

FECal Discussion

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Tungsten Powder

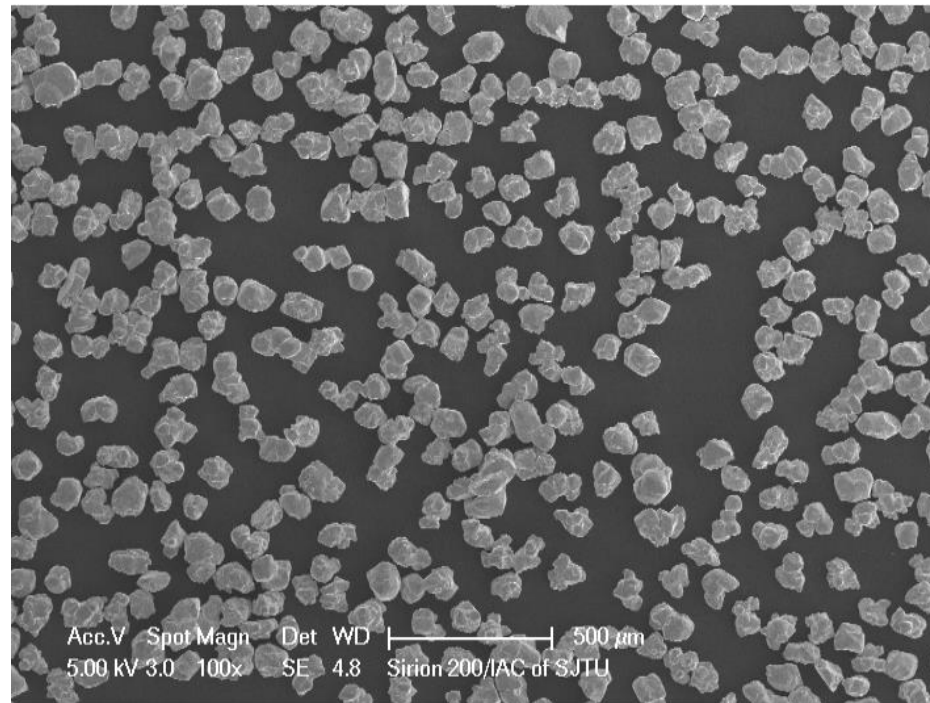
Tungsten Powder QA at Fudan:

Tap density: > 11.2 g/ml

Purity: >99.9%, Fe, Co, Ni <0.1%

Size: 60 μ m~200 μ m

EMCal block desity: ~9.6 g/cm³



Scintillation Fibers

Scintillation Fibers QA at Fudan:

Diameter: 0.47 ± 0.01 mm

Emission peak: 430~460 nm

Decay time: 2.5~3.5 ns

Attenuation length: >4m

~30% higher scintillation response than Saint-Gobain

kuraray



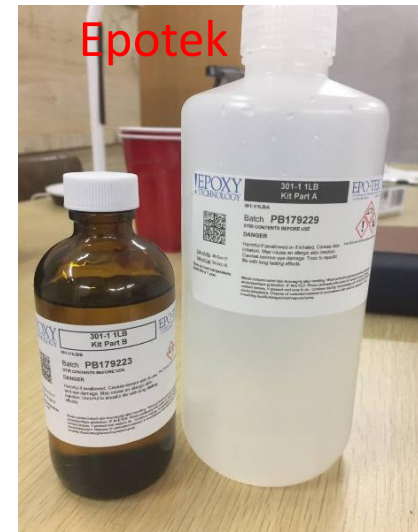
Epoxy

Planning to test three products:

