

Status of Interconnect Works in the LHC Arcs and DS regions – week 3 (January 15 - 20, 2007)

C. Vollinger, AT-MCS (on behalf of the arc coordination team)

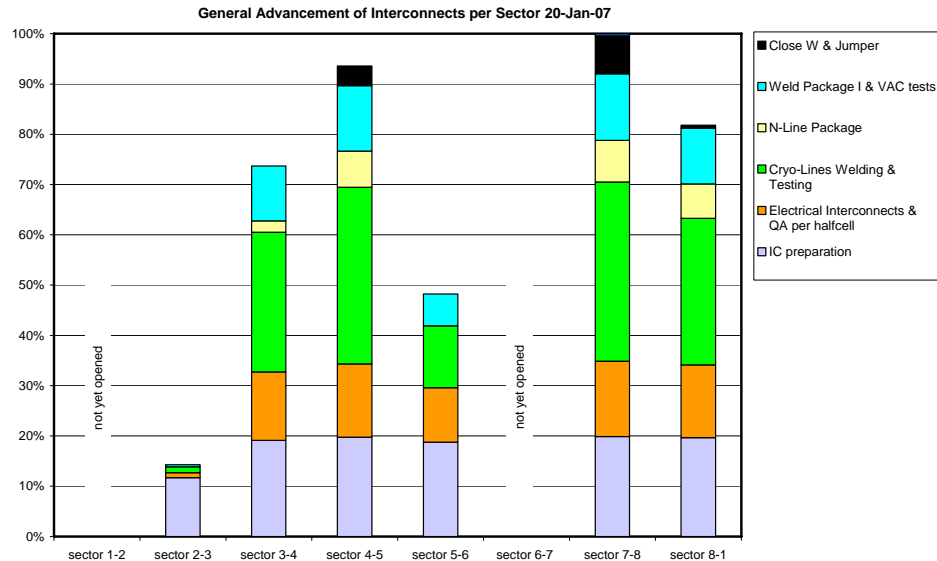
EDMS no. 815113

This report gives the status of the interconnect works in the LHC arcs and dispersion suppressor regions carried out during weeks 51, 2, 3 (December 18, 2006 - January 20, 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, the data is reported for each sector separately.

The Dashboard

- Number of magnets in the tunnel: 1066 MB, 397 SSS, 82 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:

P. Fessia, A. Musso, F. Seyvet, M. Struik, C. Vollinger

<i>Sectors</i>	<i>Started</i>
1-2 6-7	No
7-8	finished
2-3 3-4 4-5 5-6 8-1	Yes

Sector 2-3 started in week 51.

Sector 1-2/ Sector 6-7: not yet started.

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.

Sector 2-3

- Sector started in week 51 with brazing of main busbars.
- SSS233 brought to surface awaiting repairs in SM18.
- 5 dipoles awaiting magnet assingment by MEB.

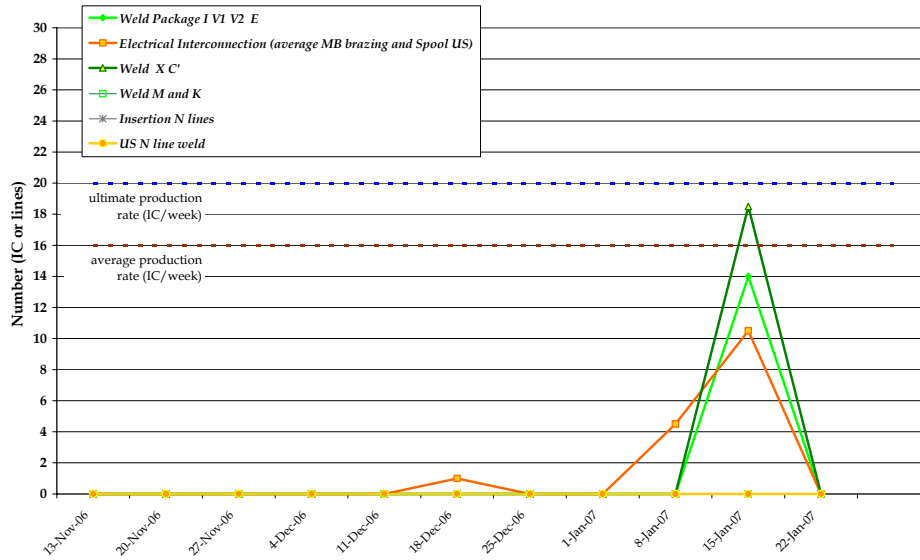


Fig. 1: Production rates in sector 2-3.

