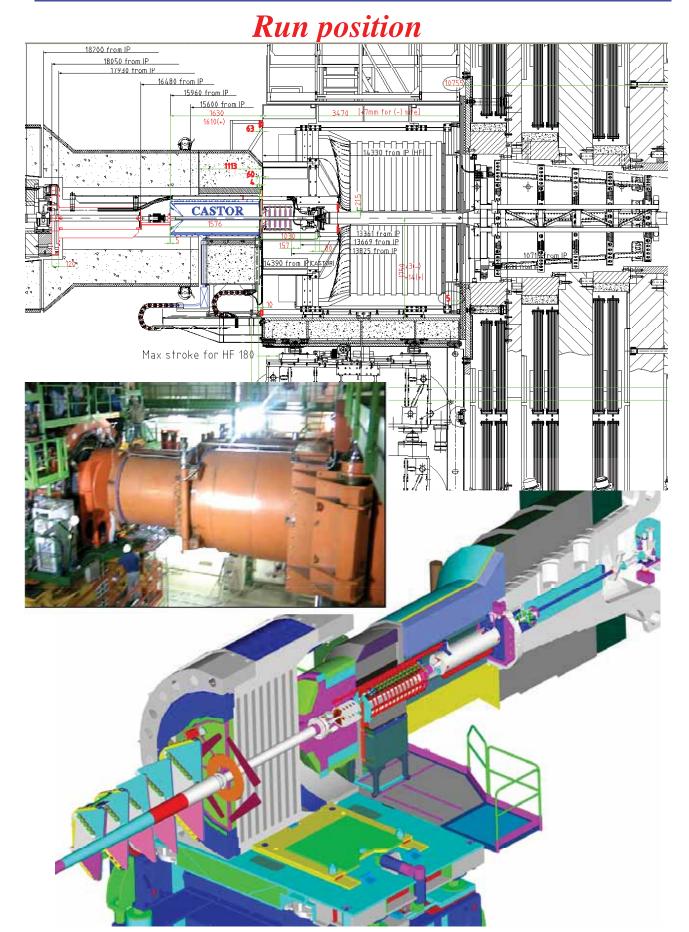
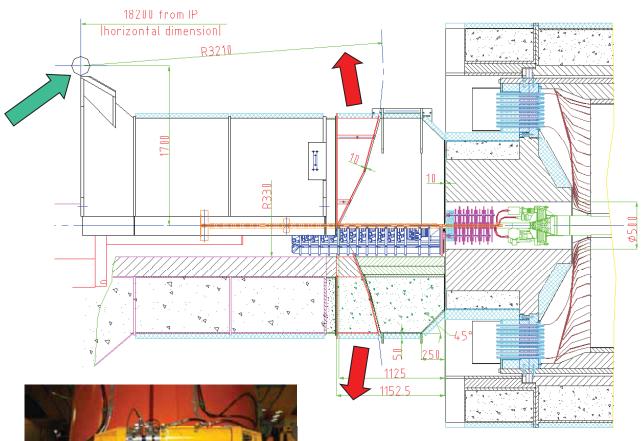
### Disassembly sequence of CMS Forward region



### **Step 1.** Removing of wooden shims between Collar and RS. Step 2. Complete opening of thin and thick parts of RS.





wooden shims (fixed by screws M6)





(The wooden shims can be removed with the remnant magnetic field)

**Step 3.** To be checked that HF, CASTOR, T2, BSC, BCM2 and ionic pumps are **switched off**. Confirmation from group leaders / field coordinators of the sub-detectors required.

**Step 4.** To stop the Forward cooling plant.

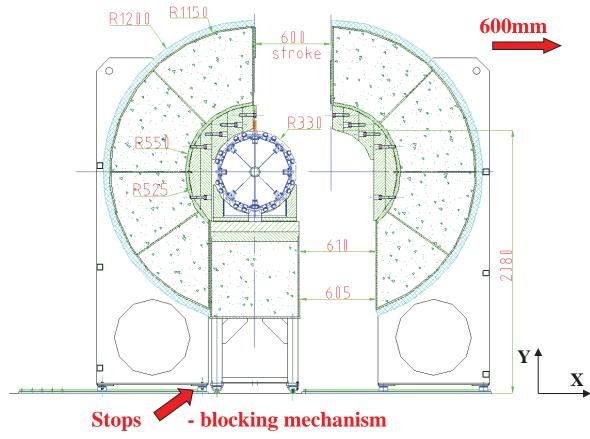
a) Lock the valves on the cooling lines.



b) Push the red button on the cooling plant.



