

# RICH-WALL and MWPC planning

M. Alexeev & colleagues

Università di Torino & INFN Torino



# RW situation

- Presently the Richwall is dismantled with a part of the short tubes on the storage support and all the long tubes on the panels
- The tension test equipment did have some issues after we moved to a new testing place in July 2020 to free the space for the rail renewal operations at 888
- We did perform some additional stand modifications and brought the gas to the storage and the test stand in September 2020



Covid-19 outbreak N2



# Tasks and manpower (preliminary vision)

May 2019 TB

Turin

JINR

COMPASS/CERN



July – September 2019:

1-2 persons, for the removal of the external parts, production of the missing elements

A.Samartsev for the general planning of the disassembly and the missing parts design

Scaffolding, **preparation of storage/repair area**

The schedule that was prepared and presented in 05.2019 and confirmed in 02.2020



October 2019:

3-4 persons permanently present during the disassembly

A.Samartsev present to guide the operations

Crane + possibly a technician for urgent elements production/modification

November 2019 – July 2020:  
Ongoing TB 04.02.2020

Will provide shifts for the test of all the tubes. Tentative repair operations

Will provide support with the wire tension test equipment and general supervision and advisor control over the procedure. **In case of new tubes necessity the possibility to produce spares in 2020 is being prepared.**

The planning of the works so that the space needed for the operations is available

9-10 month no Covid work were planned

12.2019

September - October 2020:  
19/01/2021

3-4 persons permanently present during the assembly

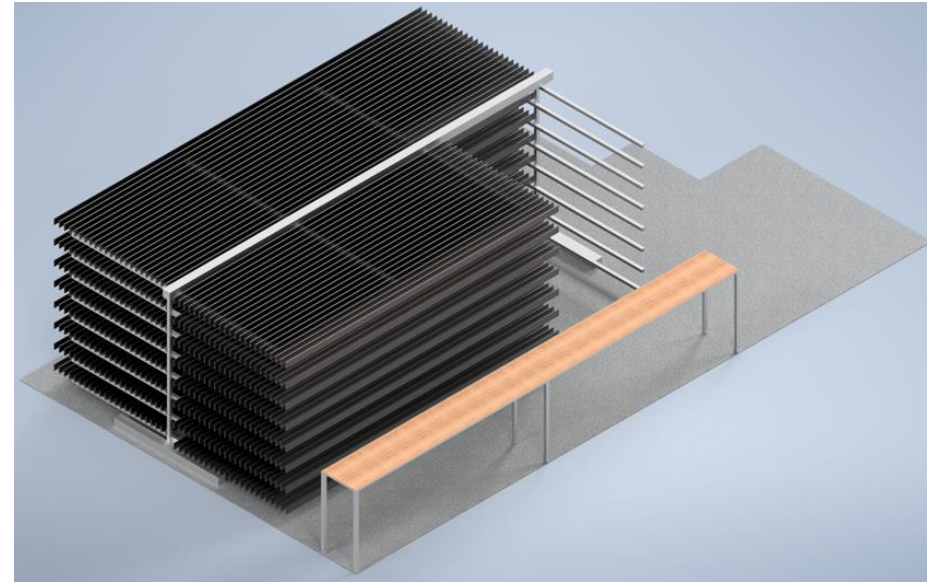
A.Samartsev present during the operations?

Crane + technician + pillars

# RW planning topics

- Presently the work needs to be finished by 01.07.2021 (not in 9 month)
- There is no possibility to reasonably plan the travels due to the possible Covid restrictions
- We decided to move the wire tension measurement equipment to Torino
- We will bring some short MDTs to Torino to start looking for the testing equipment problems
- When it is confirmed operational we will try to continue the testing of the short tubes at CERN

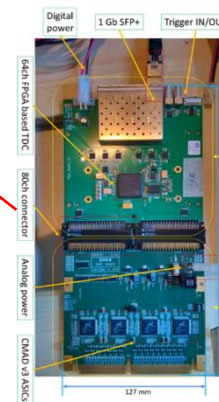
For the long tubes we need to know the availability of the storage area because if we remount the storage and dismount the panels but fail to be ready for the Run the storage would remain there during the running



