

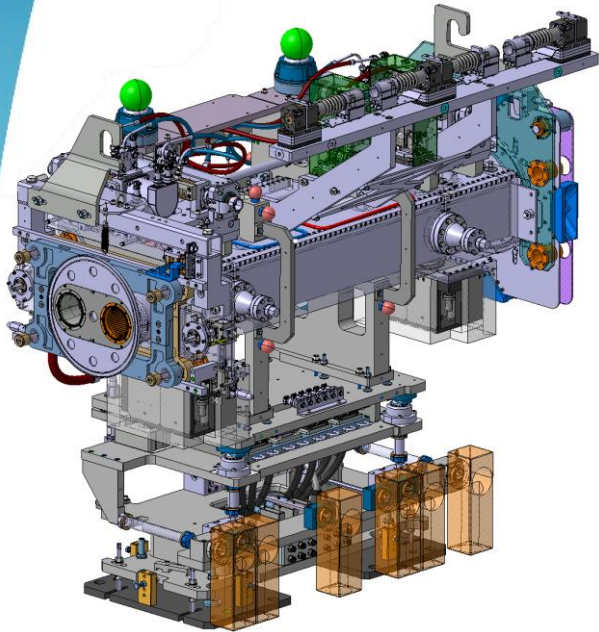


FAT Tests at MC Uldall for collimator supports - 22/10/2024

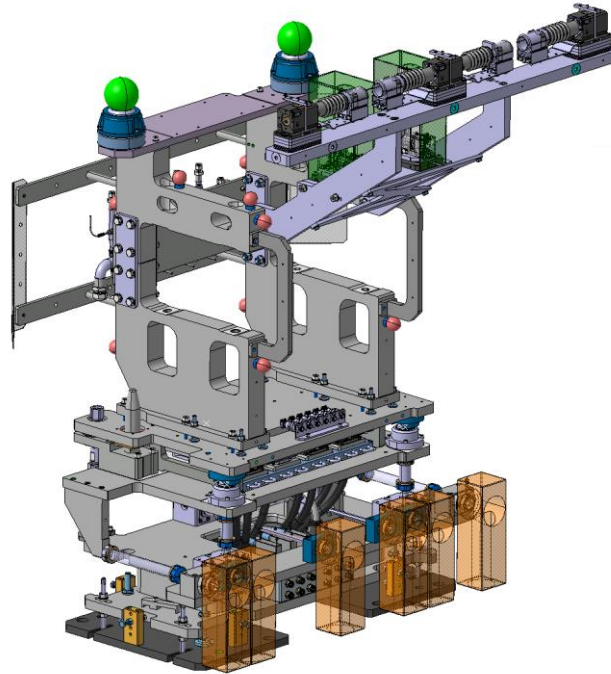
Thibaut Parmentier



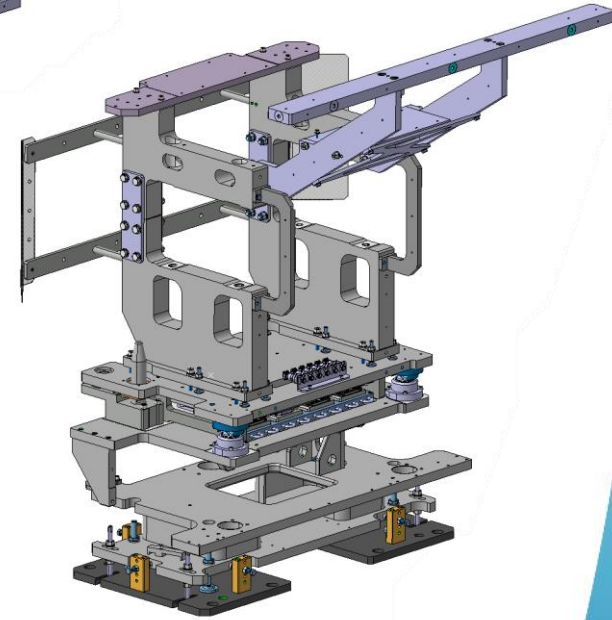
Supports for X-series and masks



Installed collimator
(TCLPX)

