



Cryomagnets Interconnections

❖ Connection Cryostats

❖ Sector 1-2

Q19 L2 : Short circuit repair

❖ Consolidation of sector 4-5

Plug-in Modules (see S Weisz's presentation)

Leaks

Overview - Status

❖ Quick interconnection overview



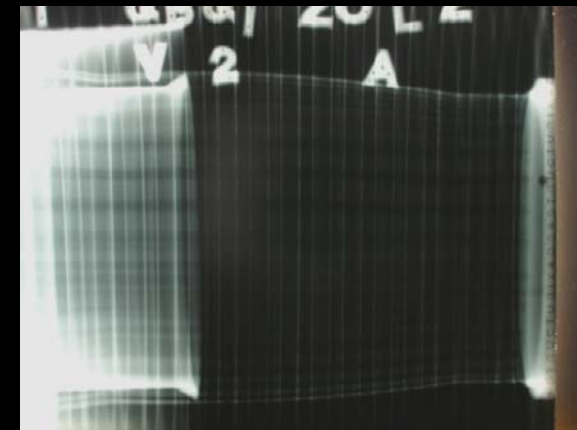
(Inter)Connection Cryostats Status

Sector	Repair of ICCs
1-2	Completed
2-3	R2 is closed / L3 is under closure now
3-4	Opened ; End foreseen beginning W15 [Open Days, in paral with 4-5]
4-5	R4 and L5 opened ; end for W17 ; not priority
5-6	Afer warm-up (8th) - 3 units ?
6-7	Completed
7-8	Completed
8-1	Completed



Sector 1-2

- Q19 L2 : [Documented in NC 890391]
- Abnormal displacement of SSS due to failure of concrete floor
- TS-IC inspected 6 out of the 8 sectors : no other problem
- Gamma-rays of PIMs : OK
- Concrete was repaired [TS/HE]
- Test with vacuum on one side : OK
- Short to ground detected on the dipole circuit and then localised in the QBQ1.20L2
- IC opened, line M3 cut open and endoscopy was performed

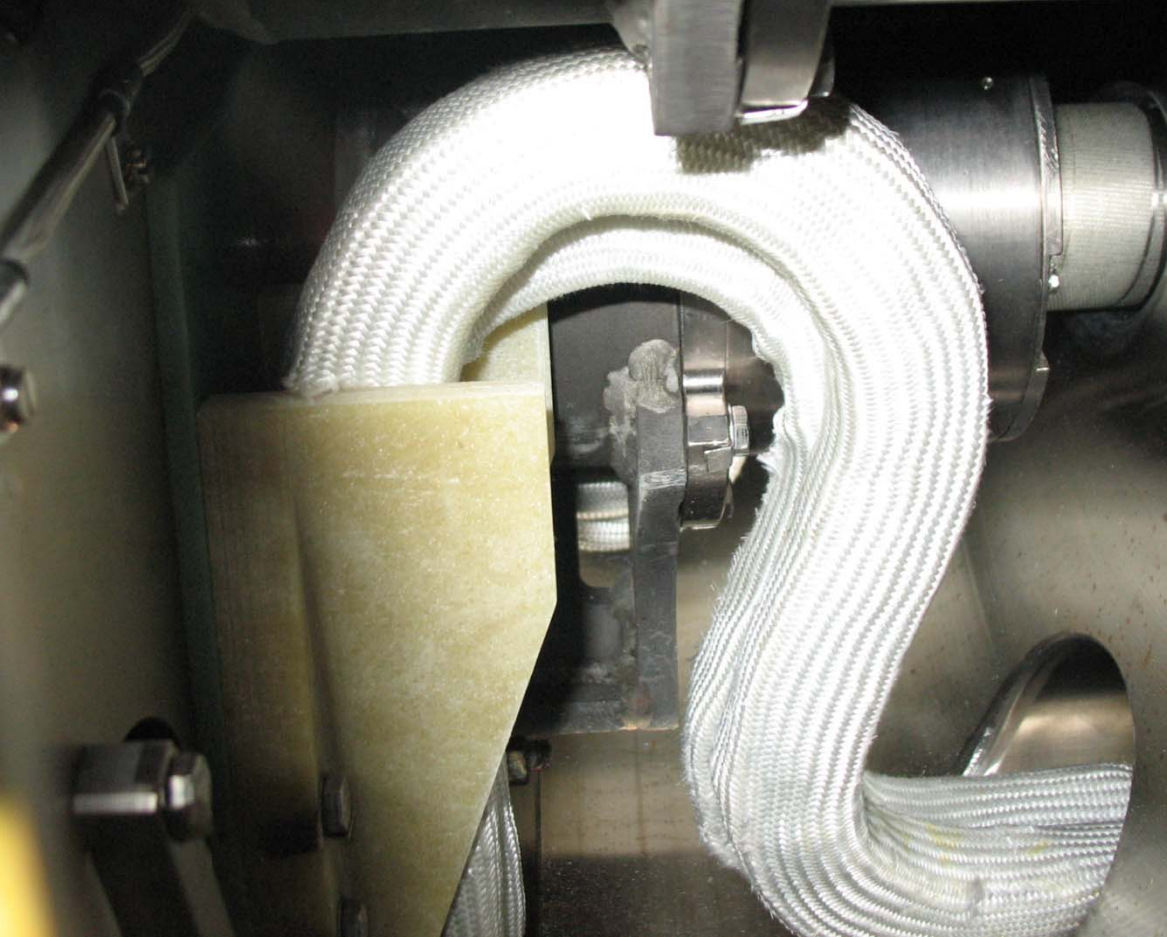
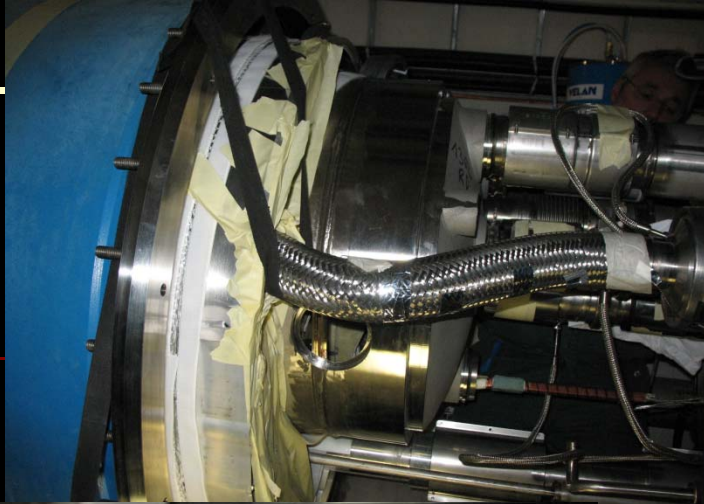




