Diamond Light Source

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diamond

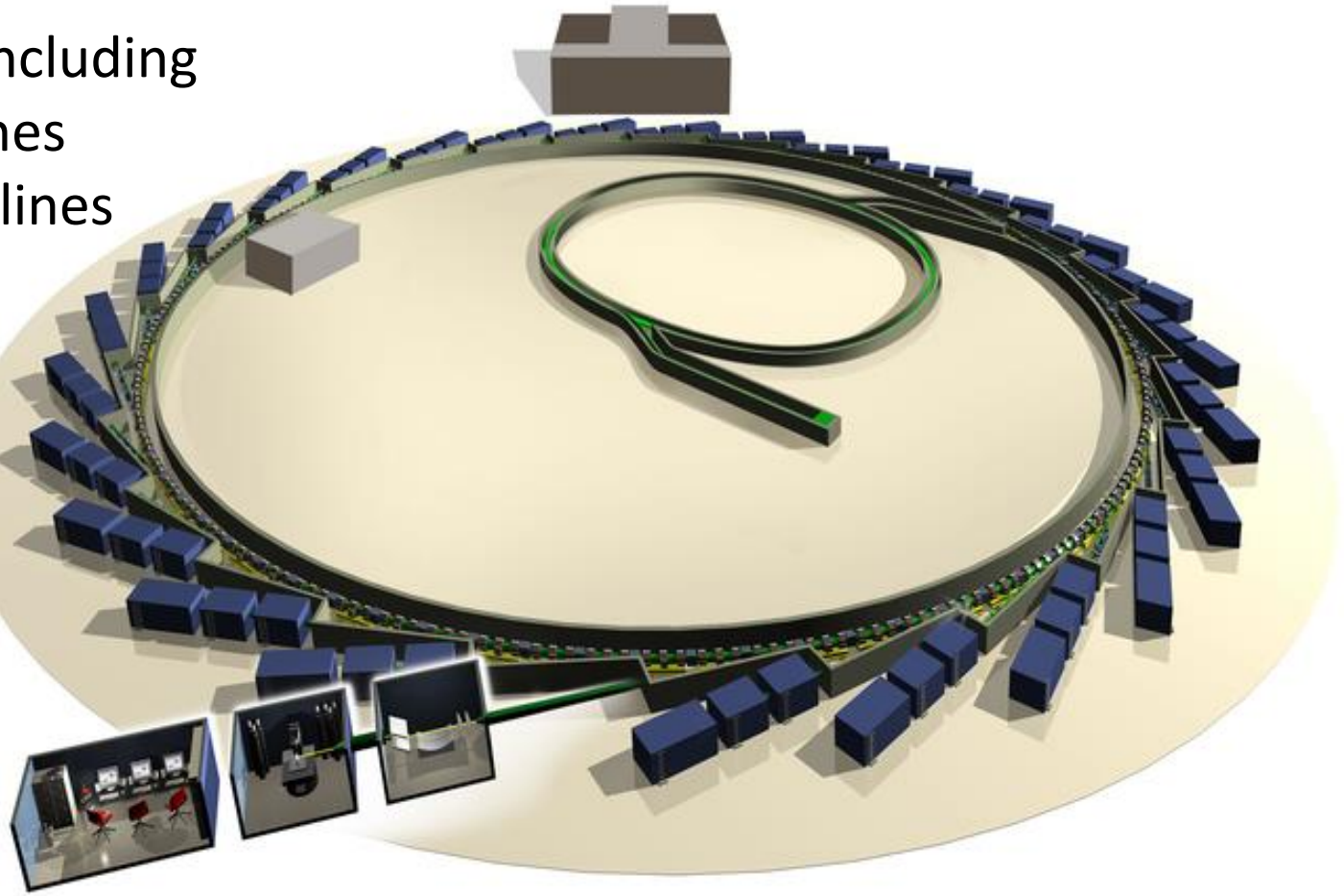
Diamond – 3rd Generation Light Source

Injector: 100MeV Linac + 3Gev 5Hz Booster

Storage Ring: 24 DBA Cells, 560m, 300mA