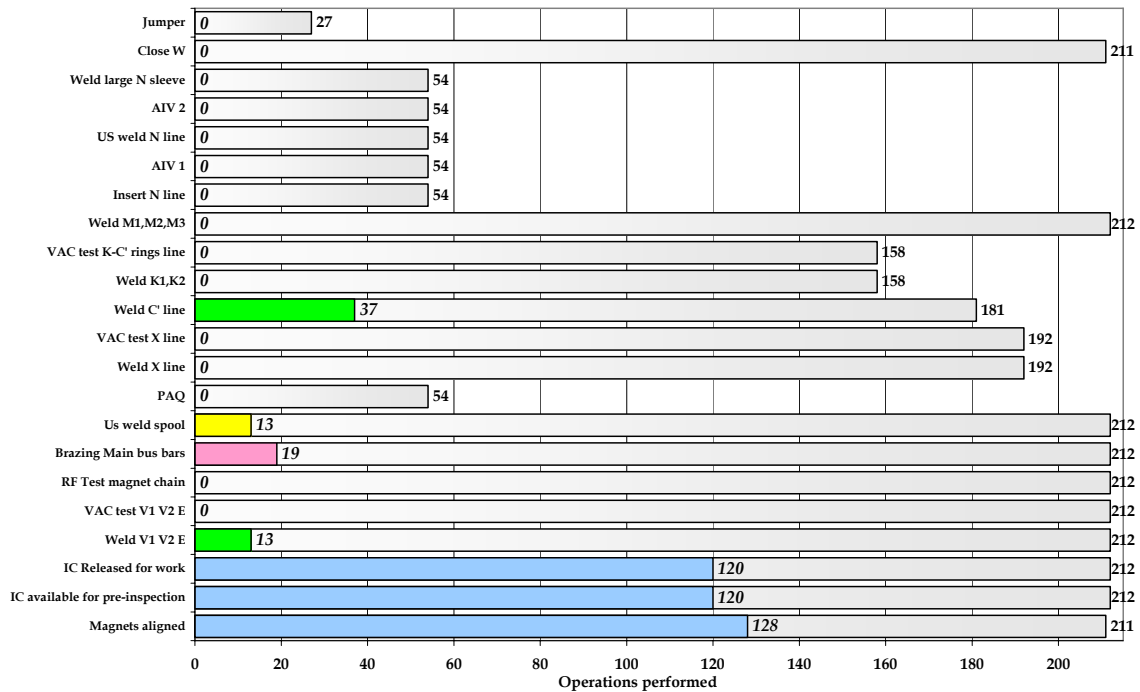


Fig. 2: Snapshot of work progress in sector 2-3 showing the number of operations achieved in total with respect to the total number of operations necessary.

Sector 3-4

- Production of Work Package 1 and welding of K1, K2 ongoing.
- AIV1 ongoing and AIV 2 started.