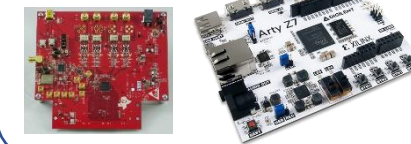
# iFTDC upgrade infrastructure



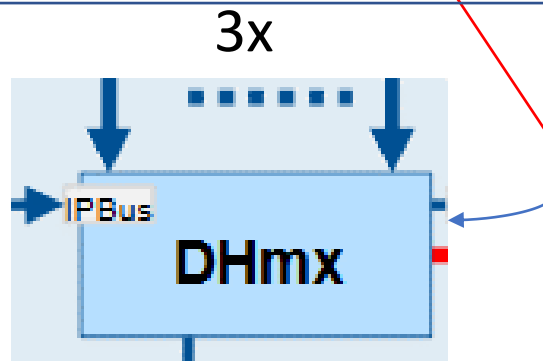
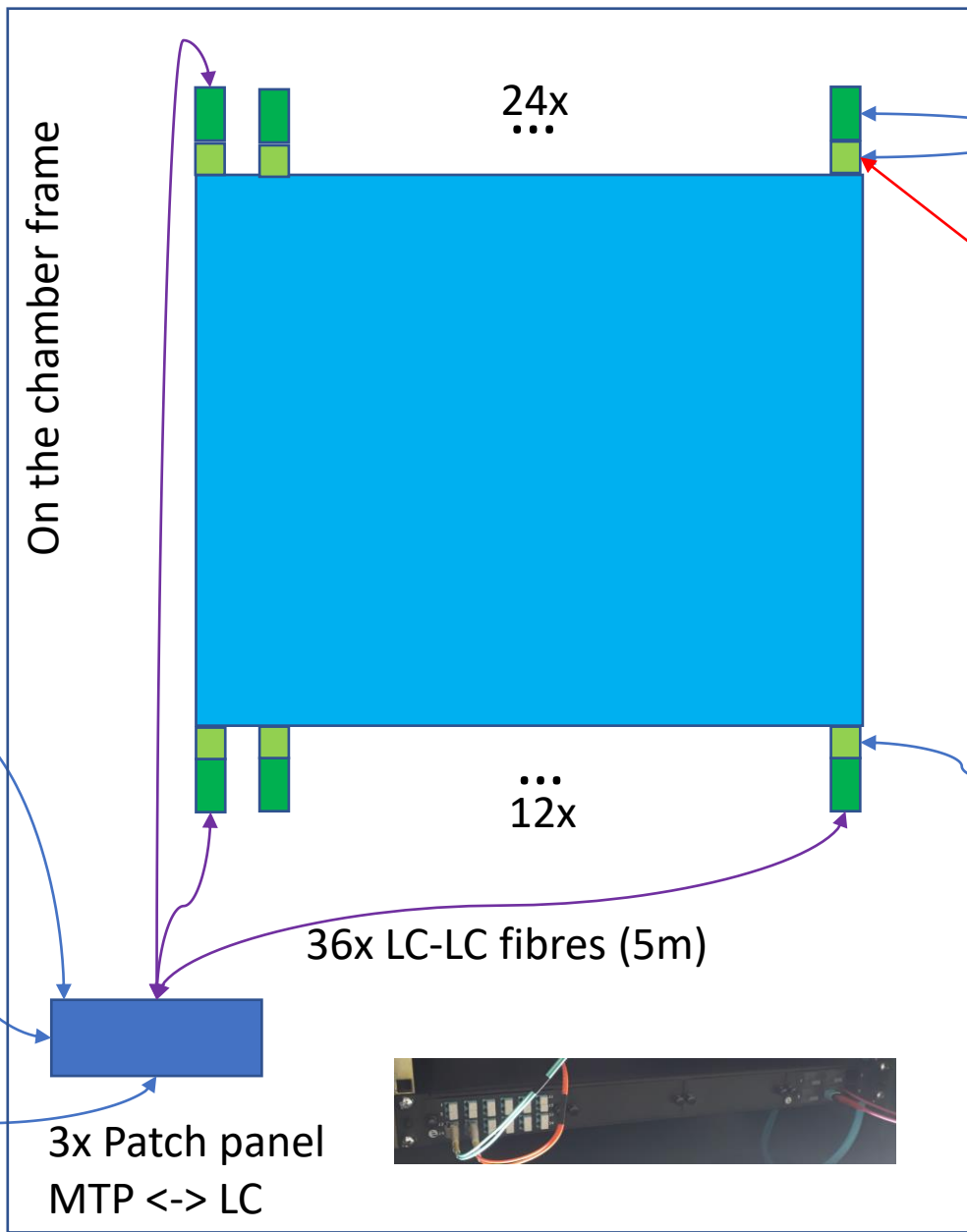
New power supplies