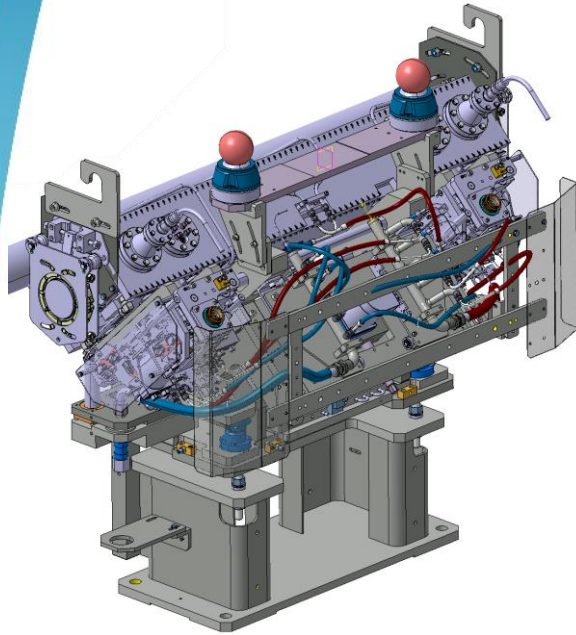


Collimator support

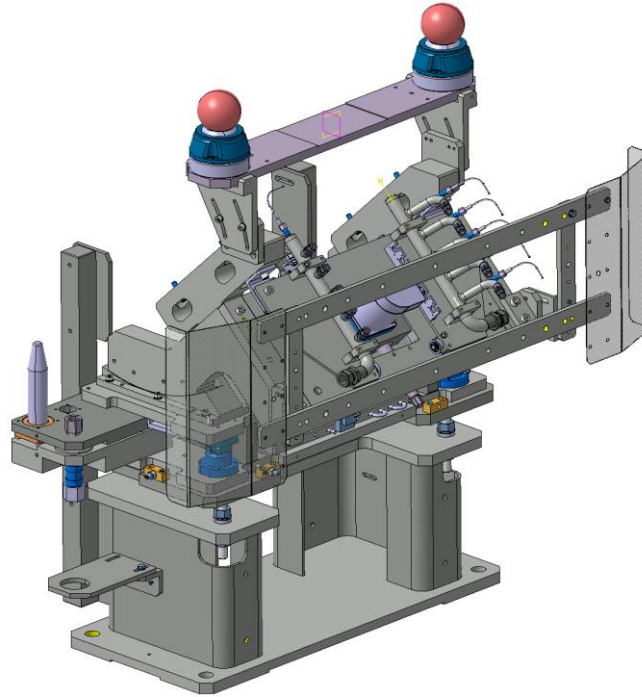


Produced by MC Uldall

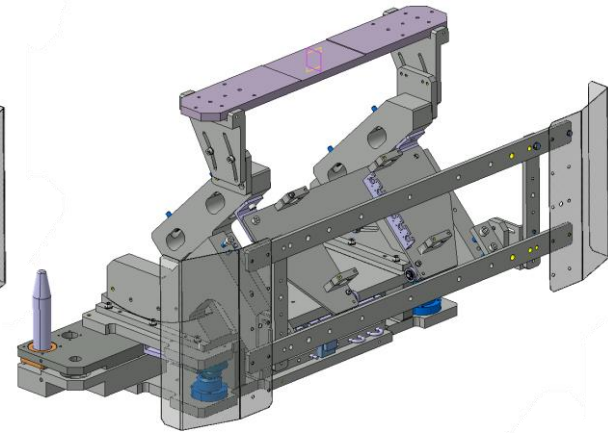
Supports for TCSPM and TCTPM



Installed collimator
(TCSPM 45°)



Collimator support



Produced by MC Uldall

Schedule

- Week 49 2024: Delivery of the Pre-series units
 - 3 Supports for X-series and masks
 - 1 Support for TCSPM
 - 7 Supports for tests at CERN
 - Loose parts for linear stage
- Week 27 2025: Delivery of the Series units
 - 28 Supports for X-series and masks
 - 11 Supports for TCSPM
 - 10 Supports for TCTPM

Description of the FAT

- Visual inspection
- Torque verification
- Ball support movement check
- Label verification
- Hypertac - and BPM connector integration test
- Fixation test
- Insertion test

