

MQYYM INSTRUMENTATION TECHNICAL REVIEW

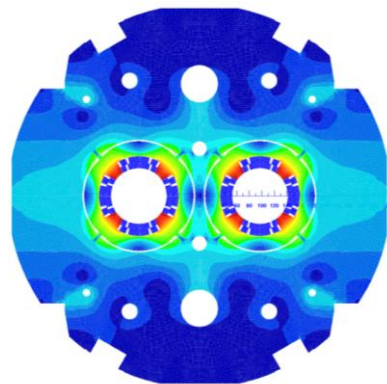
Damien Simon for the MQYYM team

CEA: H. Felice, D. Simon, M. Segreti, J.M. Rifflet, S. Somsom, R. Machado-Correia, R. Godon

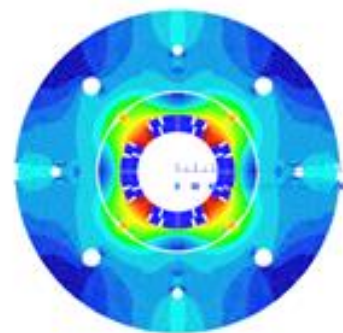
CERN: M. Guinchard, P. Grosclaude, J.C. Perez, N. Bourcey, A Foussat, E. Todesco

The MQYY project:

- Collaboration CERN-CEA for the HL-LHC
- Design of the MQYY a double aperture $\cos(2\theta)$ Nb-Ti matching section magnet
- Fabrication and test of the MQYYM single aperture magnet short model of the MQYY magnet
- Fabrication of the MQYYM coils at CEA
- Assembly, instrumentation and warm magnetic measurements at CERN
- Cold magnetic measurements at CEA

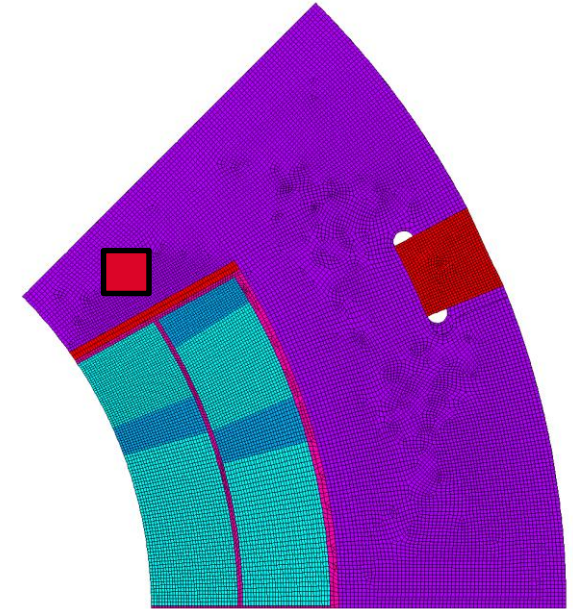
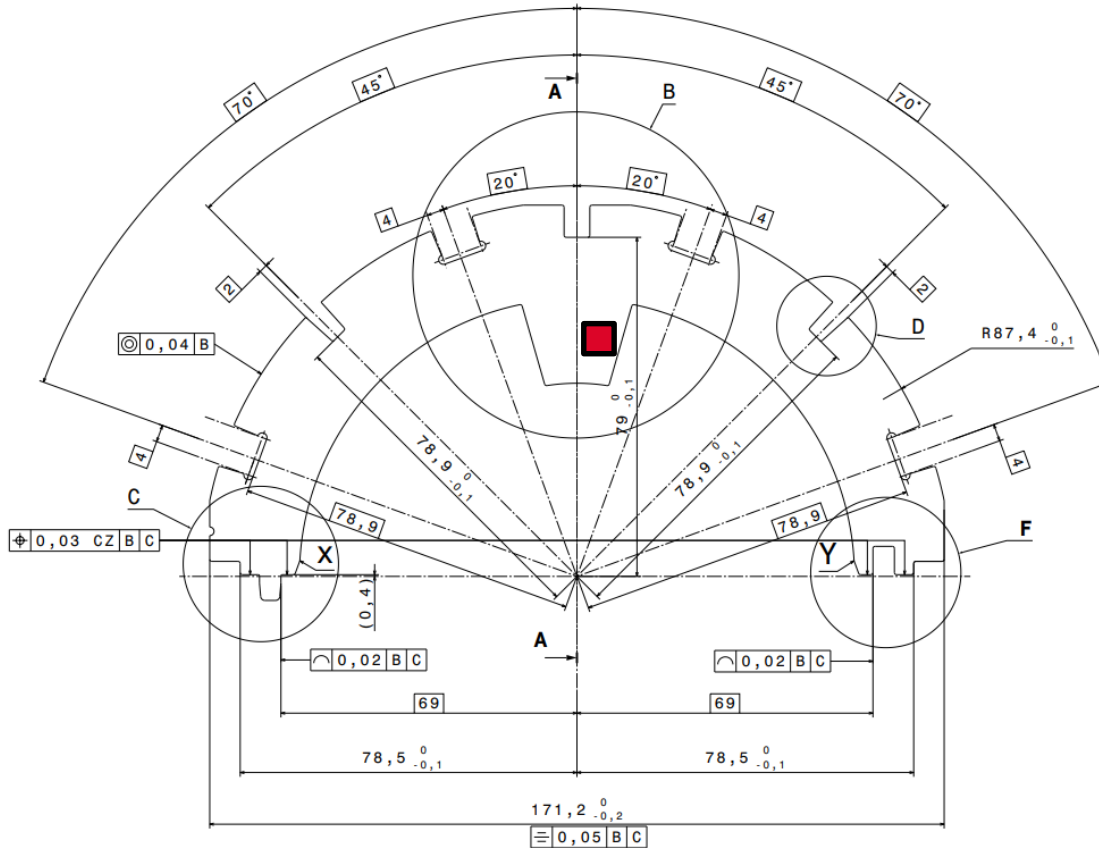


