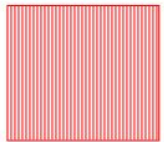


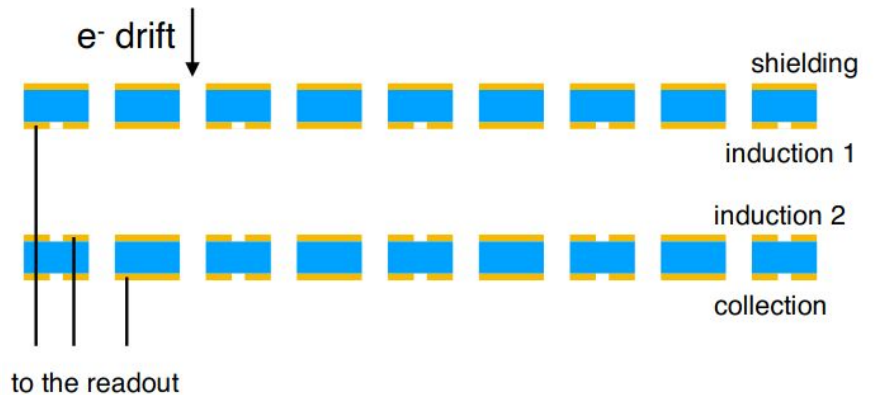
# Anode PCB production for the 2021 cold-box tests

CRP consortium meeting  
10/02/2021

# Today reference + protection layer + 3th induction layer



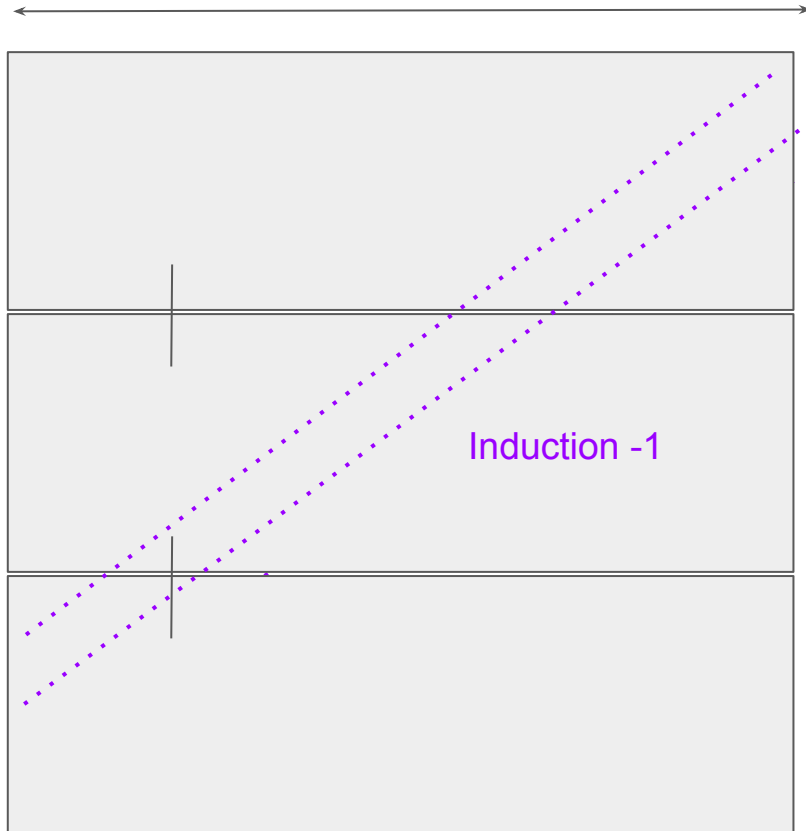
Induction-1: -48 degrees  
Induction 2: 0  
Collection : 90 degrees



# Front Anode PCB in a CRU

Front face will have the shielding and  
the back face will have the first  
induction layer

