ALICE

ITS3

Tuesday 16th April 2024

WP5 progress report

WP5 collaboration

Outline

- BBM6: heater production
- Particle release setup

BBM6: heater production

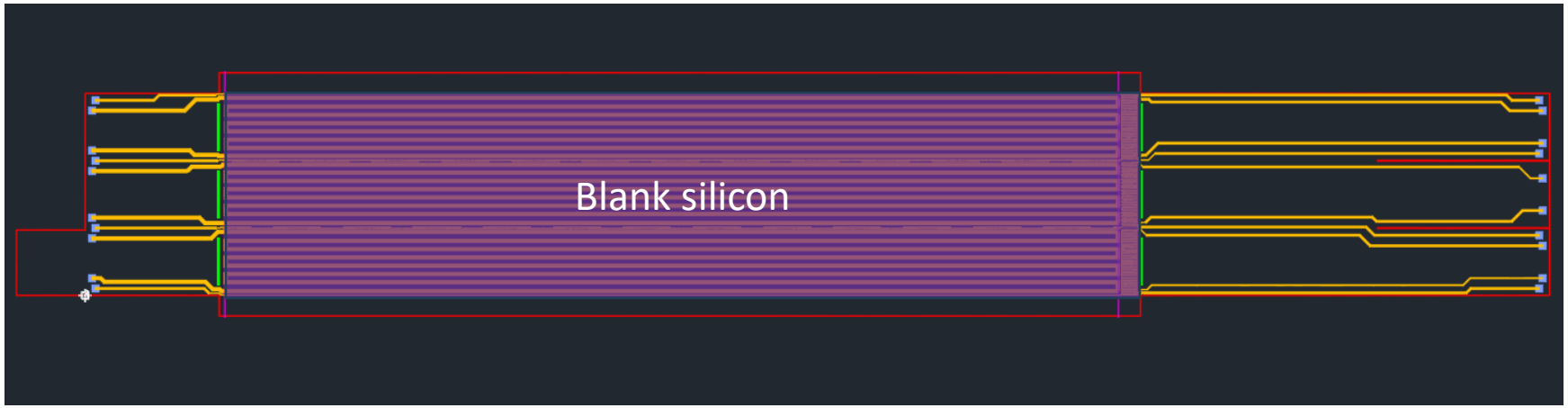
2 different possibilities:

- CERN EP-DT-MPT:
- Swissflex Microcircuits ag: (Contact from antoine)

3 designs (similar)

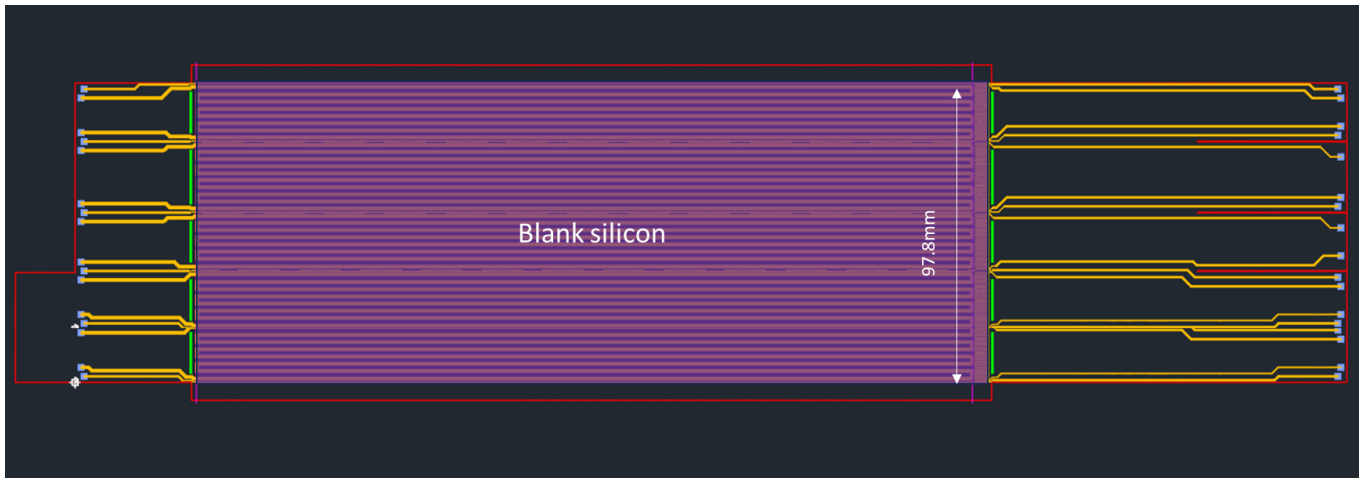
@INFN Bari design

L0



L1…

L2
(sketch)