Description of the FAT

- Visual inspection



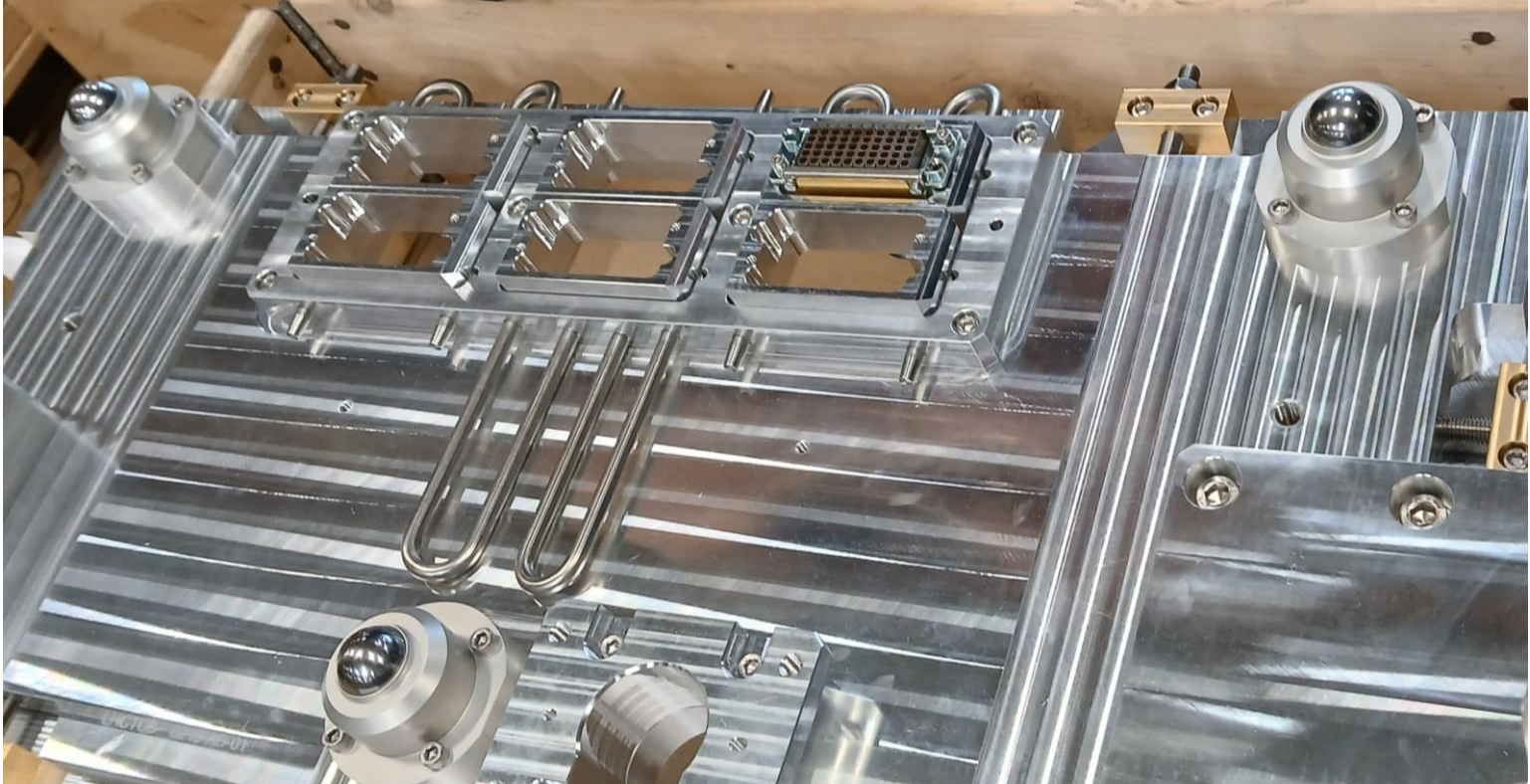
Description of the FAT

- Torque verification



Description of the FAT

- Ball support movement check

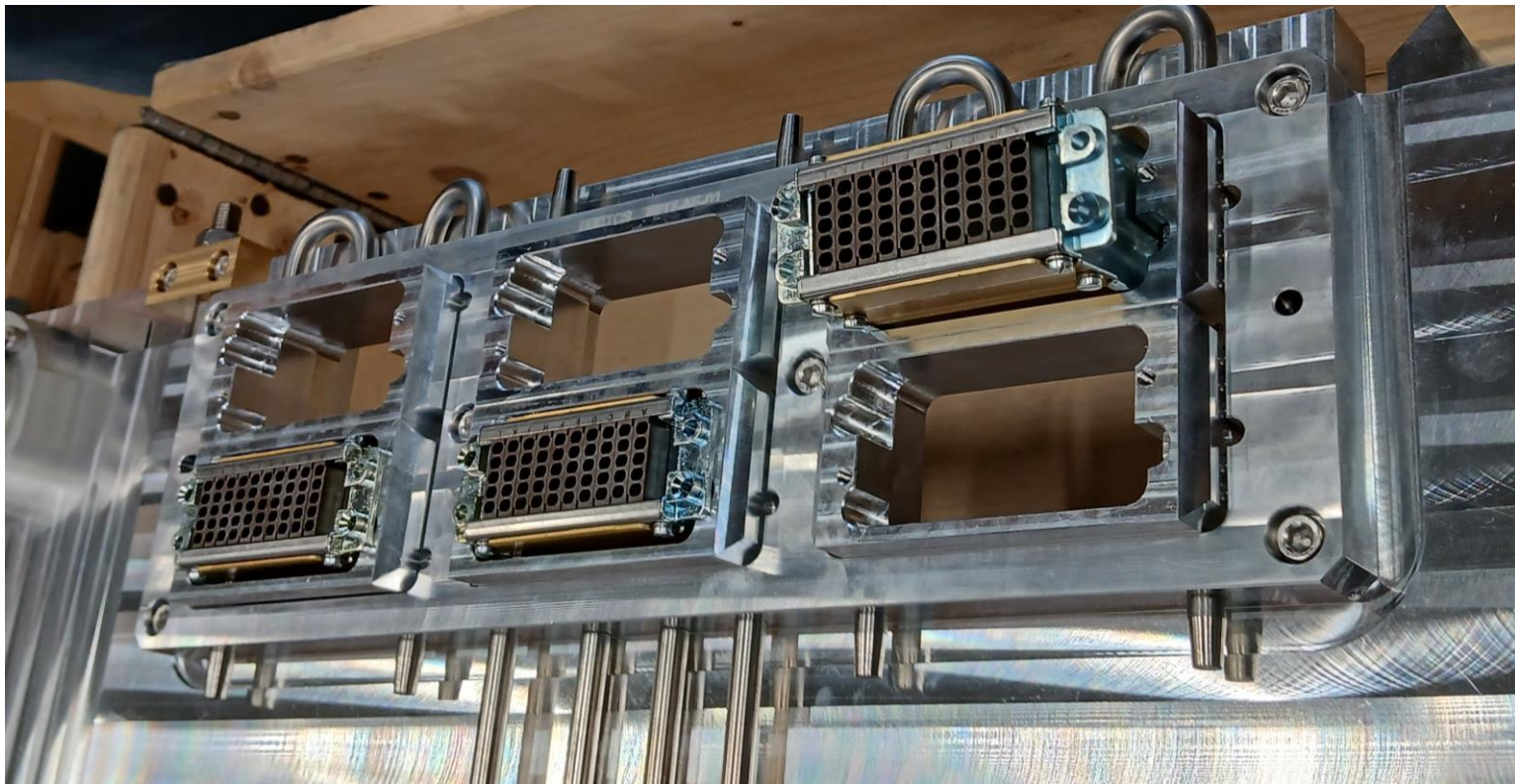


Description of the FAT

- Labelling verification

Description of the FAT

- Hypertac - & BPM connector integration test



Description of the FAT

- Fixation test



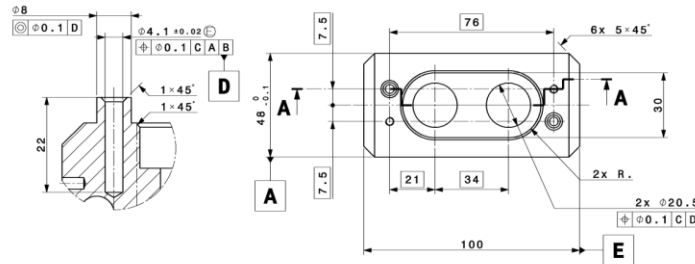
