

Beam Wire Scanner for PSB

Update

19-Sep-2016

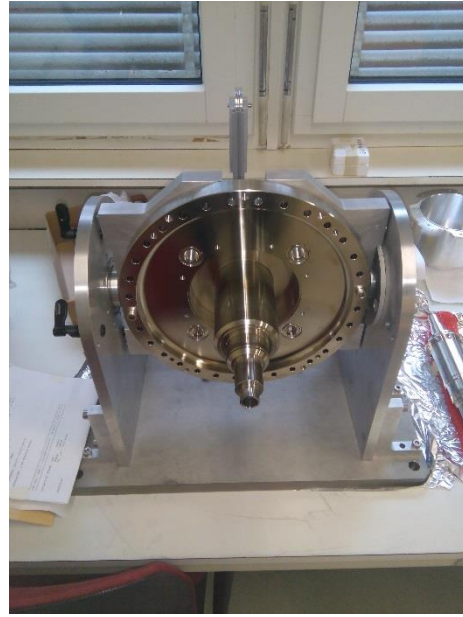
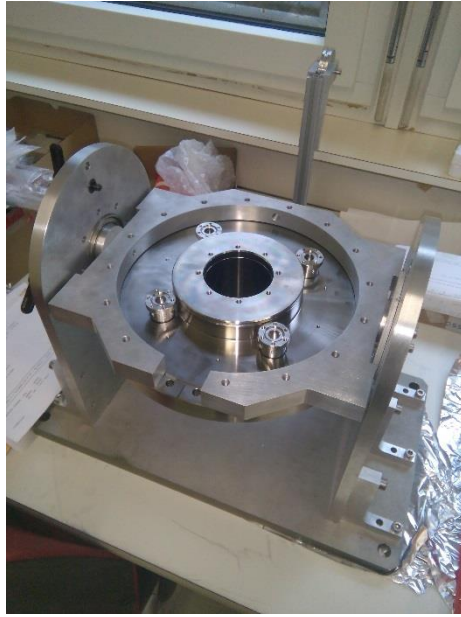
Dmitry Gudkov
BE-BI-ML

Contents

- **Assembly (BI-ML)**
- **Optical disks**
- **Scintillator/Filter box/Photomultiplier**

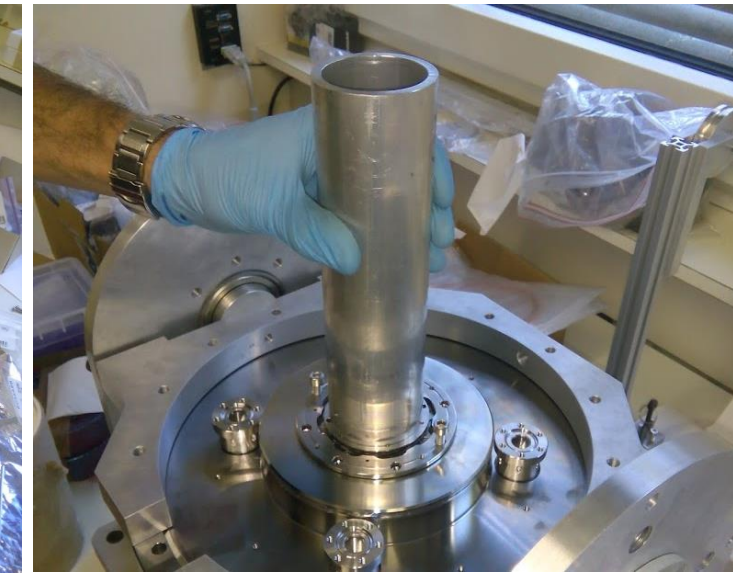
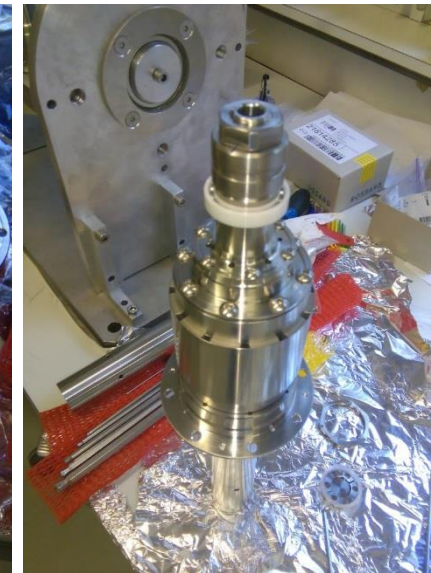
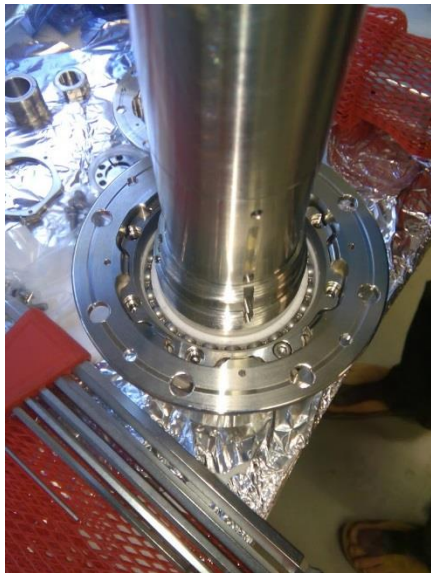
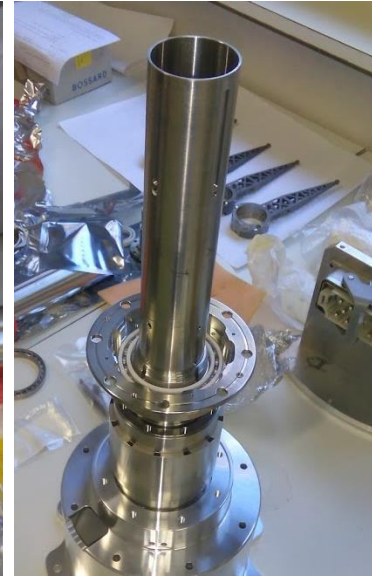
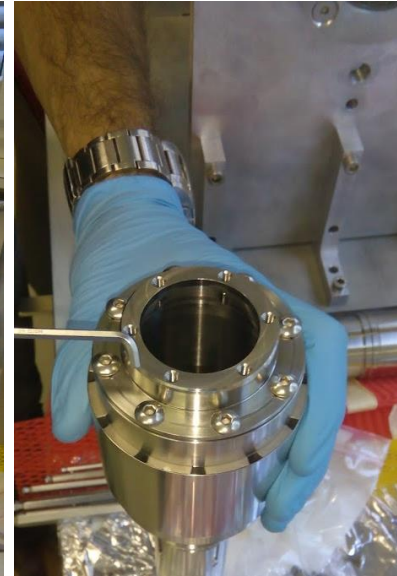
Production Status