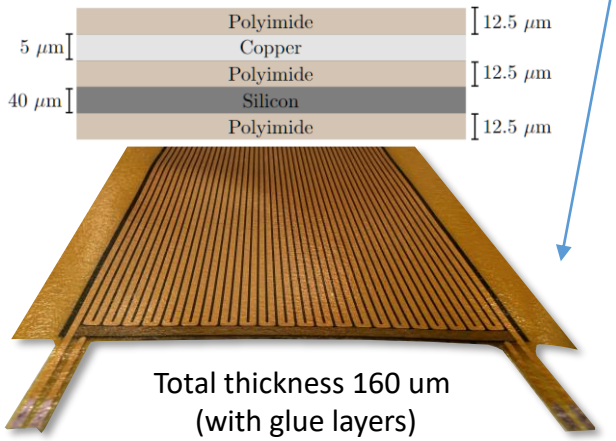
BBM6: heater production, CERN EP-DT-MPT

- Final thickness 160-170 um
- Design support
- Possible to be ready middle of June (2months)

Previous

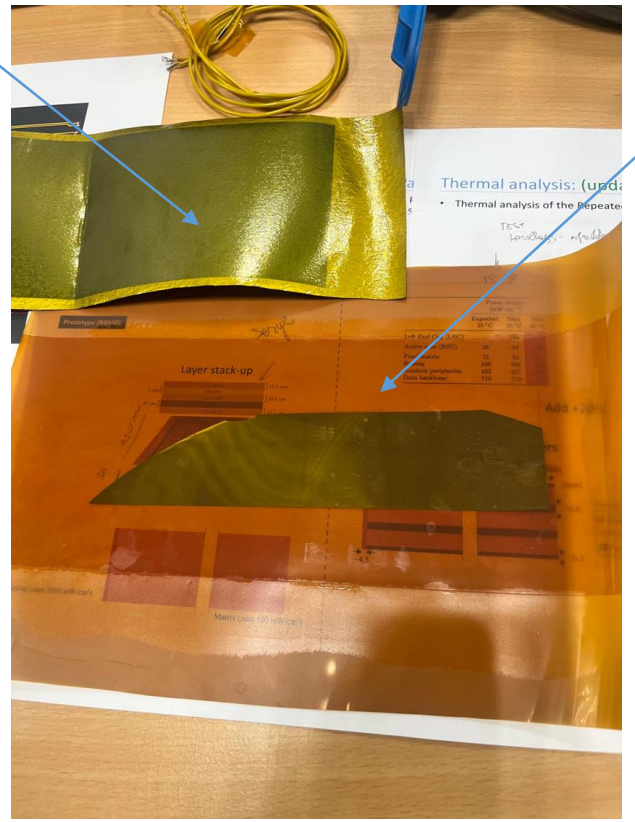
Hot press gluing

Stack-up



Total thickness 160 um
(with glue layers)