1.5m



## Induction -1

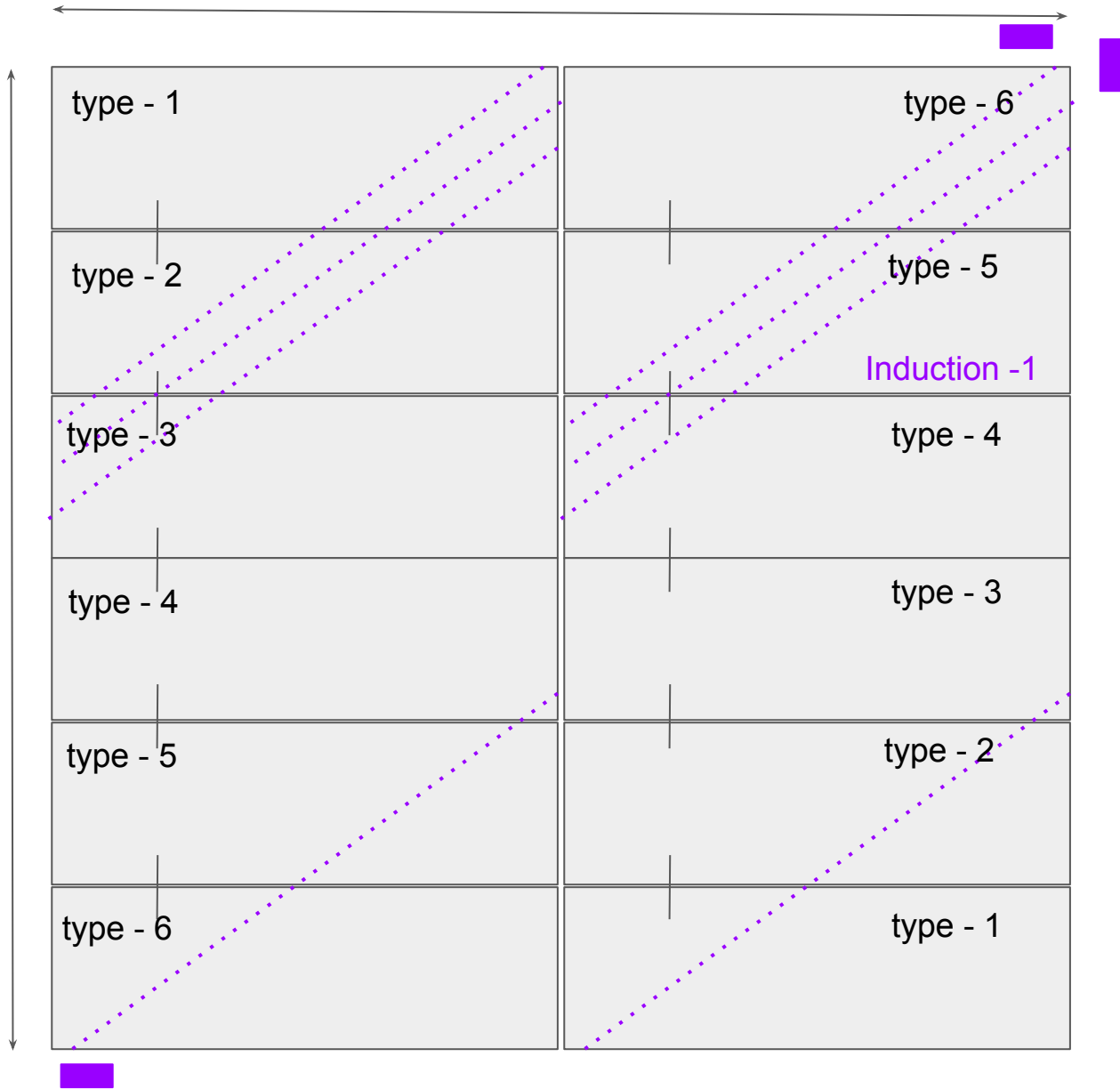
- 8.75 mm strips with 48 degree wrt beam
- 2.5 mm holes
- 3.3 mm hole pitch

