

# BHZ151 vacuum chambers

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PSB Upgrade  
Jose A. Ferreira LIU Project



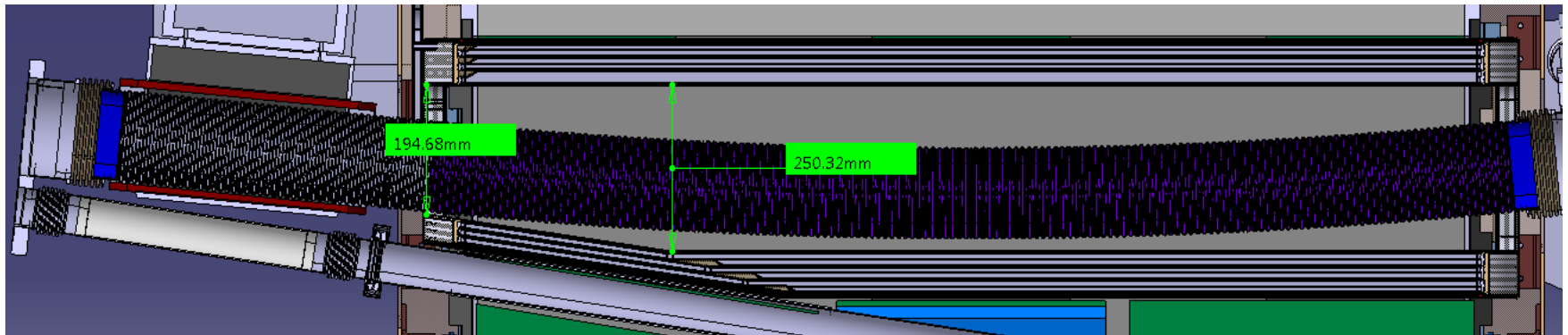
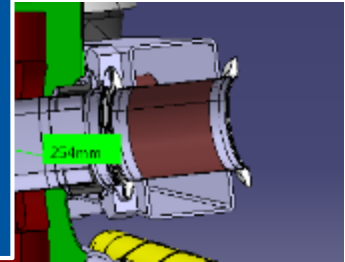
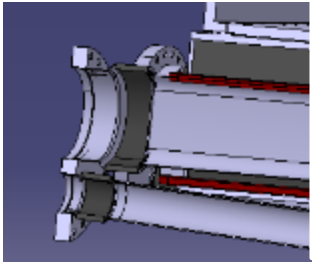
12/5/2017

# BHZ15

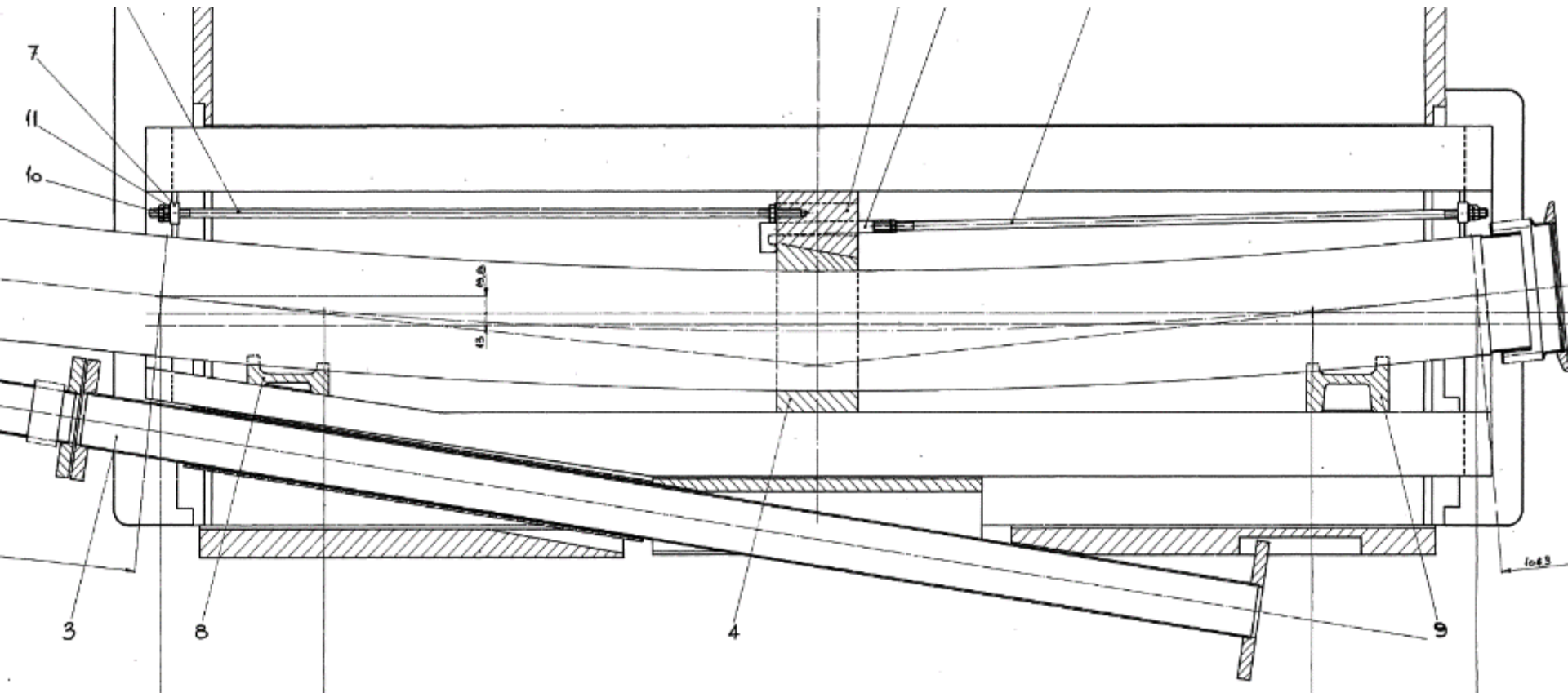
- ❑ Project baseline reuse old vacuum chambers:
  - 2 new vacuum chambers (paid by LIU) and 3 old spares (old BHZ151 configuration) → Operational spares old vacuum chambers
- ❑ New set of drawings → EN-MME found the magnet aperture has been reduced