<u>Step 5.</u> Removal of the stops on the Collar slide rails. Complete opening of Collar halves  $\pm$  600mm along X using the electrical jacks.





**Step 6.** Disconnect the T1 quick-connectors on gas lines (near side).

Disconnect the T1 quick-connectors on cooling lines (far side).



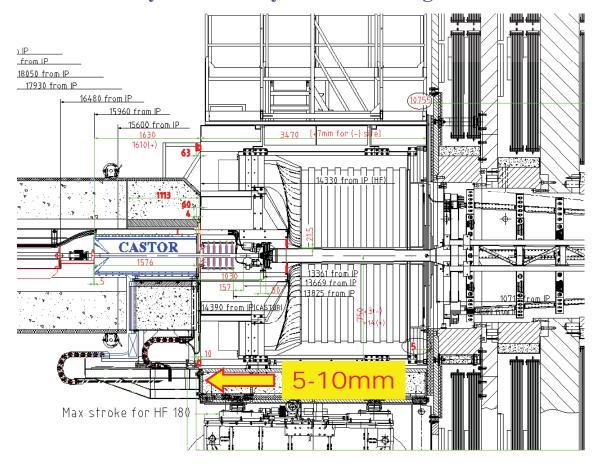


(At present for the minus side only; in future disconnect also the T1 cables)

**Step 7.** Remove access gangway (bridge) between HF and balcony gallery.



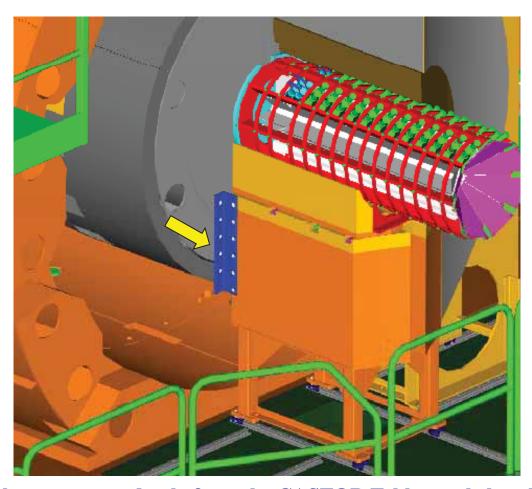
**Step 8.** Release of HF blocking mechanism on the HF Platform. Move HF away from YE4 by 5 - 10 mm along Z.



During the HF moving it's mandatory to check positions of BSC, magnetic probes, cables and potentiometers mounted on the rear side of CASTOR!

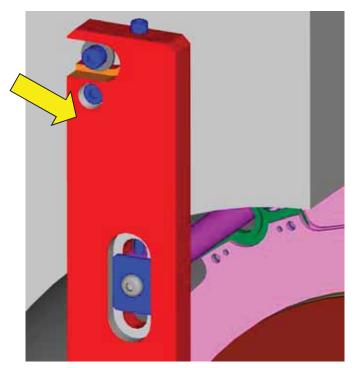


**Step 9.** Release of the table locking bracket (bolts M12).



Bolts are removed only from the CASTOR Table; angle brackets remain attached to the HF plug.

Step 10. Release the bolts M8 on the T2 support bars .