- Epotek
- De Neef Denepox I-40
- BONDHUAJU

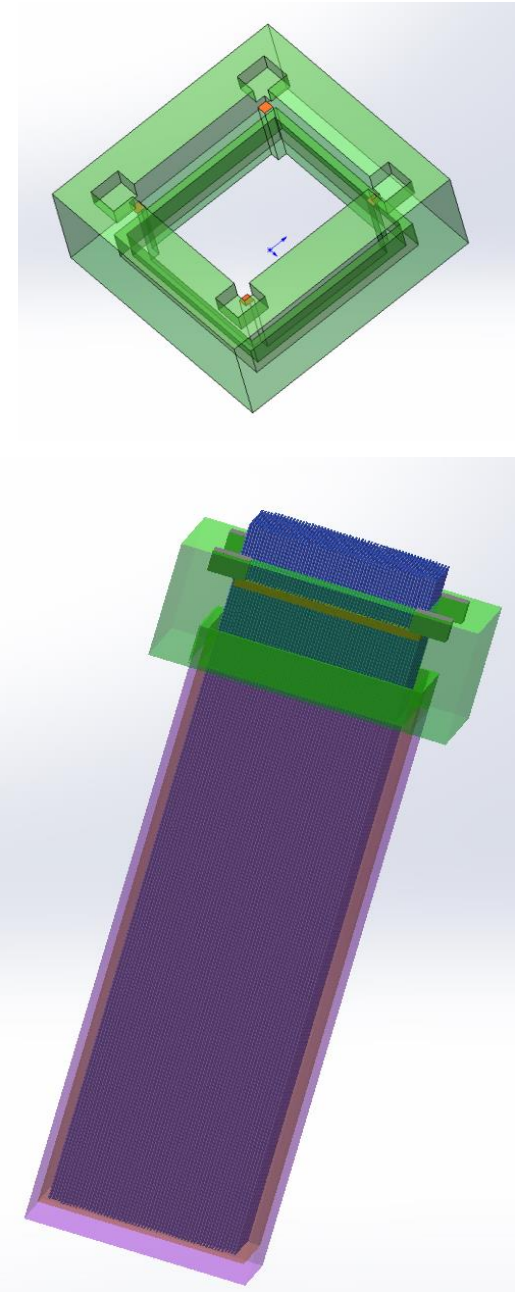
Concerns:

- Long term stability
- High shear strength
- Safe
- Cheap

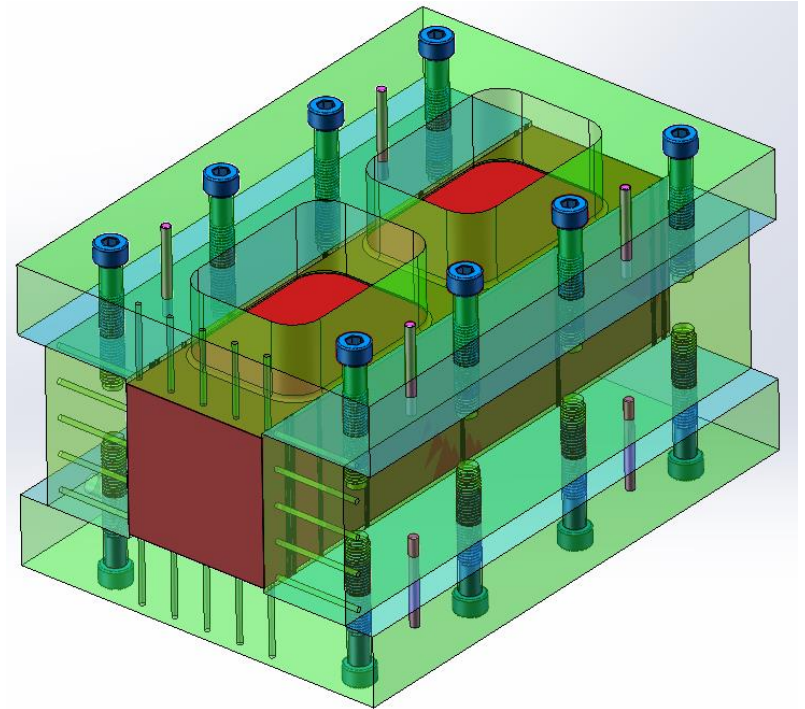
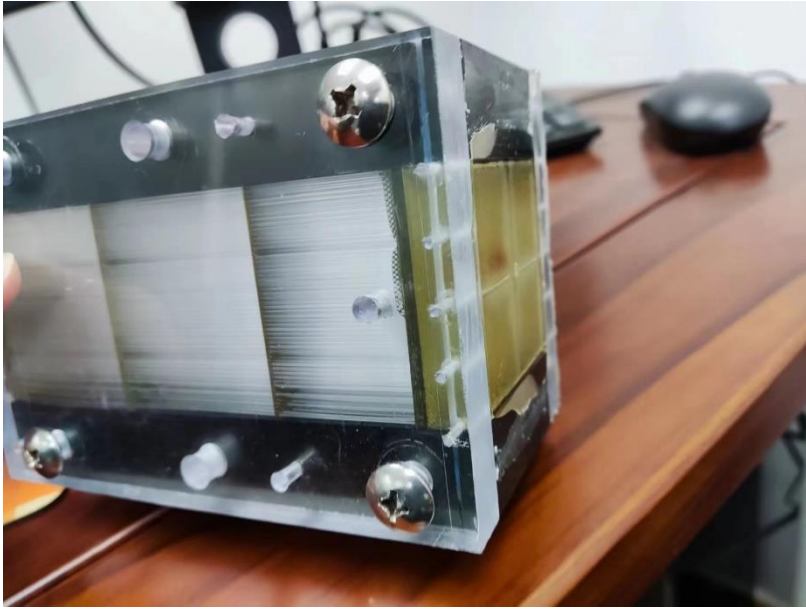