The MQYY



The MQYYM

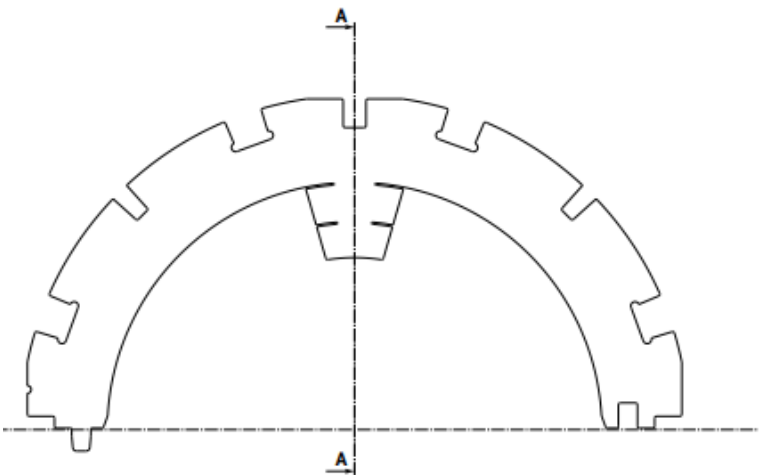
Collars instrumentation:



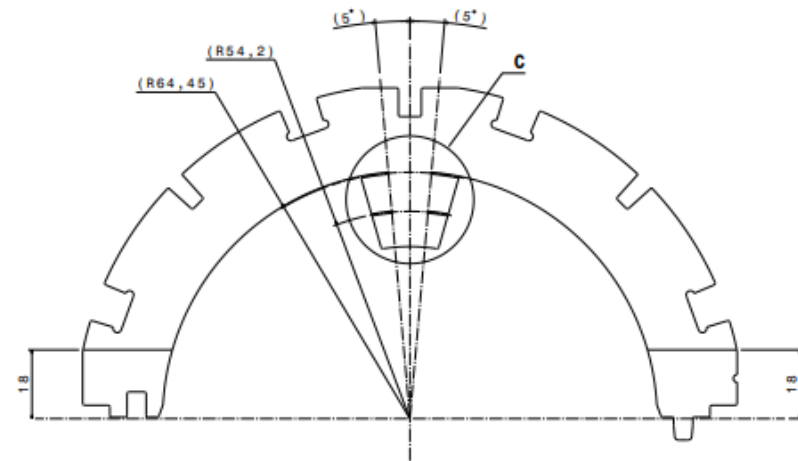
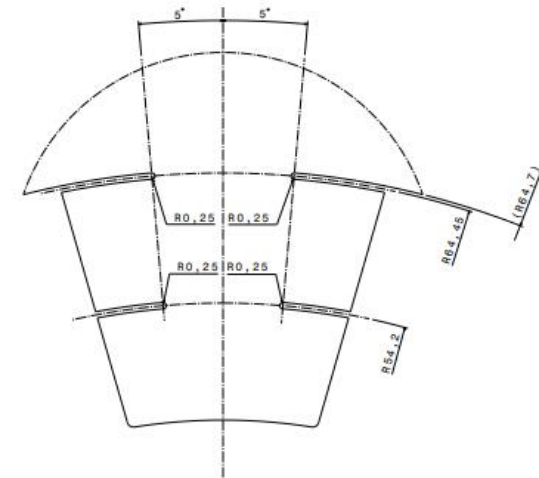
 Strain gauges

Collars instrumentation:

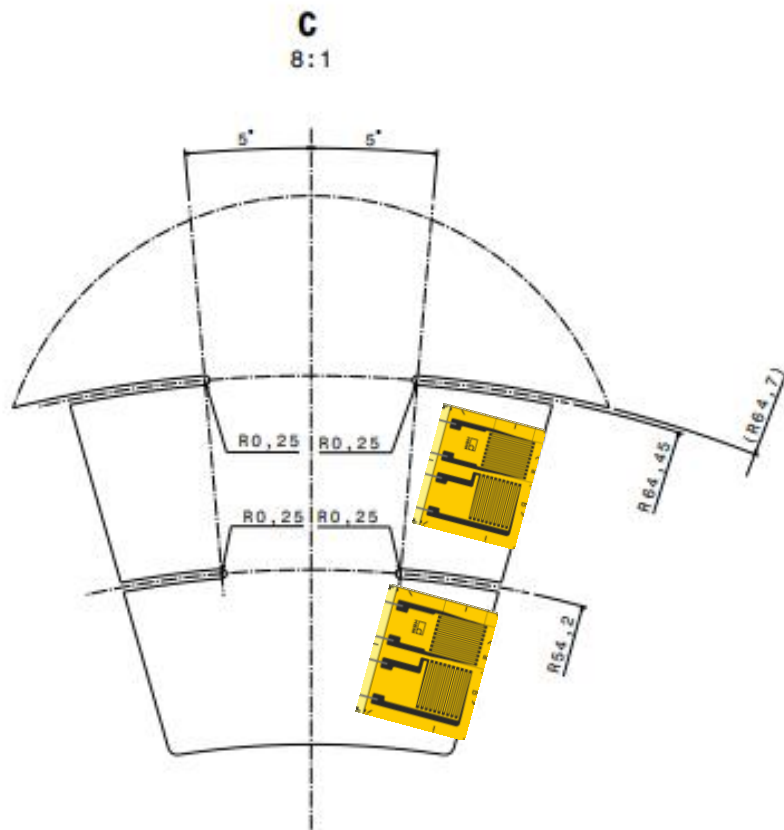
- The goal is to measure the azimuthal stress on the pole

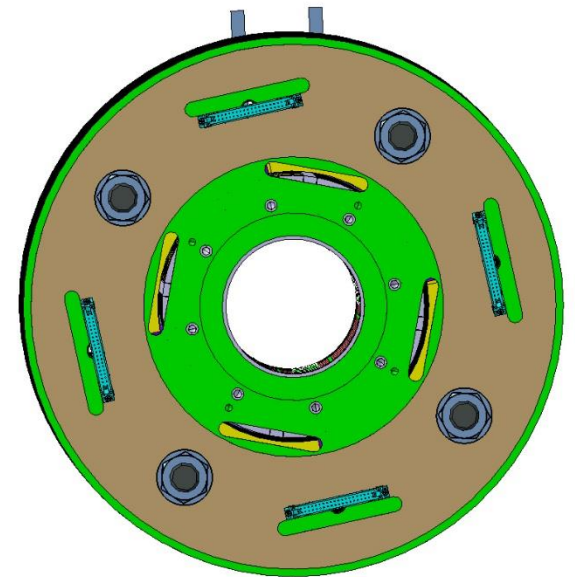
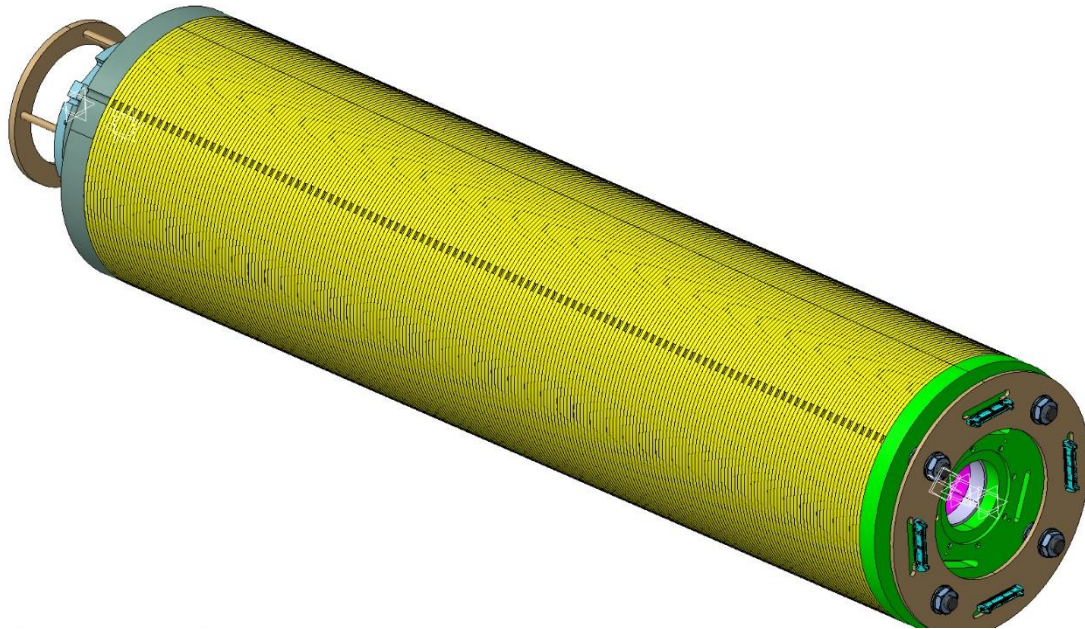