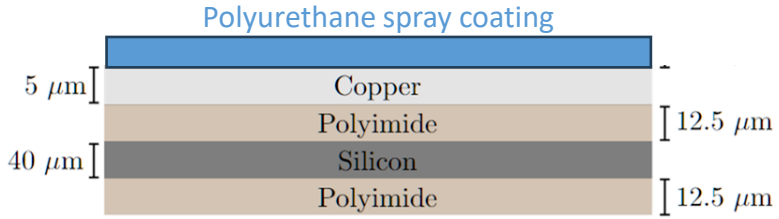
CERN EP-MPT



Previous heaters

Cold press gluing

- T ambient
- Avoid chip failure

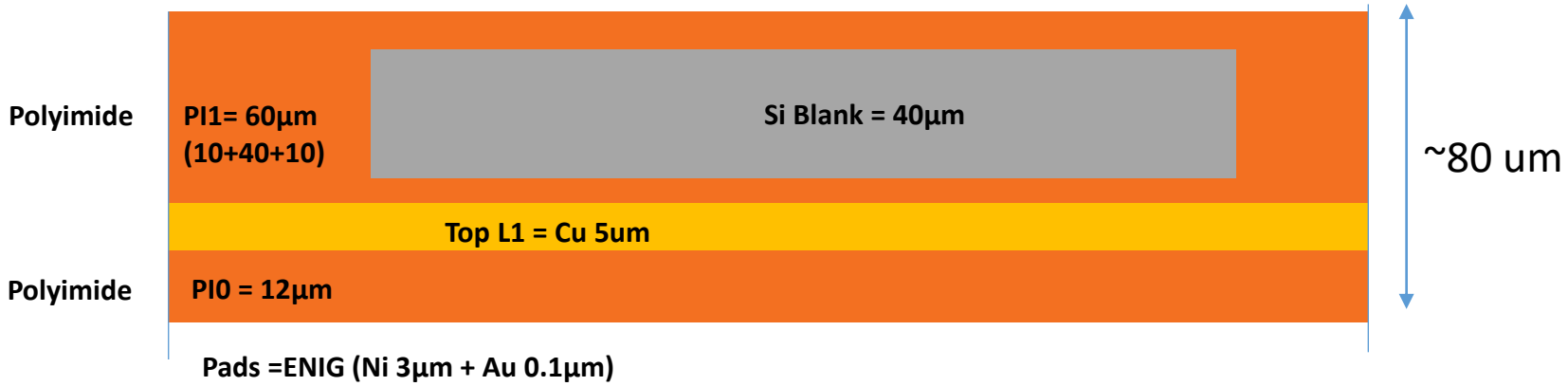


- Production test in the next days

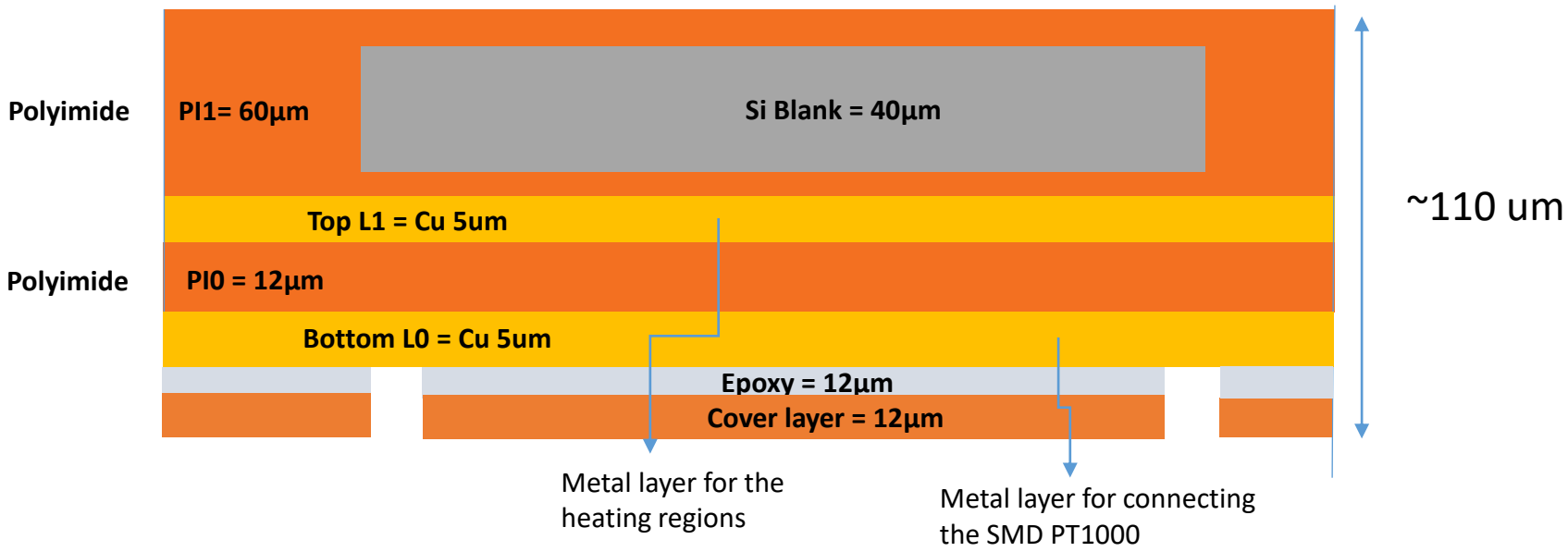
BBM6: heater production, Swissflex Microcircuits ag