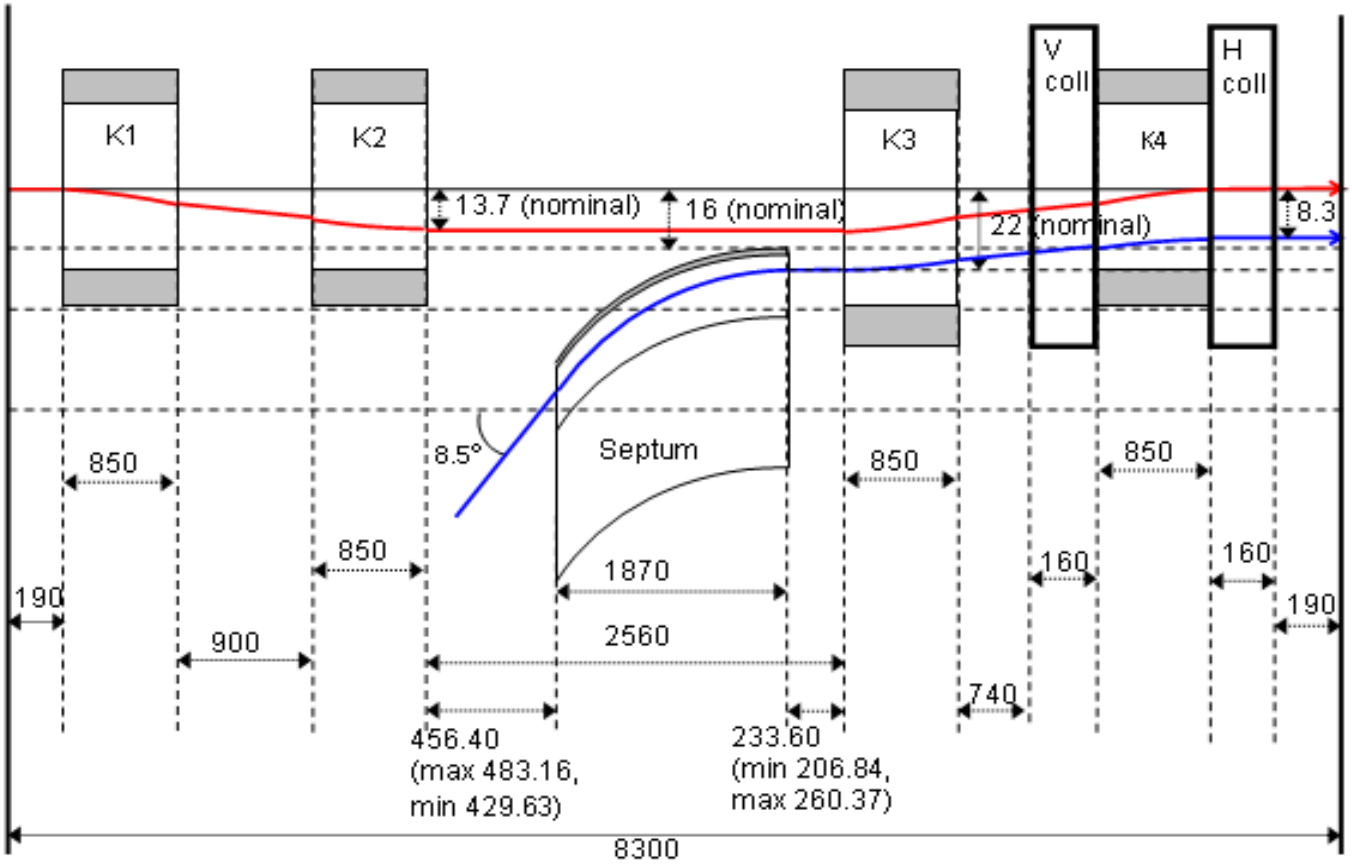
30 Beam lines, including

- 22 I.D. Beam lines
- 7 Dipole Beam lines



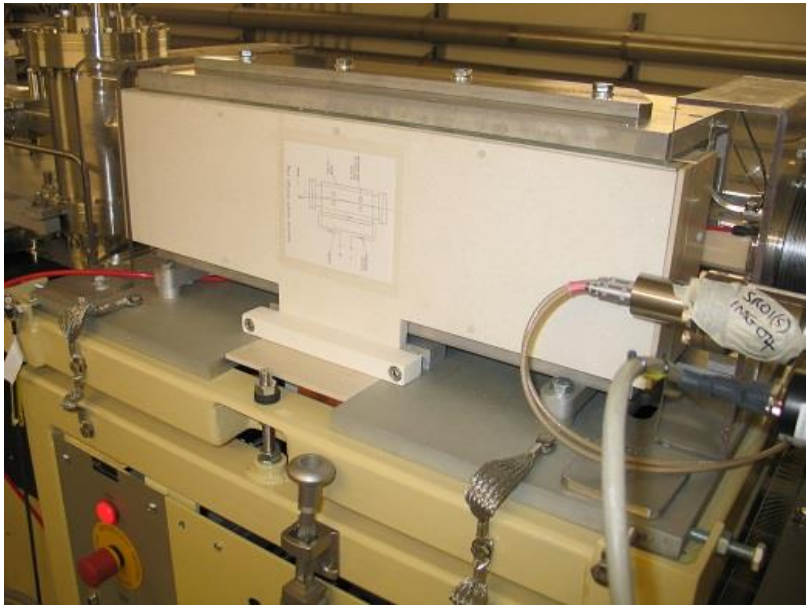
Diamond SR Injection

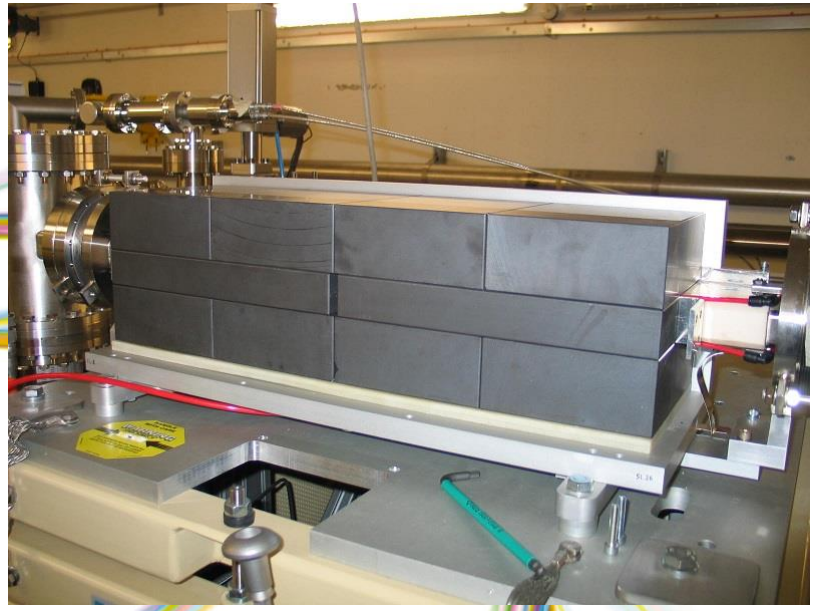
