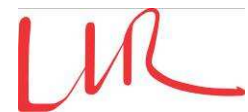


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*ECAL Module - Assembly*

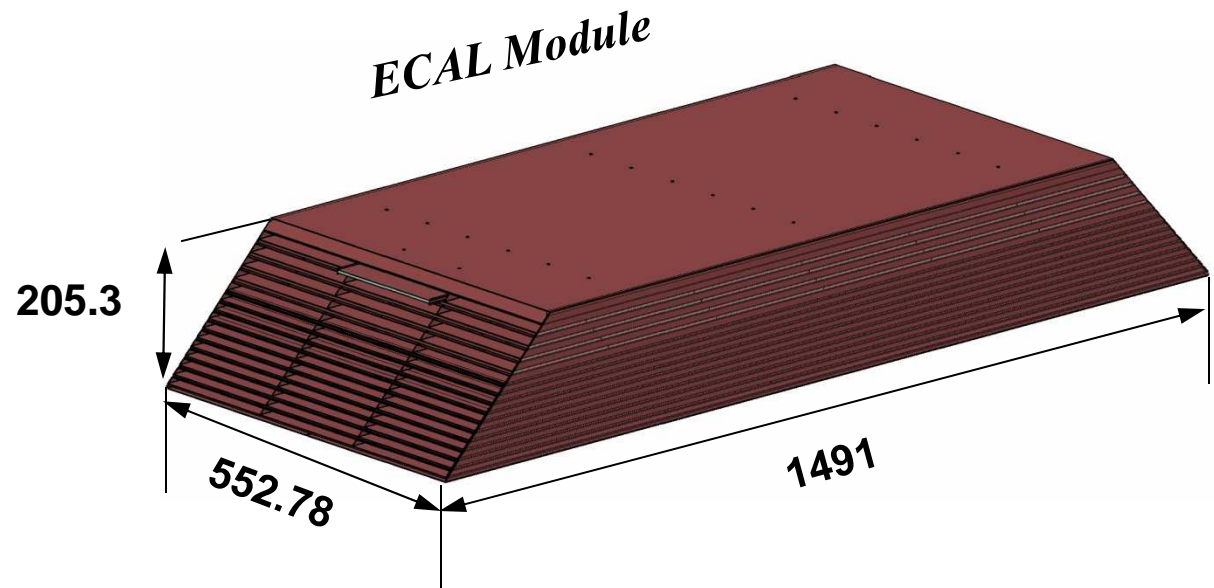


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ECAL meeting - LLR

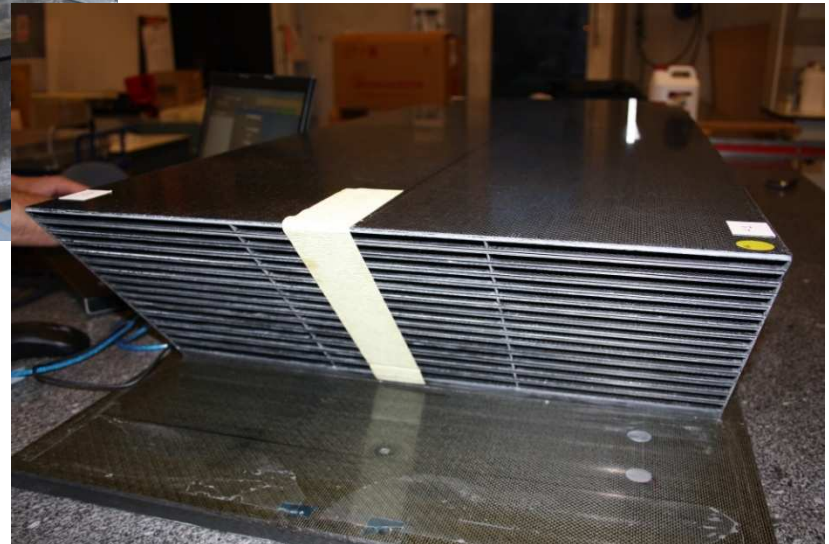
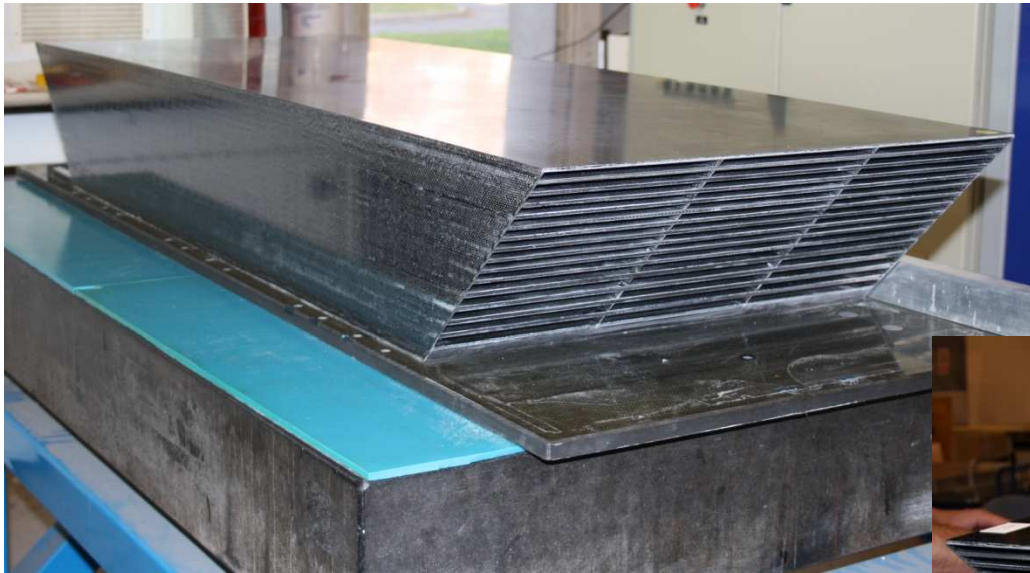
# ECAL design

