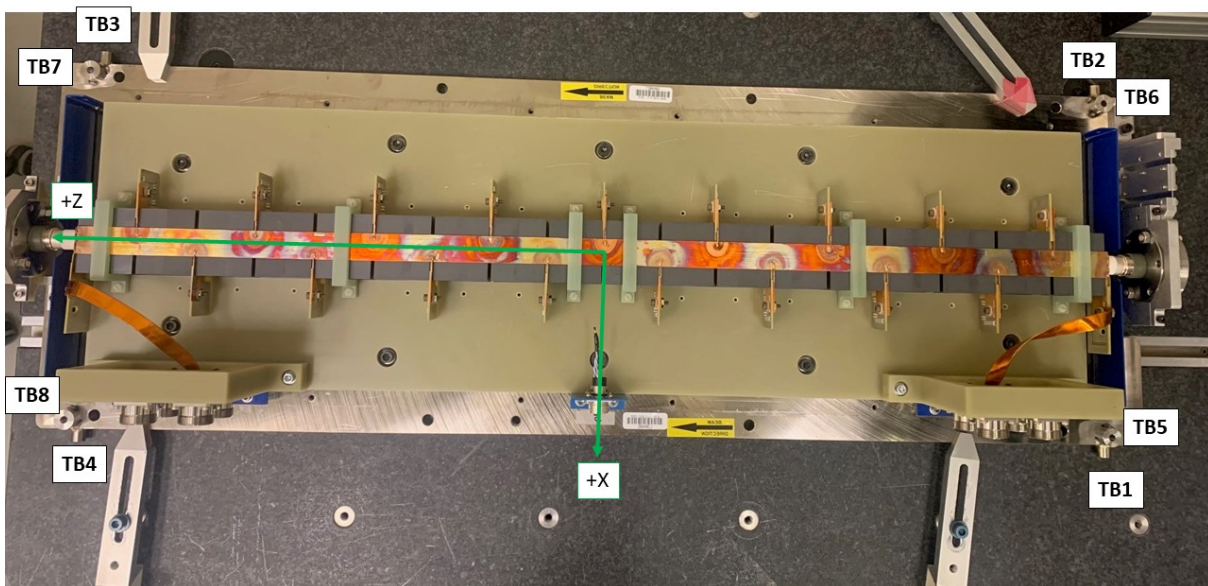
Symmetry Plane of the Outer Ferrite U-Core
Upstream End and Downstream End
Sets Zero in X and sets Pitch/Yaw

Planar Alignment

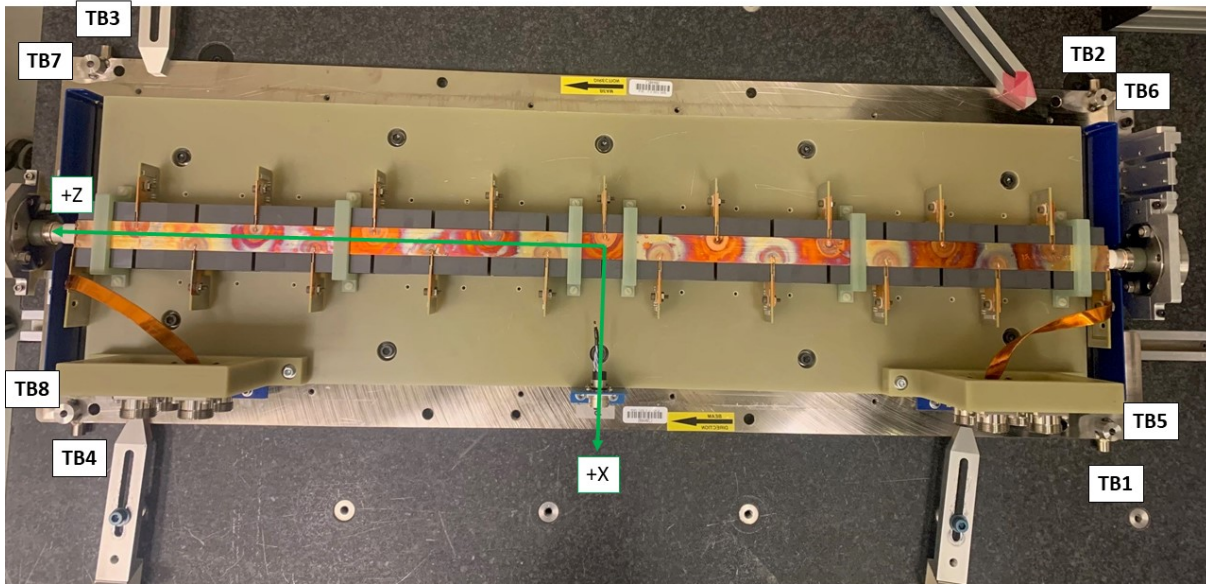
Top of Ferrite U-Core, shifted down -0.425"
Sets Roll and Zero in Y

Coordinate Origins

Origin in Z is the symmetry Plane of the end of the Upstream end of U-Core Ferrite
(side with flexure holder sticking down from plate) and Downstream end of U-Core Ferrite.