All the parts are available for assembly



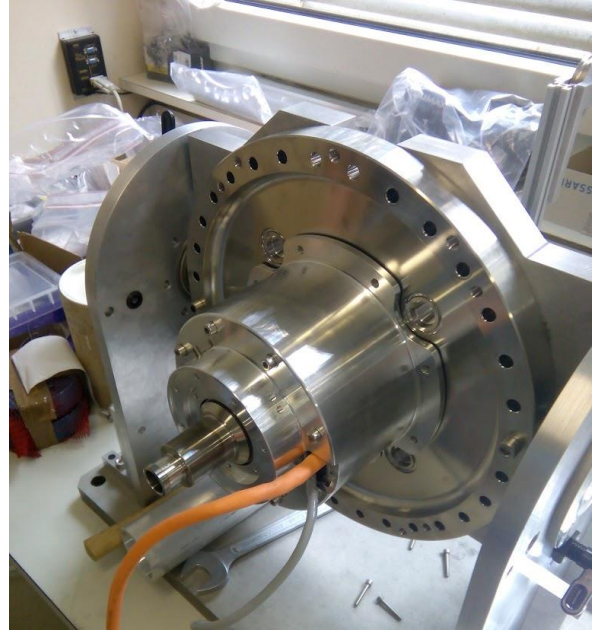
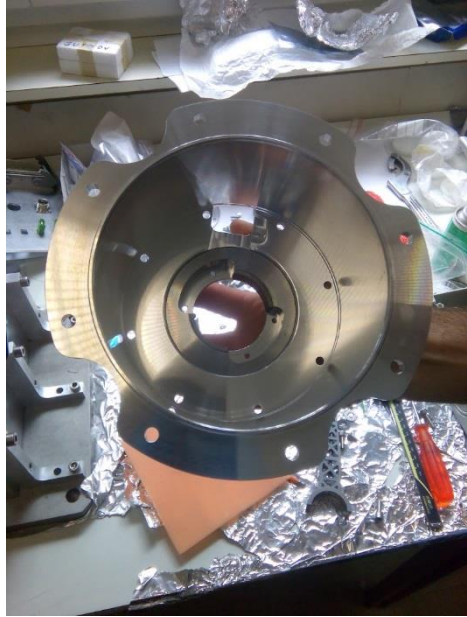
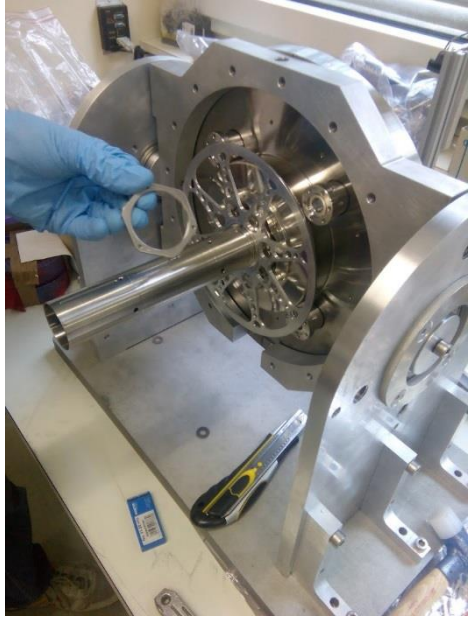
Assembly Status

Assembly of 1 prototype is under way (75% readiness)



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...Will continue during CW38...

