

Status of Interconnect Works in the LHC Arcs and DS regions – week 45 (November 05 – November 11, 2007)

O. Denis, AT-MCS (on behalf of the arc coordination team)

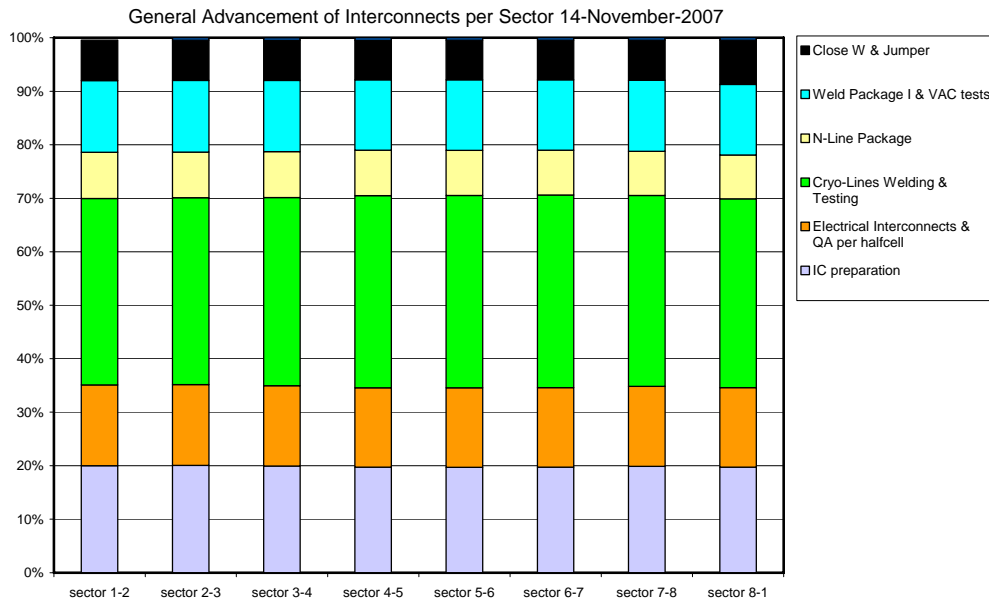
EDMS no. 882353

This report gives the status of the interconnect works in the LHC arcs and dispersion suppressor regions carried out during week 45 (November 05 – November 11, 2007) in responsibility of the interconnection arc coordination team, starting with a general overview about the advancement per sector.

For the status of the VAC test, production rates, work progress, and number of operations foreseen and performed, data are reported for each sector separately.

The Dashboard

- Number of magnets in the tunnel: 1232 MB, 474 SSS, 114 LSS.



Data for General Advancement Plot is counted by number of interventions and grouped by activities as follows:

- IC preparation: Magnet alignment, IC pre-inspection, IC released for work,
- Electrical Interconnects & QA per halfcell: PAQ, US weld of spool pieces, brazing of main busbars,
- Cryo-Lines Welding & Testing: Welding of main busbar lines M1, M2, M3, weld K1 line, K2 line, K3 line, C' line, X line. Vacuum tests of K lines, C' line, X line.
- N-Line package: Insert N line, AIV 1, AIV 2, US welding of N line, weld of large sleeve for N line.
- Beam Pipes Welding & VAC tests. VAC sector test: Welding of V1, V2, E line and VAC tests V1, V2, E line. RF test magnet chain.
- Close W bellow and Jumper.
- VAC test for sector.

Sector coordination team:
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| <i>Sectors</i> | <i>Started</i> |
|---------------------------------|----------------|
| 1-2 2-3 3-4 4-5 5-6 6-7 7-8 8-1 | finished |

Remarks:

1. The color coding of the general advancement plot matches the color coding of the other plots (snapshot and production rates).
2. The plots of the production rates also show the average production rate (IC/week) foreseen for the sectors and the ultimate production rates for the ideal case.
3. From week 9 on, we added a plot showing the general advancement per sector. For easy comparison, the starting dates in all plots is set to 1-Oct-06, except for sector 4-5.
4. For sectors that are completed, we will suppress the plots and simple give the work status instead.

Sector 1-2 (completed on 05-Nov-07)

- Repairs of the leaks detected during leak tests of VAC sectors have just started.
- Repair of Helium guards have just started, inspections being carried out, following sectors to be checked in this sequence: 2-3, 7-8, 8-1, 6-7, to be defined.