Four kickers bump in one straight sections (8.3 m flange-to-flange)
2007-15: septum at -16mm and injection point at -8.3 mm

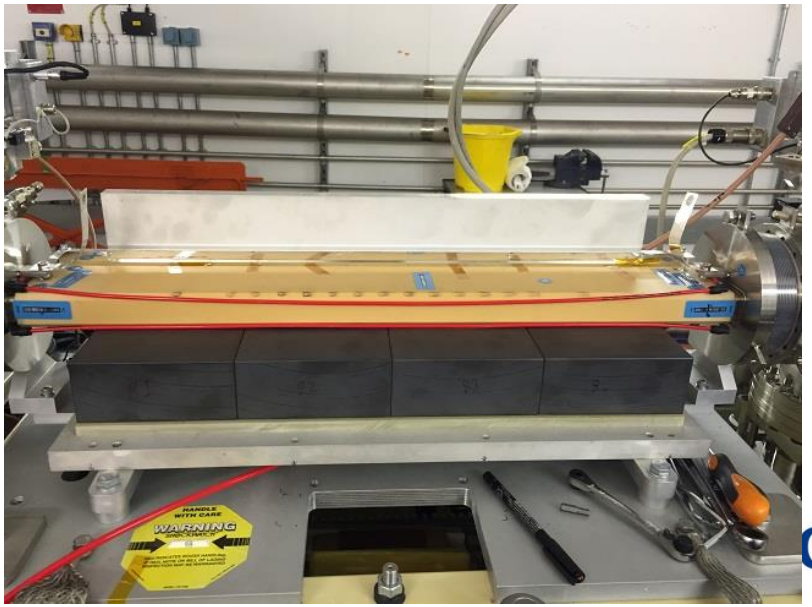


2015-now septum moved at -12 mm to have the injection point at -6.5 mm and lower the strength of the kicker bump

