

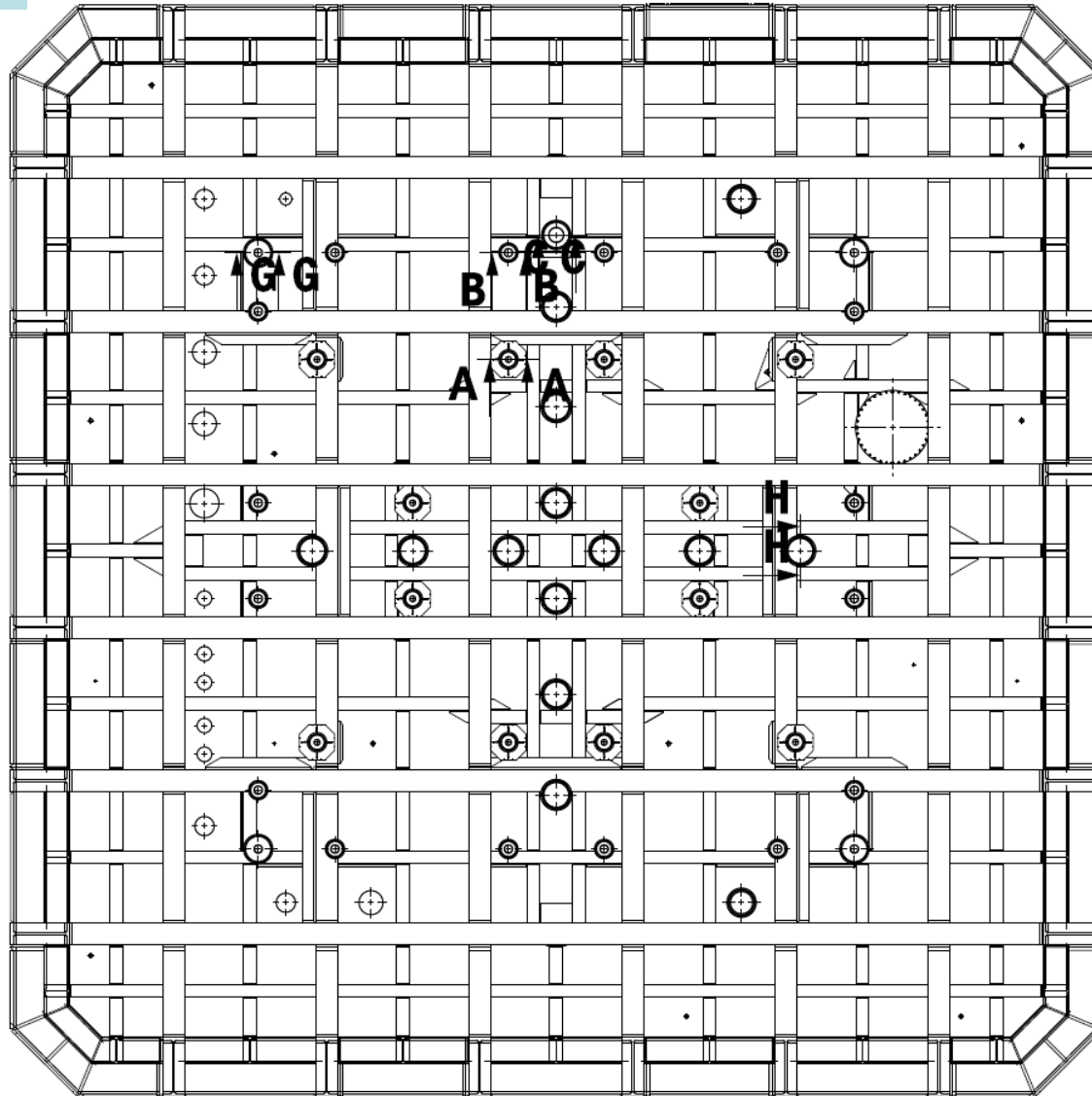
Status of Penetrations

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ETH zürich

15.02.2017

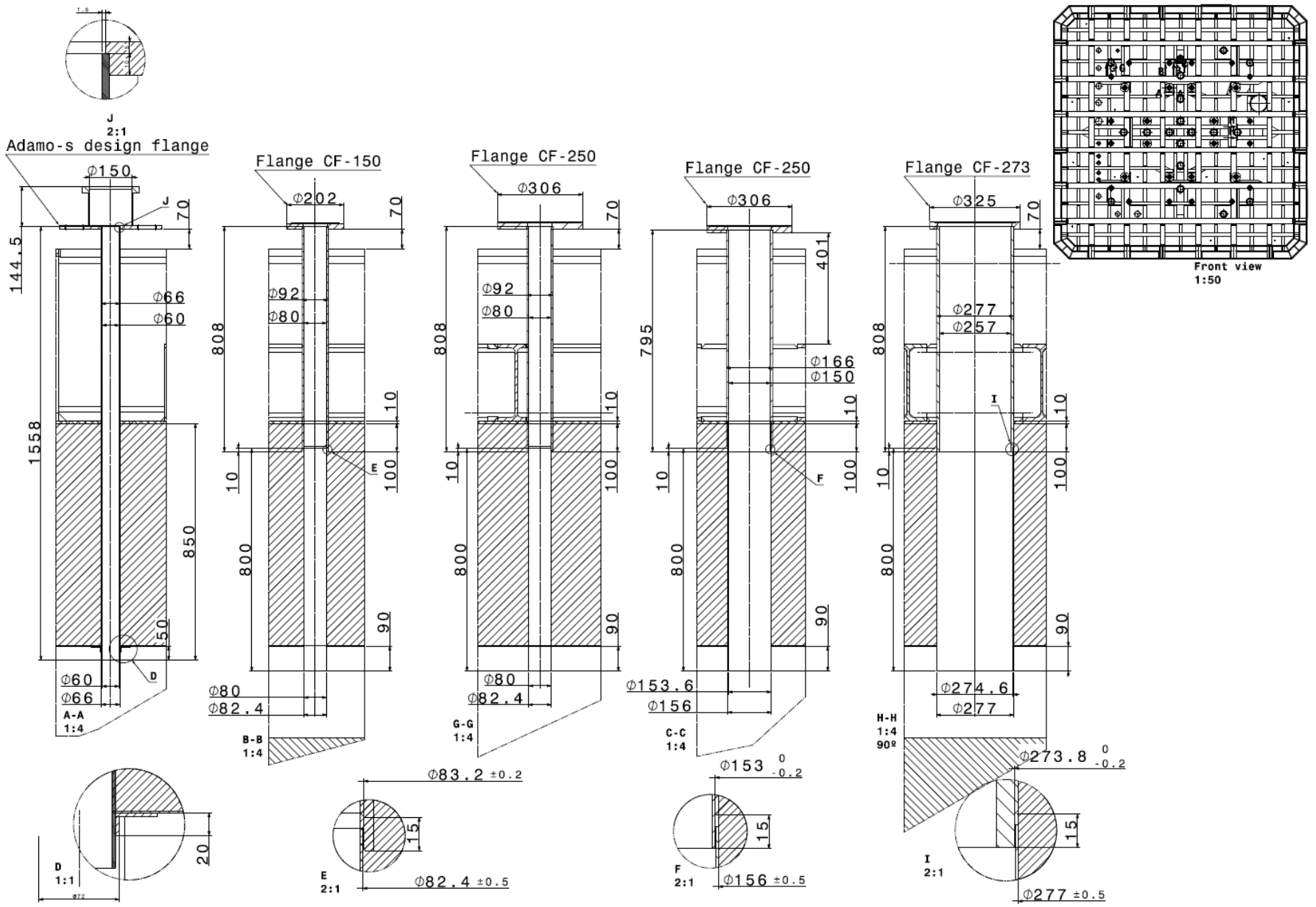
- **Final Drawing with Penetrations dimensions received (Dimitar)**
 - still need to be cross checked
 - first impression they look like what we agreed
 - we need to confirm the orientation of the Flanges (where is required a special precision)
- **Modification for the SPFT Crossing pipe**
 - difficult to weld LAPP design «special flange» at the pipes
 - solution agreed to weld simply a CF100 Flange at the penetration pipe
 - «special Flange» will need a CF100 interface
- **HVFT Penetration detail definition**
 - Detail for the collar interface (degrader connection) ready to be send to Dimitar
- **SGFT Penetration pipe**
 - Free space between Penetration pipe and SGFT is very tight → 1.5mm clearance
- **Penetrations at the cryostat schedule**
 - at 03.03.2017 Pipes will be welded (without flanges) at the Top Cryostat