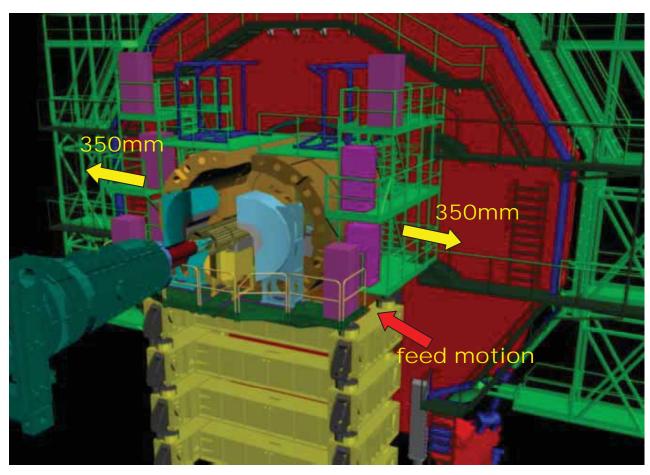


**Step 11.** Complete opening of HF halves  $\pm$  350mm along X.

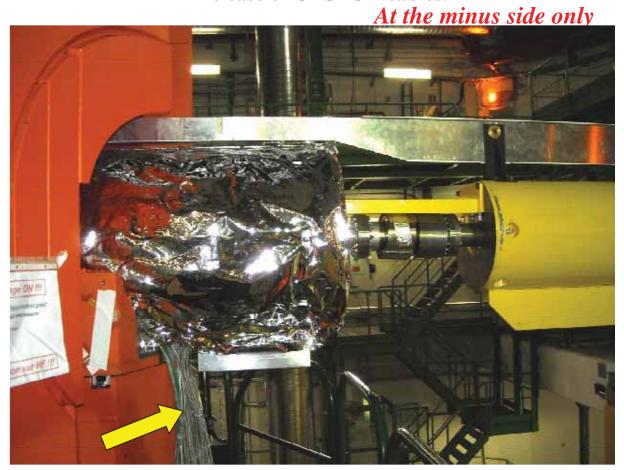


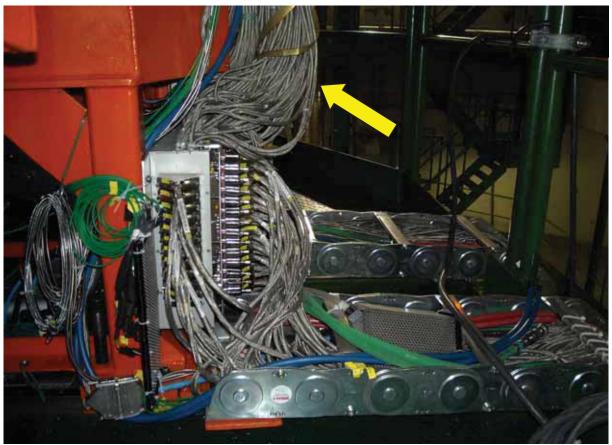
During opening both HF halves check: BSC, magnetic probes, cables in the gap between HF and polyethylene sectors.





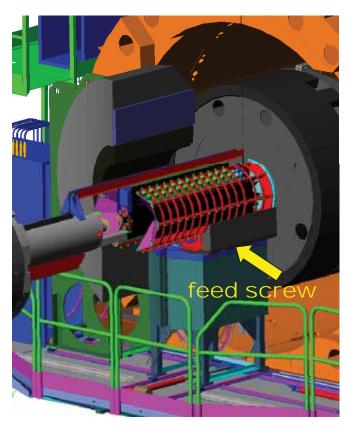
**Step 12.** Remove the cover of the CASTOR cables. Release of CASTOR cables.

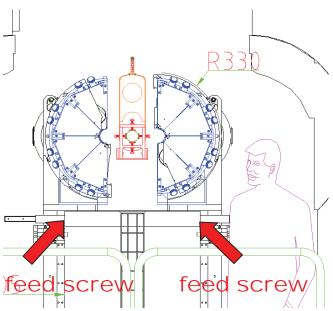




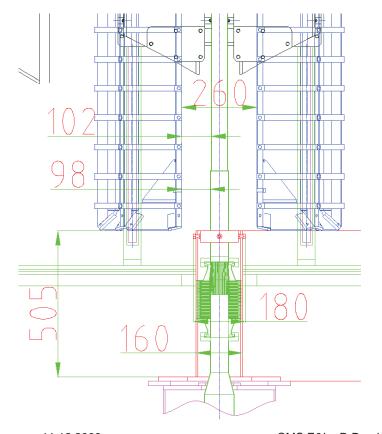
#### **Step 13.** Complete opening of CASTOR halves $\pm$ 130mm along X.