- A lot of competences in chip embedding
- High price (4x)
- Less design limitation
- Final thickness 80 um
- Design support
- Production time= 2months,

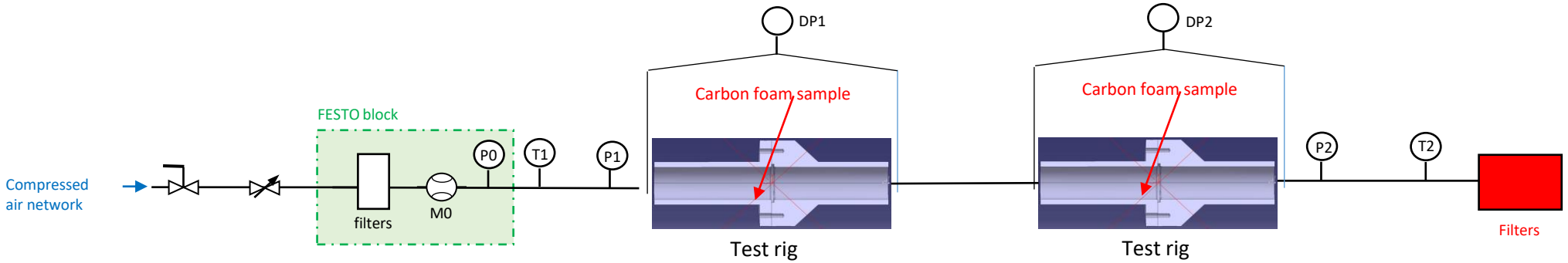
SWISSFLEX MICROCIRCUITS AG

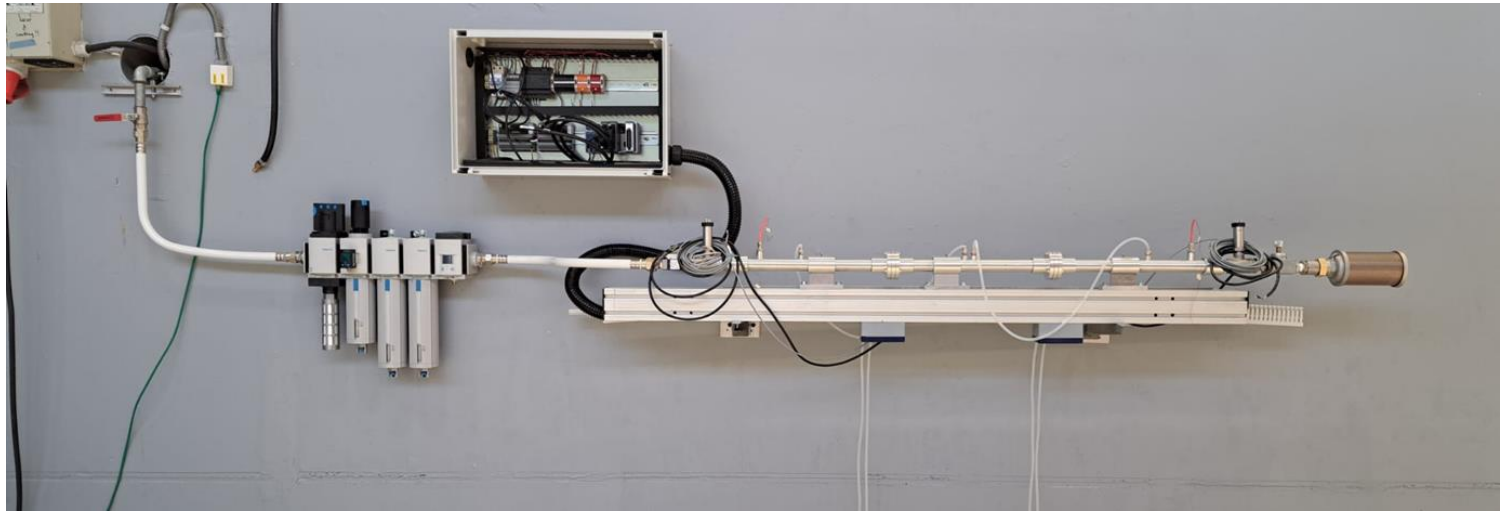


- Possibility to make up to 5 metal layers



Particle release setup





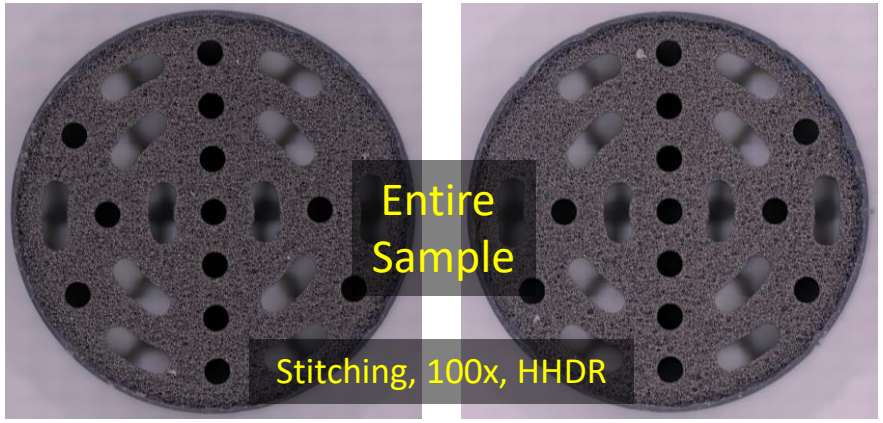
Foam samples

- Service routing, Wednesday morning.
- Preliminary test with dummy plastic sample (1week)
- Test to start on 29th April, with foam samples.