Standard 1 inch offset Tooling Balls

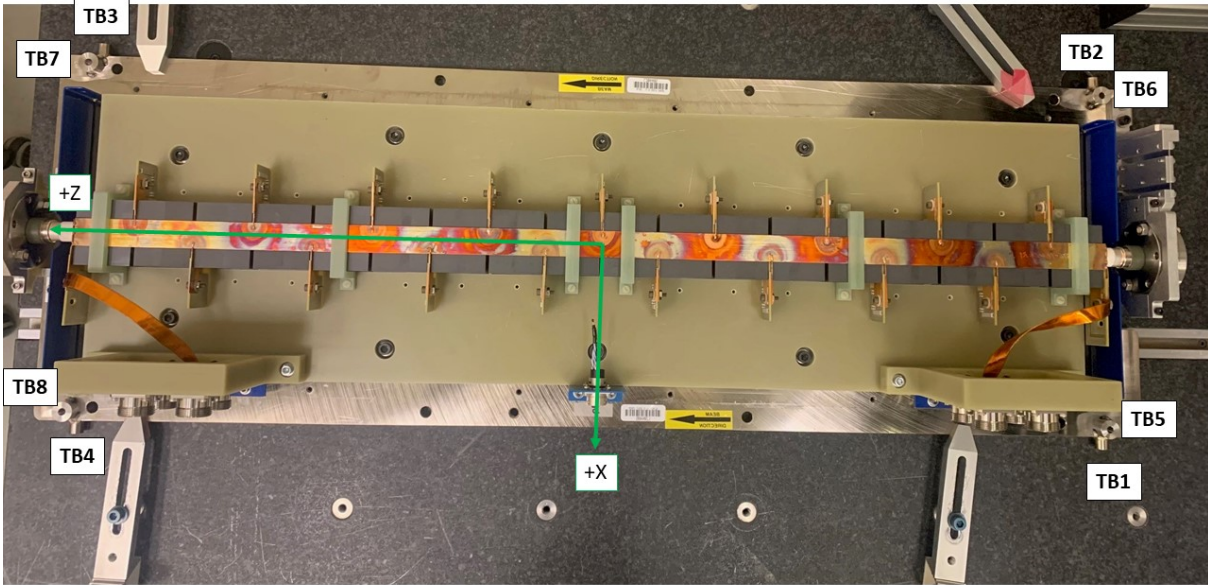


Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	8.5083	-2.3596	-20.2818
TB 2	-8.4905	-2.3894	-20.2767
TB 3	-8.5042	-2.4013	19.5881
TB 4	8.4925	-2.3740	19.5954
TB 5	6.6574	-0.6217	-20.2462
TB 6	-6.5913	-0.6205	-20.2586
TB 7	-6.6066	-0.6302	19.8281
TB 8	6.6289	-0.6305	19.8353

Tooling Ball Locations are 1 inch above Tooling Ball Adapter Plane

Dimensions in Inch

Tooling Ball Locations Short Tooling Balls - 5/16 inch

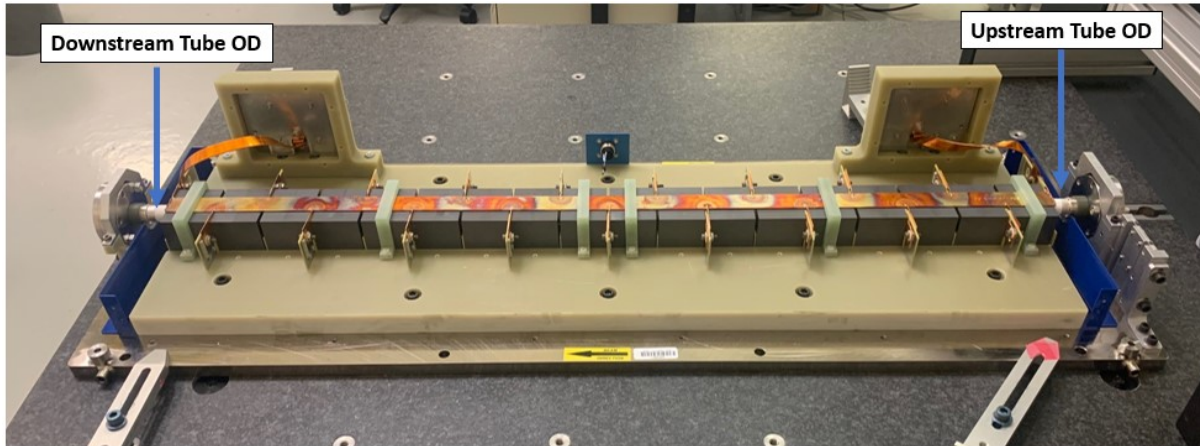


Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	7.8205	-2.3639	-20.2702
TB 2	-7.8029	-2.3813	-20.2711
TB 3	-7.8161	-2.3954	19.5964
TB 4	7.8061	-2.3770	19.6046
TB 5	6.6555	-1.3091	-20.2481
TB 6	-6.5940	-1.3080	-20.2575
TB 7	-6.6072	-1.3177	19.8277
TB 8	6.6245	-1.3179	19.8320

Tooling Ball Locations are 5/16 (.3125) inch above Tooling Ball Adapter Plane

Dimensions in Inch

OD Tube Measurements U/S-D/S



OD Tube Loc	X-Coord.	Y-Coord.	Z-Coord.
Upstream Tube OD	0.0045	0.0212	-18.8435
Downstream Tube OD	0.0019	0.0208	18.8417