Front view
1:50

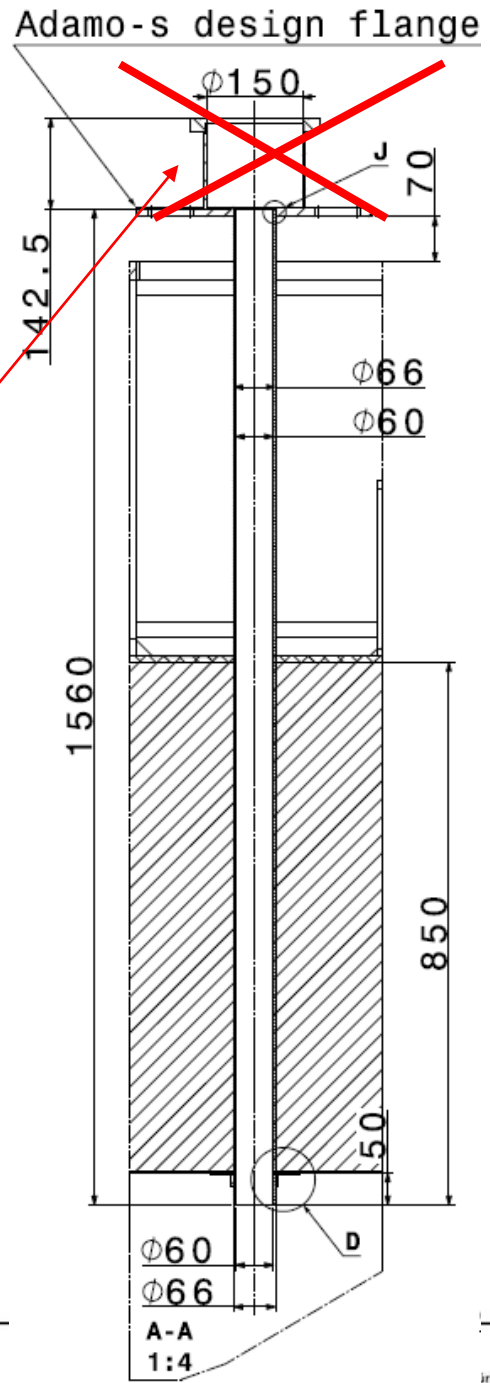
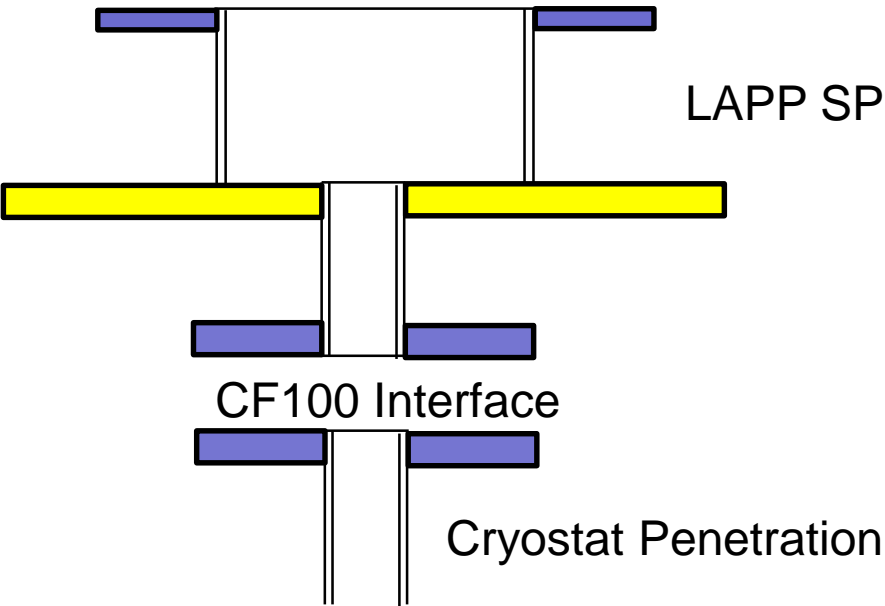
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Dimitar Drawings:



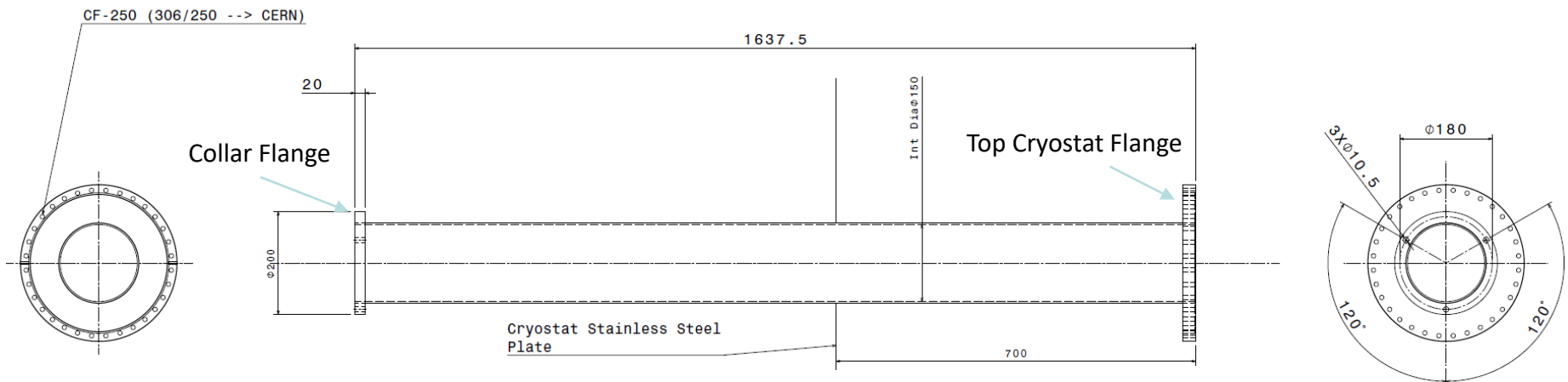
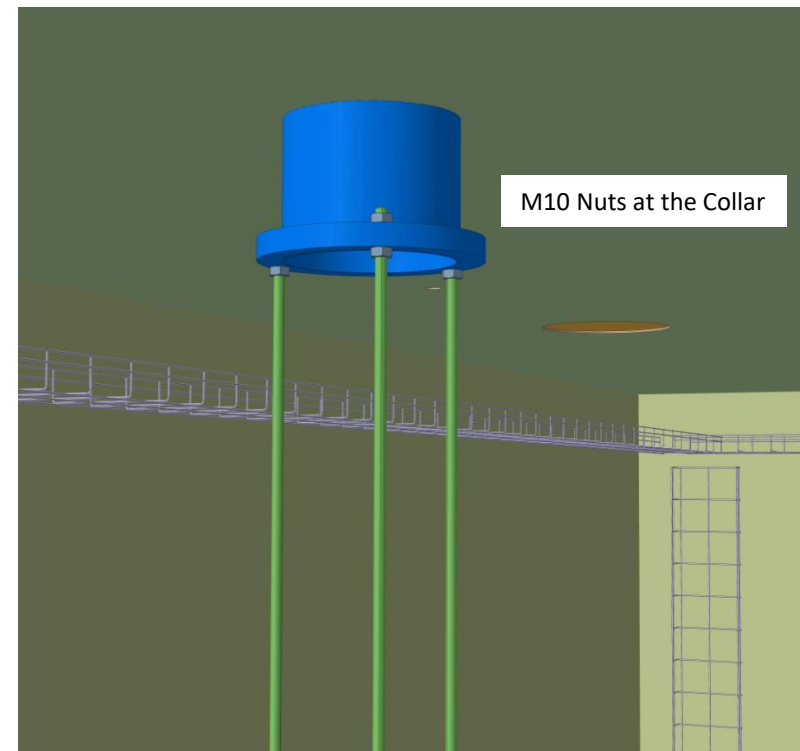
SPFT MODIFICATION:

- Instead of Welding directly the «Adamo's design flange» we agreed to Weld a simple CF100 Flange at the pipe
- We will than have an adaptor: CF100 + pipe + «Adamo's design flange»



HVFT CROSSING PIPE:

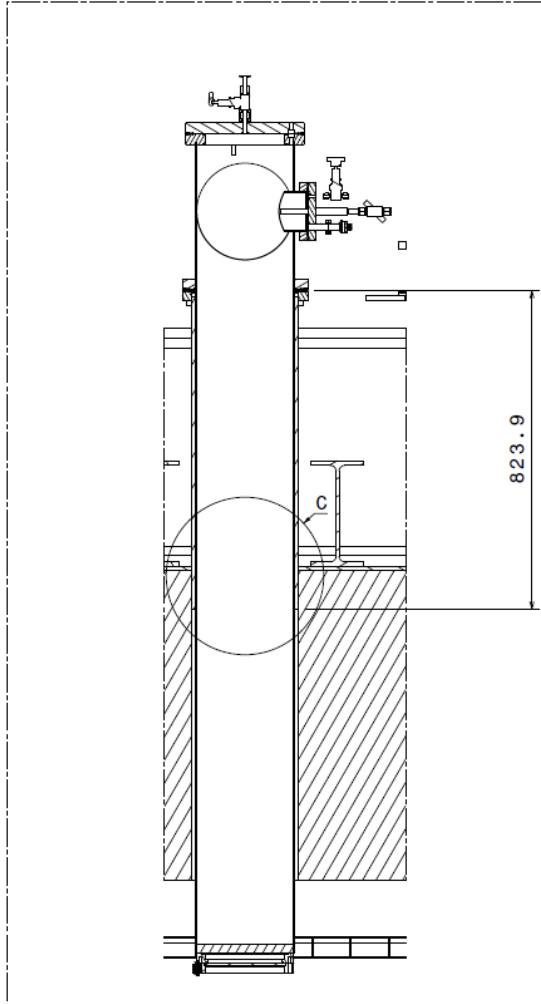
- The Bottom Pipe of the HV Penetration needs a collar in order to connect 3x M10 Threaded Rods for hanging the HVFT degrader
- Collar needs to be wide enough in order that a M10 Nuts can be placed (see picture)