56 cm

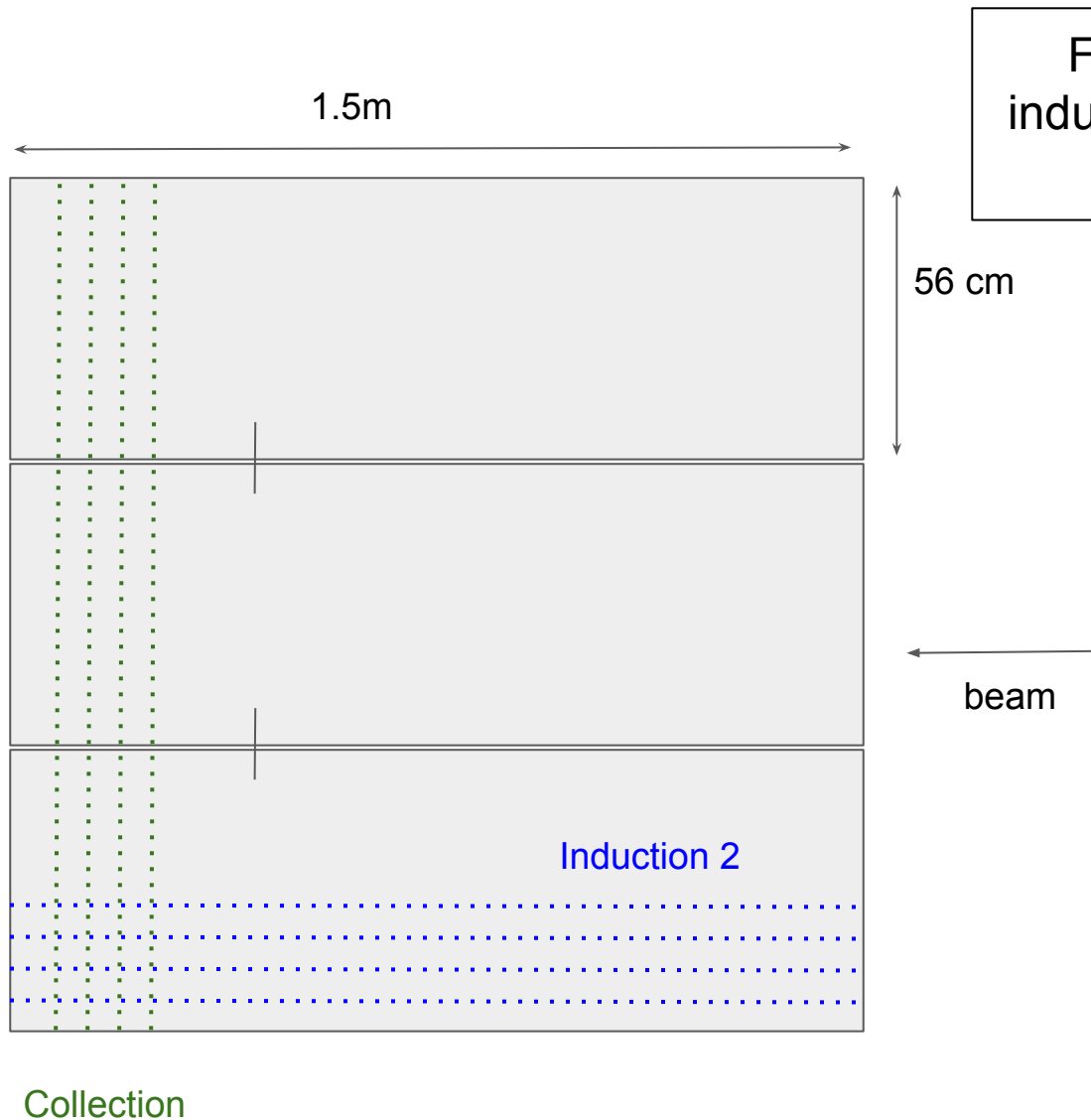
beam

3.0m

3.375m



# Back anode PCB in a CRU



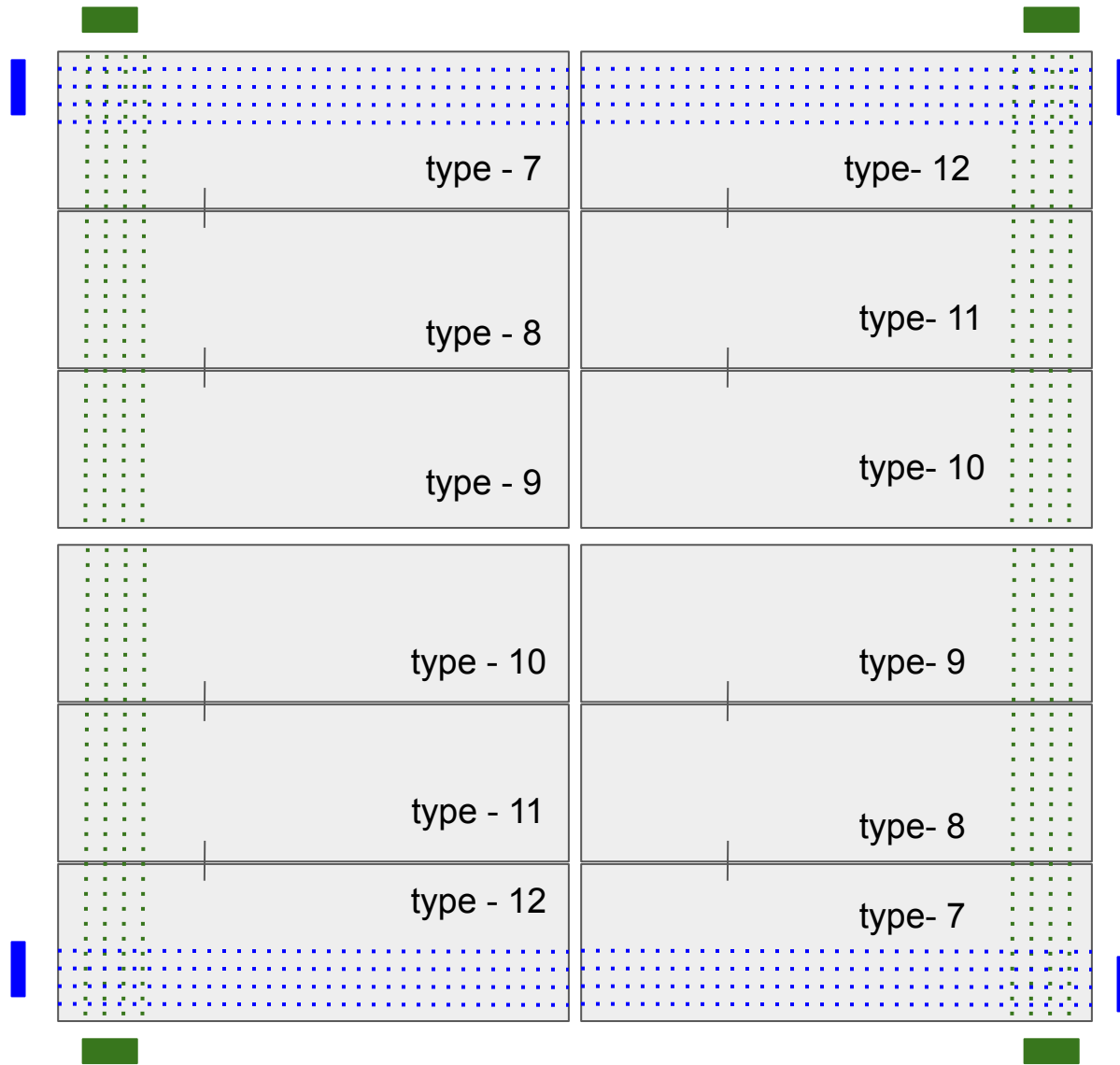
Front face will have the second induction layer and the back face will have the collection

## Induction-2 plane:

- 5.2mm strips parallel to beam
- 2.5 mm holes
- 3.3 mm hole pitch

## Collection plane:

- 5.2mm strips perpendicular to the beam
- 2.5 mm holes
- 3.3 mm hole pitch



Induction 2

Collection

# Initial quotation from ELTOS and current status

- Initial quotation from ELTOS:
  - 876 CHF per panel (except tooling, file treatment (garber etc))
  - 6 weeks of lead time
  - 600 CHF tooling cost
  - Pattern, drilling, milling, all included
  - Does not include gluing
- Gluing and conductive epoxy treatment on the glued surfaces will be done at CERN PCB workshop
- Plan:
  - Order 24 units to build a CRP and 1 spare from each panel = in total 36 PCB panels
  - We are looking for options in China and in Europe as well
  - We would like to have pieces ready sometime in May
- Next steps:
  - Finalizing the design files and details → Bo is working on that

Documentation at EDMS related to the Cold-box anode PCB:

<https://edms.cern.ch/ui/#!master/navigator/project?P:100704998:100767673:subDocs>