

The gas systems infrastructure for the CERN Gamma Irradiation Facility

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on behalf of the CERN Gas Service Team (EP-DT-FS)

AIDA-2020 4th annual meeting

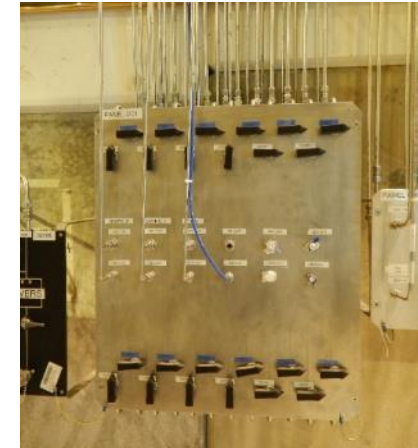
Gas mixture distribution panels

- 21 distribution panels (6 lines each)

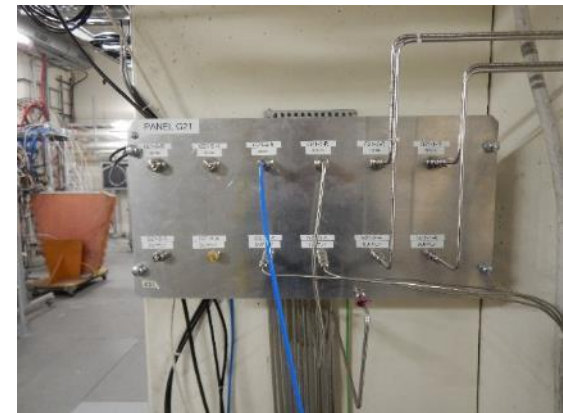
From service area to bunker and preparation area

- Two types:

From service area to bunker only



Corresponding gas panels in the GIF bunker



- Additional supply gas panels: good idea to decouple users
 - Additional panels can be useful in the near future.
- However, it would require installation of additional pipes from gas area to bunker

Complete commissioning

- Second generation of new gas recirculation system
- Installation completed;
- Commissioned at GIF will start asap (**resource problem to be solved**)
- To be used by RPC community (today high R134a consumption – cost and ghg issue)

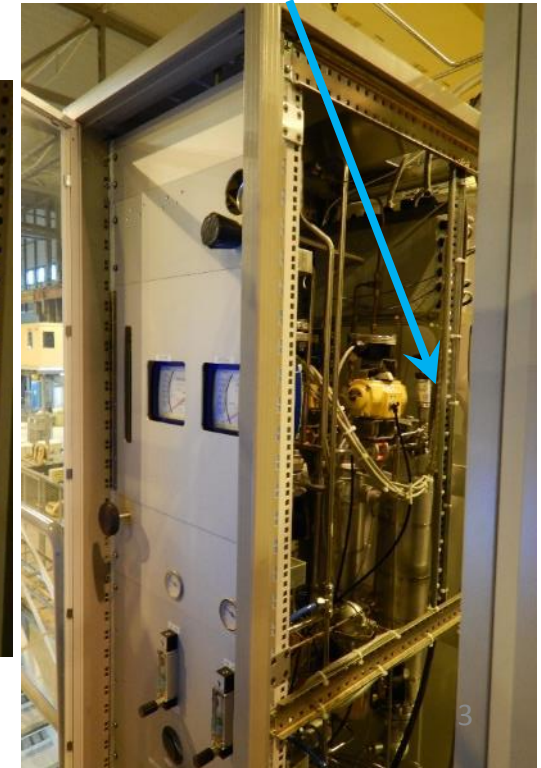
*Not really AIDA-GIF,
But AIDA-RPC eco-gas*

Gas recirculation module

Gas mixture purification module

Cartridges with cleaning agents

Monitoring and controls panel



- The gas systems infrastructure is a key element of the successful R&D programs performed at GIF++
 - Gas supply and distribution panels almost fully used: **add new?**
 - Mixing units (originally built for cosmic and beam triggers) are now used by many other users
 - Gas recirculation systems and gas analysis modules are used for detector R&D studies

- **Gas systems infrastructure is extensively used. Some resource problem:**
 - **to complete commissioning of new gas recirculation unit (really not AIDA but ATL&CMS-RPC)**
 - **Operation rely on EP-DT gas team already fully booked for LHC gas system activities**