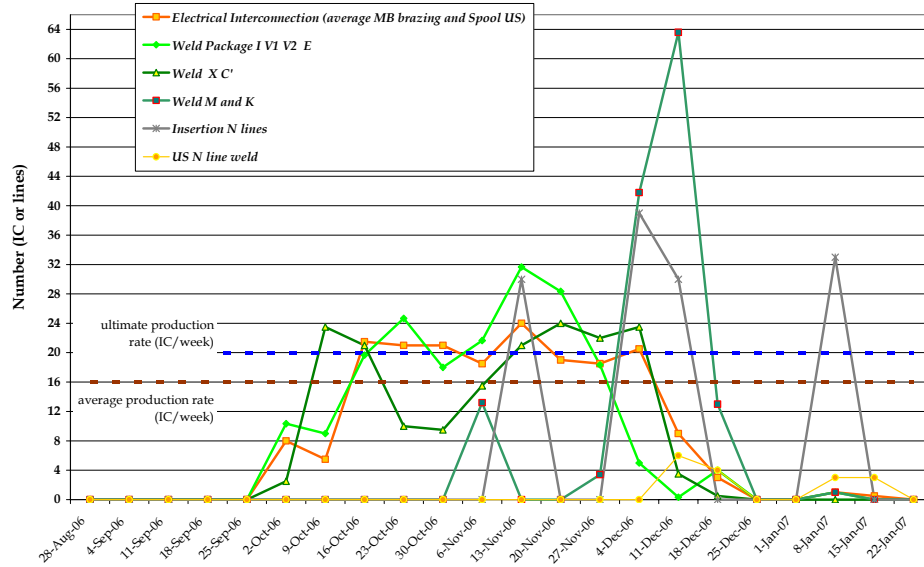


Fig. 3: Production rates in sector 3-4.

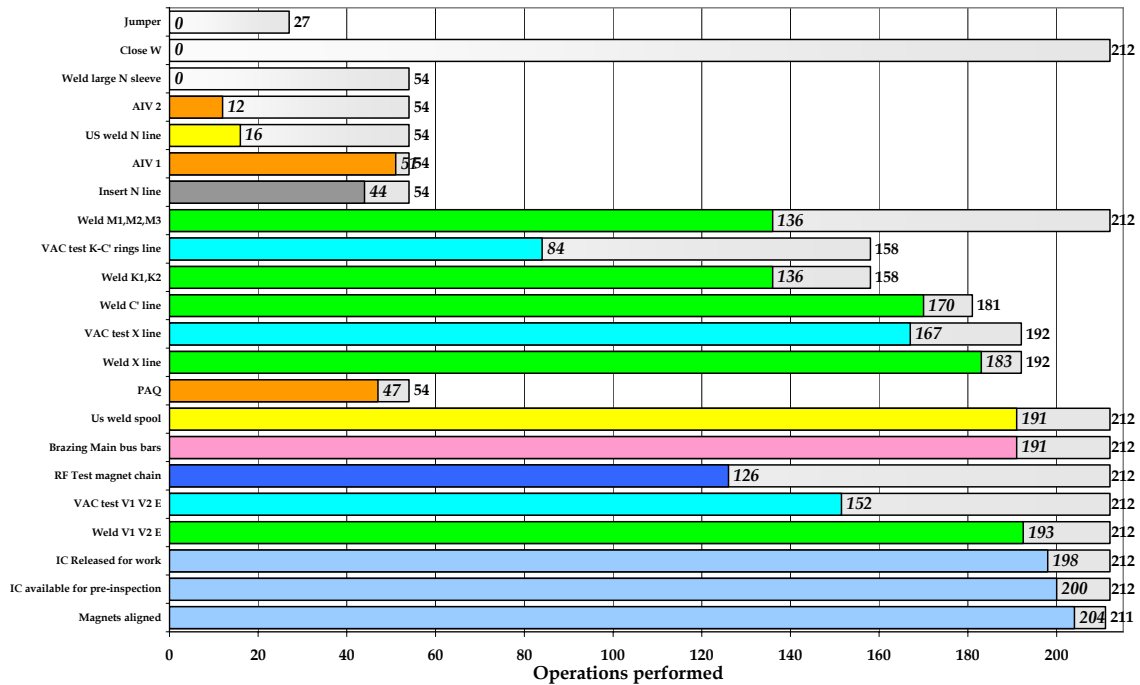


Fig. 4: Snapshot of work progress in sector 3-4 showing the number of operations achieved in total with respect to the total number of operations necessary.

Sector 4-5

- First vacuum sector finished and delivered to VAC group.

