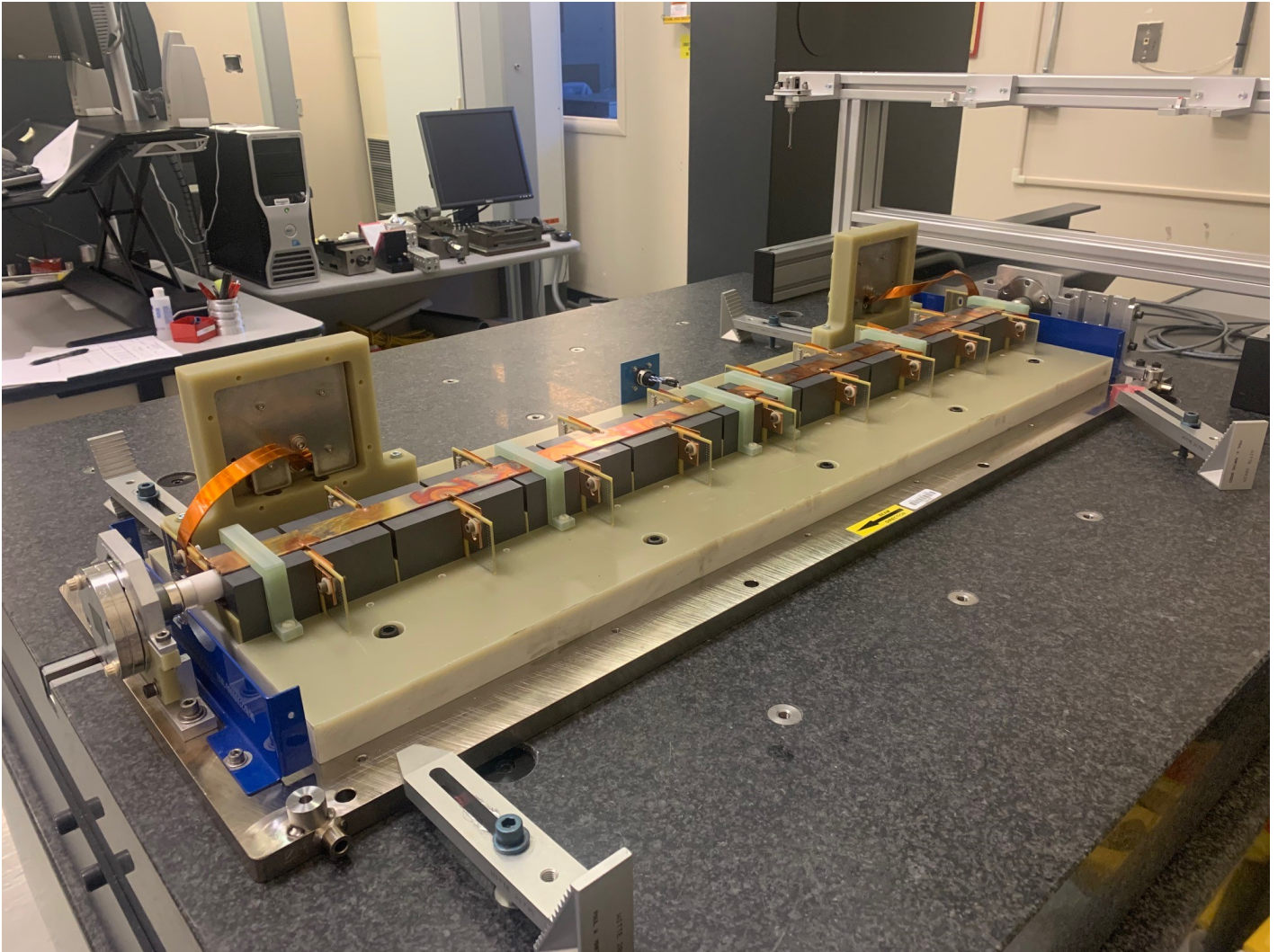


S30XL HIGH RATE KICKER MAG ASSY



Inspector : K. Caban
Engineer : T. Beukers
Drawing No. : SA-375-164-01 R1
Barcode # :4481