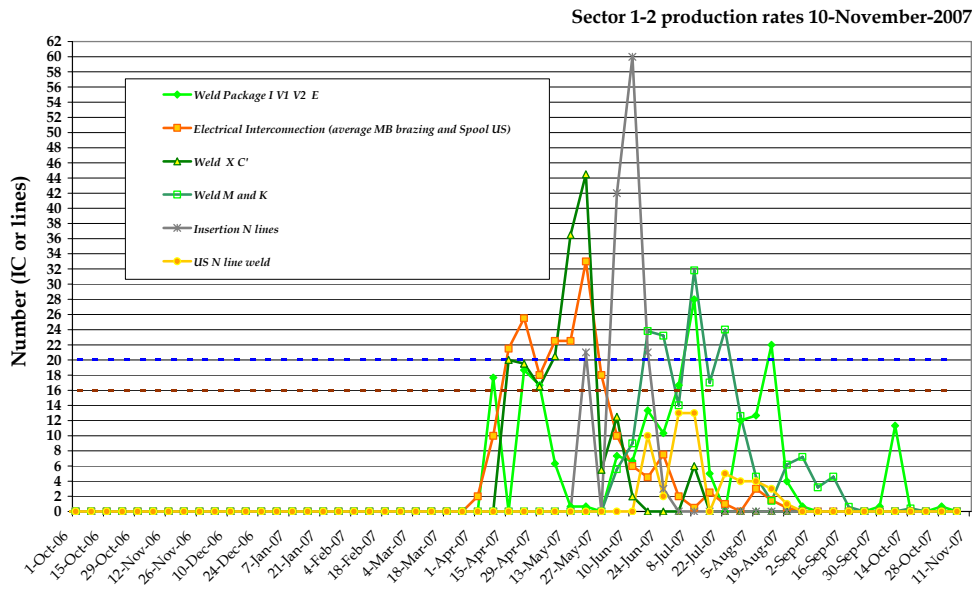


Fig. 1: Production rates in sector 1-2.

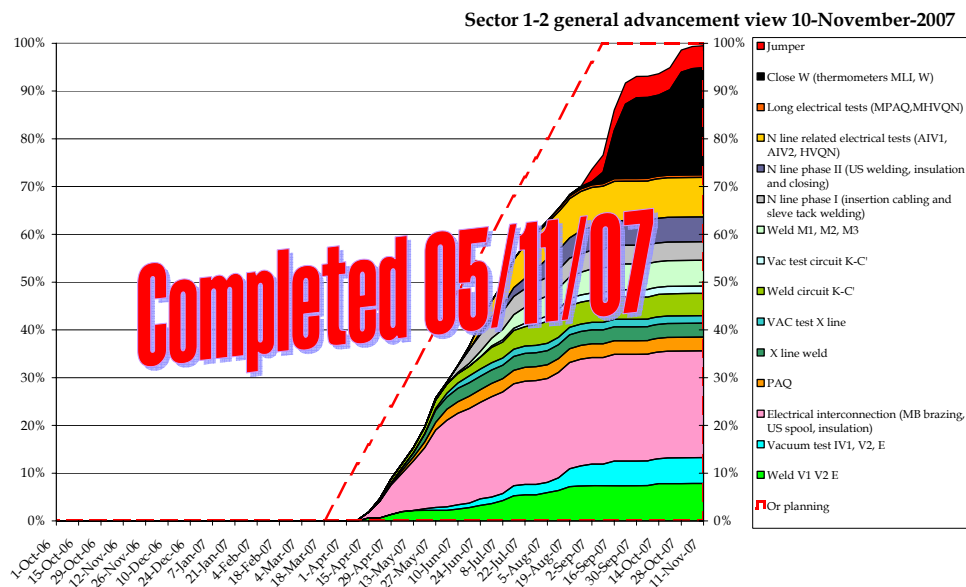


Fig. 2: General advancement view for sector 1-2.