Kickers assembly overview







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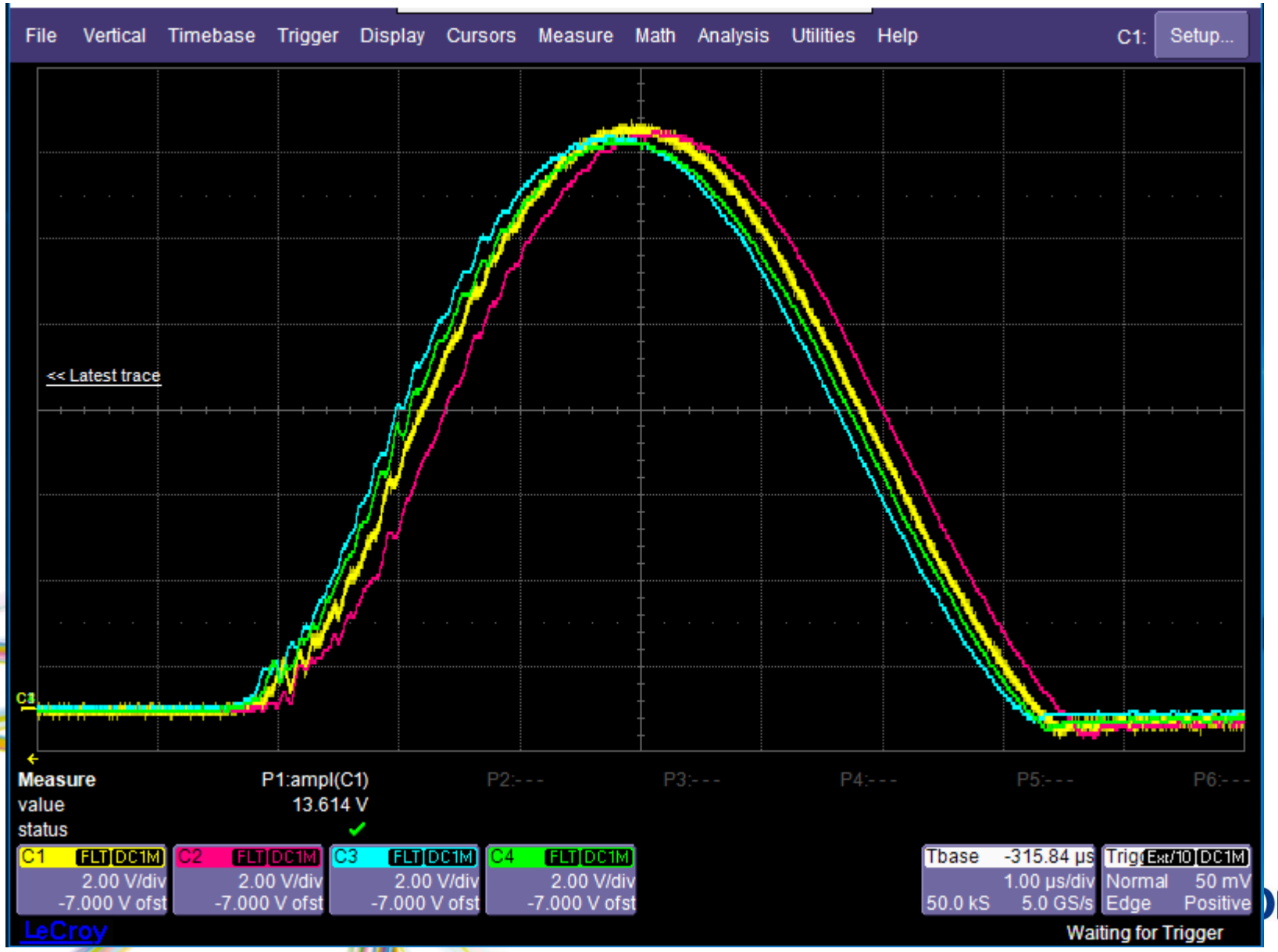
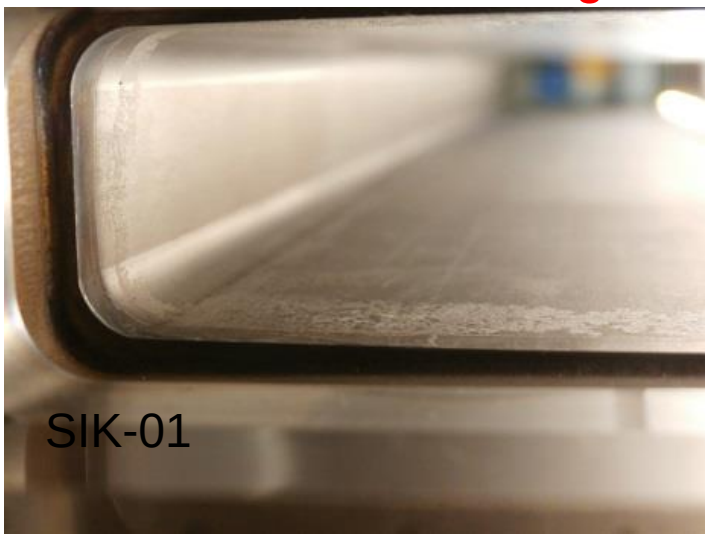
Kicker Poor Matching