- We have built a first **prototype** to validate all composite process after the small demonstrator.
- Width alveolar: (181.34 mm\*7.3 and 9.4)
- Ready for First test of **slab integration** (gluing, interconnection ...)
- Ready for **Test beam, analysis** and **cooling system**.



•weight : ~ 600 Kg

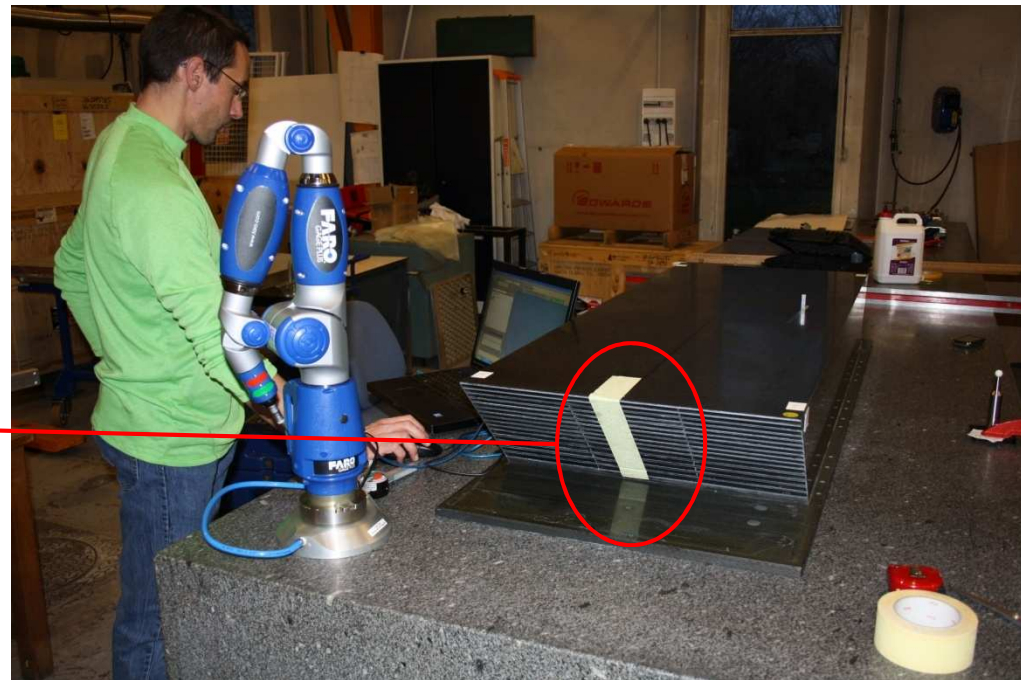
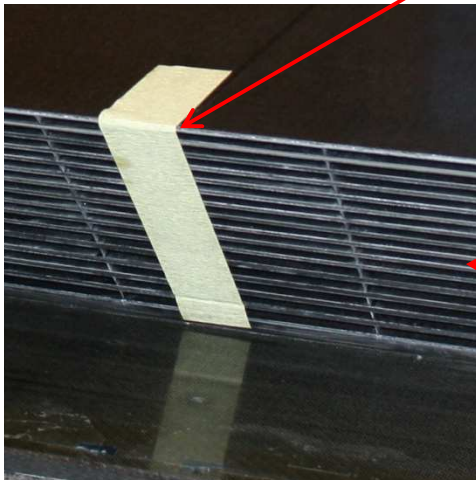
- Results