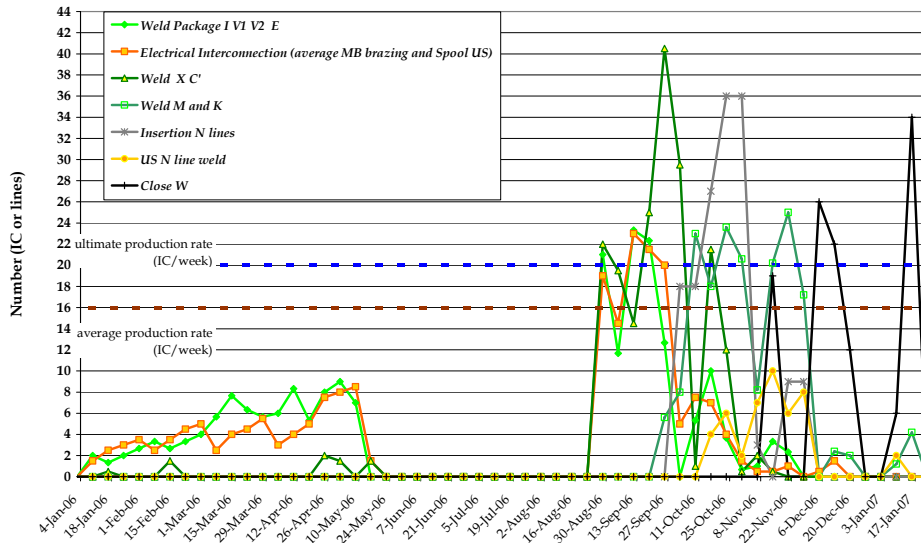


Fig. 5: Production rates in sector 4-5.

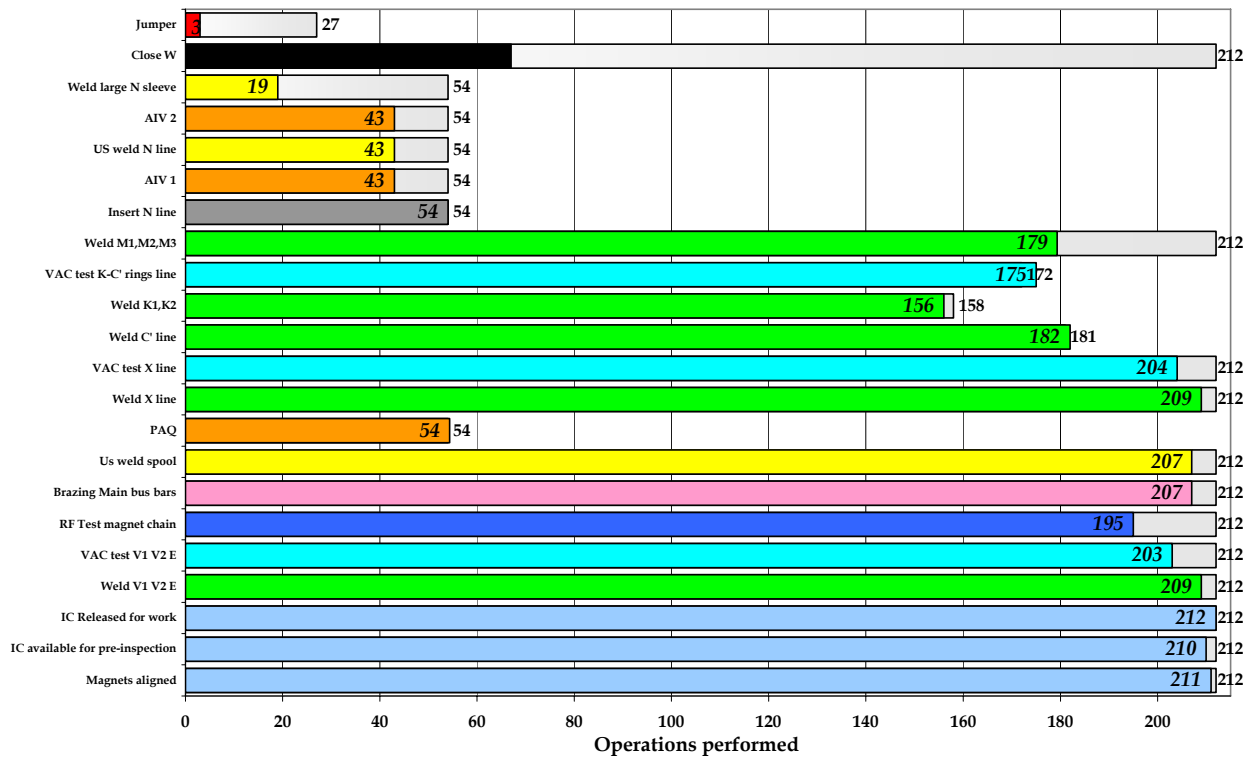


Fig. 6: Snapshot of work progress in sector 4-5 showing the number of operations achieved in total with respect to the total number of operations necessary.

Sector 5-6

- Dipole 1159 was repaired and is currently under vacuum test.