Particle release setup: Allcomp k9

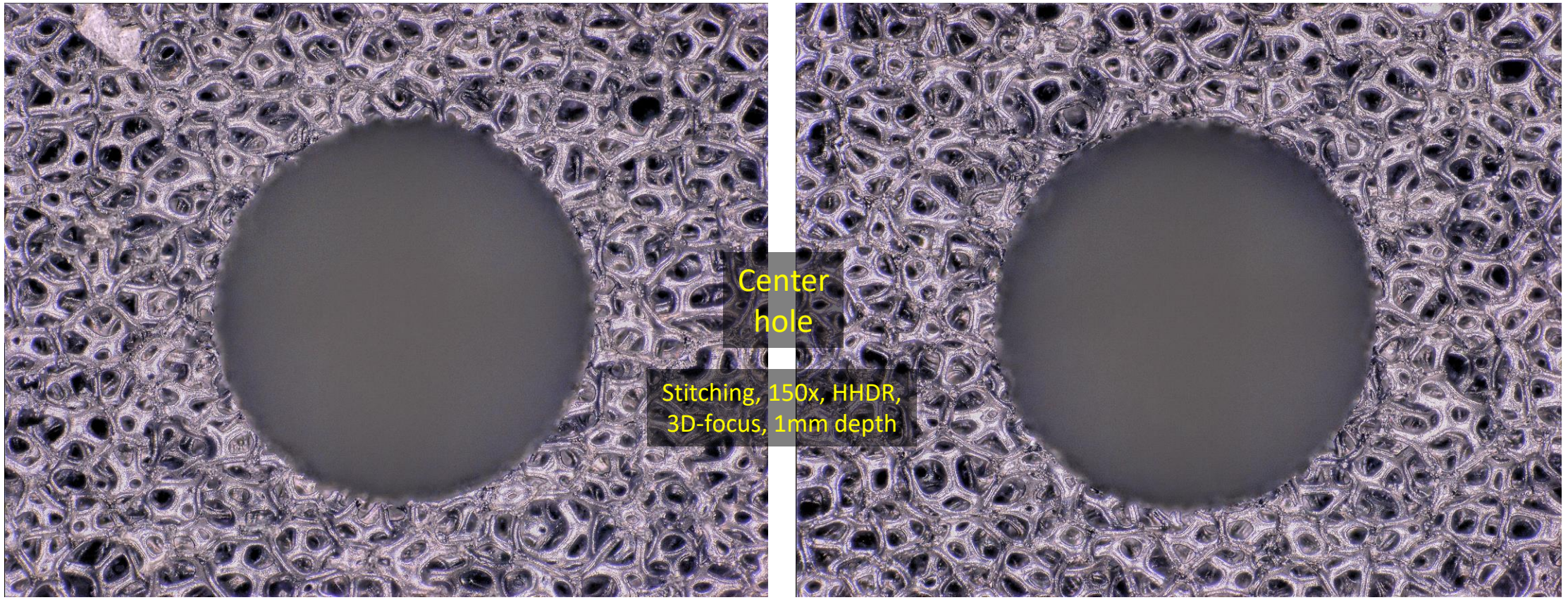
@Pieter

A-Side



B-Side

*These pictures are not in high resolution

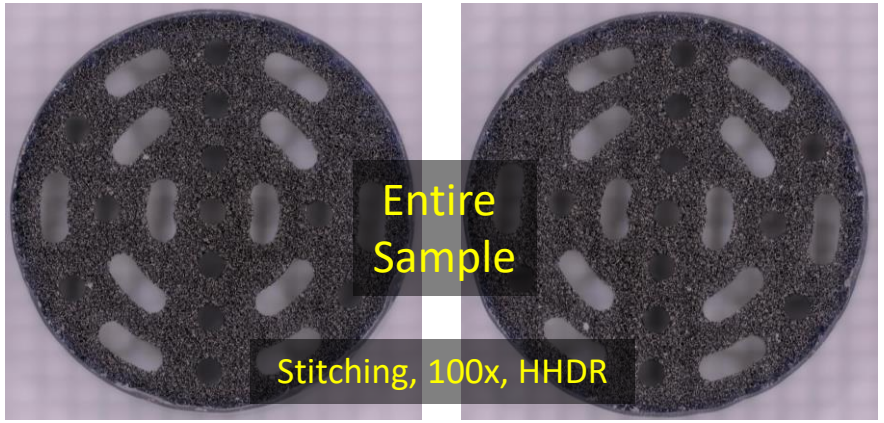


