

## SOME NEWS FROM TC

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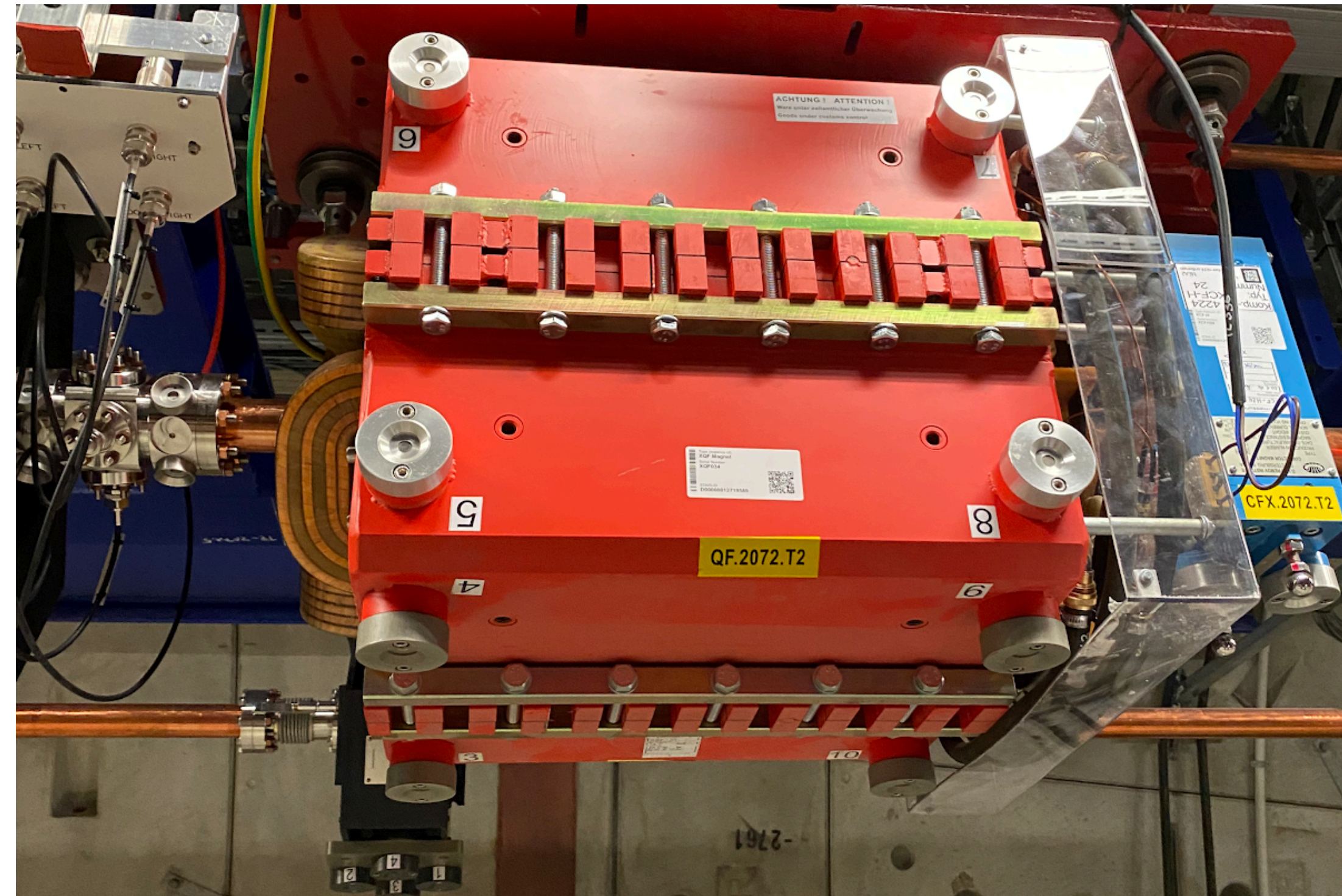
LOUIS HELARY - DESY





## Alignment:

- Accuracy means 1 sigma error. (100 microns neighbouring object precision).
- Fiducialisation transfer measurement from monuments to model.
  - The fiducialisation can or not be done with inner elements (our choice).
  - Monuments on outside of all elements.
  - Need to plans in time for the fiducialisation (and define some reasonable things on what needs to be measured).
  - 12 for a standard xfel magnet (4 on the top, and 4 on each side)
  - Absolute minimum is 3 for the 360 degree of freedom.
  - Example: Monument diameter 60mm\* 20(height)mm.
- Reference grid in the tunnel connected to the overall reference grid.
- Can extend the reference grid to UG02 (laser area), and help with the laser transport line alignment.
  - Will need to make the measurement in the TD20 annex shaft as apparently they did not had the measurement in their DB yet.
- If we need high accuracy they can not provide this for us, but he proposed that we could do a 1 micrometer measurement between different elements using a laser going through all the beam line if needed.

