

- **Summary of all sectors excluding 7-8 (See presentation by A. Poncet)**
- **DFBMs, DFBL, DFBA**
- **Triplets**
- **F 523 Contract**

Work done by the whole MCS-IC section in collaboration with MCS-ET, MCS-SC, AT-MEL, AT-VAC, TS-IC, TS-SU, ... and IEG (F523 Contract) and especially :

LSSs (Including triplets)

C Garion / I Slits

DS

P Galbraith / F Bertinelli / A Bastos Marzal

DFBA / DFBM

F Laurent

DFBL / Cryo ext / WRL

I Slits

Arcs

P Fessia, A Musso, M Struik, (1...7)

A Poncet (7-8)

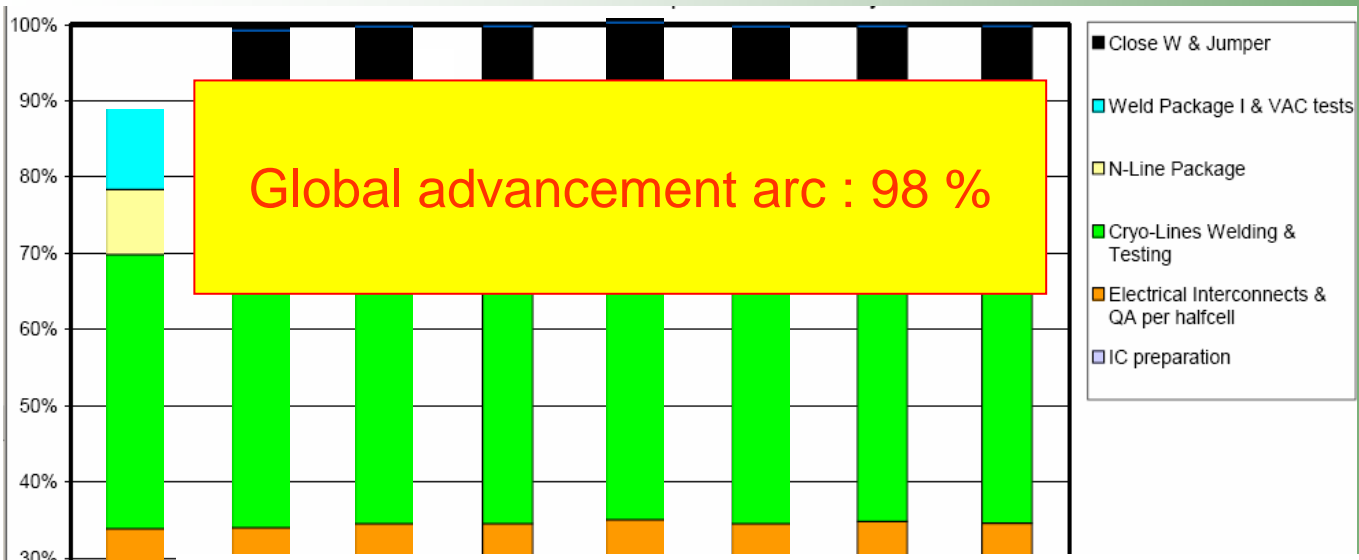
F Bertinelli (8-1)

Reporting

O Denis

Progress status of the LHC interconnections

Arc Interconnections progress



Main remaining activities :

PIM installation:

- 2 IC in 2-3 (urgent)
- 18 IC in 1-2 (3 urgent)
- 12 IC (TBC) in 7-8
- A few M and K welds
- Closure (< 200 ICs not counting 7-8)
 - 1-2 : Closure started end of last week, work for 2 weeks
 - 7-8 : Closure to start W39 for 4 to 5 weeks

Progress status of the LHC interconnections

Arc interconnections : Main points

* Sector 4-5 :

ELQA done at 80K ; no defect detected so far (see MEL presentation)

Localisation of the leak in DSL5 is starting today, then IC will be opened for repair

* Sector 8-1 :

flushing

jumper Q17R8 (SSS80!) tack welded collapsed during vacuum pumping - no impact on flushing – no damage – rewelded tomorrow.

Intention to redetect leak in 15R8, then replace SSS80 after flushing.

Replacement SSS1257 at cold testing SM18.

Both triplets are closed.

(Cool to 80K after flushing?)

* Sector 3-4 :

Sector 11R3 pending for repair of W bellows (too short, 2nd repair).

DSL5 according to schedule

Progress status of the LHC interconnections

Arc interconnections : Main points

* Sector 2-3 :

Q6 is in place

Two last PIMs (DFBA-Q7) are urgent, available from VAC this week?

Leaks in two sectors being localised (found QBQI.19L3 on M3, 2nd on KC')

* Sector 6-7 :

Closed. 6 sectors leak tight, 2 under test, 6 to be tested

* Sector 5-6 :

Big leak detected and localised in last vacuum subsector (7L6) on the cold mass circuit. Repair starting today, estimated 2 days: critical for pressure test.

* Sector 1-2 :

Progress ~88 %

Installation of PIM stopped since a few weeks; should restart for a few of them. Is it useful to leave some holes? (for extended testing of damaged PIM detection methods, but BPMs are not active ...)

Full closure of IC started where possible.

Progress status of the special LHC interconnections

DFBL (I. Slits) : PROGRESS : 89 %

DSL A (1L), DSL D (5L), DSL E (5R), DSL B (1R, internal lines) : completed
DSL C (3L and 3R) : 3 internal ICs completed and electrically validated,
connection with DFBL C to start soon.

DFBM #23 (F. Laurent) :

22 interconnected (DFBMA at 2L last week);

- DFBMD at 3L : To be put in place and aligned this week
Electrical connection will start next Monday

PROGRESS: 96 %

Progress status of the special LHC interconnections

DFBA : Cryogenics pipes were wrongly connected

- No marking of tubes exiting the HCM
- Instruction to connect facing tubes in case of no marking was not correct

DFBAH R4	DFBAJ R5	DFBAG L4
<ul style="list-style-type: none"> - Crossing of lines - Repair done (1st case) 	<ul style="list-style-type: none"> - crossing of lines - repair done and ACR tested 	Will be corrected after venting



Progress status of the special LHC interconnections

Triplets (See also Ranko's presentation)

- * L8 : electrical connections and welding of cryolines is ongoing.
not on critical path for 7-8 reclosure
Leak on cold mass (known since 2006 closure) ; VAC localisation in coming weeks.
- * R8: leak detected after closure for flushing (on KC' circuit), VAC localisation after flushing
- * R1 : Electrical interconnection completed ; welding of cryolines ongoing
- * L2 : Electrical interconnection completed today (to be tested)
- * R2 : Electrically connected ; welding of cryogenic lines is ongoing
- * L5 : Electrical interconnection is pending installation of Q3 (planned this week?)

General issue (L8, R1, L2, R2, L5): installation of PIMs is in stand-by. Justified for triplets ?

Progress status of the LHC interconnections

F523 Contract

- * CODIR on 27/9/2007 [End of Contract management]
- * Reconnection of triplet 5L and DSLC brought forward to end 2007
- * Additional openings and closures in 7-8 will be done on a fixed cost ;
to be negotiated
- * Will include provisions for some openings in 4-5
- * Transfer of tooling and knowledge should start now