Particle release setup: ERG

@Pieter

- Keyence microscope

A-Side



B-Side

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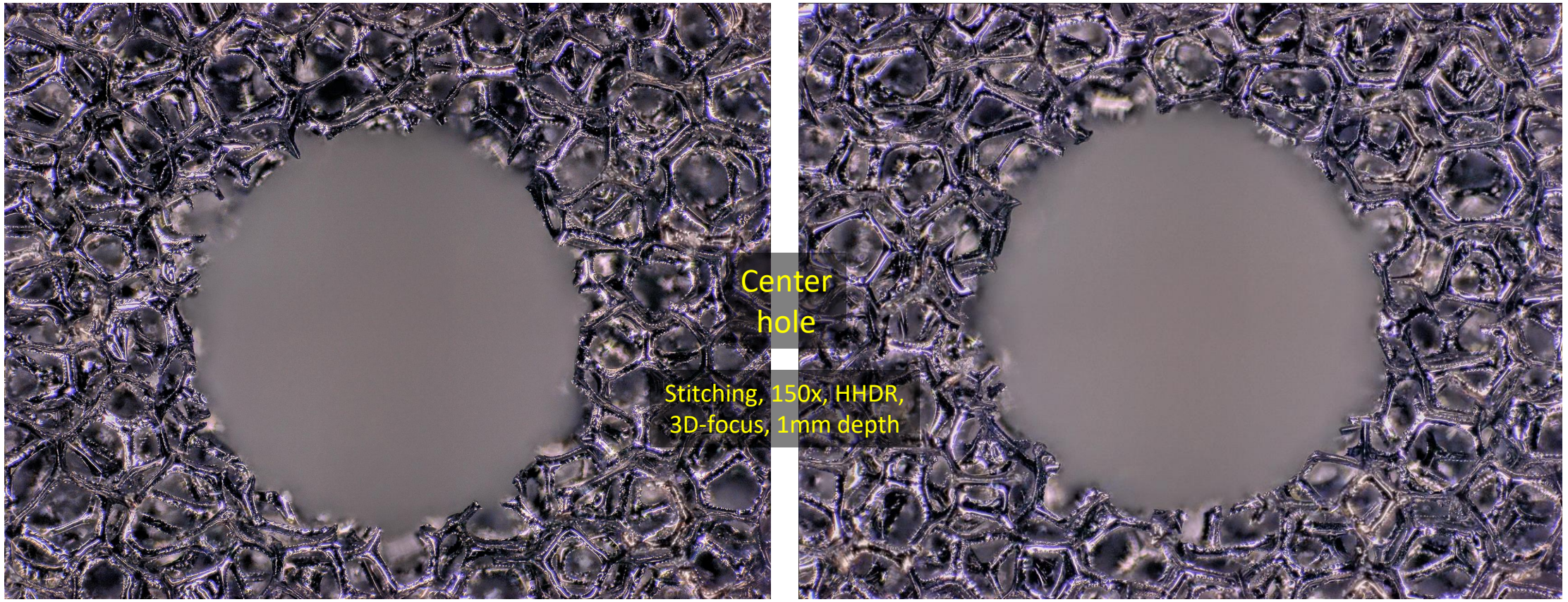

