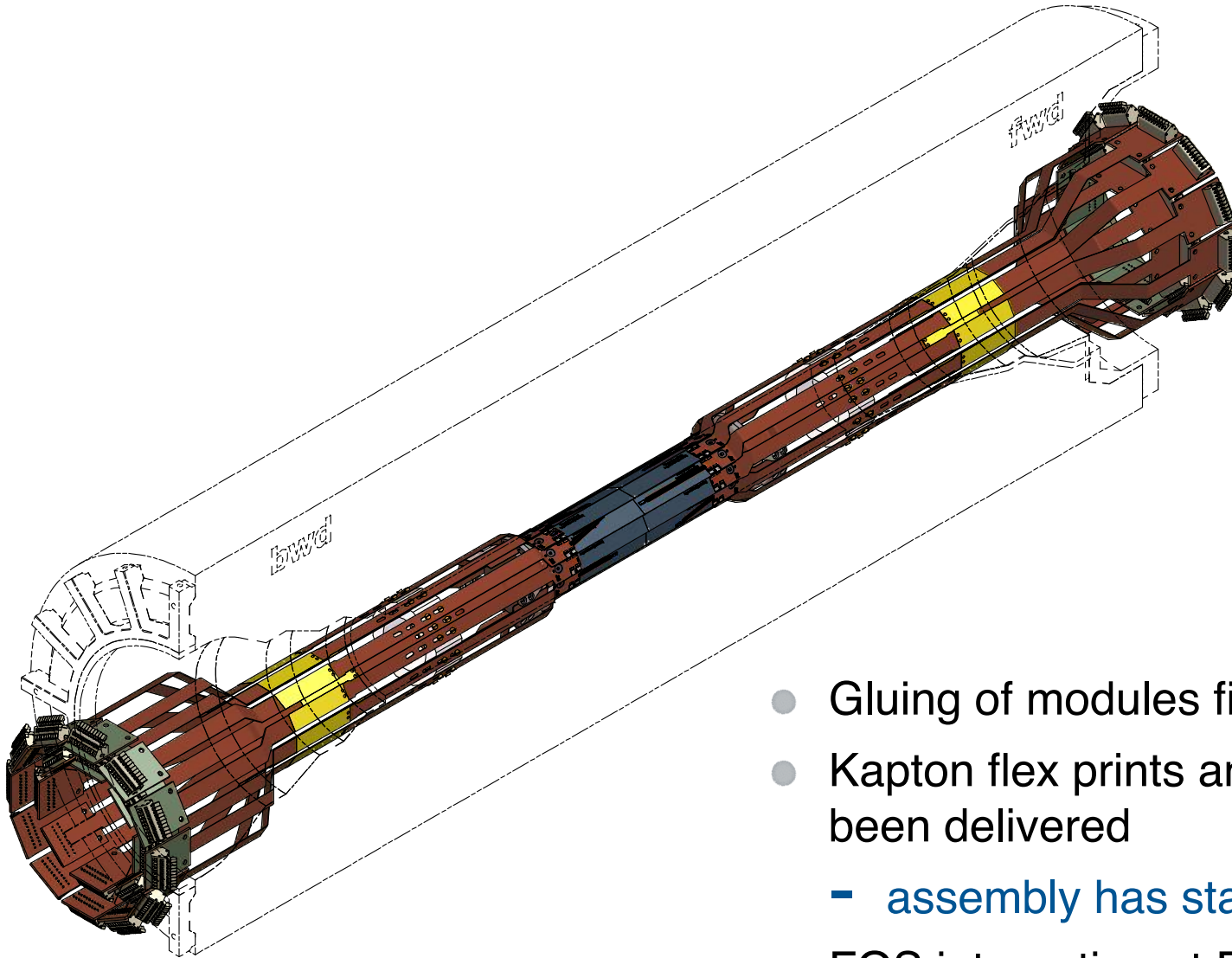


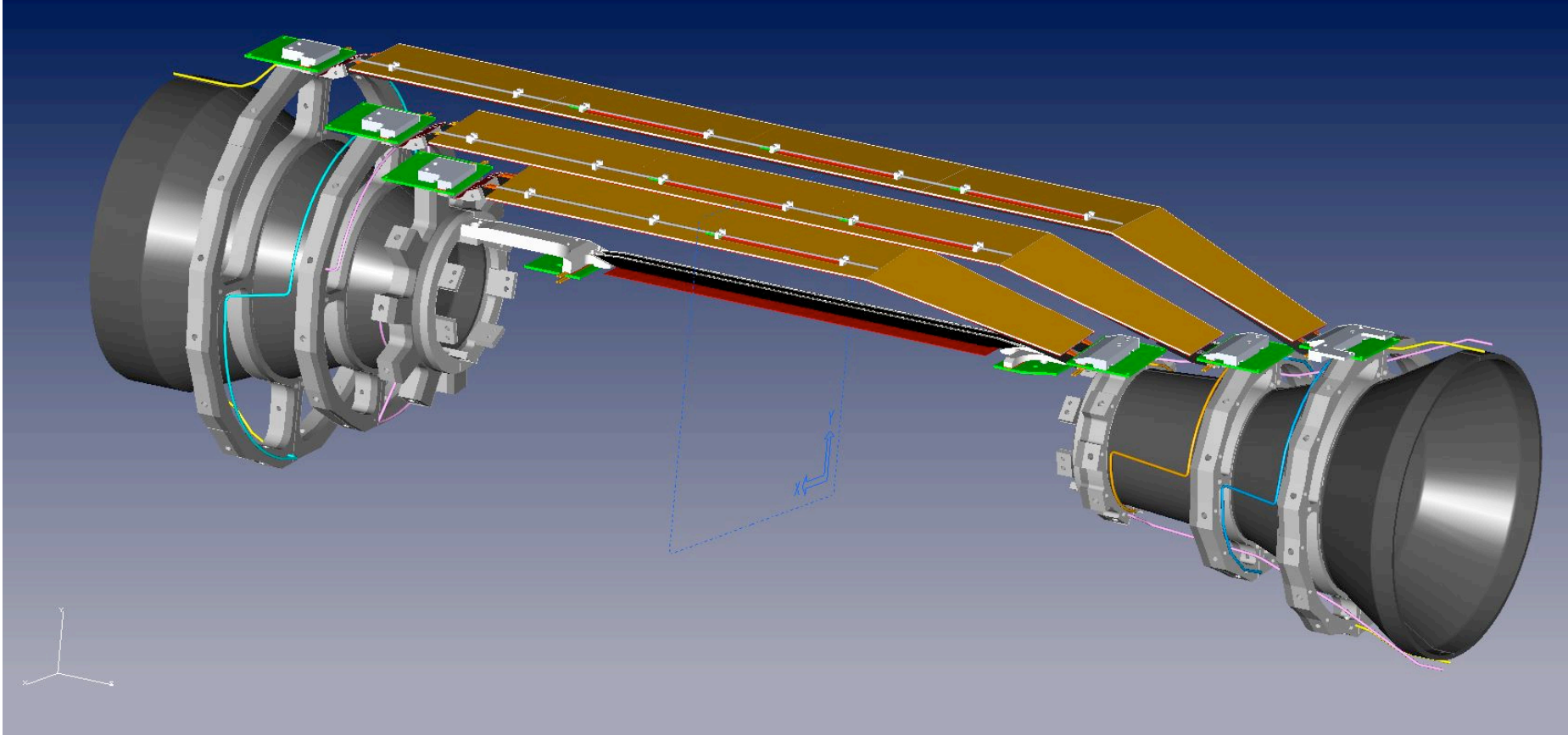
Status of Thermal Mockup Preparation

Status of PXD Mockup (Hans-Günther)