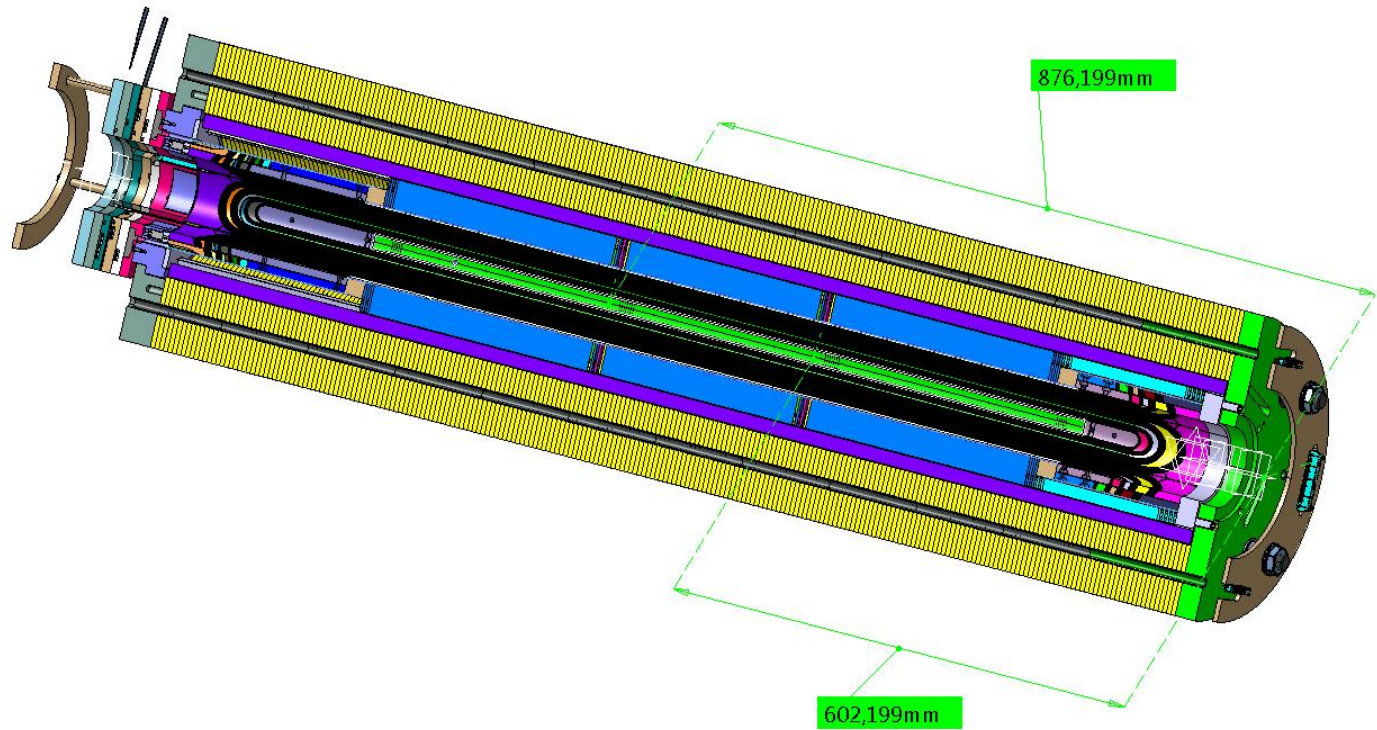
A-A

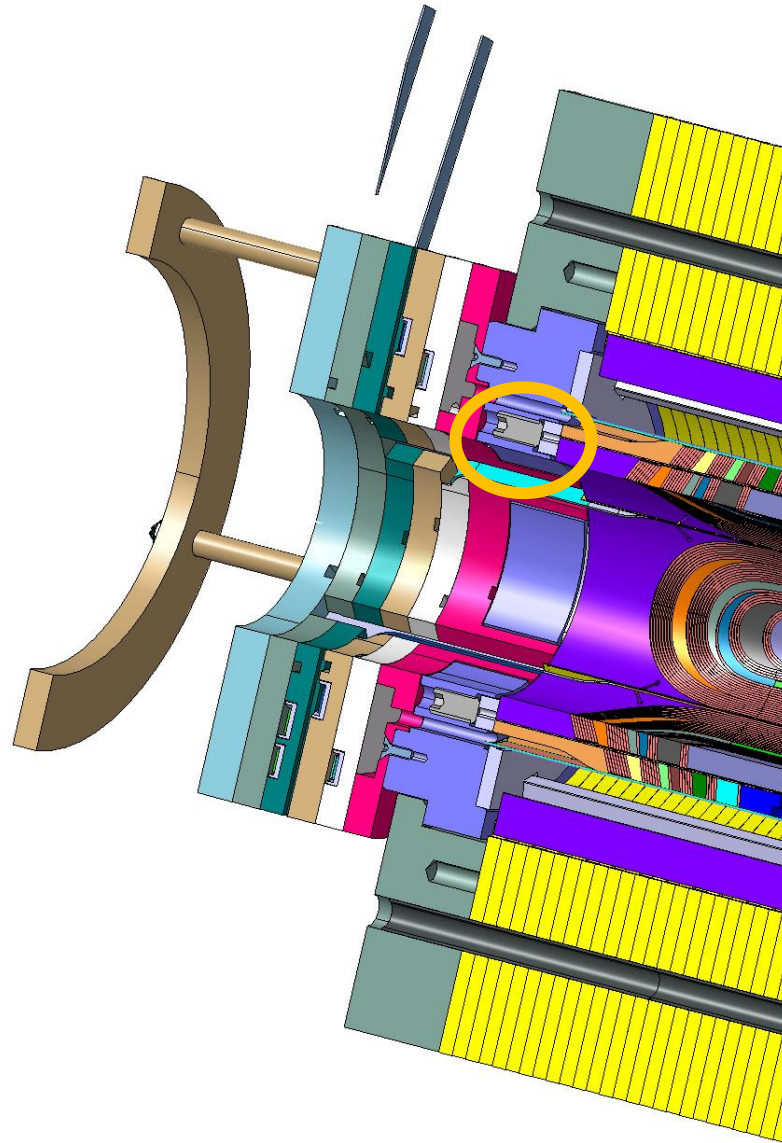