Particle release setup: ERG

- Keyence microscope

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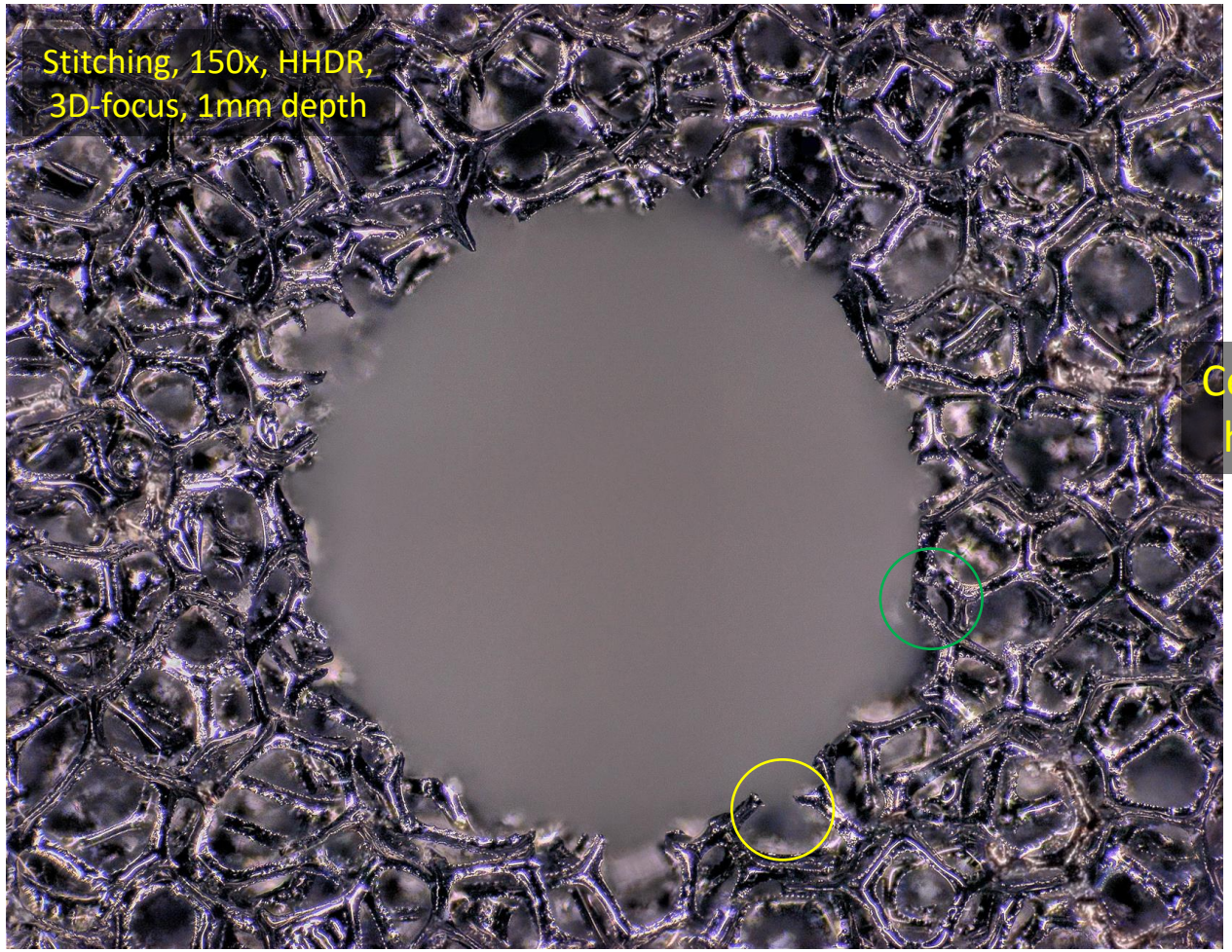
A-Side



Center hole