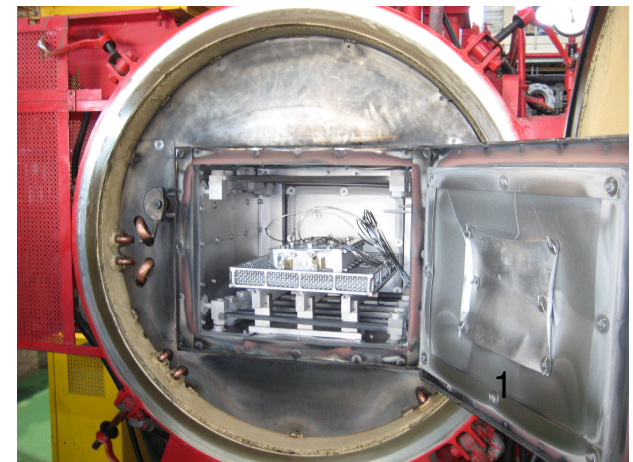
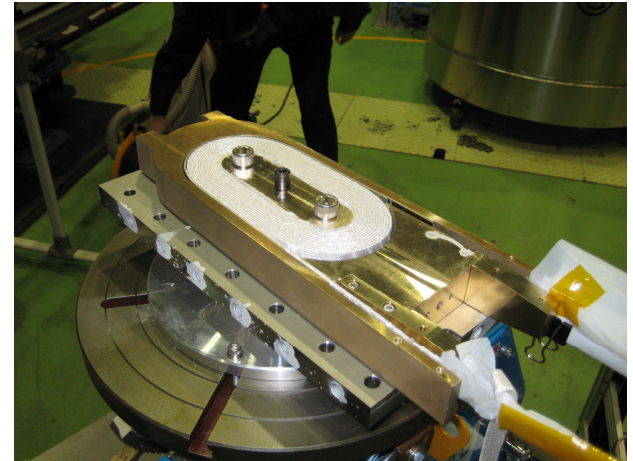
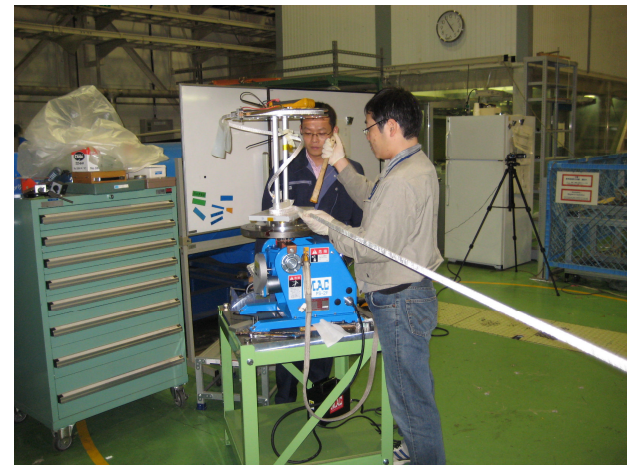


Present Status - Coil Fabrication -

- The 1st practice coil winding (w/ residual LHC NbTi cable insulated by alumina tape 0.125 mm thick) was completed.
- Heat reaction at 800 °C for 10 hours in a vacuum furnace is being done to check uniformity of temperature. Vacuum impregnation will be carried out soon.
- Following another practice winding, the 1st Nb3Al coil will be completed within JFY2009.



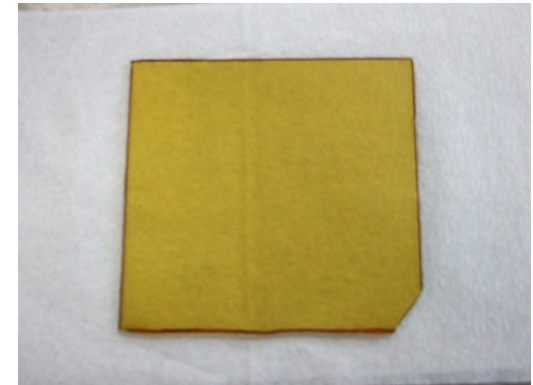
Remarks

- Thinner alumina insulation tape 0.08 mm thick is being developed and it could be applied for further coil winding.
- Cyanate Ester resin will be used for the impregnation.

Cyanate Ester Based Resin for Nb3Al Coil Impregnation

- Collaboration for accelerator HFM application (SLHC):
 - Mitsubishi Gas Chemical: provider of Cyanate Ester resin
 - Univ. of Hyogo: evaluation (**bonding & mechanical properties**)
 - JAEA: gamma-ray irradiation, evaluation (**evolved gas**)
 - KEK: specification, specimens
- **Radiation resistant resin of Cyanate Ester** is being developed for the Nb3Al coil impregnation.
- Spec.
 - low viscosity
 - control of solidification
 - mechanical strength

A first resin will be delivered to KEK next week.



Newly developed CE resins for HF accelerator magnets