



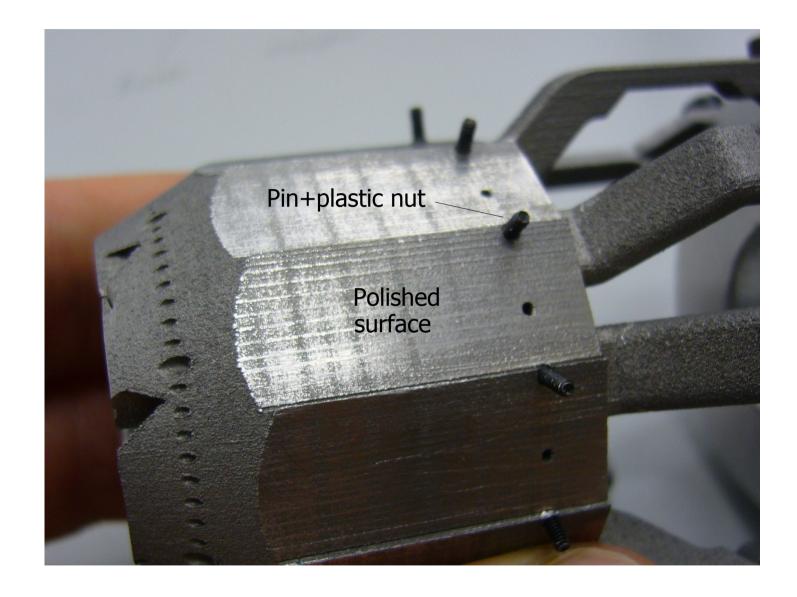
#### Status in Valencia

- ✓ Thermal mock-up✓ Thermal enclosure



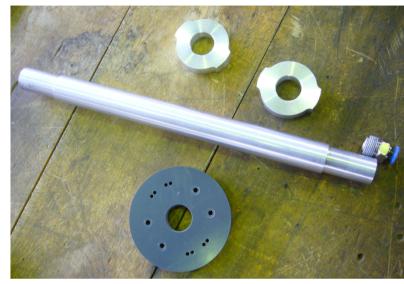
## **Thermal Mock-up**

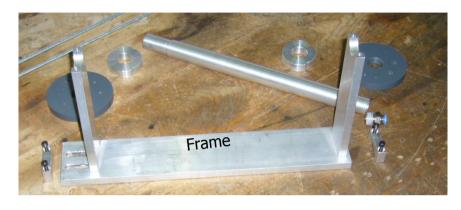


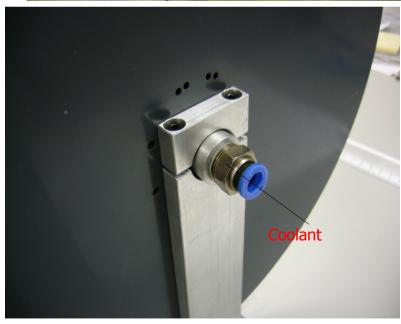




















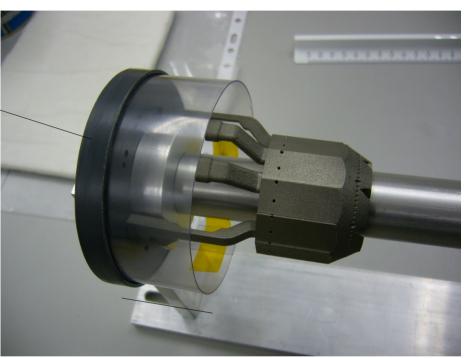
- The two independent halves attached to the support ring
  Support ring held to the beam pipe