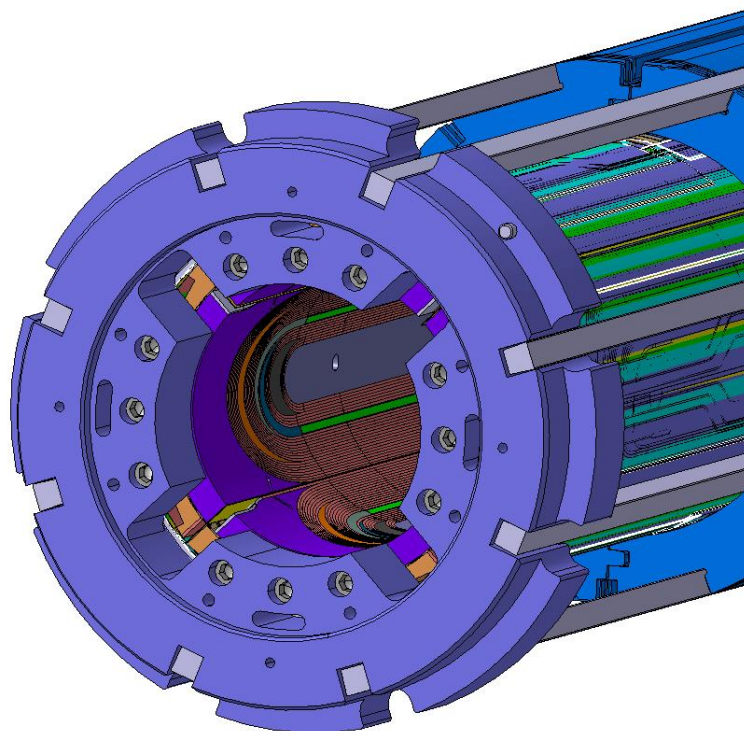
BEST SOLUTION: Solution 1

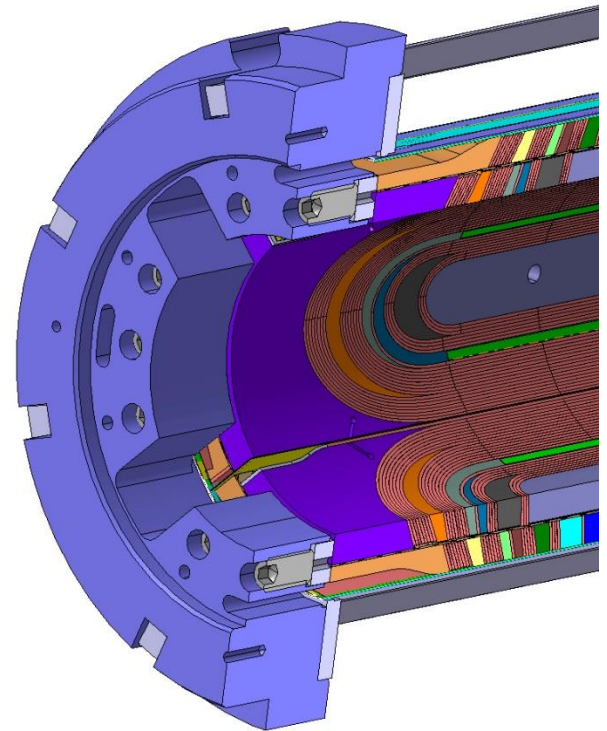