Coordinate System Setup

Spatial Alignment

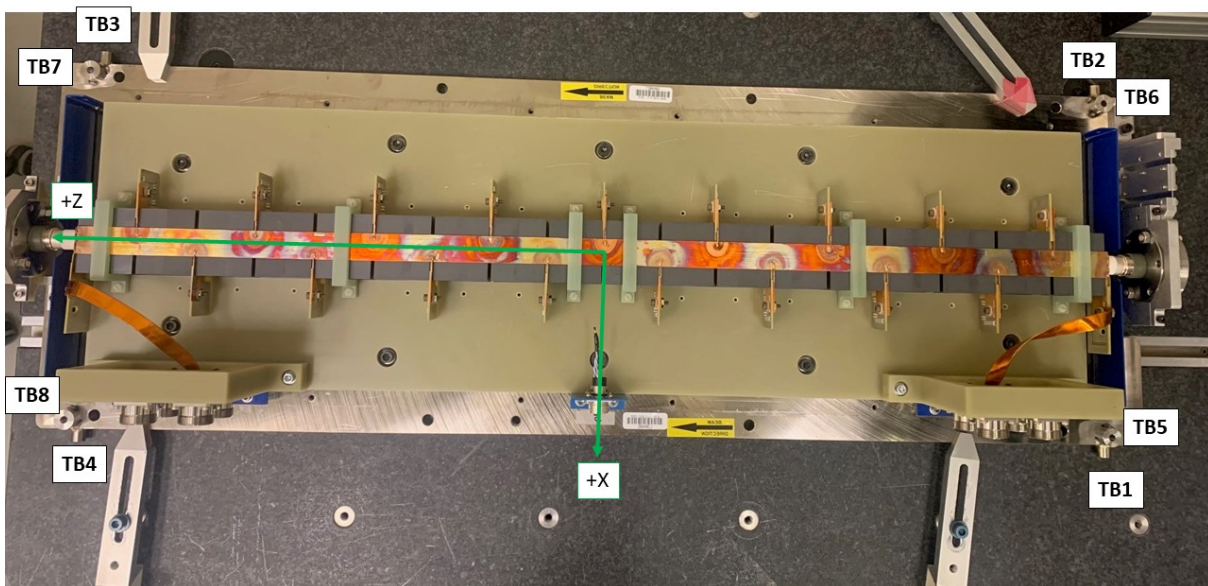
Symmetry Plane of the Outer Ferrite U-Core
Upstream End and Downstream End
Sets Zero in X and sets Pitch/Yaw

Planar Alignment

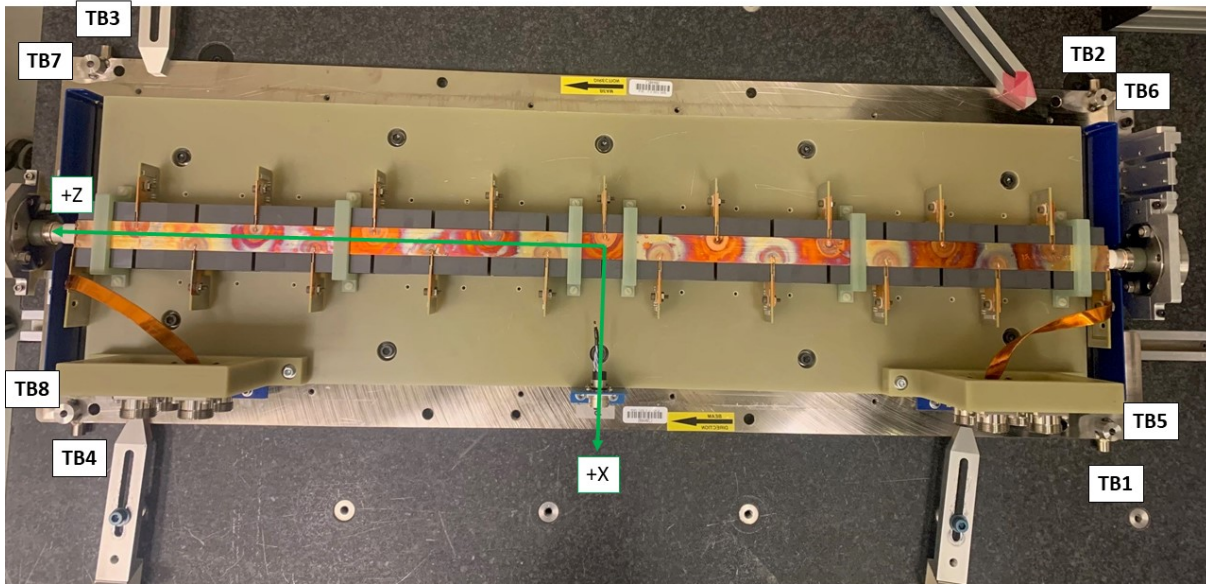
Top of Ferrite U-Core, shifted down -0.425"
Sets Roll and Zero in Y