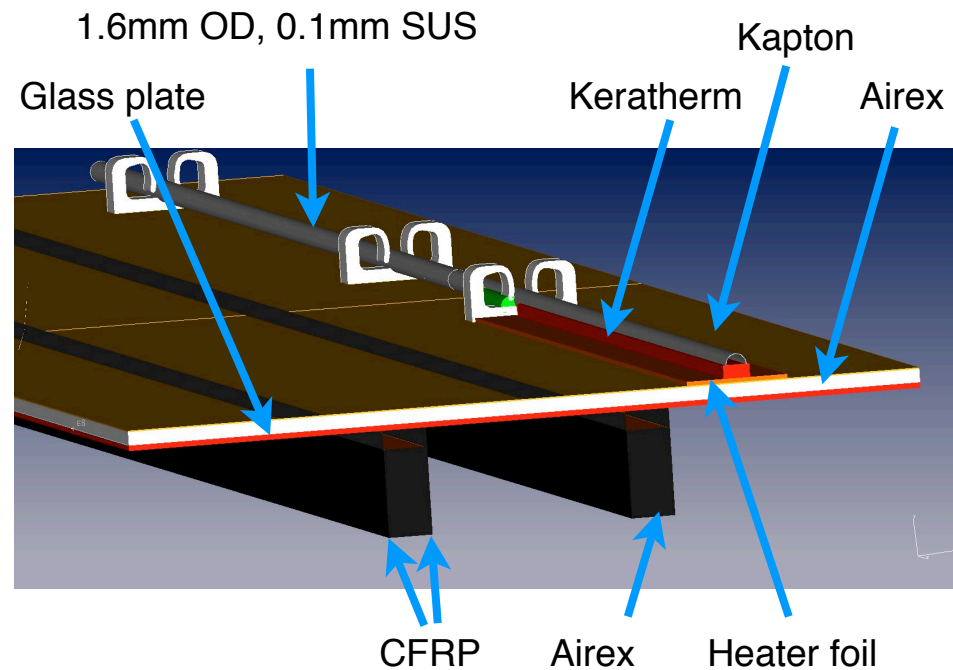
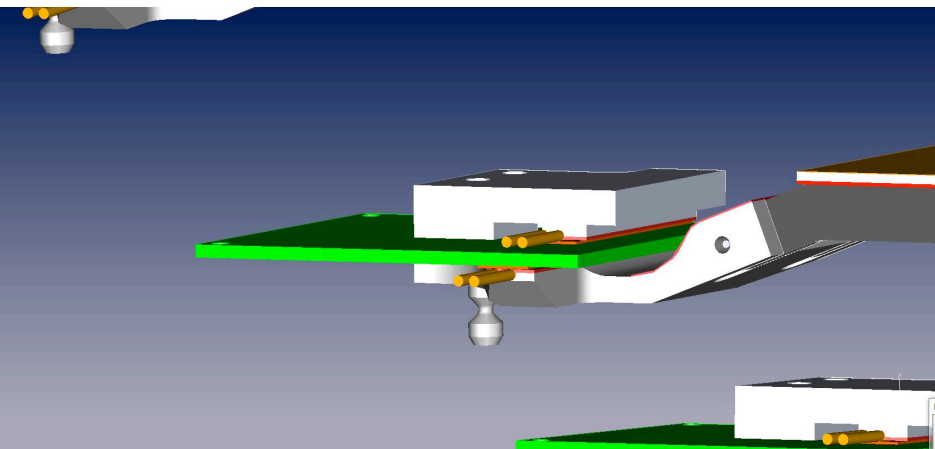
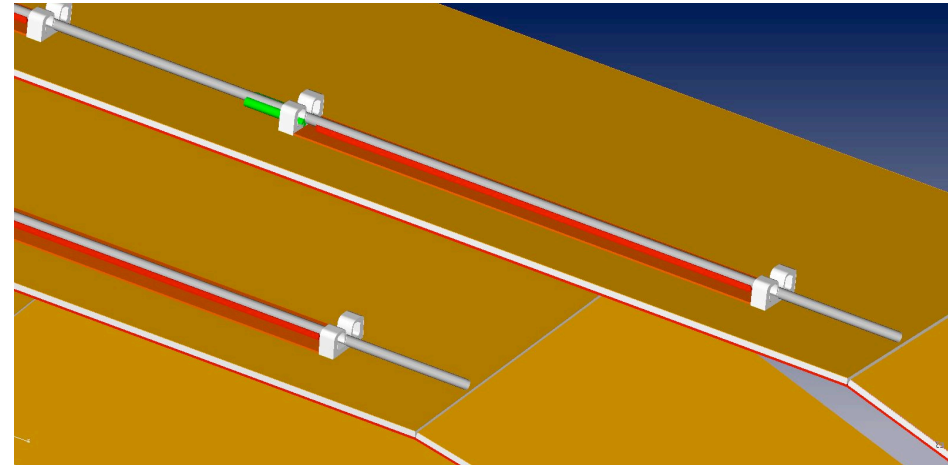
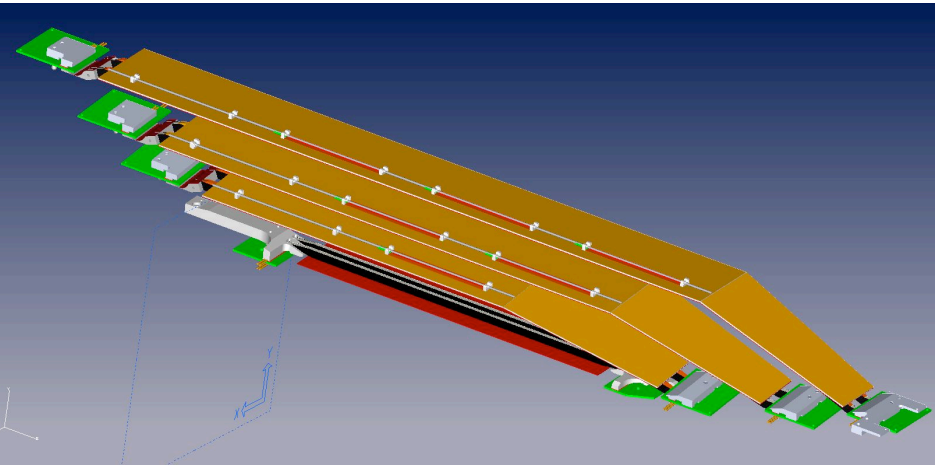