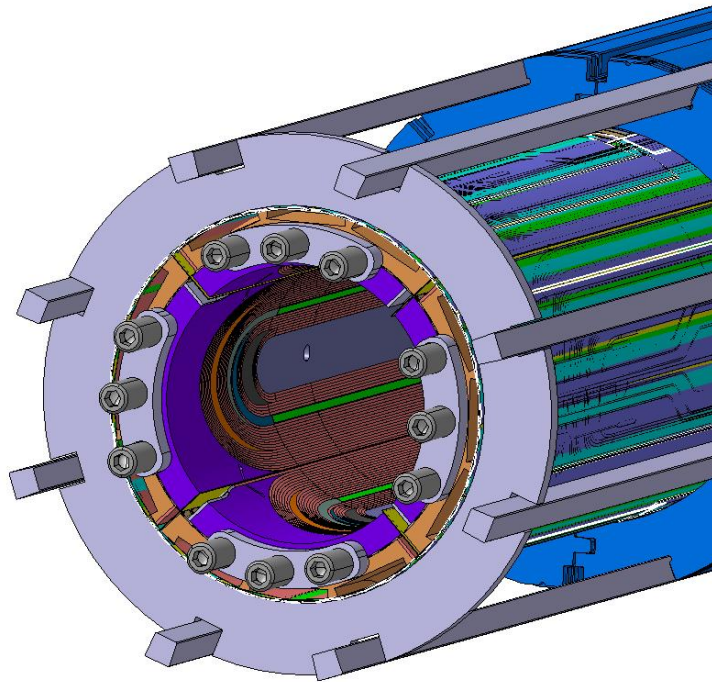


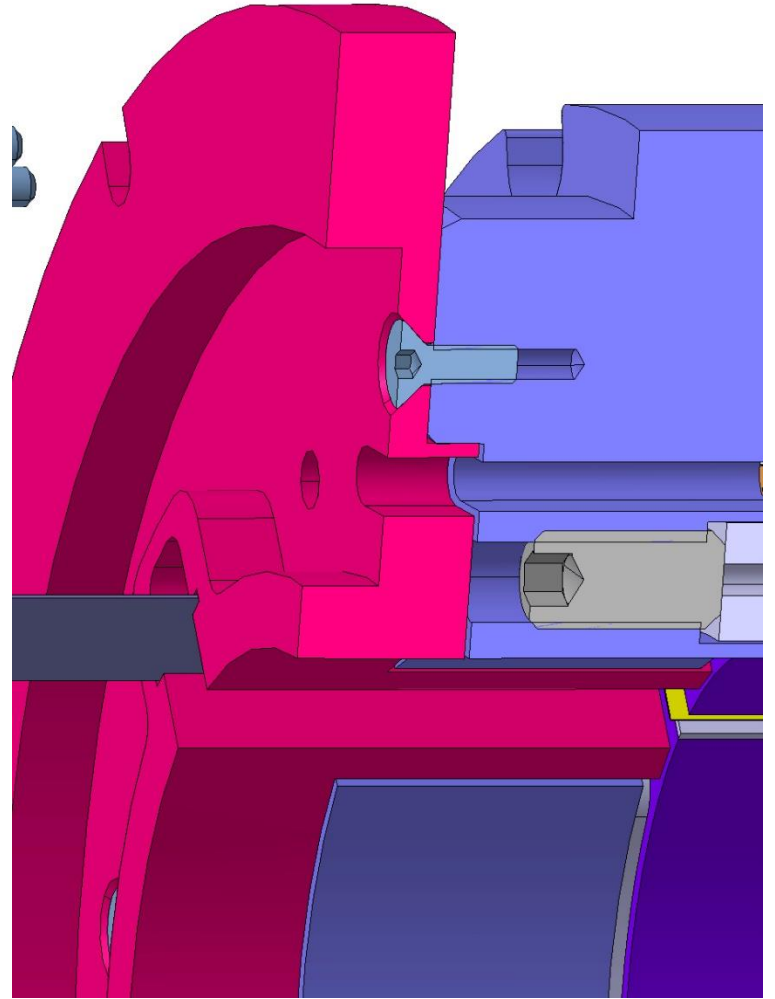
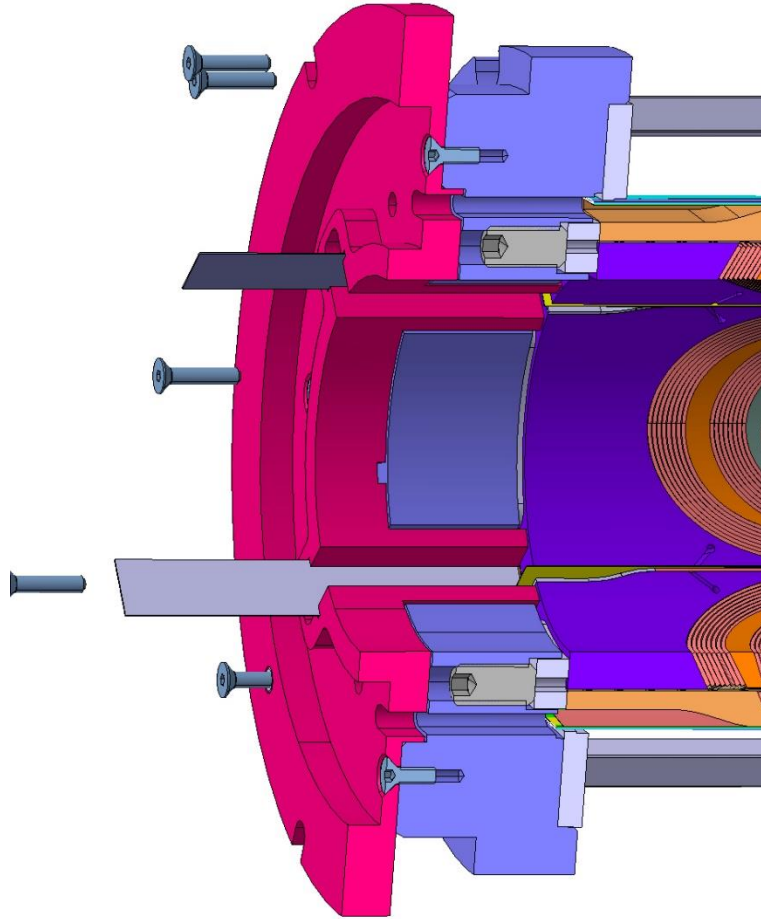