# BHZ151

- New set of drawings to order new vacuum chamber and aperture  
➤ Impossible to use same supporting system (not included in integration model).  
➤ Concerns about how to install BSW magnets

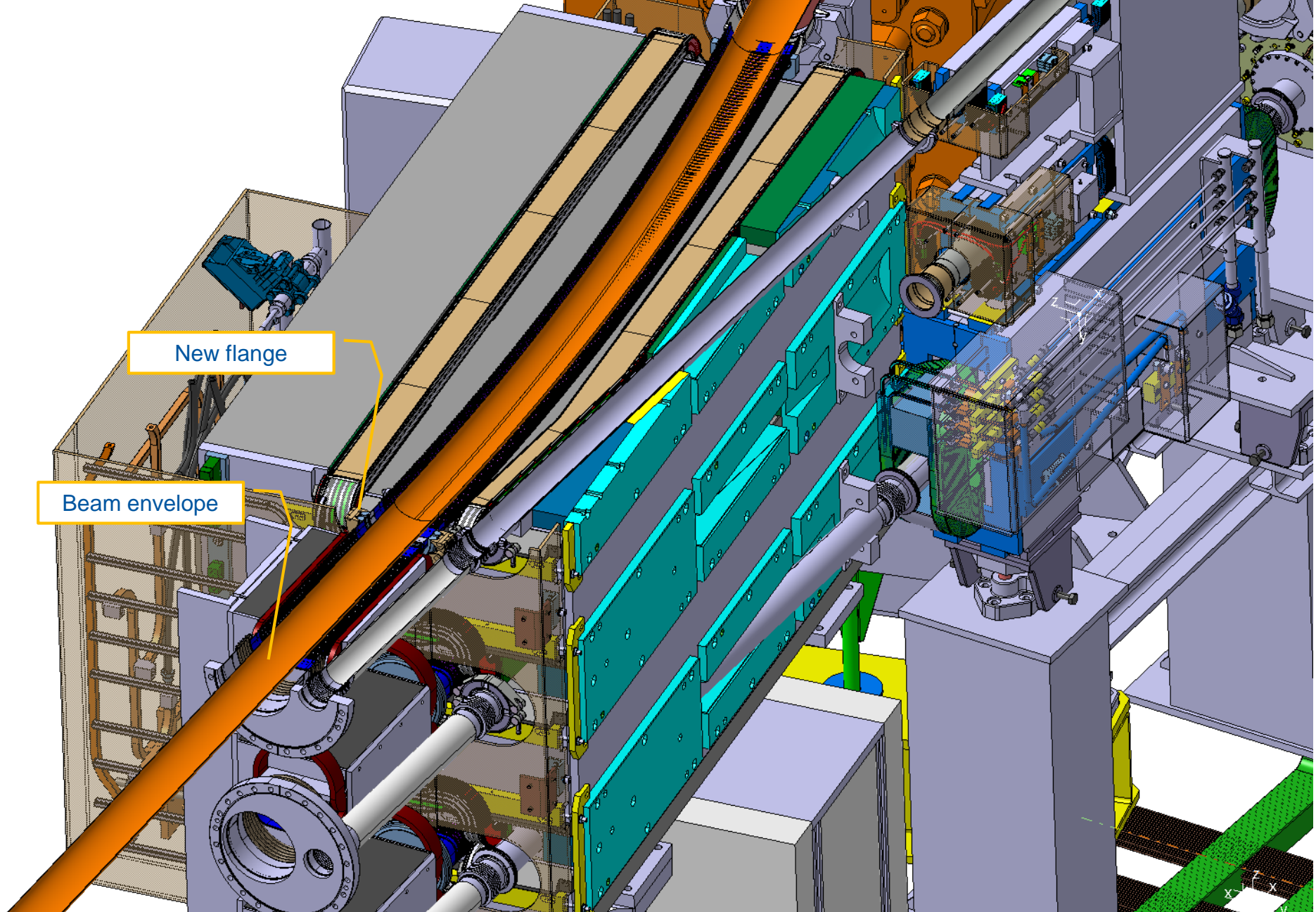


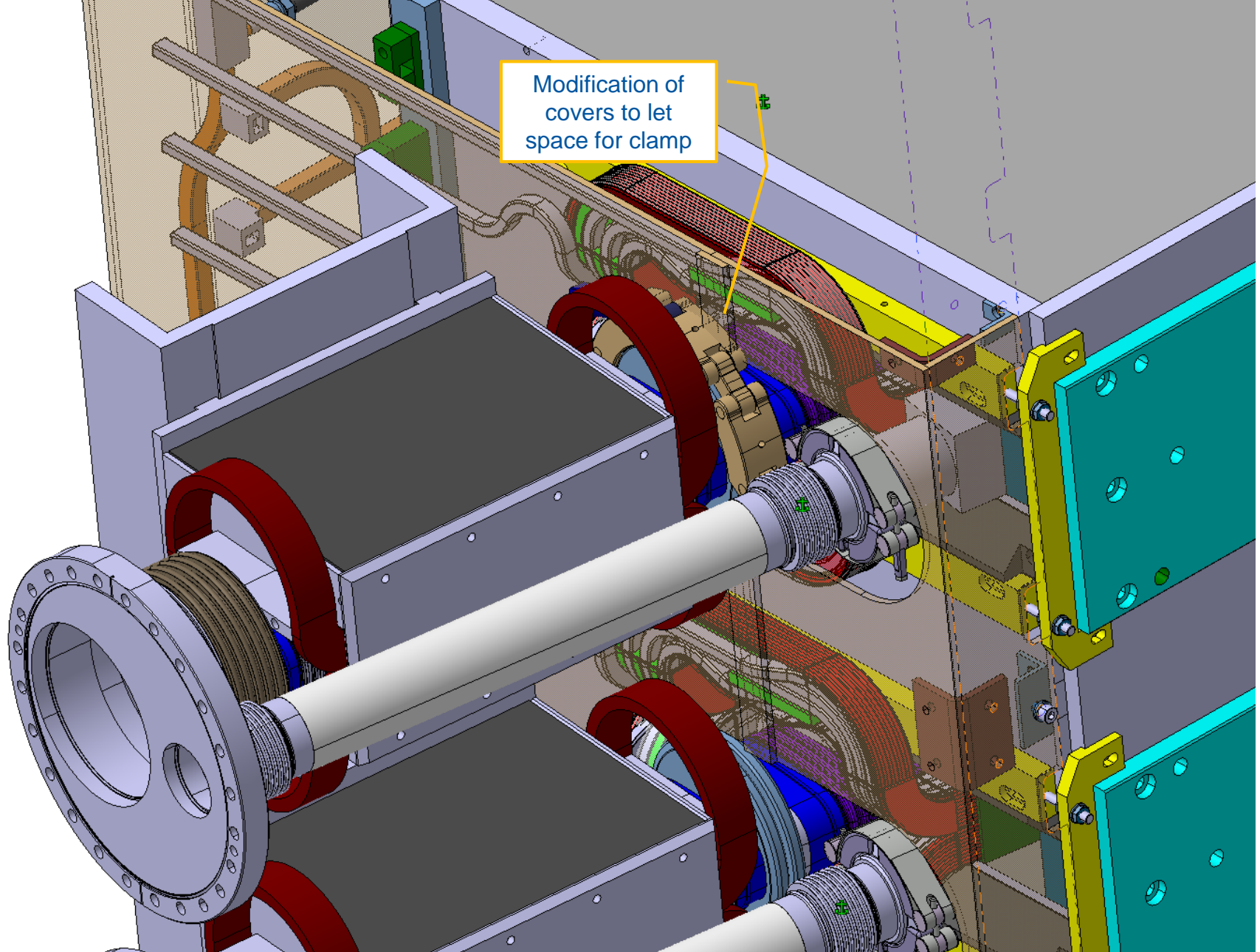
# BHZ151



# BHZ151 Proposal

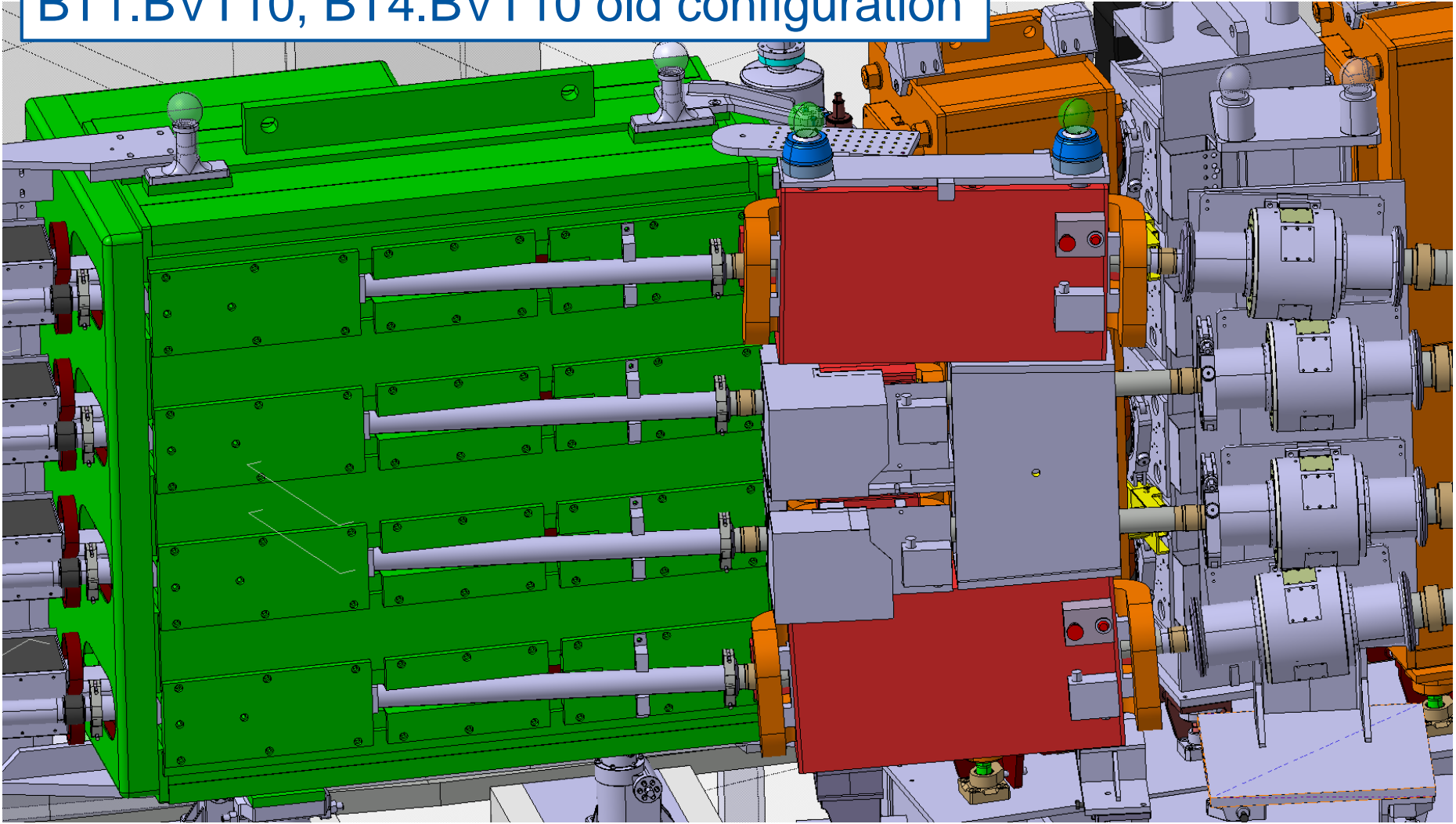
- ❑ Same Inconel chamber inside bending like BHZ11 and BHZ162 (share spares and tooling)
- ❑ Split BSW and BHZ chamber if possible
- ❑ Simplify supporting (similar to BHZ162)
- ❑ Modifications of BT.BVT10 chambers