# Dimensional inspection

- We have controlled this first ECAL module with an 3D measuring arm machine @IAS (thanks antoine arondel)
- Division of the surface measured in 8 shares
- Global dimensions : Thickness, Width
- **1 Flatness controlled (top)**
- **2 Trapezoidal side were measured**
- Central cells and dead zones (Tungsten thickness with alveoles)

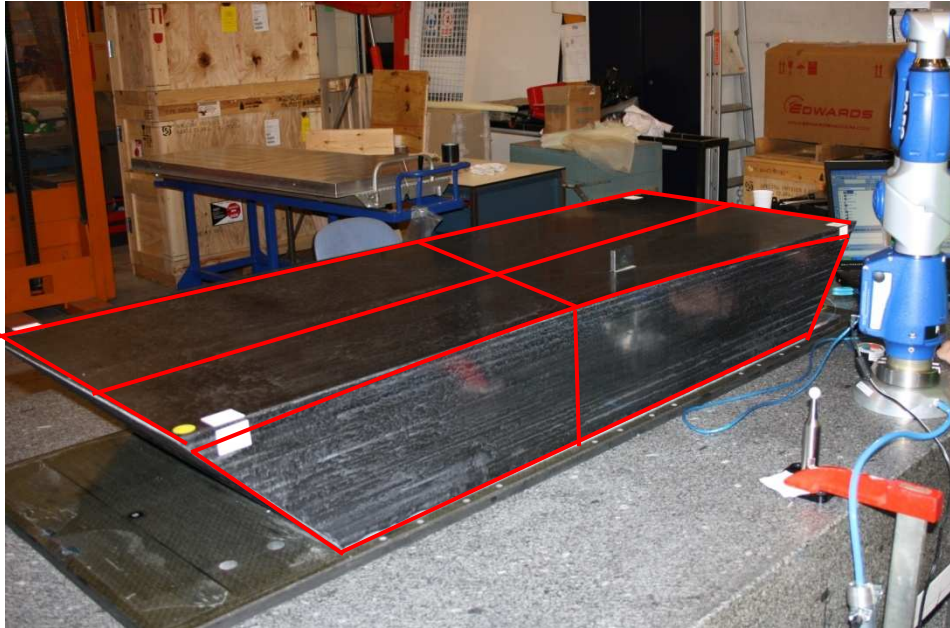
*Measuring ligne*





# Global dimensions

Expected (structure dim.) *VS* Measured