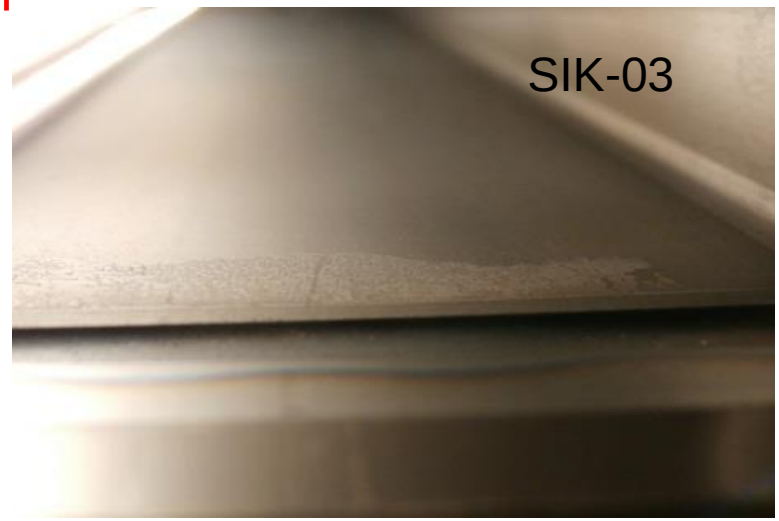


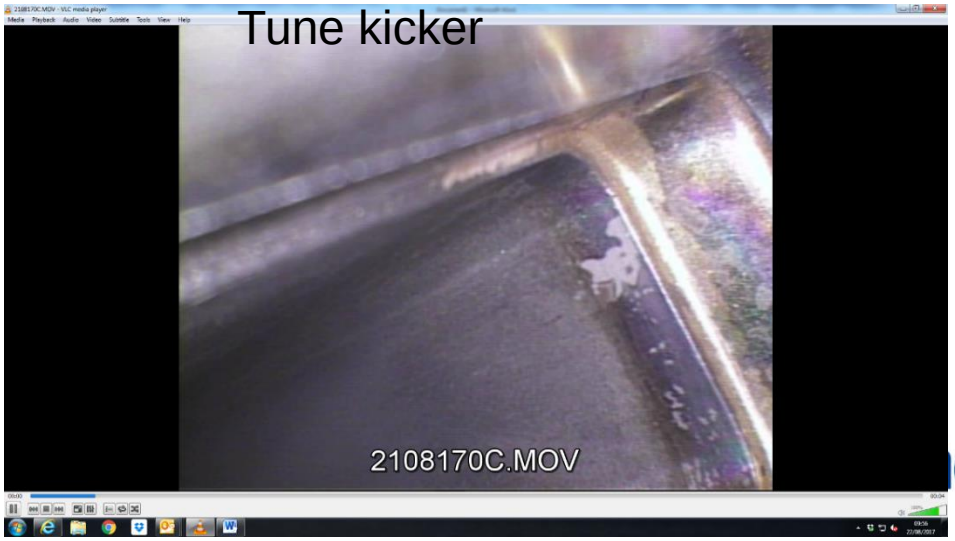
Kicker vessel coating damage

Existing kickers coating and tune kicker coating

coating damage appears at the ends