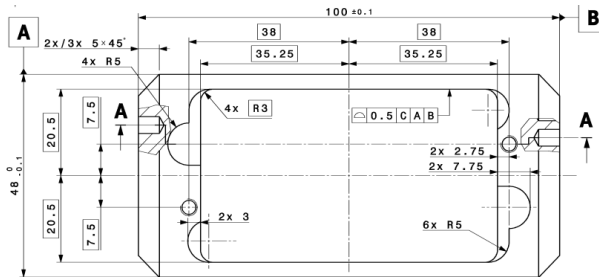
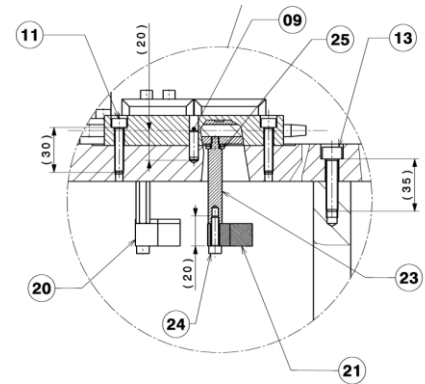
Description of the FAT

- Insertion test



Results of the FAT

- Excellent overall
- Minor remarks (mostly CERN design):
 - Hypertac female connector integration
 - Fischer connector guiding pins
 - Cable support thread length



Next steps: SAT

- Repeat of the FAT
- Insertion test with prototype collimators
- Assembly of commercial and CERN-made components

Questions