Two PVC "endcaps" will define the working volume: PXD standalone or PXD+SVD



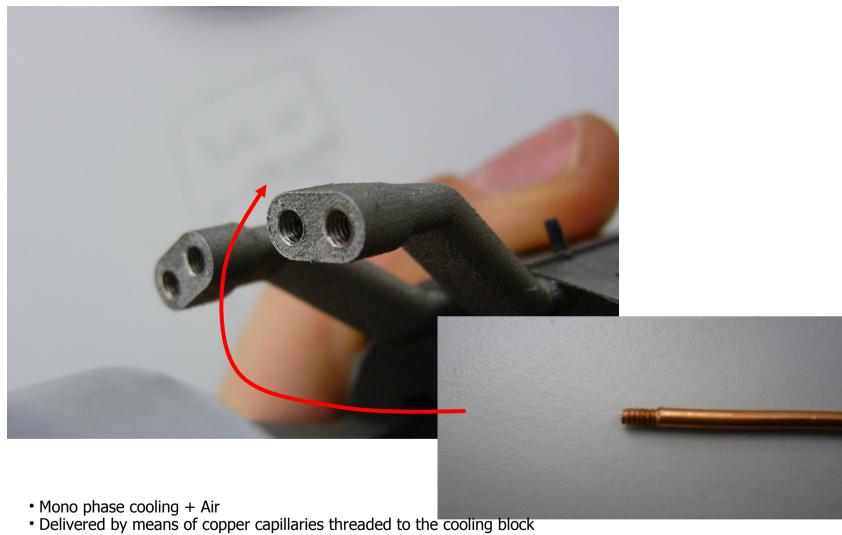


The polycarbonate screen will be extended to cover the full volume

Holes for the services (air and coolant)