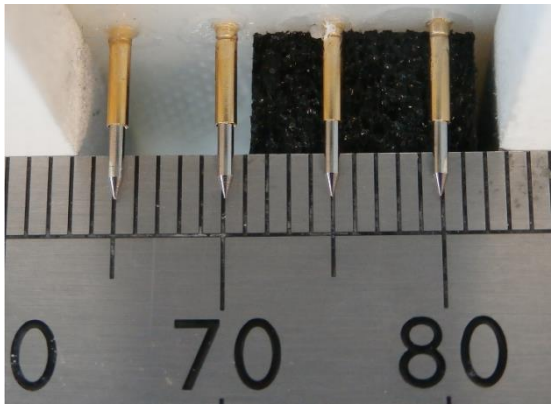


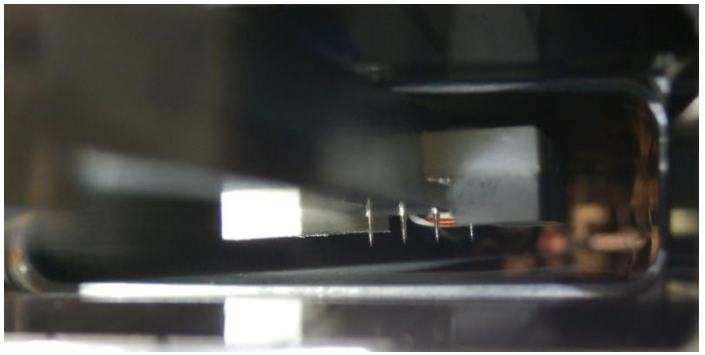


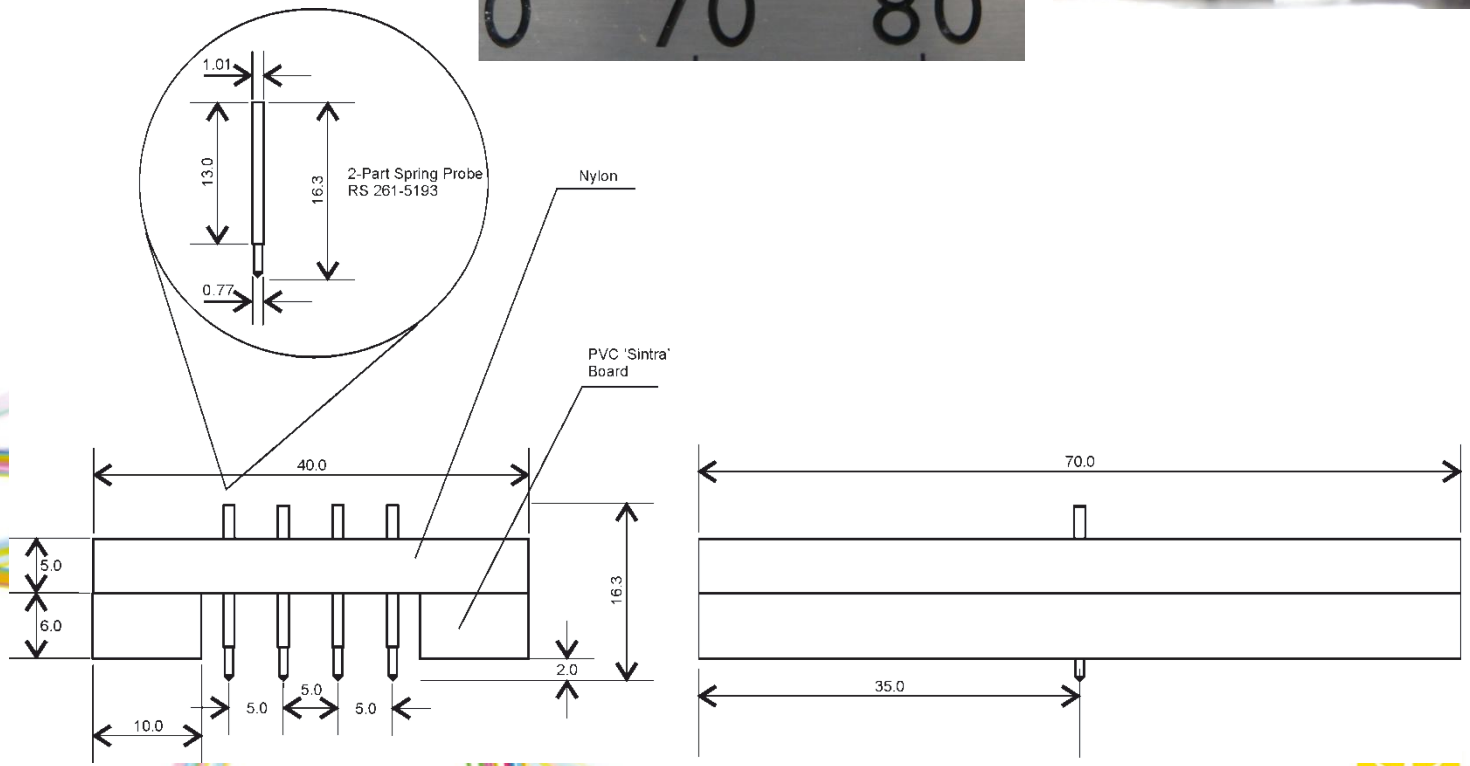


Coating thickness measurements

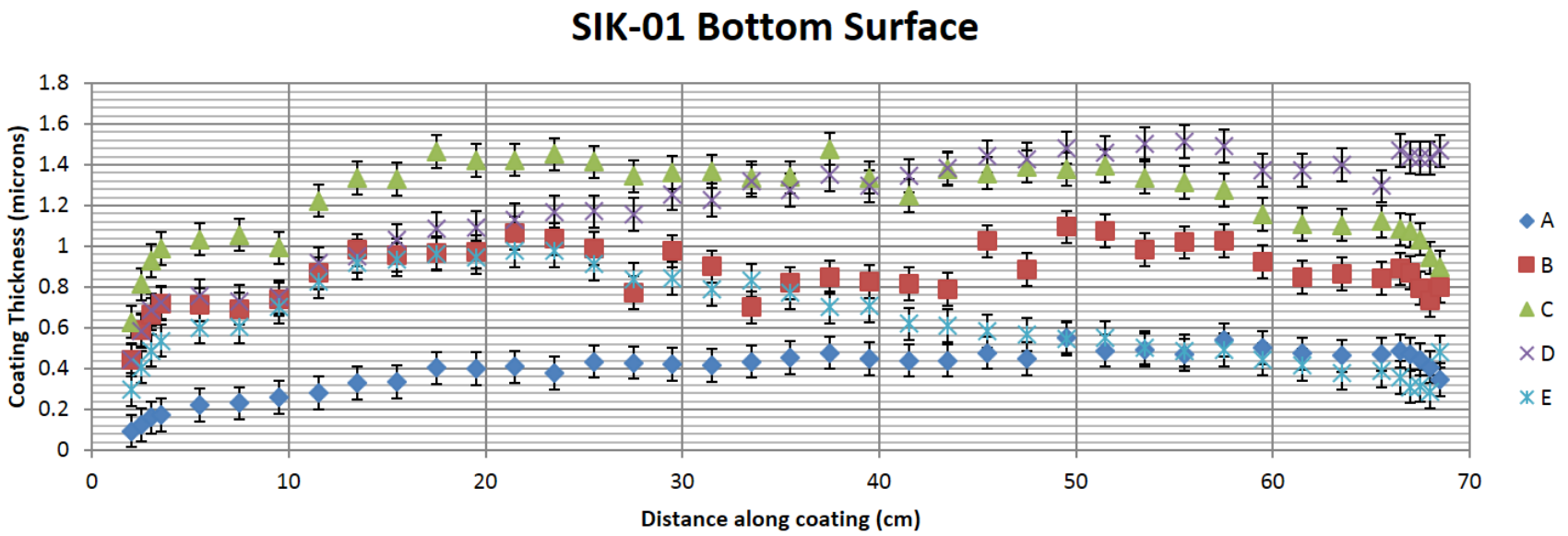
