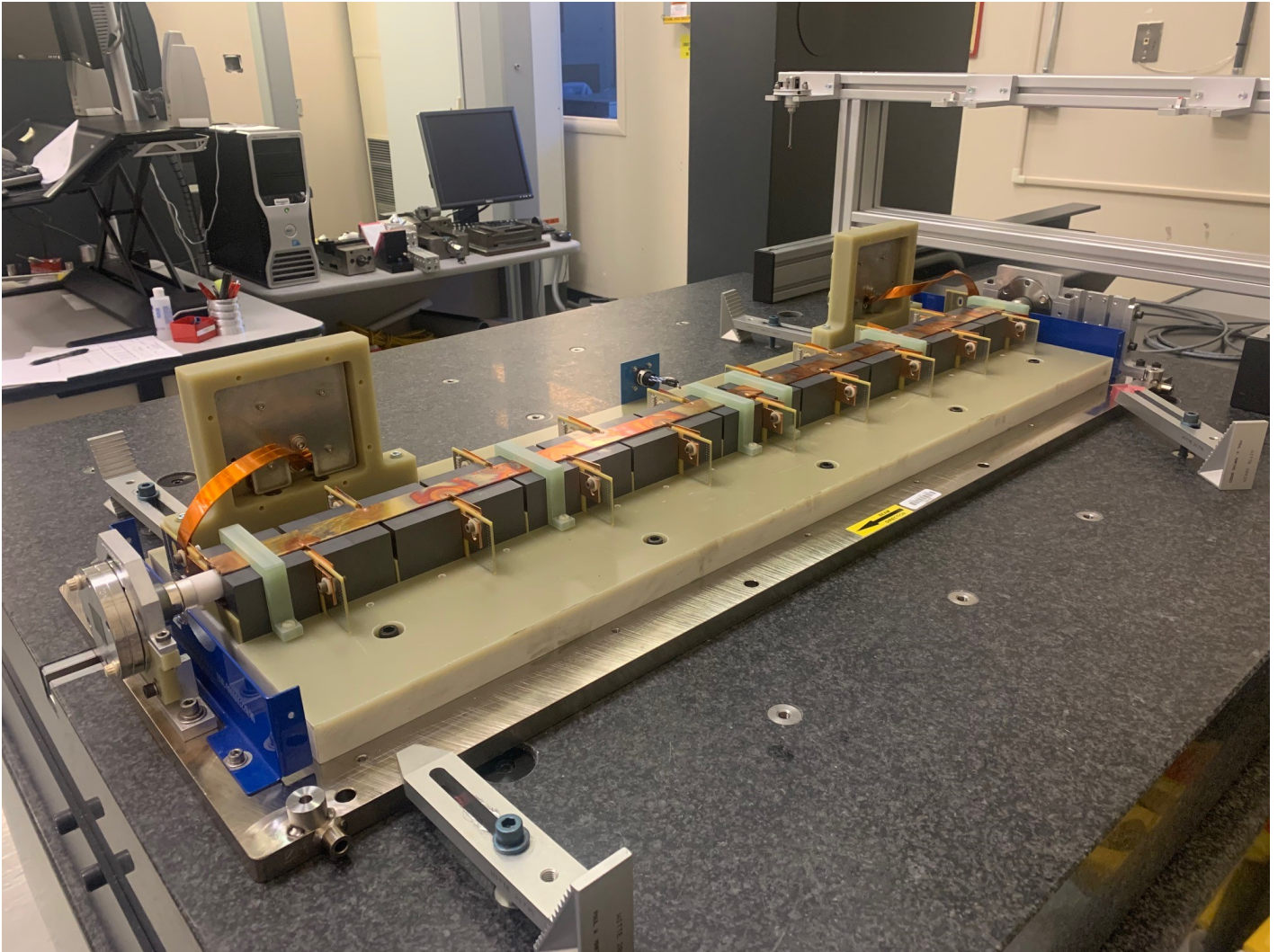


S30XL HIGH RATE KICKER MAG ASSY



Inspector : K. Caban
Engineer : T. Beukers
Drawing No. : SA-375-164-01 R1
Barcode # :4485