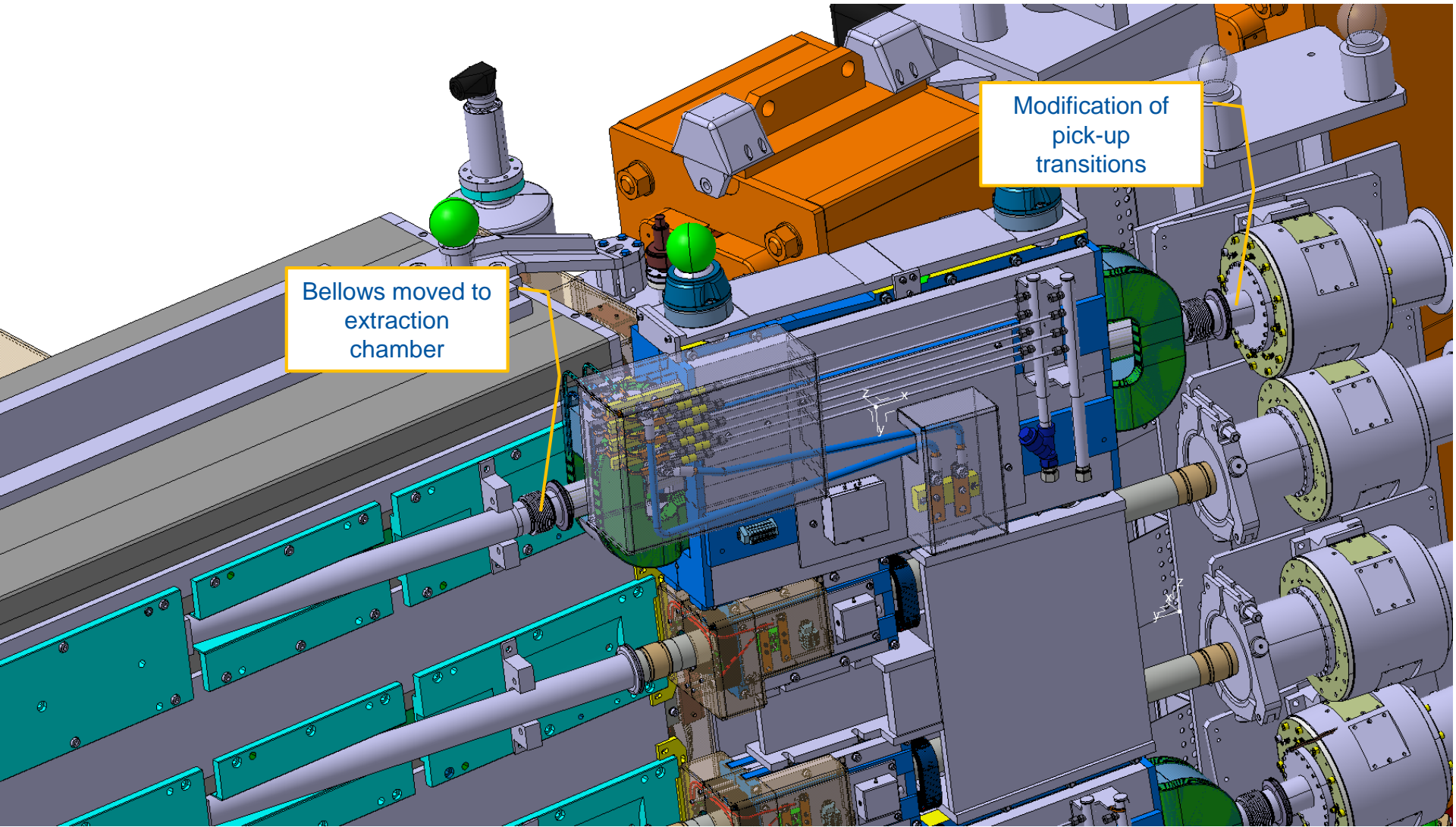


Modification of covers to let space for clamp

# BT1.BVT10, BT4.BVT10 old configuration







Bellows moved to extraction chamber

Modification of pick-up transitions

# BHZ151: draft proposals

## Spare chambers

- ❑ 2 + 2 spares dipole chambers (30kCHF/p)
- ❑ 4 + 2 spares BSW chambers (20kCHF/p)
- ❑ 4 + 2 extraction chambers (15 kCHF/p)

Cost: 330 kCHF

## Spare BHZ151 unit

- ❑ 2 + 4 spares dipole chambers (30kCHF/p)
- ❑ 4 + 4 spares BSW chambers (20kCHF/p)
- ❑ 4 + 4 extraction chambers (15 kCHF/p)

Cost: 460 kCHF