Fiber filling

- Tools for fiber filling are readiness.
- It works well both for meshes and filling.
- 30 min. filling time for the first try.

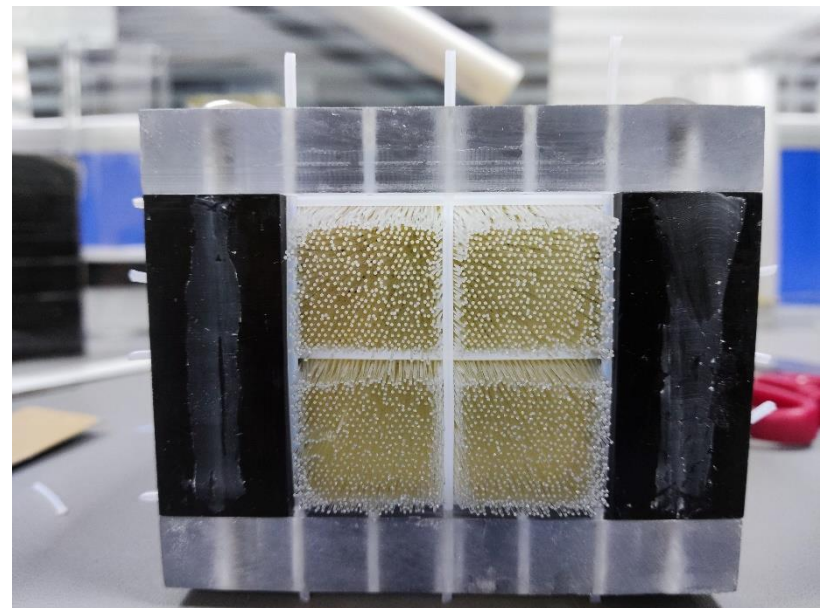
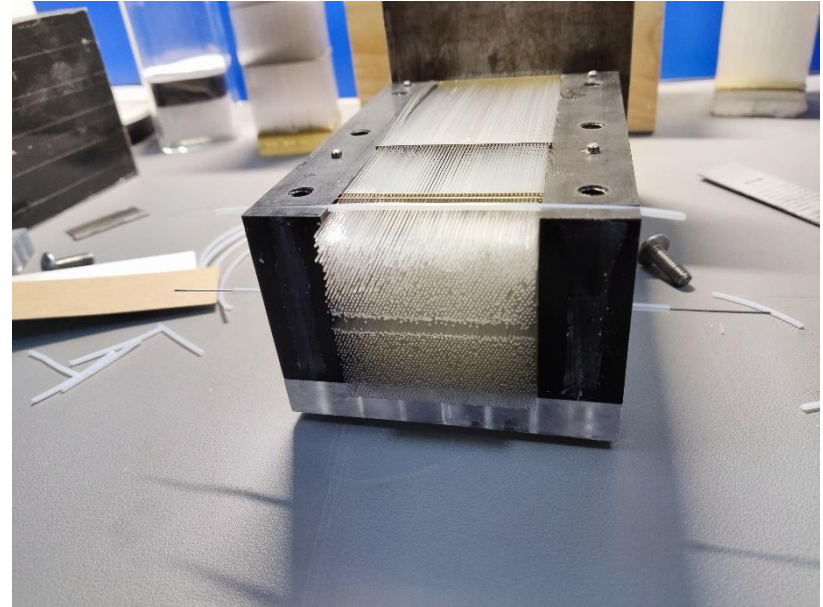
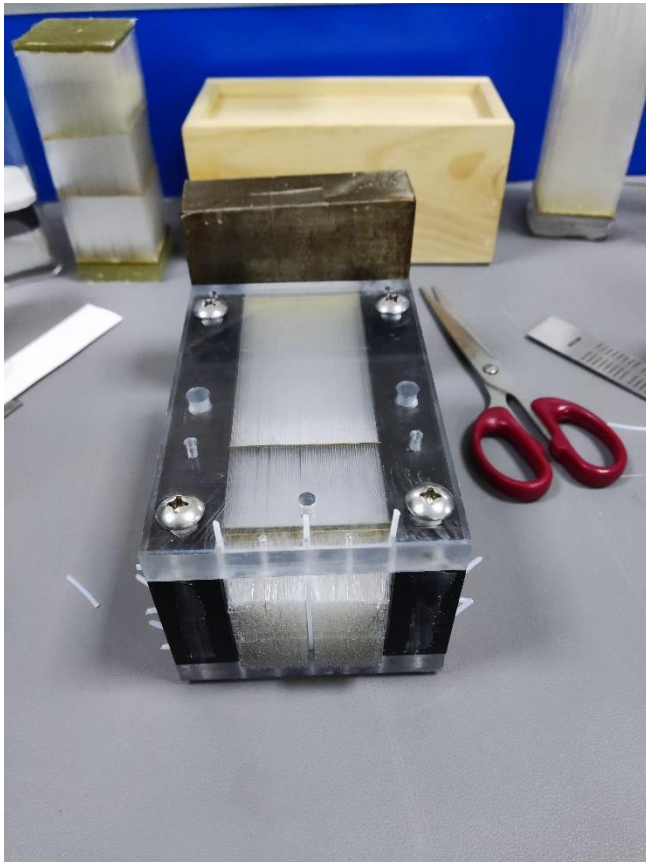