#### At the minus side only





# Be cautious, serious risk to damage BCM2 fibers!

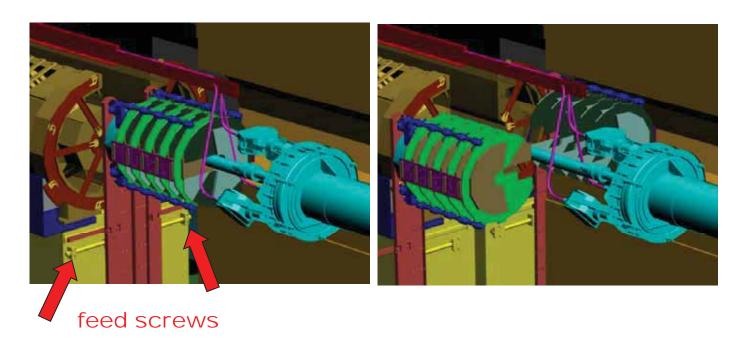


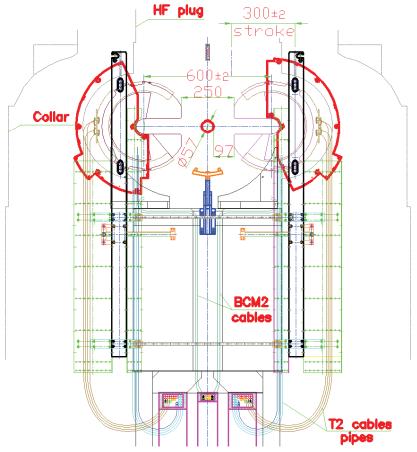


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#### **Step 14.** Complete opening of T2-halves $\pm$ 300mm along X.