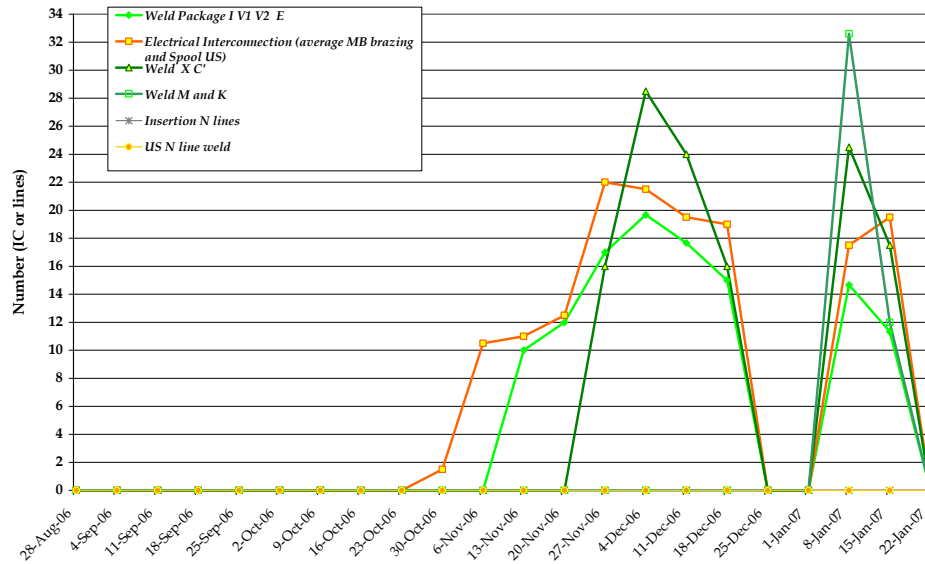


Fig. 7: Production rates in sector 5-6.

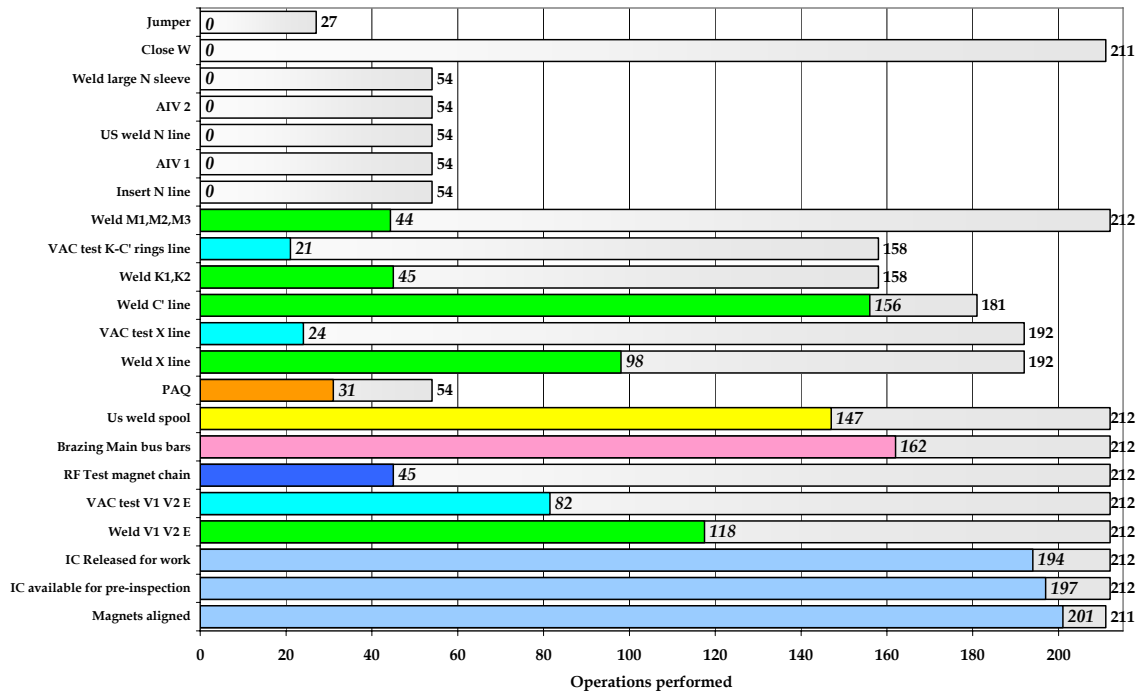


Fig. 8: Snapshot of work progress in sector 5-6 showing the number of operations achieved in total with respect to the total number of operations needed.