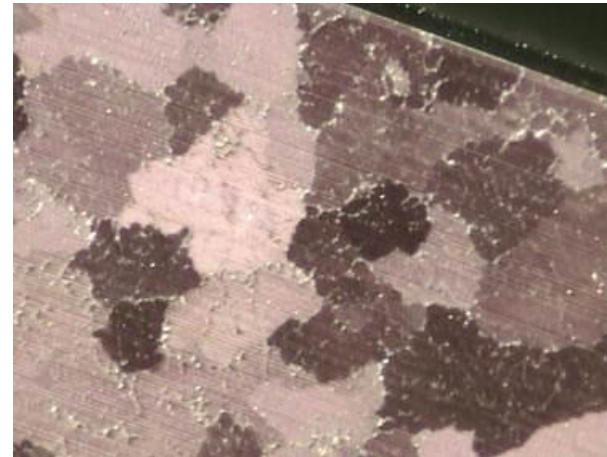
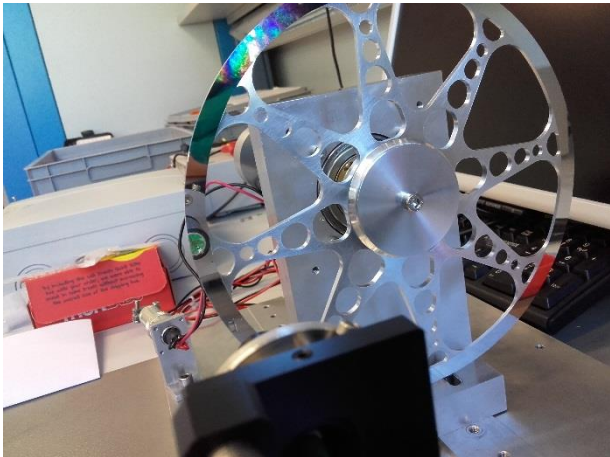
Optical Disks Status CW 36

Current status (CW 36)

1. Production of 3 metallic optical disks is complete.
2. Diamond turning of optical track is done.
3. Tests shows that the face reflectivity is not sufficient for using these disks in the encoder.
4. Material for actual disk is AW-2219 (T851) while for tests (successful) the AW-6082 T6 was used.

Proposed actions

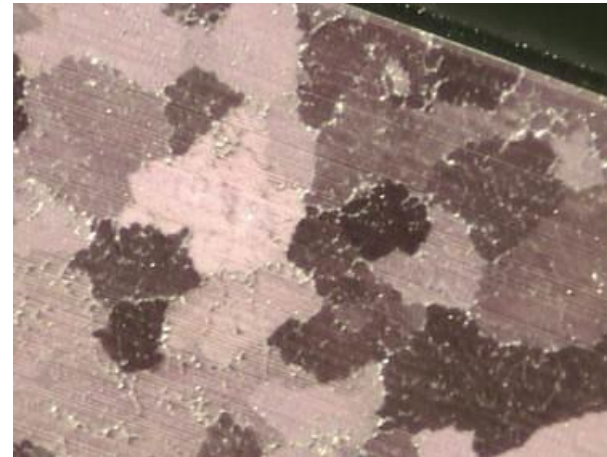
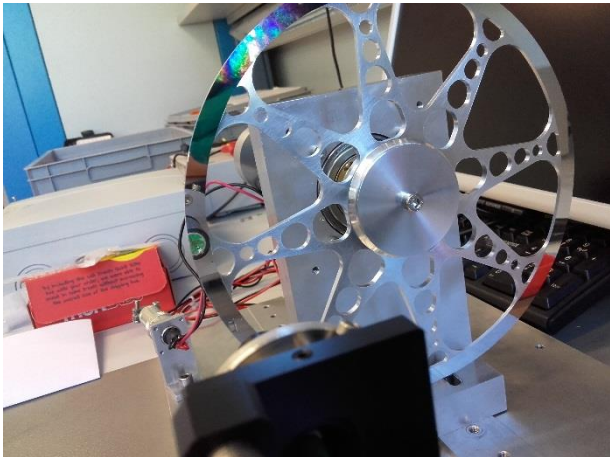
1. Manual polishing of the face improved reflectivity, but not significantly.
2. Production of 3 x disks (AW-6082 T6) is going to be organized with external company (VDL, LT-Ultra).
3. Laser engraving is postponed.



Optical Disks Status CW 38

Current status (CW 38)

1. Production of 4 disks from AW-6082 T6 is offered by VDL (NL), delay 8 weeks TBD; 5000 EUR, order this week.
2. Possibility of brazing of glass ring on aluminium support (hybrid disks) is under consideration, missing temperature constrains information.



Scintillator/Filter box/Photomultiplier

1. We have no spare components in stock.
2. No 2D drawings or 3D models are available in CDD/Smarteam.
3. 3D model has to be remade (readiness 80%), working on design optimisation considering new commercial components available on market (filters, holders etc.).
4. Drawings will be completed after 3D model (~20 new drawings). Drawings approval process?
5. How many complete units to be produced?