- Gluing of modules finished
- Kapton flex prints and PT100 have been delivered
 - assembly has started
- FOS integration at DESY with help of IFCA (Ivan Vila et al.)

SVD Thermal Mockup Design

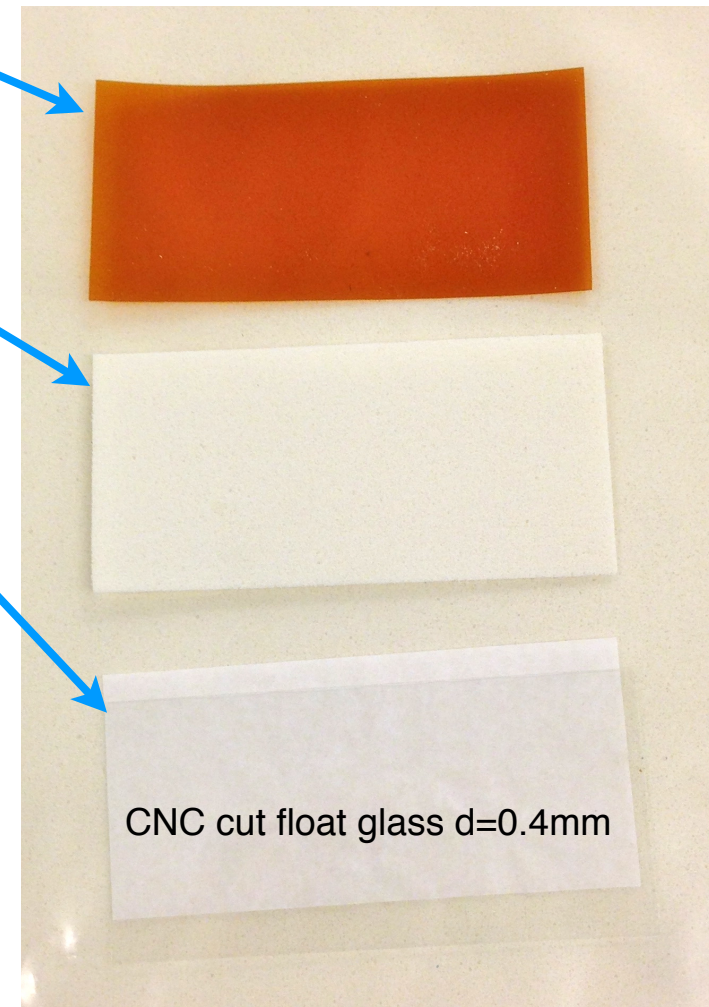
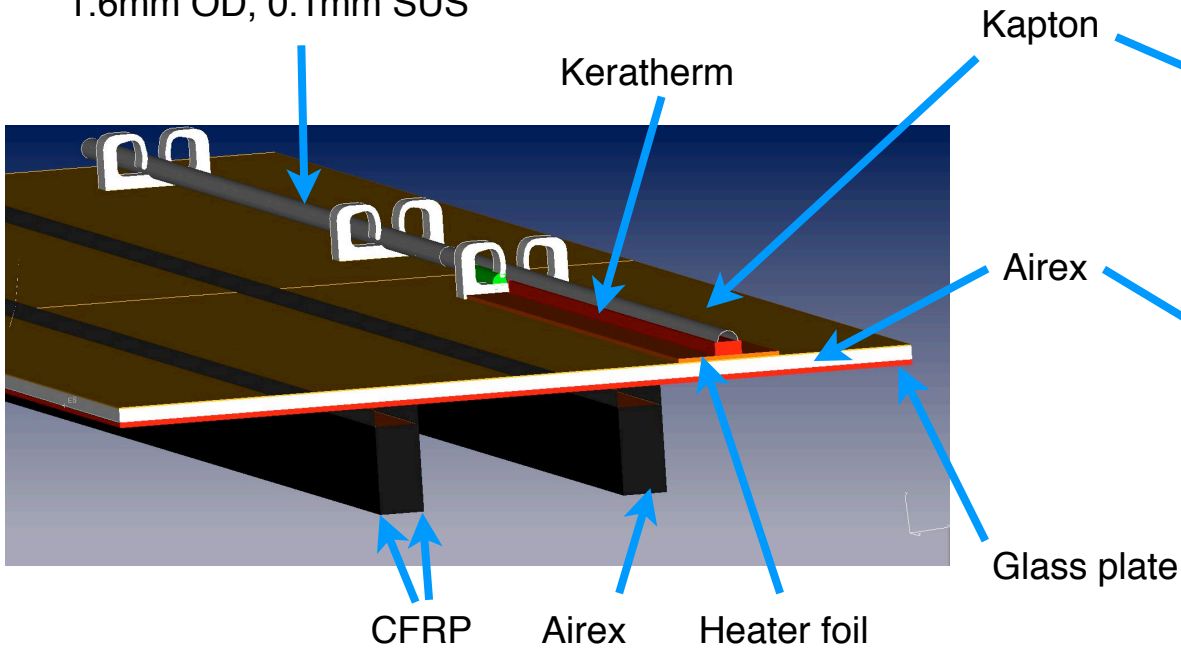