4-Point Probe setup

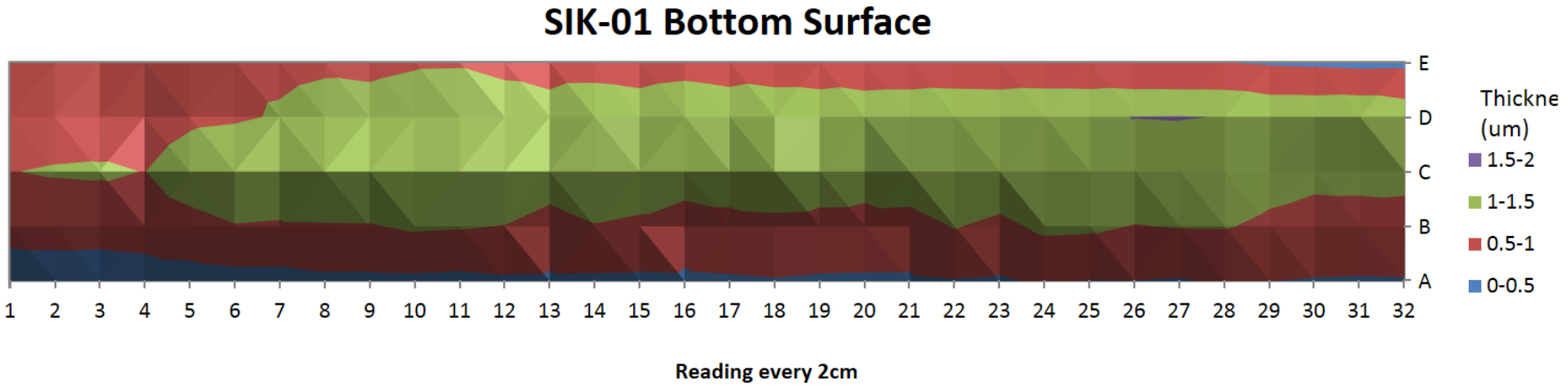




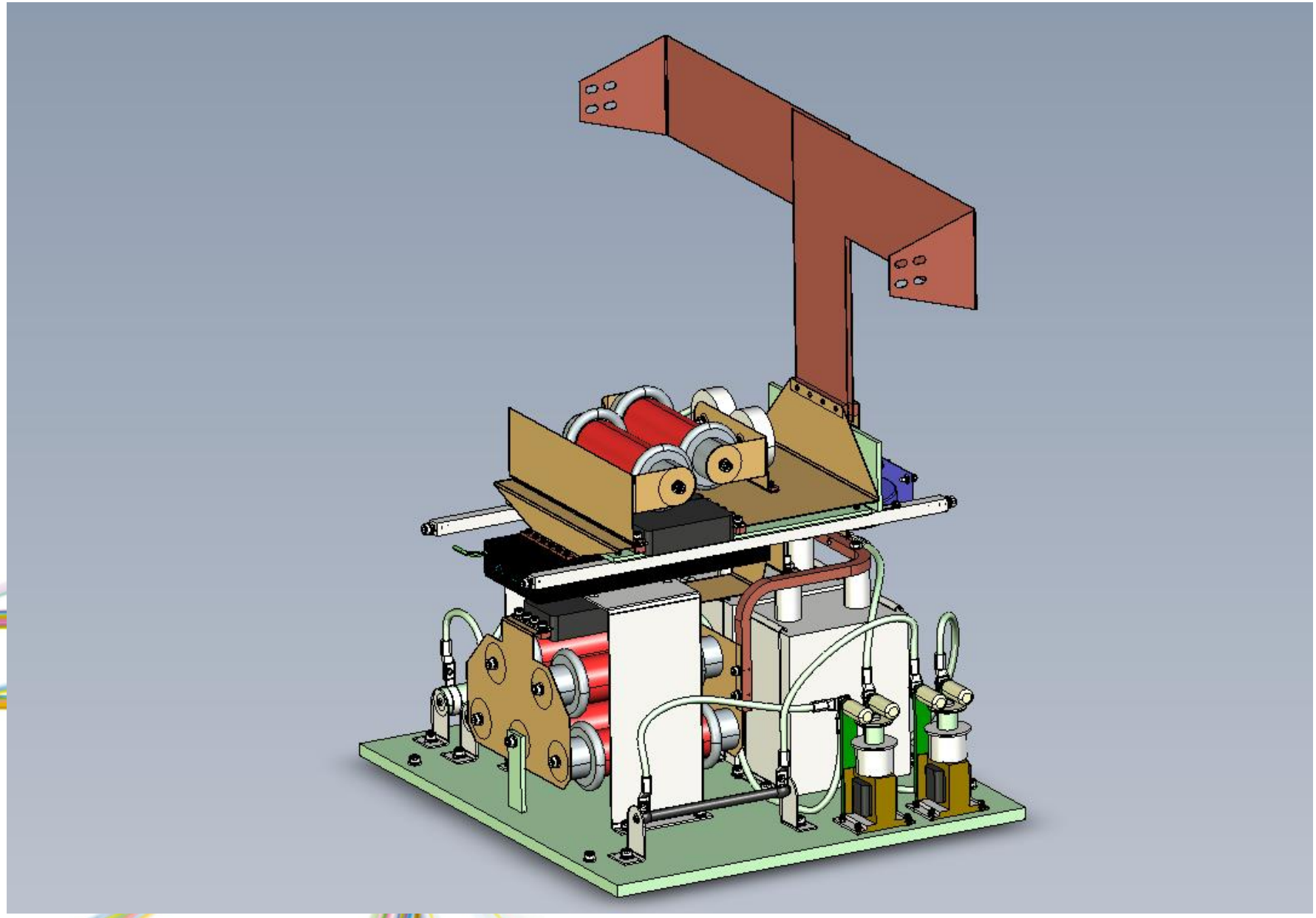


Coating thickness measurements





Kicker Test Stand



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