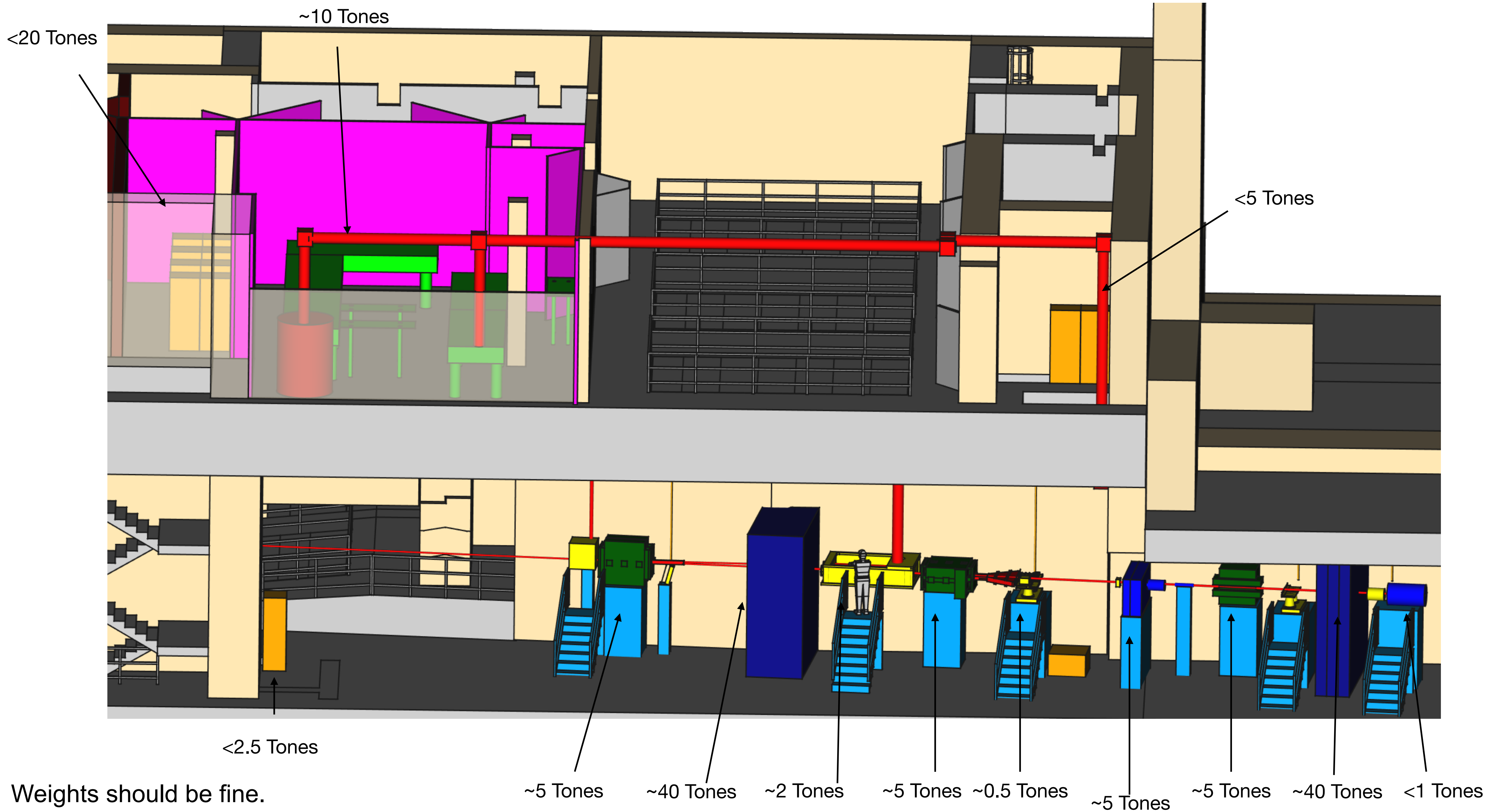






| Path to detector site |     |
|-----------------------|-----|
| Target                | 21m |
| IP                    | 11m |
| Forward               | 13m |
| Dump                  | 15m |

- Dust in the electric cabinet, will require some civil engineering if one really want electronics to go there, should we move all the electronics to Laser service?



- Weights should be fine.
- Temperature in XS1: 20 degrees 50% humidity controlled.