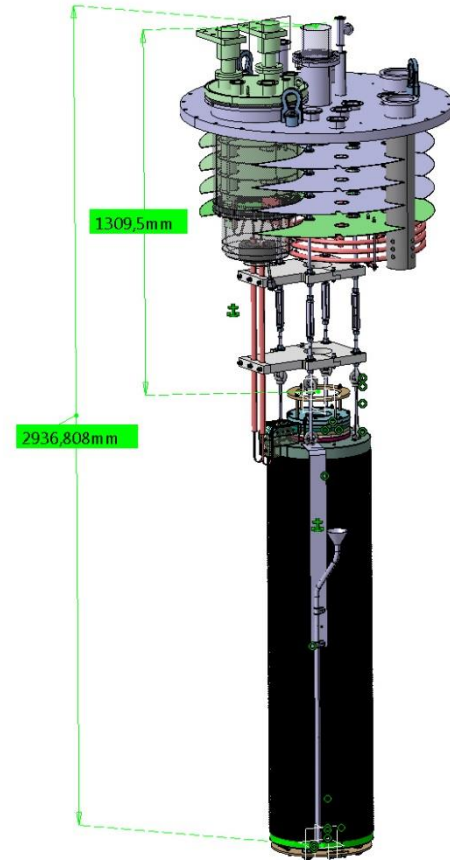
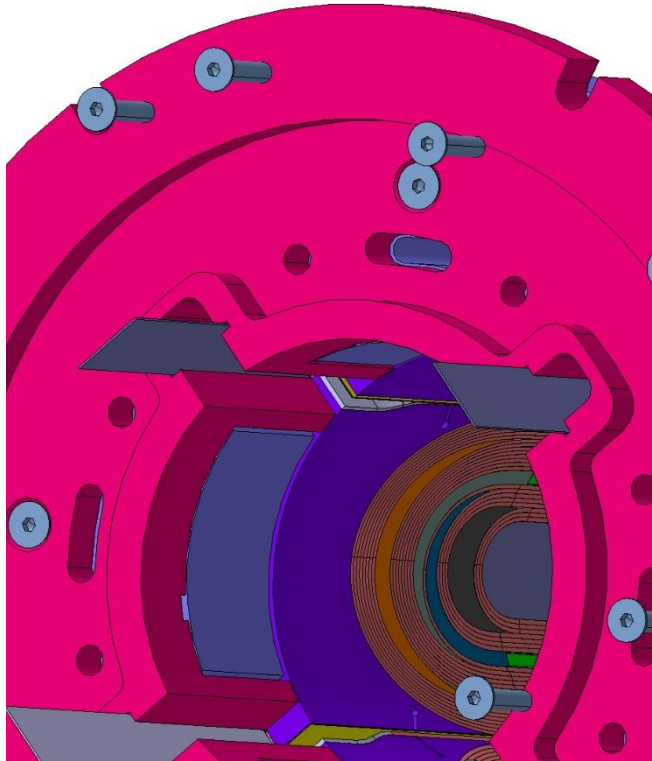