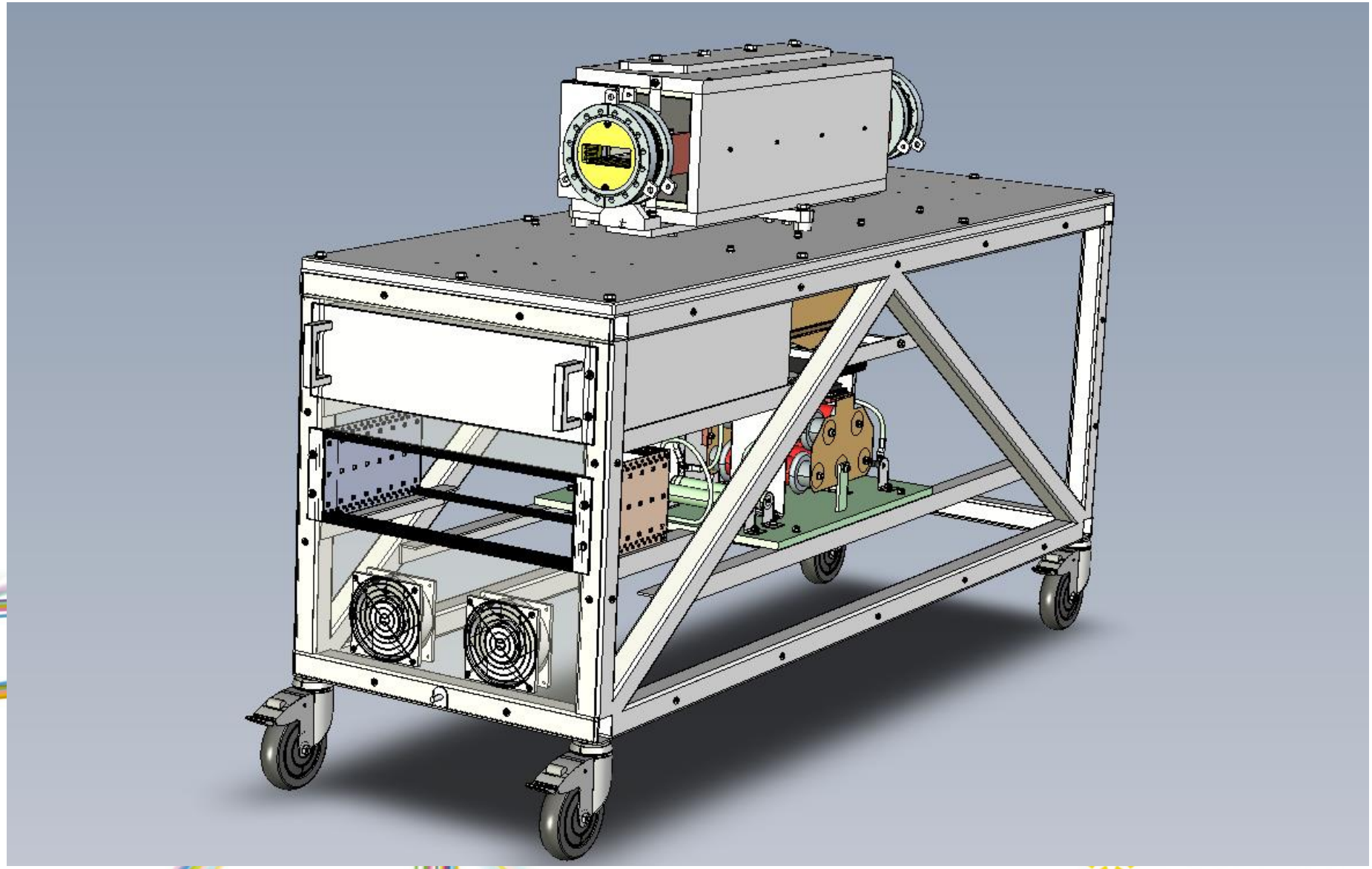

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Thank you for your Attention.

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