

H8 beam area services, status report

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GAS system, drift chamber

- Gas mixture: He-Isobutane 90-10
- Price estimation to premixed bottles has been provided, with the gas volume we want to use, price ~6kCHF!
- We try another way,
 - I'm in contact with somebody who could borrow us a gas mixer certified for flammable gases;
 - CERN can provide (for free) He gas but is not pure enough (3.5, we want 6)
 - We need to order the gas bottle (50l /200bar) of He6.0 à 195 CHF -> need to understand how many we want and where to install it, probably inside the gas cage
 - Isobutane bottle to buy
 - If we go for the borrowed mixer we need a PC to be installed in the gas cage (I don't know yet the software we need)
- Gas pipes to be installed (either CERN gas service or by us). We need to install Cu pipes
- Need to mount a temporary setup, even a plastic wrap, on top of the drift detector with an "alarm sensor" provided by the SPS
- We will have a first safety inspection the week before testbeam (once detector and gas lines will be installed), then we need to fill the proper documents and do the last safety steps, then the final safety inspection the day1 of the beam

GAS system, GEM + uRWells

- 2 bottles of AR/CO₂/CF₄ 45/15/40, ordered (available at the CERN store)
- gas pipes, pressure reducers, flowmeter to be installed.
 - Rilsan gas pipes 6mm to be ordered
 - pressure reducer to be ordered
 - Flowmeters brought from Italy
 - Gas line installation probably will be done by CERN

Testbeam area

- Cable length estimation from Control room to beam area ~ 20m
- Ethernet cables to be bough at CERN market
- HV cables + connectors missing for uRWells and drift chamber, to be done by the groups
- Drift chamber mechanical support to be done (Lecce)
- To ask to M. Jeckel (now on holiday, still to be done)
 - Rack installation
 - Make space for mu chamber
 - Table close to racks
 - Check rotating platform and XY table for calorimeter
 - Add more electric sockets

Beam

- Since all measurements are planned to be done with beam $<60\text{GeV}$ we have asked to Henric to have the 60GeV wobbling (to maximise the rate at low energies) but the answer is negative.
- We will affect AFP users in H6 who want high energies.
- To understand what to do
- Richard proposed an intermediate solution: 80GeV , no answer yet...