SVD Thermal Mockup Design



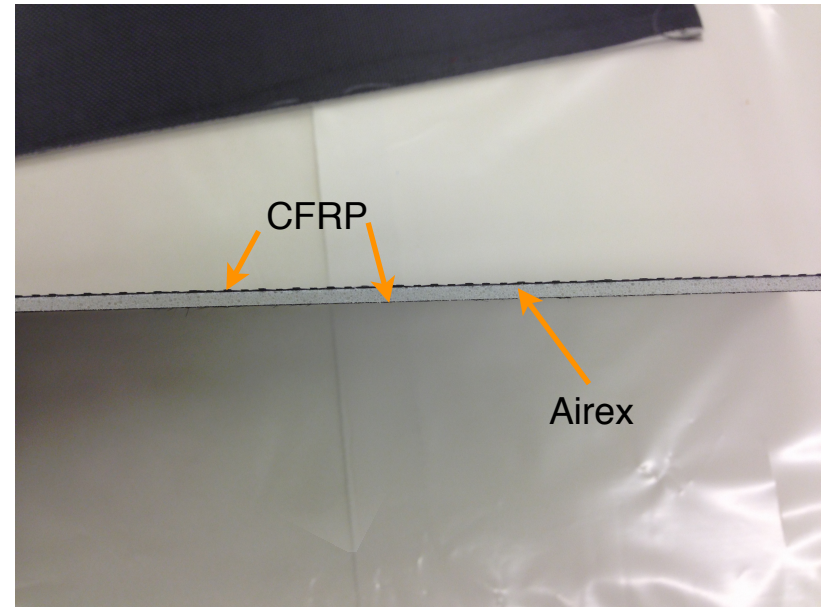
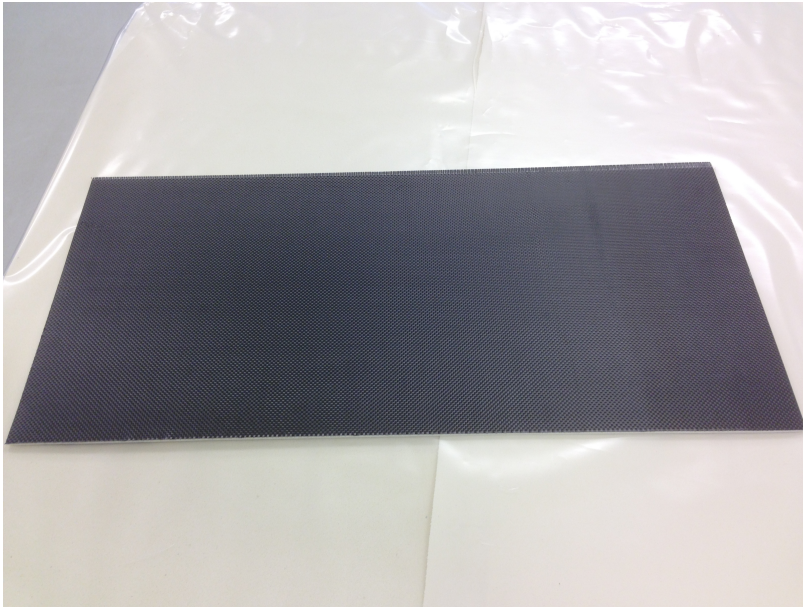
Status of SVD Dummy Ladder Components