Coordinate System Setup

Spatial Alignment

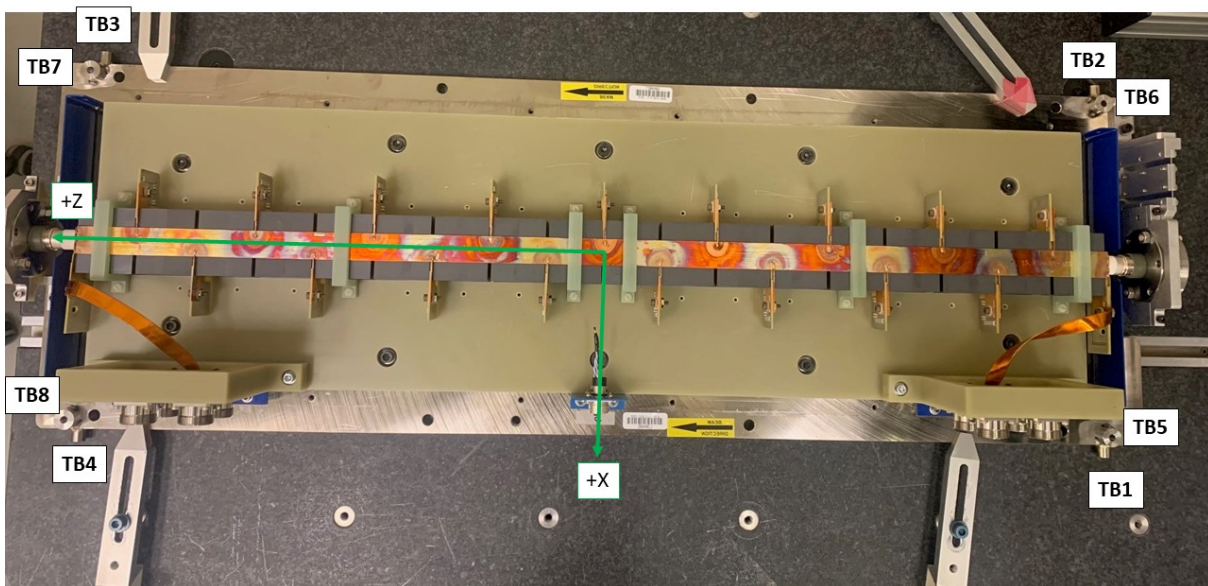
Symmetry Plane of the Outer Ferrite U-Core
Upstream End and Downstream End
Sets Zero in X and sets Pitch/Yaw

Planar Alignment

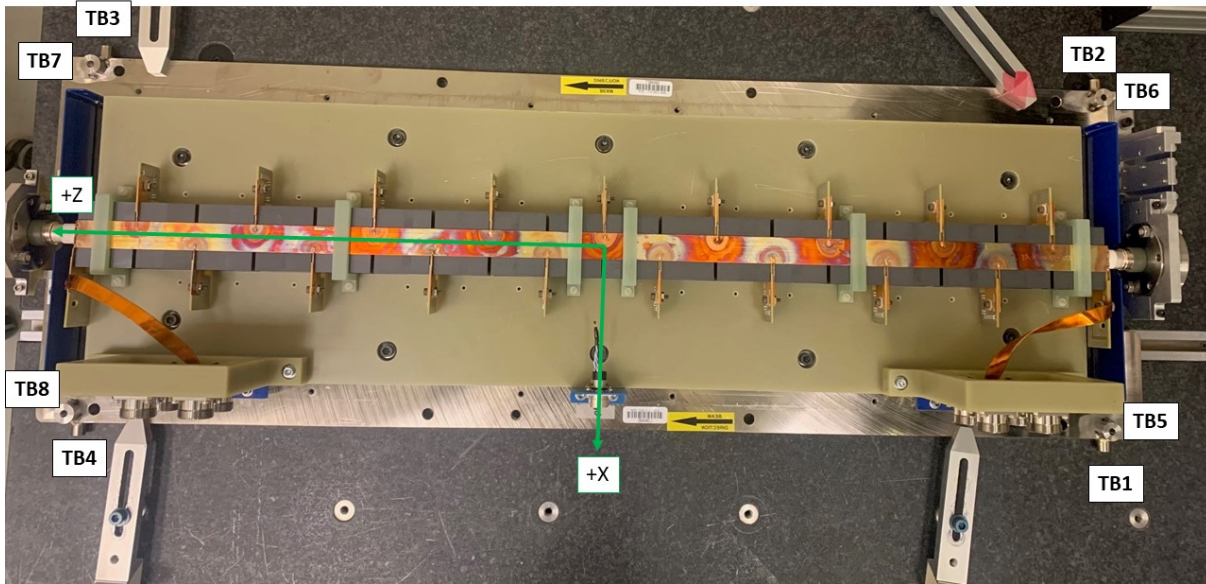
Top of Ferrite U-Core, shifted down -0.425"
Sets Roll and Zero in Y