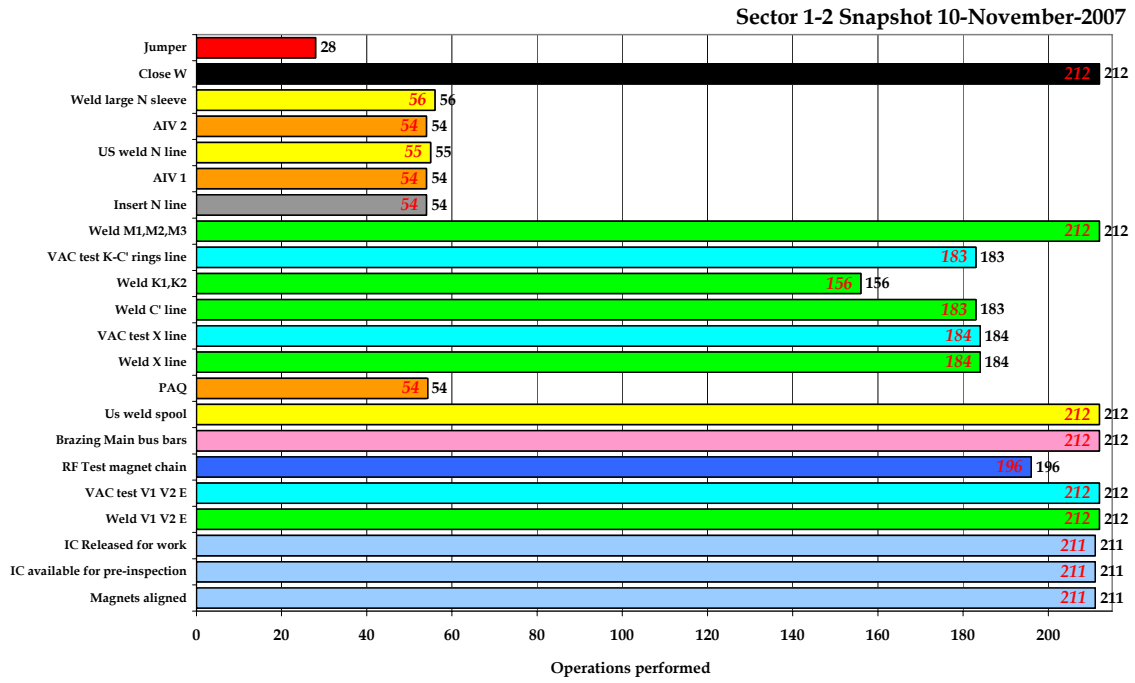


Fig. 3: Snapshot of work progress in sector 1-2 showing the number of operations achieved in total with respect to the total number of operations necessary.

Sector 2-3 (completed on 30-Oct-07)

- Waiting for pressure test, scheduled for end of W46.

Sector 3-4 (completed on 18-Sep-07)

- Repair of the leak on the DFBA (4L) ongoing.
- All remaining activities are linked to the activity of the DSLC.

Sector 4-5 (completed on 29-Apr-07)

- Cool-down.

Sector 5-6 (completed on 05-Sep-07)

- Electrical test (TP4B) ongoing.

Sector 6-7 (completed on 30-Aug-07)

- Being prepared for flushing.

Sector 7-8 (completed)

- Completing leak test of repaired sector.

Sector 8-1 (completed on 9-May-2007)

- SSS change completed, waiting for leak test of VAC sector to which SSS belongs to.

Vacuum Tests by Sector

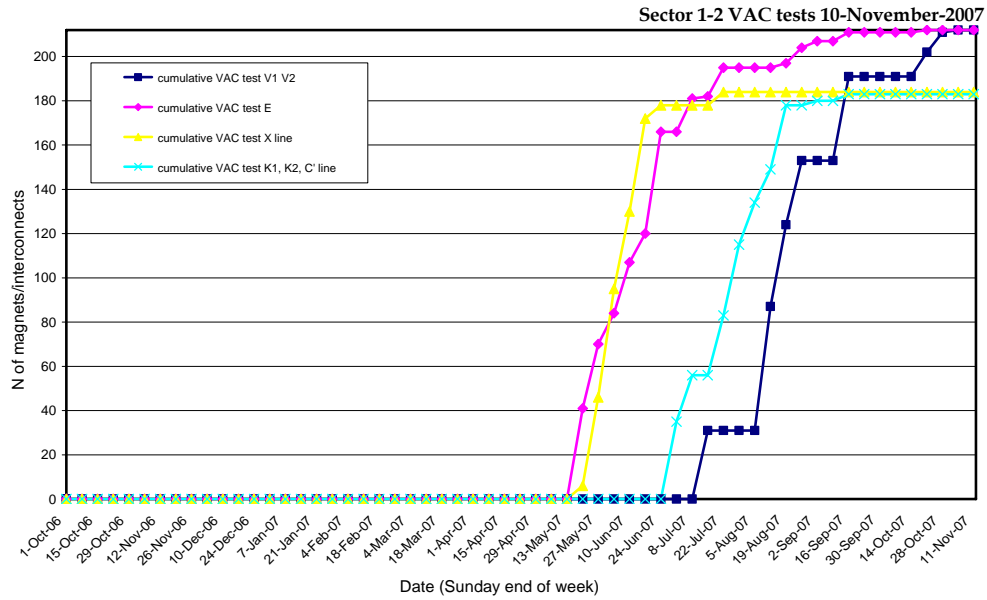


Fig. 4 : Status of the VAC tests in sector 1-2.