Sector 8-1

- Weld of N sleeve ongoing.
- Electrical tests AIV1 and AIV2 ongoing.

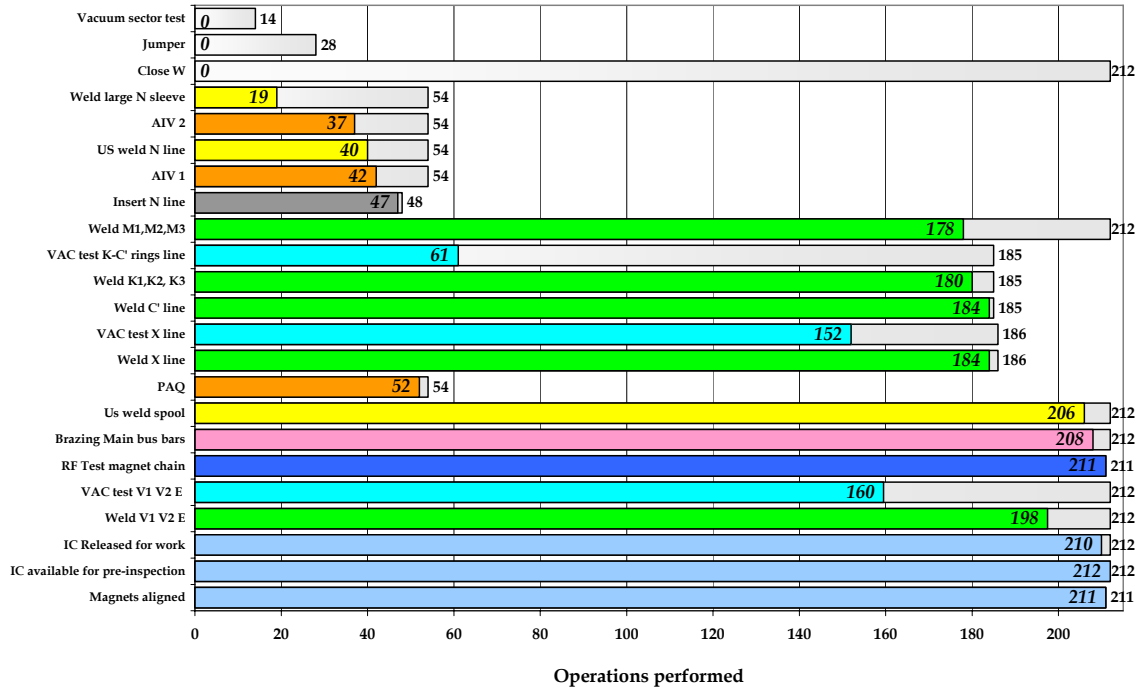


Fig. 9: Snapshot of work progress in sector 8-1 showing the number of operations achieved in total with respect to the total number of operations needed.

Vacuum Tests by Sector

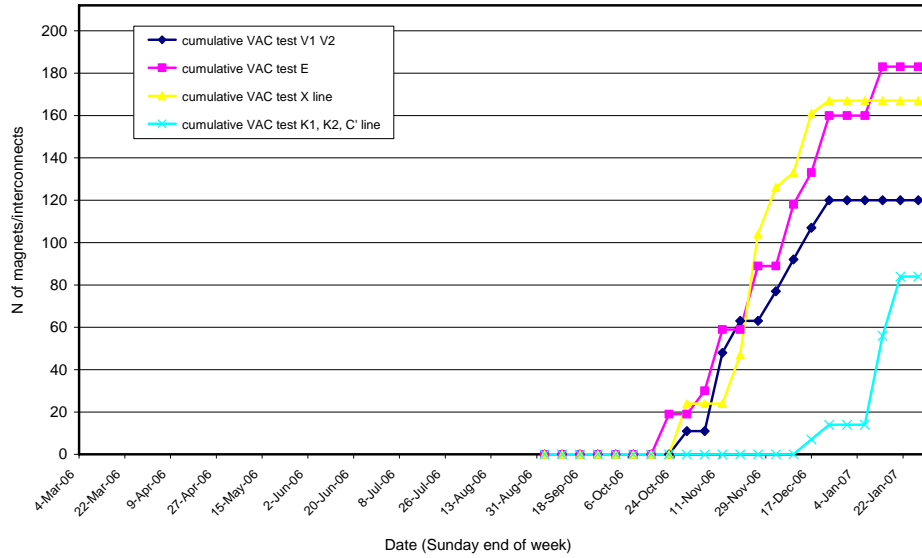


Fig. 10: Status of the VAC tests in sector 3-4.