## Any operations with the T2 detector are supposed to happen only in the presence of a T2 representative!

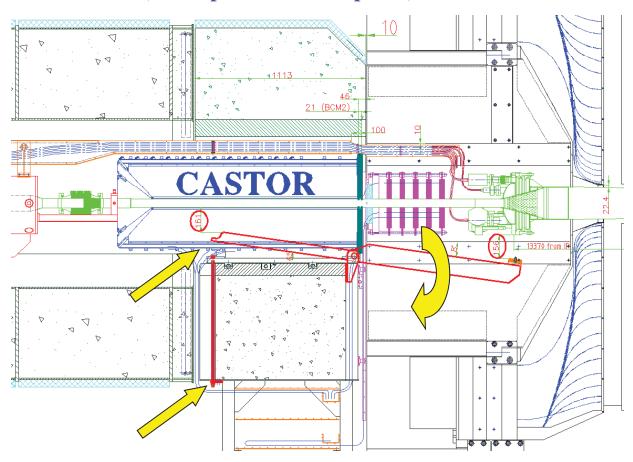


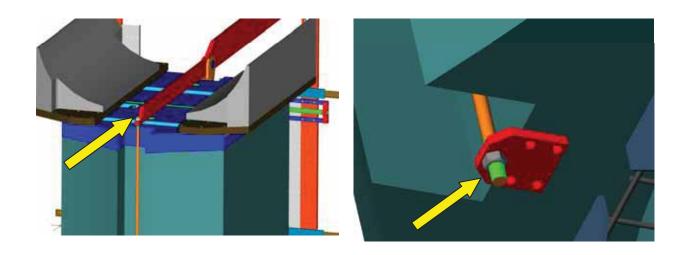


### Be cautious, serious risk to damage BCM2 fibers!

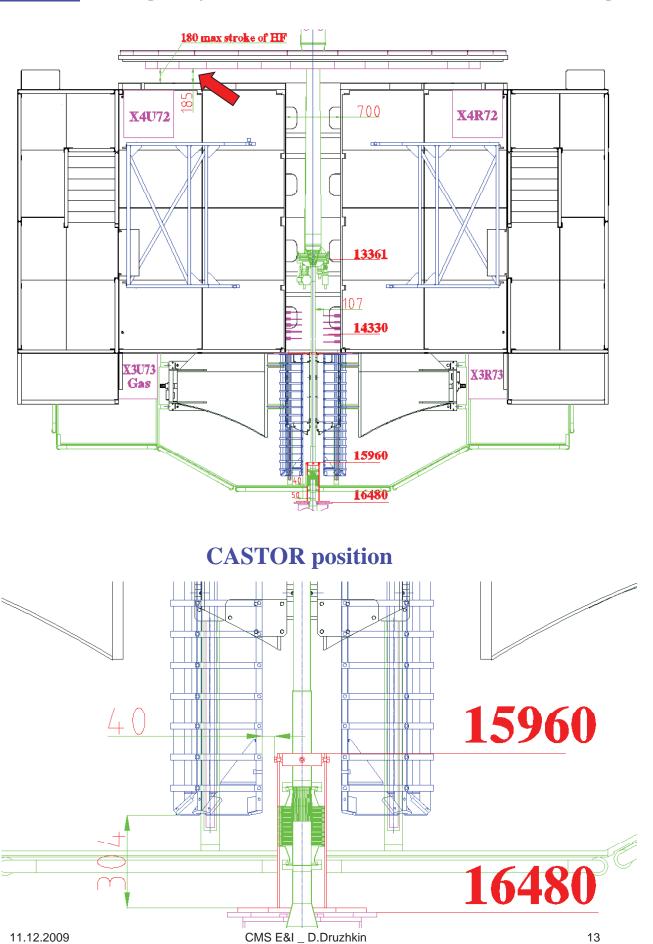


**Step 15.** Release (rotation) of BP support 13,36m. (follow procedure P. Lepeule.)

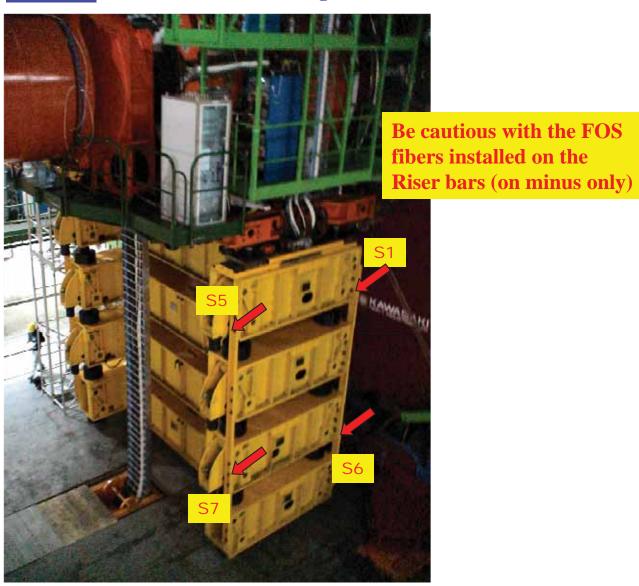




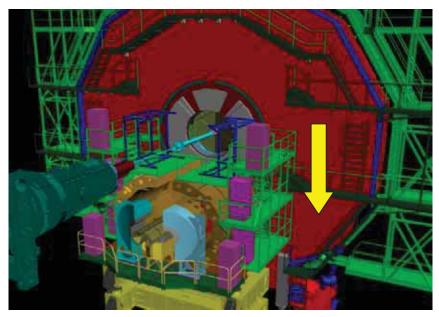
Step 16. Moving away HF from YE4 to a distance of 185 mm along Z.



**Step 17.** Remove Riser stabilizing bars.



**Step 18.** Lowering HF onto 2 risers. (follow procedure H. Gerwig.)

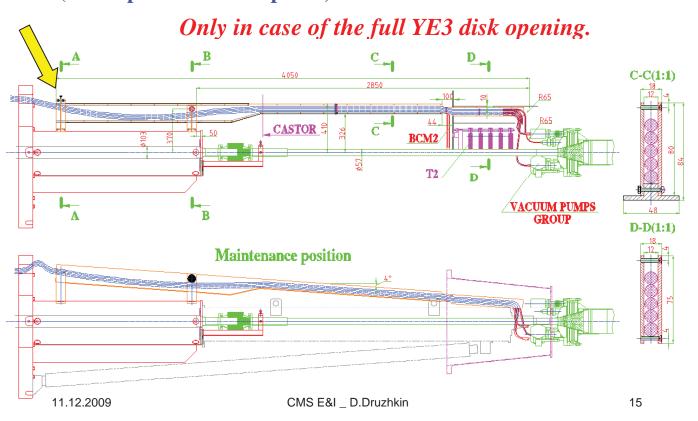


**Step 19.** Installation of temporary BP support; Removing of BP support on Z=10,6m. Survey of BP. (follow procedure P. Lepeule.)



**Step 20.** Installation of temporary protection of CT2 pipe; (in the future, installation of radiation protection) (follow procedure P. Lepeule.)

**Step 21.** Release and rotation of support beam tray. (follow procedure P. Lepeule.)



**Step 22.** Lowering HF to floor position. (procedure H. Gerwig.)

Step 23. Closing of T2, HF and CASTOR.

Only in case of the full VF3 disk on

Only in case of the full YE3 disk opening.

Step 24. Placing the HF in the garage.

Only in case of the full YE3 disk opening.





Check the potential conflict with a recently installed pipe!

Step 25. Risers transferred to the surface building.

Only in case of the full YE3 disk opening.