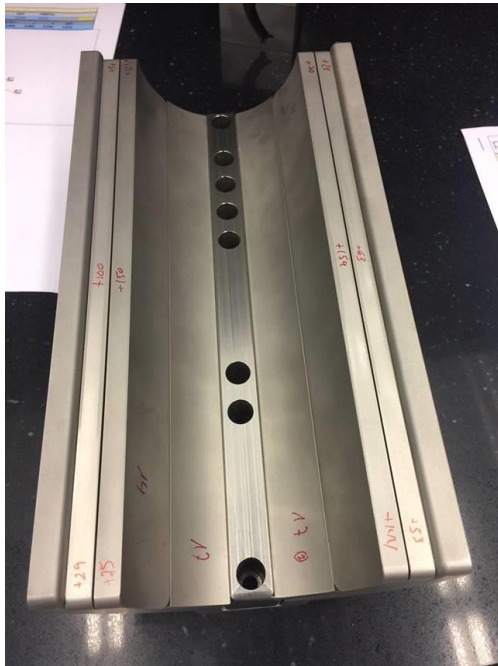
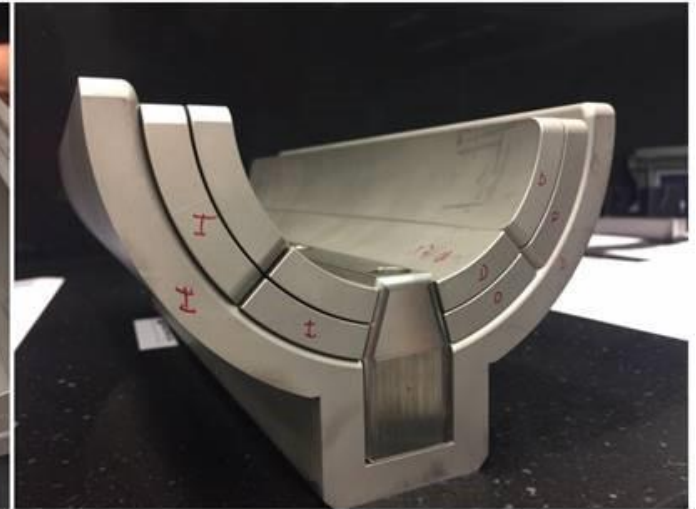
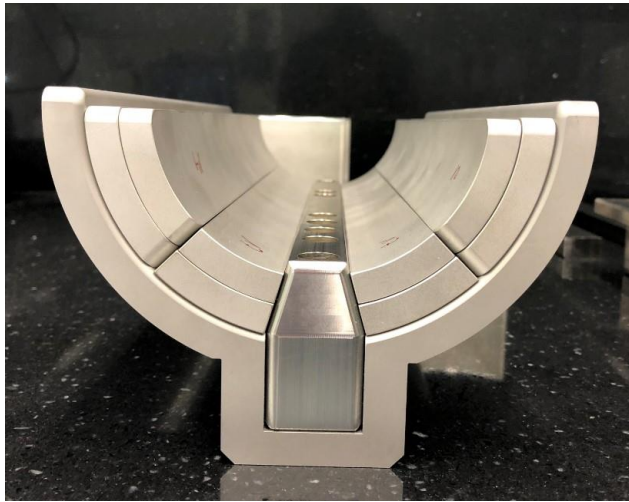


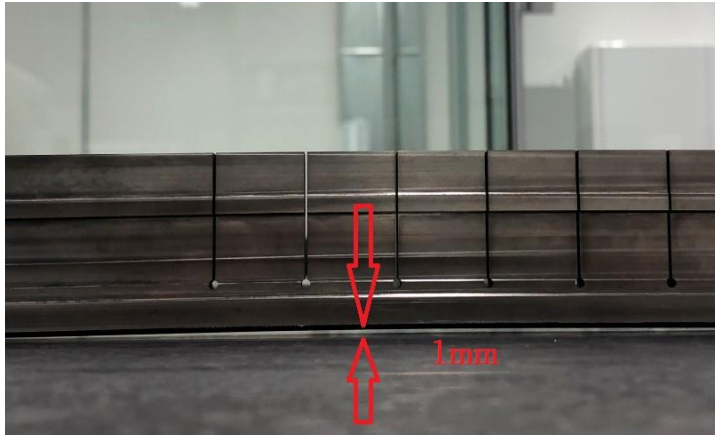






COIL MEASUREMENTS





Before



After