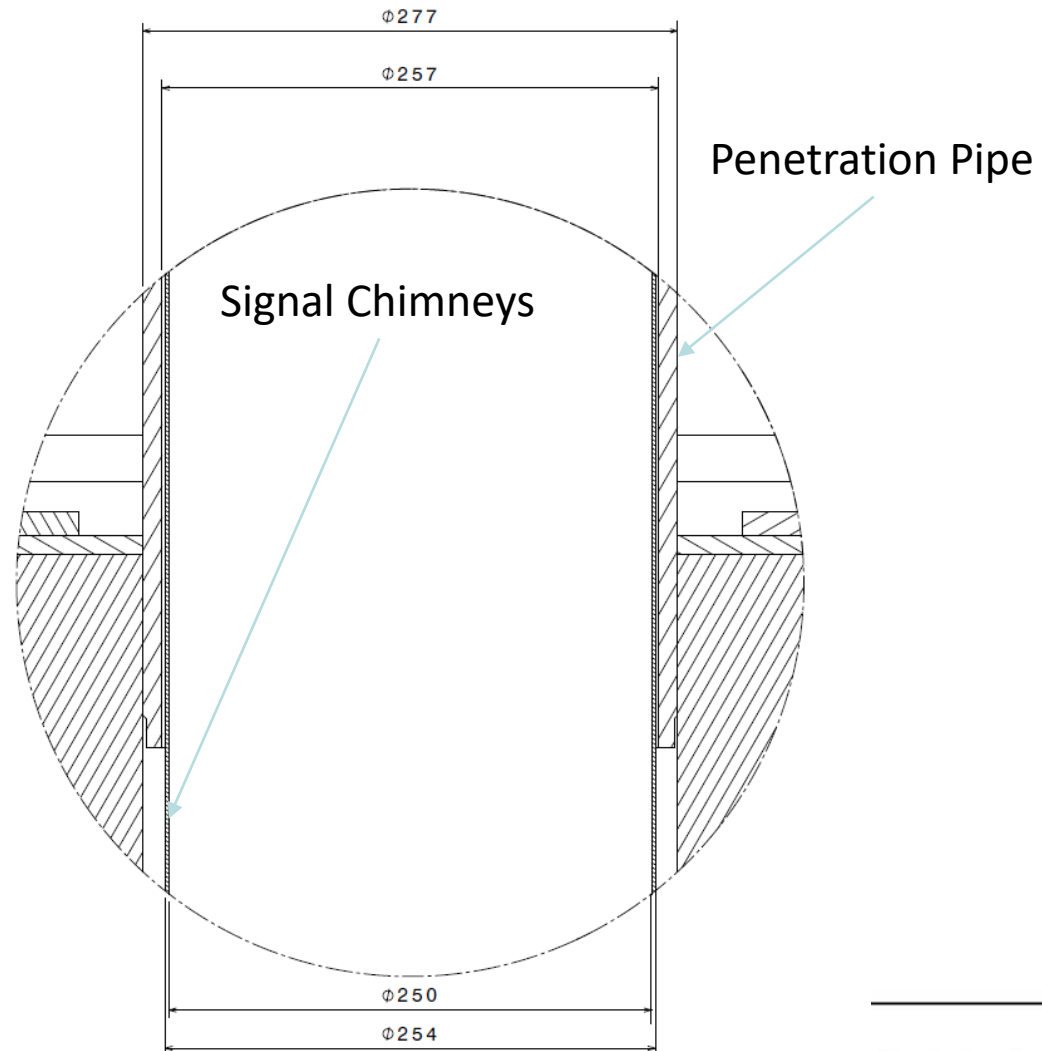
SGFT CROSSING PIPE:

- 1.5mm clearance over 824mm length
- Purge need to be somewhere under the flange
→ type size and length according to Cryogenic Group (M.Chalifour)

SGFT SECTION



Detail C



- Sometimes in the next 2 weeks CERN will mark at the cryostat the position of the pipes.
 - date still unknown but Dimitar should let me know the date
- Before starting to drill the holes in the Cryostat Marzio requested our presence in order to give the green light for proceed
 - Adamo will be there
 - It would be good if also LAPP will be there concerning the SPFT position
- After this they will drill the holes and prepare for the welding of the pipes
- Welding of the pipes is foreseen at 03.03.2017

Thank you.....