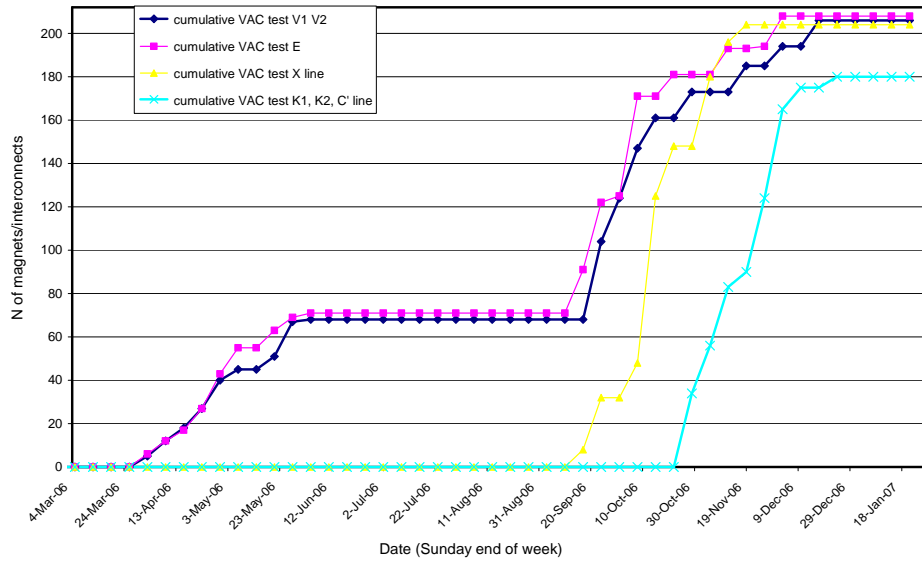


Fig. 11: Status of the VAC tests in sector 4-5.

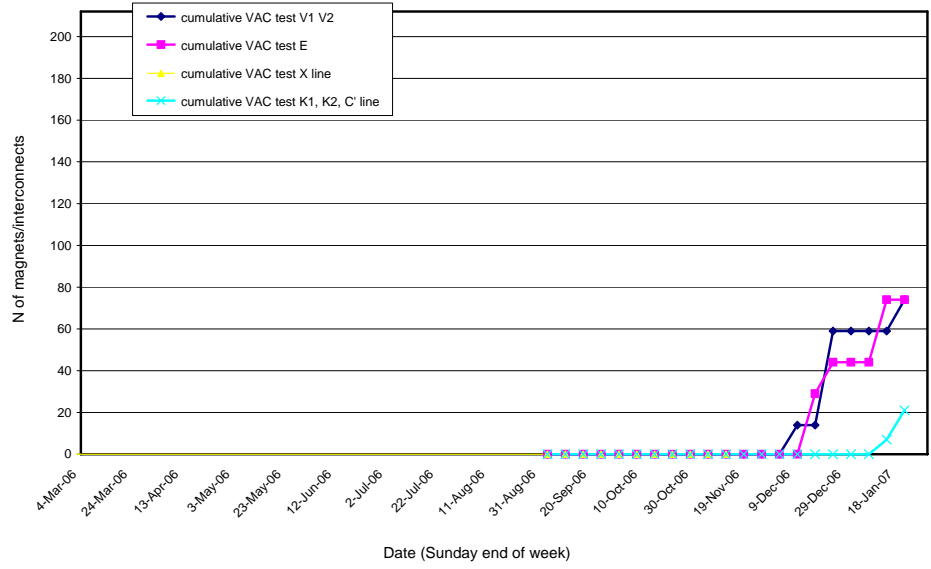


Fig. 12: Status of the VAC tests in sector 5-6.