Mold

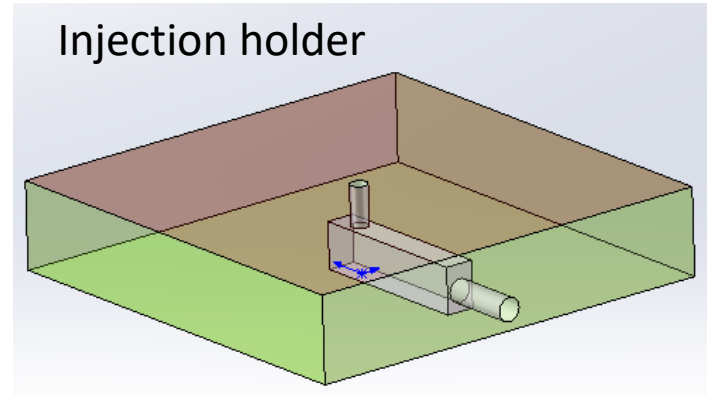
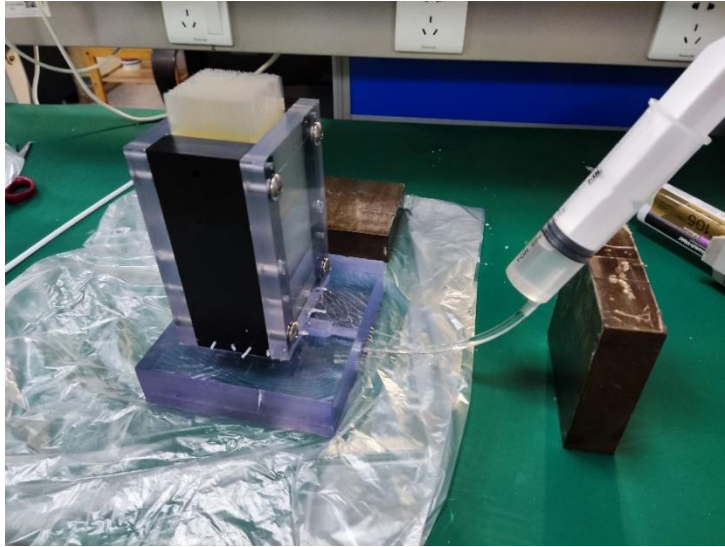


Mold assembling

- Tools (screws, dowels, capillary tube, etc) for mold assembly are readiness.
- It works well for putting the fiber set in the mold.



Epoxy flow test



Bubbles: Warm and flow slowly

preheating table

0.1mm镊子
直尖镊子
弯尖镊子

标配+3件套

品牌	邦远	温度范围	0-400°C
型号	BY2020	加热铝板	200X200mm
功率	700W	外形	防烫包边



Next plan

- Waiting for mold boards to be machined at factory.
- Testing and improving the epoxy injection.
- To test new mold.