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

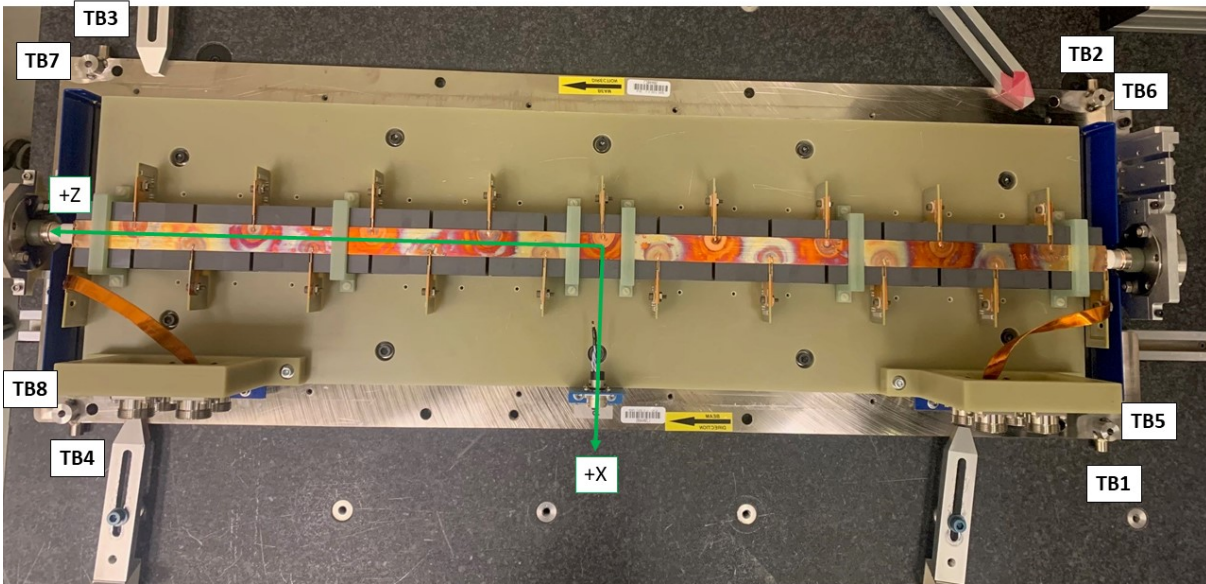


Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	8.4712	-2.4095	-20.2113
TB 2	-8.5275	-2.3722	-20.1925
TB 3	-8.4855	-2.3692	19.6728
TB 4	8.5108	-2.3972	19.6561
TB 5	6.5954	-0.6333	-20.1904
TB 6	-6.6683	-0.6214	-20.1574
TB 7	-6.6009	-0.6226	19.8820
TB 8	6.6360	-0.6263	19.8805

Tooling Ball Locations are 1 inch above Tooling Ball Adapter Plane

Dimensions in Inch

Tooling Ball Locations Short Tooling Balls - 5/16 inch

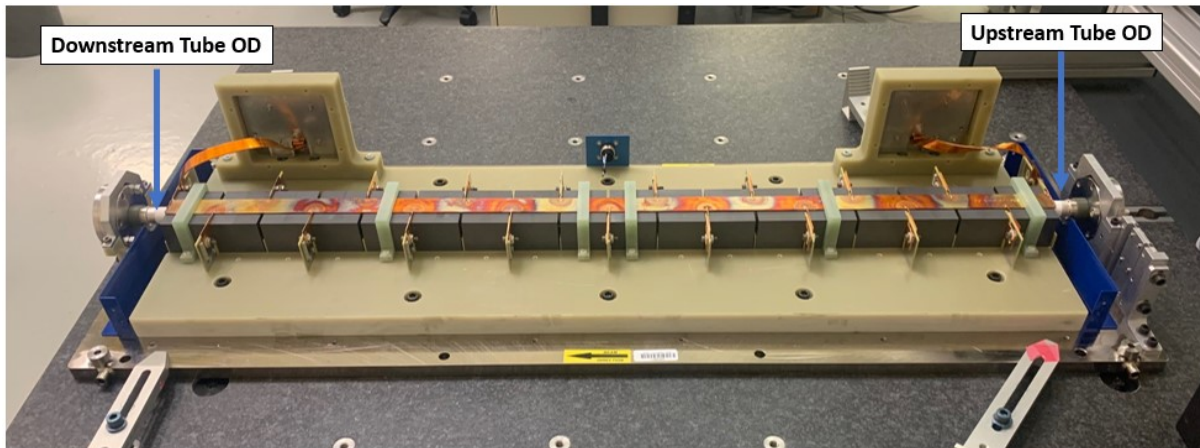


Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	7.7840	-2.3997	-20.2194
TB 2	-7.8393	-2.3776	-20.1980
TB 3	-7.7971	-2.3696	19.6698
TB 4	7.8232	-2.3876	19.6524
TB 5	6.5962	-1.3208	-20.1919
TB 6	-6.6680	-1.3089	-20.1574
TB 7	-6.6014	-1.3101	19.8821
TB 8	6.6378	-1.3138	19.8782

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	-0.0052	0.0261	-18.8384
Downstream Tube OD	0.0179	0.0261	18.8441