1.6mm OD, 0.1mm SUS



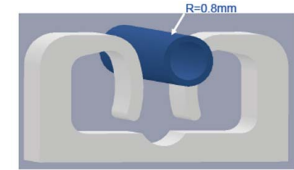
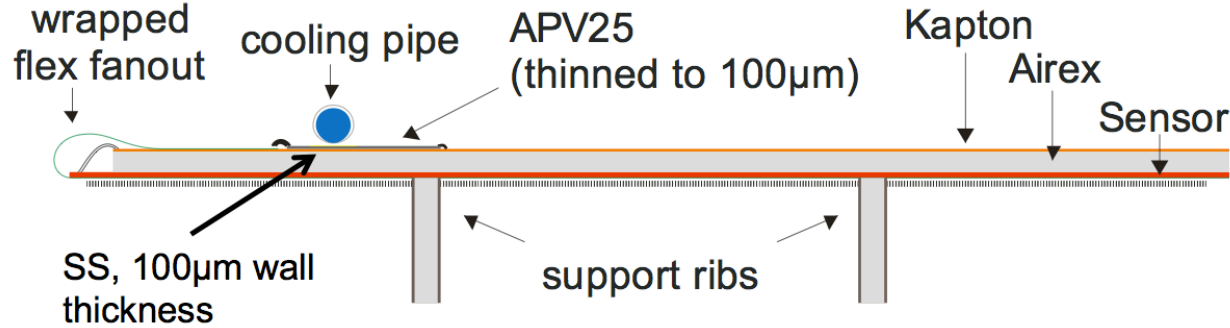
- Gluing of „sensors“ will start next week
- Missing components ordered
 - heater foils w/ integrated thermal sensors
 - Keratherm foil
 - cooling pipes
 - clips to be provided by HEPHY

CFRP Sandwich for Support Ribs

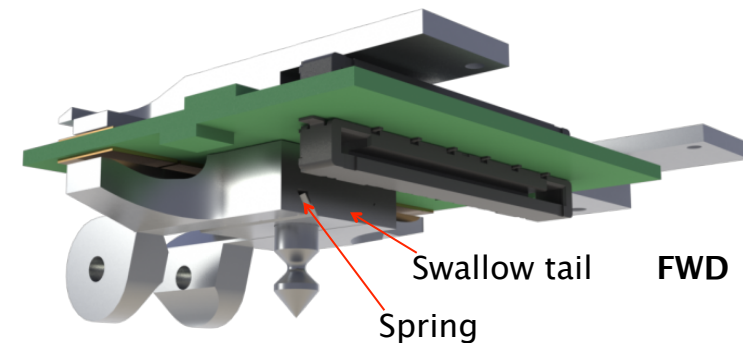
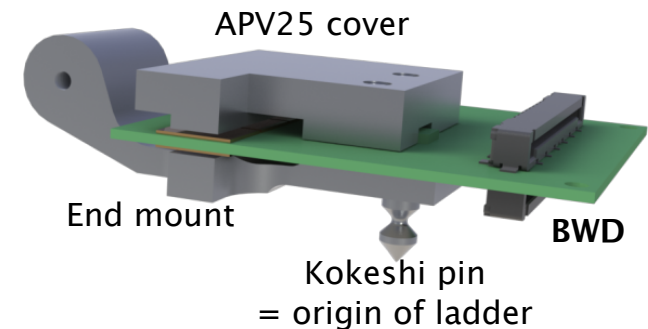


- Sheets of Airex and CFRP prepregs have been laminated
- Next step is test of water jet cutting process