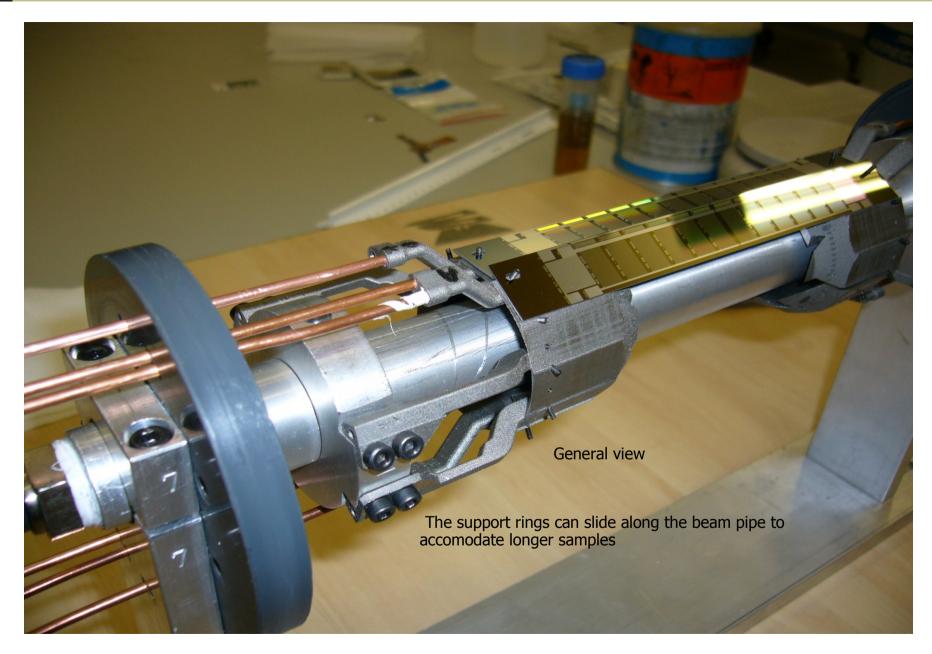






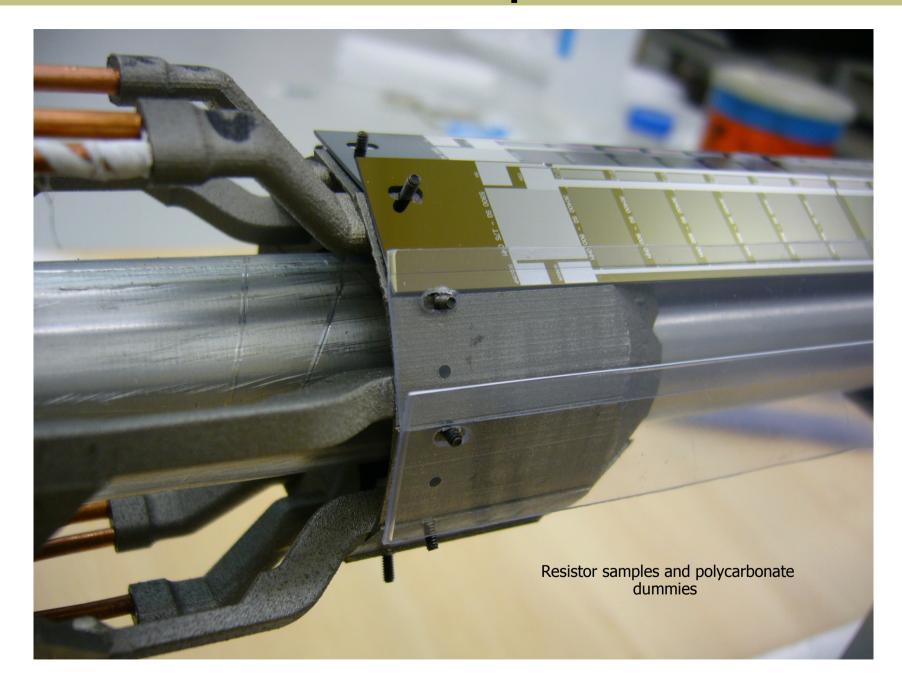














#### Materials for the support



Material	Thermal conductivity (W/m·K)	CTE (um/mºC)	Tensile strength (N/mm²)
Stainless steel 17-4	16	11.7	~1000
Stainless steel 15-5	22.6	13	
Steel CL20	15	17	650
AISI 316 steel	16.2	15.9	~600
DM20	30	18	400
→ AlSi10Mg	140	21	310
Ti6Al4V	7.2	9.2	1200

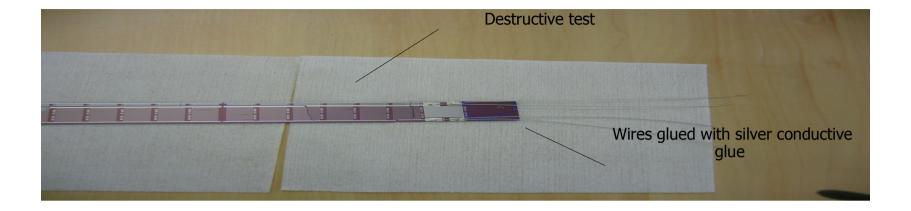
We like: DM20 and AlSi10Mg

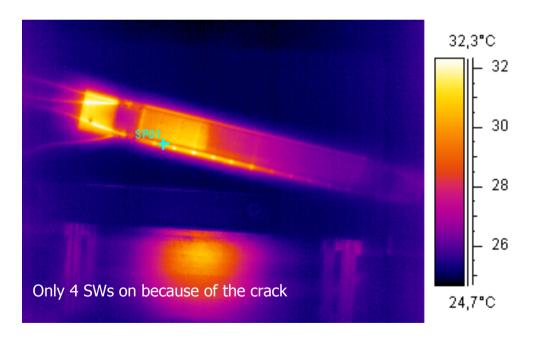
Blocks made with these materials ordered. As soon as received will be sent to Munich for pressure tests

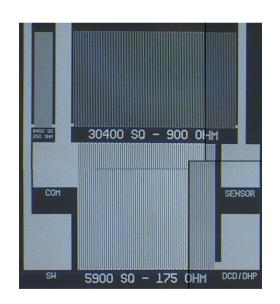


### **Dummy sensors with integrated Resistors**





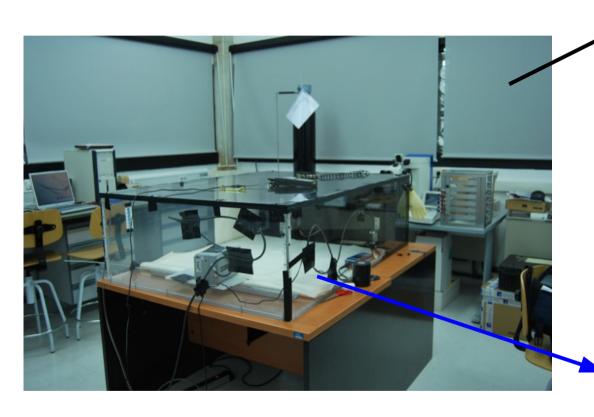


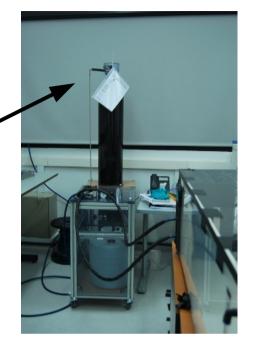




### CO2 open system







Open CO<sub>2</sub> system built in house following NIKHEF note.