Sector 1.

Q19 L2 :

- To allow intervention :
 - M3 bellows was cut
 - M1 sleeve open
 - Hole drilled in cold mass
- The quad lines are OK



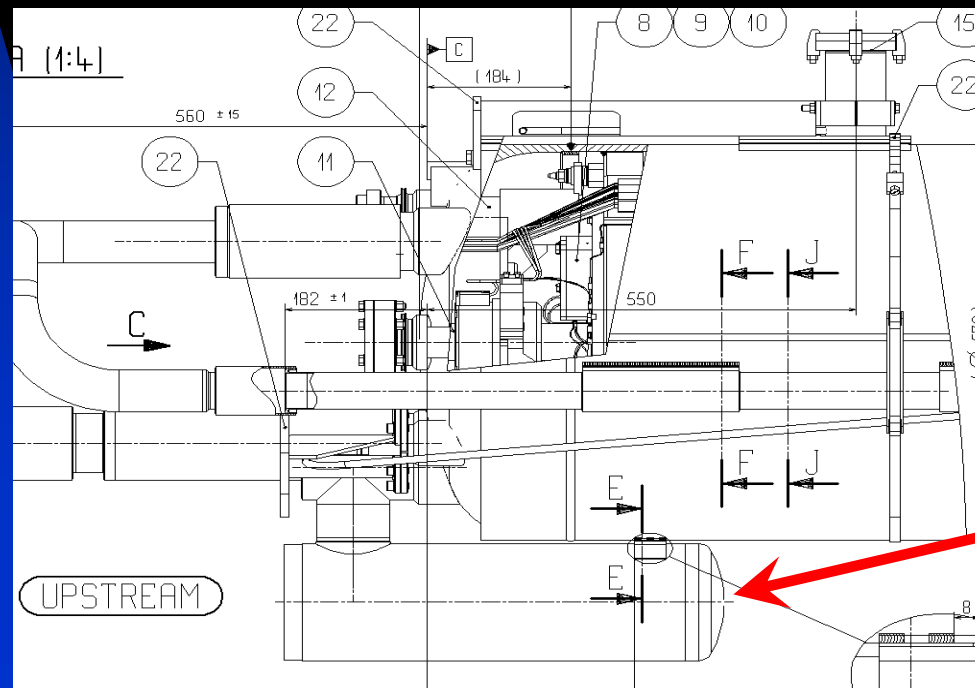


Consolidation of sector 4-5

Leaks

Interventions :

1. VACSEC 7R4 (NC847504) – CM leak to insulation vacuum of $1 \cdot 10^{-5}$ mbar l /sec
Localised on diode box container inner side ; container under dismounting for repair or replacement
2. VACSEC 15R4 – C' K leak to insulation vacuum of $6 \cdot 10^{-6}$ mbar l /sec
Disappeared during localisation ; leak not present anymore
3. Check of beam lines leak tightness : OK
4. Q17L5 and Q29R4 (NC 826696 and 820313) – leak air to insulation vacuum – temporary solution now but to be consolidated by AT-VAC during repump down phase





Consolidation of sector 4-5

Sector 4-5 Consolidation			<u>Schedule</u>	Remark
1	Plug-in modules	6 failed PIMs localised / 10 cut ;	OK	
2	Photometer test	Planned 9-10/4	OK	
3	Y lines	2/3 analysed and under repair	OK	In IC
4	Helium guards	20 to be repaired / 30 % done	OK	
5	Leaks	1 disappeared / 1 under localisation	OK	
6	Triplet 5L	Electrical connection completed	OK	Problem with instrumentation connector
7	Q5R4	Short localised / under repair	?	
8	Connection Cryostats	Started	OK	
9	CC splices	Not critical	Done	
10	DFBs cables	Not to be done	NA	



Quick IC overview

Sector	On-going
1-2	Short circuit in Q19L2
2-3	ICC closure today
3-4	Repair of ICC
4-5	Consolidation
5-6	Cold
6-7	Ready for cool-down
7-8	Cool-down
8-1	Cool-down

31 ICs opened:
 27 in the arc:
 6 for CC, 19 in 4-5, 2 in 1-2
 4 in LSS : L5 triplet
 DFBX/Q3 + 2 jumpers
 Q5-D4 @ R4

		LHC SECTORS OPENINGS FOLLOWUP															
		1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-1
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QSQ: 7 L																	
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