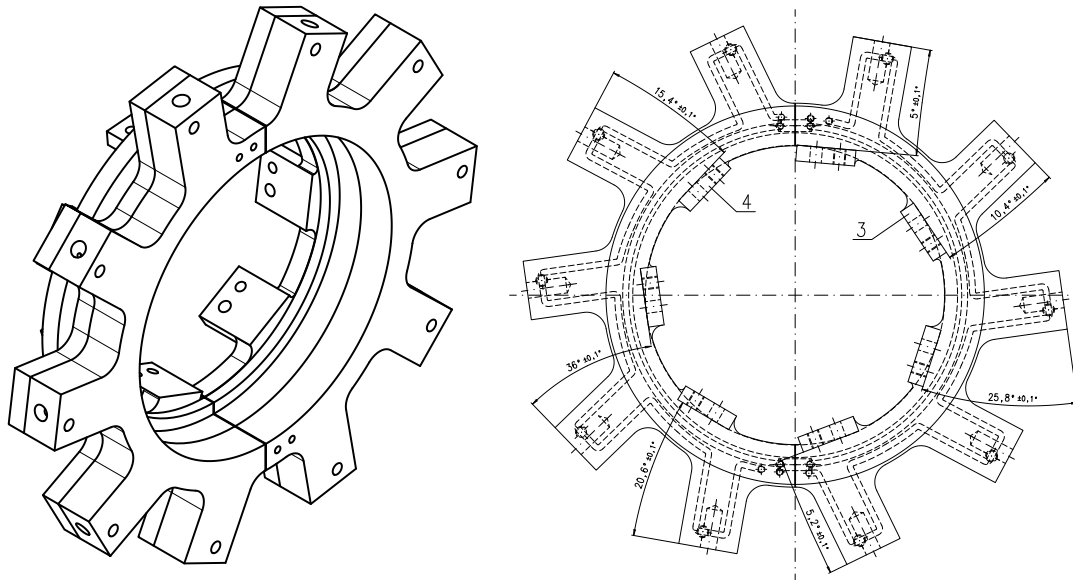
SVD Origami Cooling and End Mounts



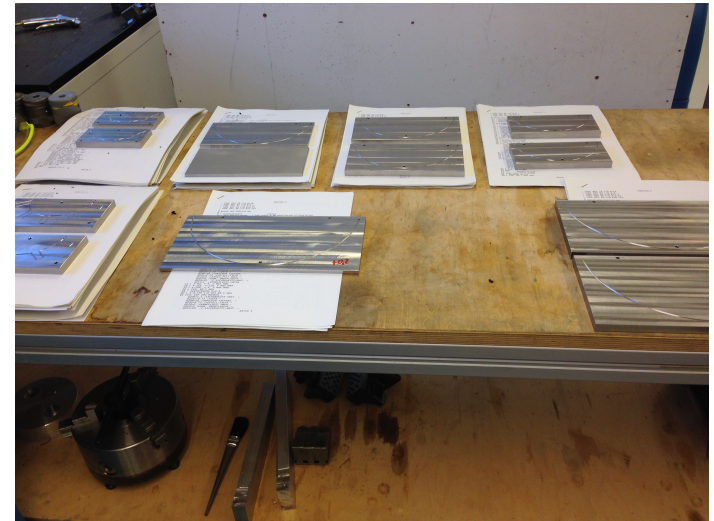
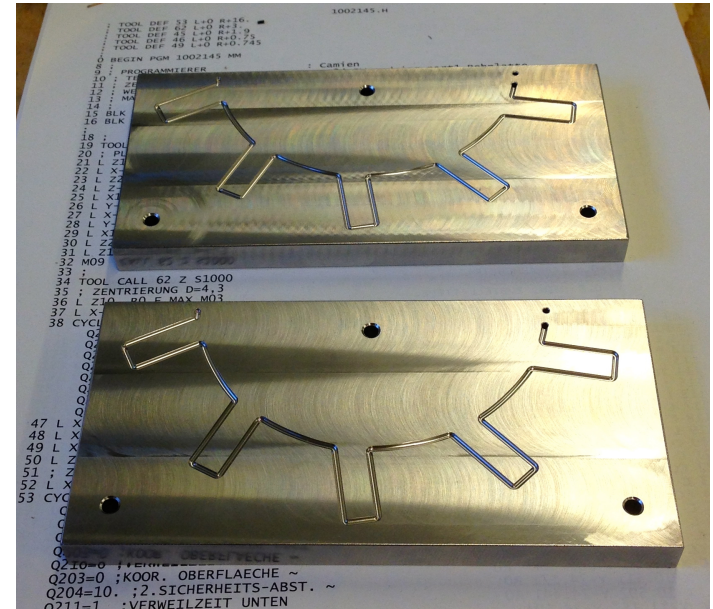
- For realistic mockup need to simulate heat transport
 - from hybrids through end mounts to end rings
 - from Origami APV through Keratherm to cooling pipes
- Recycle old version of printed boards from HEPHY
- Before dummy ladder assembly need to glue CFRP ribs to end mounts
 - delivery of (forward) end mounts (from Japan) might turn out to be bottleneck for dummy ladder production



SVD Endrings



- Machining of parts for all layers almost finished
- Test of diffusion welding will start soon in Freiburg



Alternative Production of Endrings

<http://www.lzn-hamburg.de/>



Rapid Prototyping:

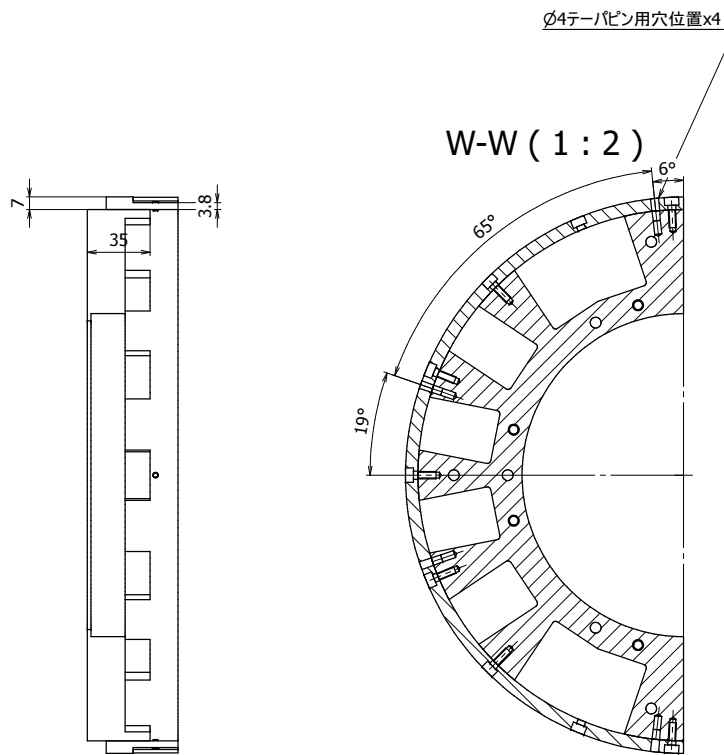
Edelstähle, Werkzeugstähle, Titan und Titan-Legierungen, Kobalt-Chrom-Legierungen, Aluminiumlegierungen, Nickel-Basis-Legierungen und weitere Werkstoffe auf Anfrage

- Prototype for endring of layer 3&4 ordered
- Delivery date ~ mid April

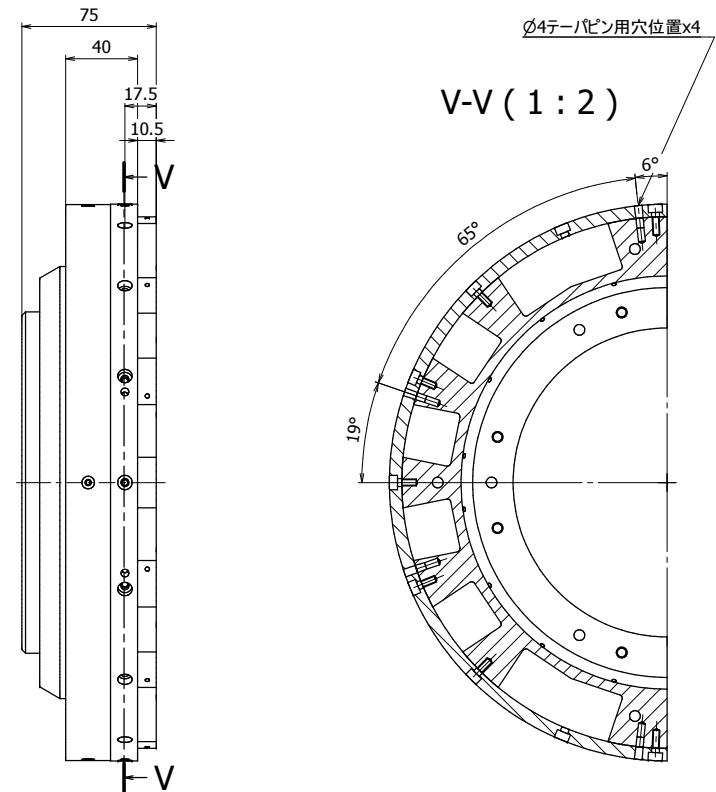


Endflange

- Once final design is available end flanges will be produced by Hamburg University



backward



forward

Schedule for Thermal Mockup

		2014											
Task	Who	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Maintenance/replacement MARCO CO ₂ pumps	DESY												
Study transfer lines & dry volume Final SCB production Dummy ladder / kapton flex production PXD thermal mock-up assembly Integrate environmental sensors PXD thermal studies	DESY												
	MPI												
	HLL/MPI												
	DESY												
	CSIC-US												
	DESY												
SVD mock-up design	DESY												
SVD end ring production	DESY												
SVD end mount production	KEK												
CFRP support cone / outer cover production	KEK												
VXD end flange production	UniHH												
Origami cooling pipe production	DESY												
Cooling pipe fixation clips	HEPHY												
SVD mock-up construction	DESY												
Environmental sensor integration	DESY												
SVD & VXD thermal studies	DESY												