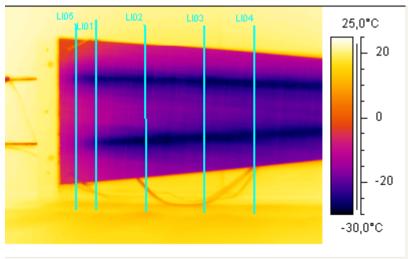
Line State of the State of the

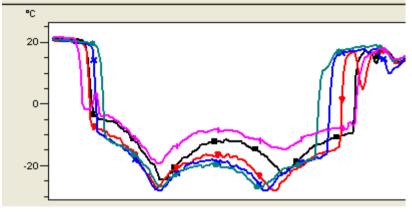
The petal

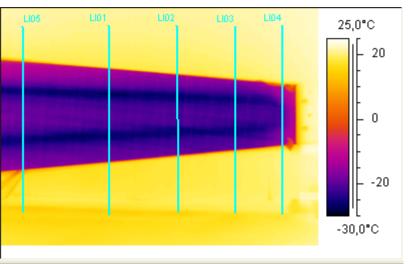


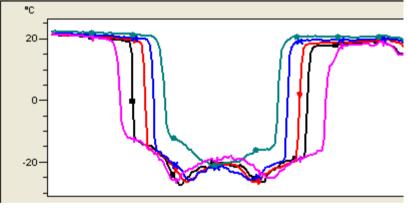
# CO2 cooling system













### Air cooling



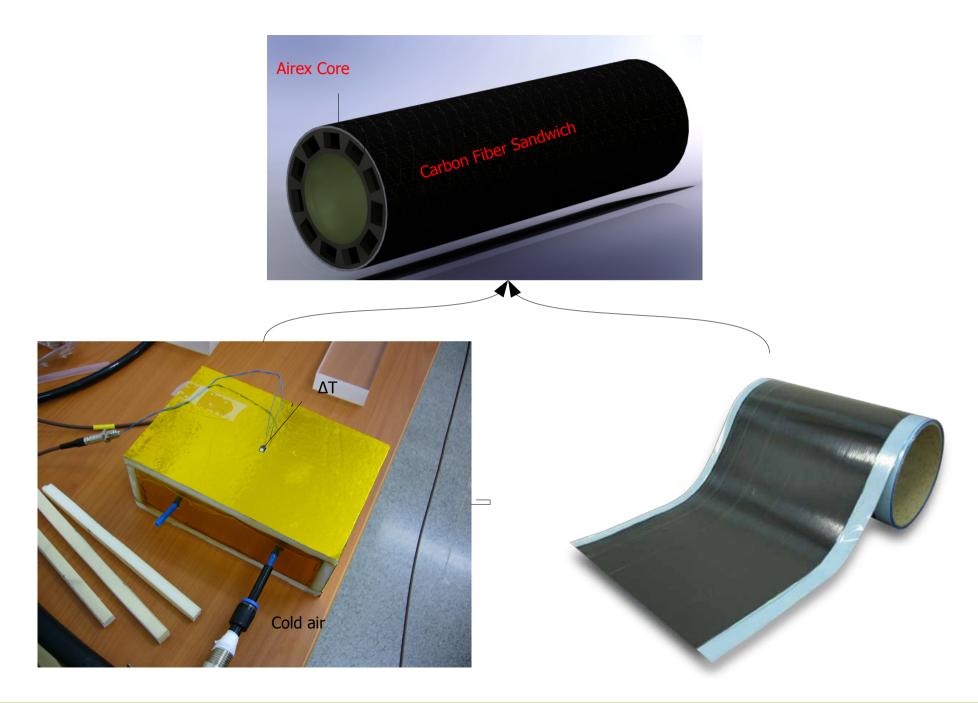
- Not too complicated unless need be...
- Dry air through a liquid N<sub>2</sub> dewar





### **Thermal Enclosure**





C & C