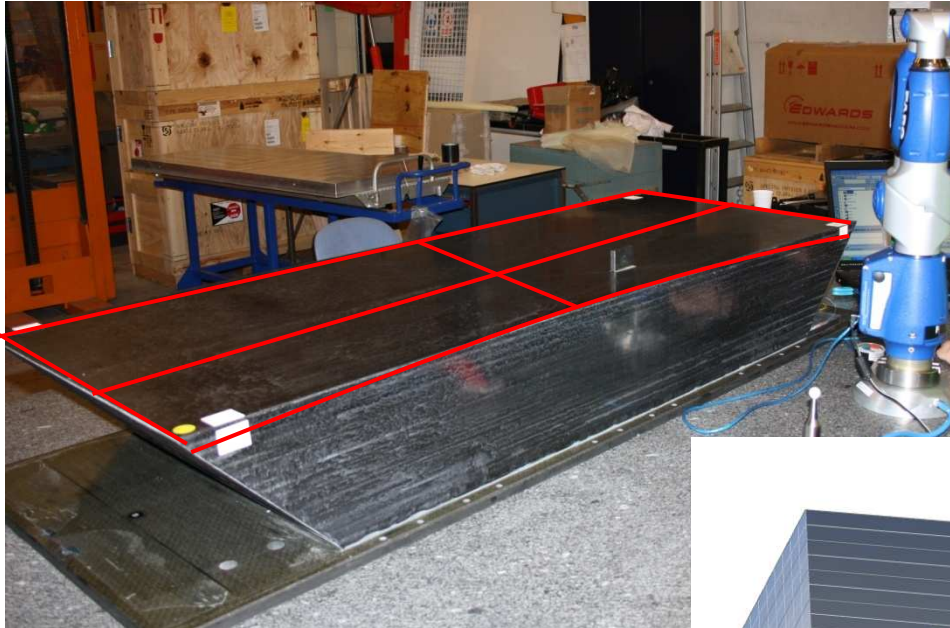


Global width (to be confirmed):  
552,78 mm vs 552,65 mm +/- 0.05

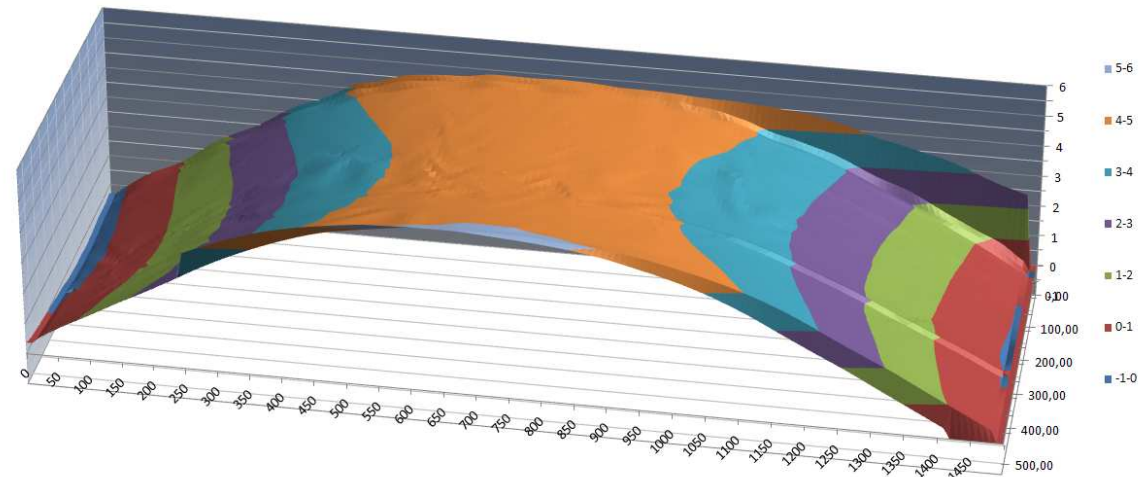
Total thickness (15 layers) :  
205.3 mm vs 205 mm 0+5.28

- Concave deformation, in studies!

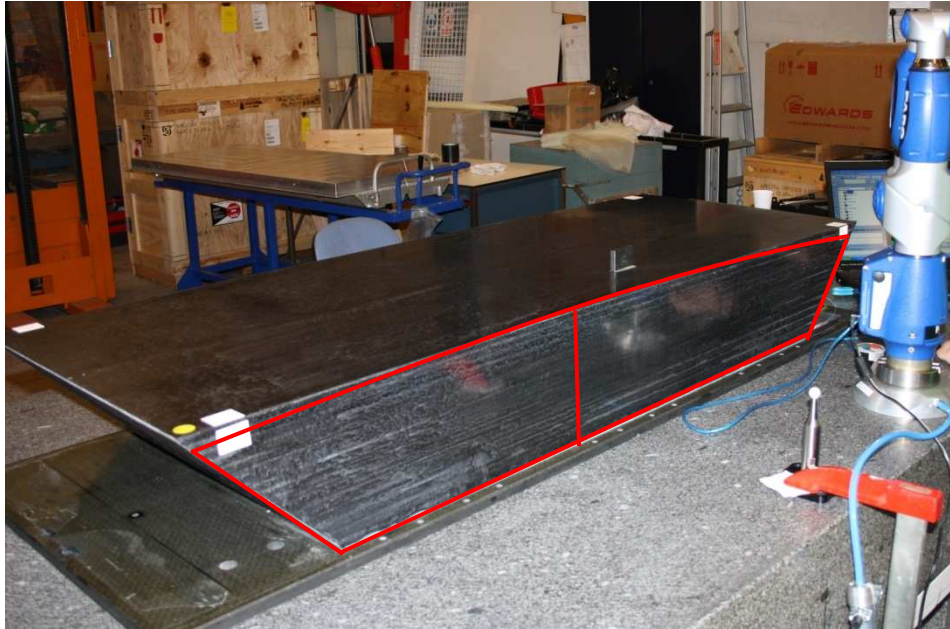
# Flatness



**Flatness (to be confirmed) :**  
**205.3 mm vs 205 mm 0+5.28**



# Steps 2 : Flatness



Global flatness (to be confirmed):  
**552,78 mm** vs **552,65 mm +/- 0.05**