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

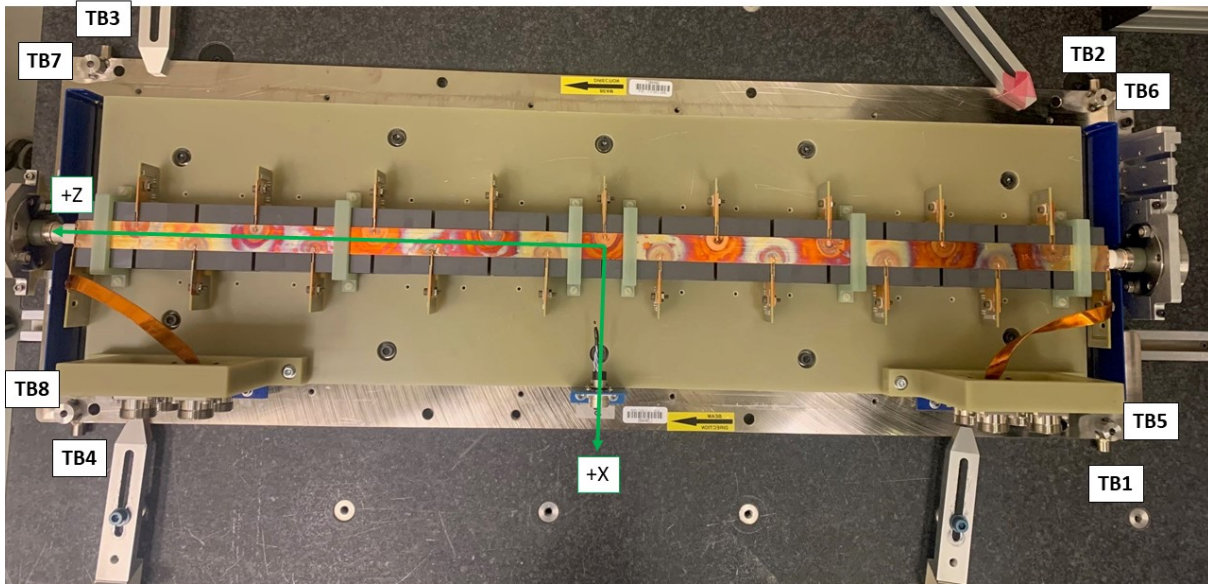


Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	8.4874	-2.4093	-20.2600
TB 2	-8.5153	-2.3664	-20.2775
TB 3	-8.5249	-2.3562	19.5354
TB 4	8.4837	-2.4141	19.5970
TB 5	6.6137	-0.6254	-20.2751
TB 6	-6.6347	-0.6168	-20.2959
TB 7	-6.5991	-0.6243	19.8146
TB 8	6.5968	-0.6321	19.8136

Tooling Ball Locations are 1 inch above Tooling Ball Adapter Plane

Dimensions in Inch

Tooling Ball Locations Short Tooling Balls - 5/16 inch

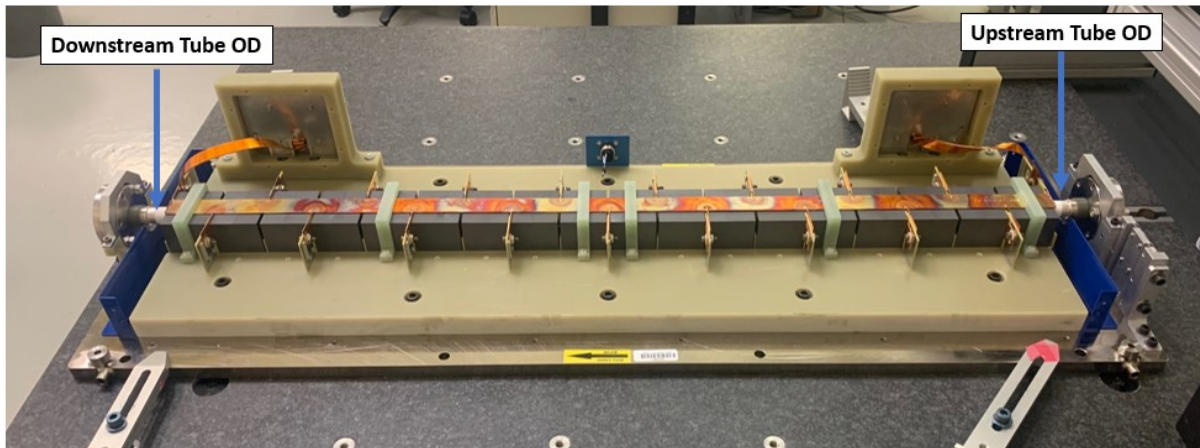


Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	7.8000	-2.4047	-20.2680
TB 2	-7.8274	-2.3657	-20.2811
TB 3	-7.8372	-2.3632	19.5584
TB 4	7.7946	-2.3997	19.5940
TB 5	6.6107	-1.3129	-20.2789
TB 6	-6.6383	-1.3042	-20.2967
TB 7	-6.5999	-1.3118	19.8142
TB 8	6.5979	-1.3196	19.8137

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	-0.0153	0.0185	-18.8457
Downstream Tube OD	0.0054	0.0185	18.8418