Test pulse generator



12 Fibers MPO/MTP Connector      24 Fibers MPO/MTP Connector



DAQ room

3 x 24 fibre bundles

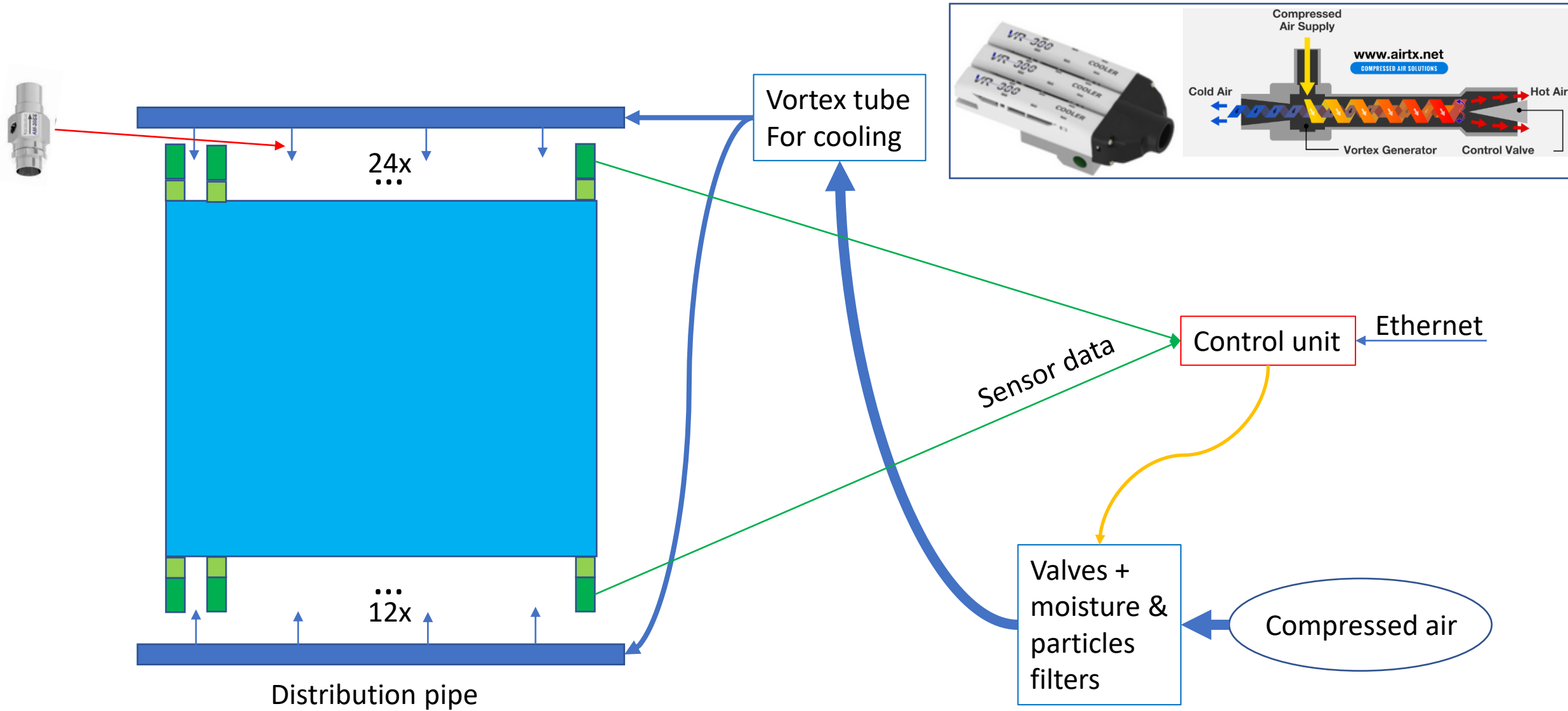
On the chamber frame

3x Patch panel MTP <-> LC

36x LC-LC fibres (5m)



# Cooling upgrade infrastructure



# MWPC planning topics

- Presently all the elements needed to the instrumentation of one MWPC with the new iFTDC based FEs are available
- We plan to prepare the chamber for the new FEs and install the new PSs in 888 during 02.21
- The installation of the new FEs should take 10-15 days taking into account the cabling and the initial checks
- We will need help with the installation of the DHmx in the DAQ barrack and we need to decide who will lay down the fibres there
- We expect to need 5-7 days for the installation of the cooling on one MWPC



No major interferences with other detectors is foreseen during the MWPCs preparation