

Status of Interconnect Works in the LHC Arcs and DS regions – week 6 (February 5 – 10, 2007)

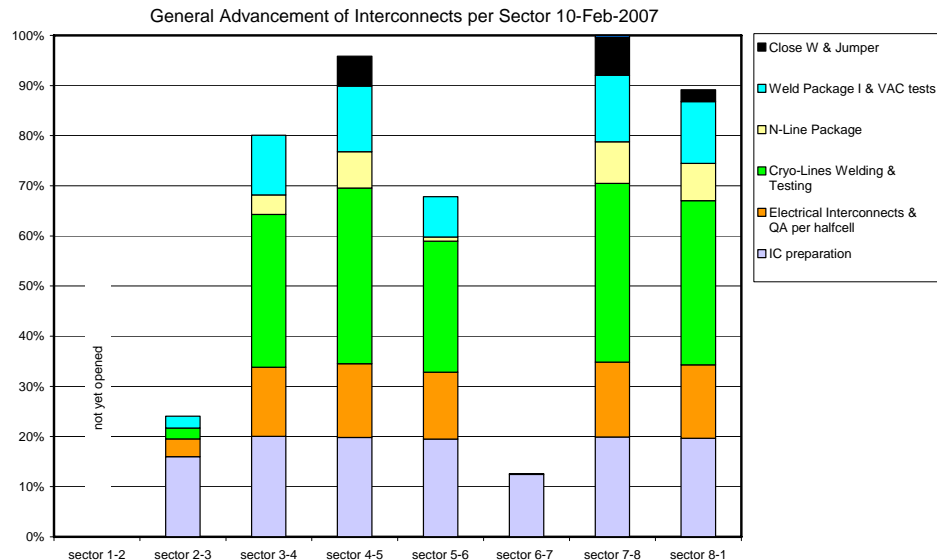
C. Vollinger, AT-MCS (on behalf of the arc coordination team)

EDMS no. 820233

This report gives the status of the interconnect works in the LHC arcs and dispersion suppressor regions carried out during week 6 (February 5 - 10, 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: 1127 MB, 428 SSS, 93 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	No
7-8	finished
2-3 3-4 4-5 5-6 6-7 8-1	Yes

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

- Mounting of PIMs (Plug-In-Modules) had to be stopped due to lack of PIMs.
- Good progress in magnet alignment and pre-inspection.

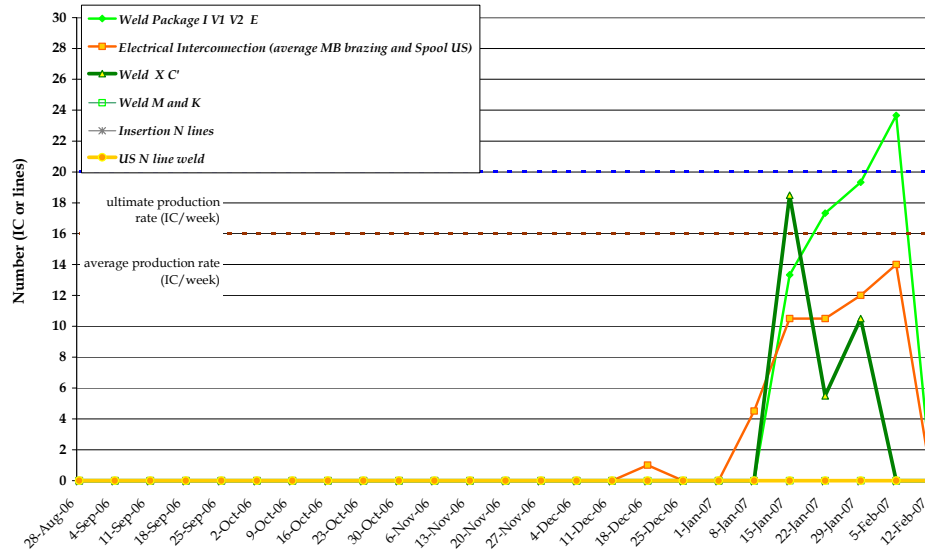


Fig. 1: Production rates in sector 2-3.

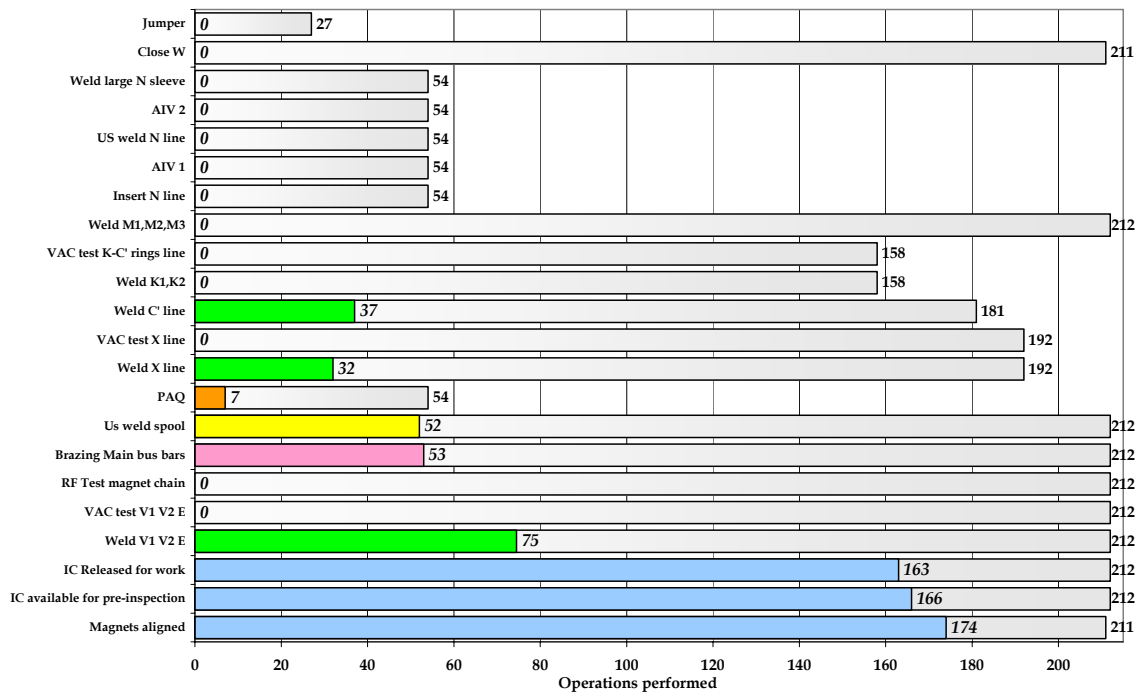


Fig. 2: Snapshot of work progress in sector 2-3 showing the number of operations achieved in total with respect to the total number of operations necessary.

Sector 3-4

- 2nd MPAQ accomplished. All magnets installed.

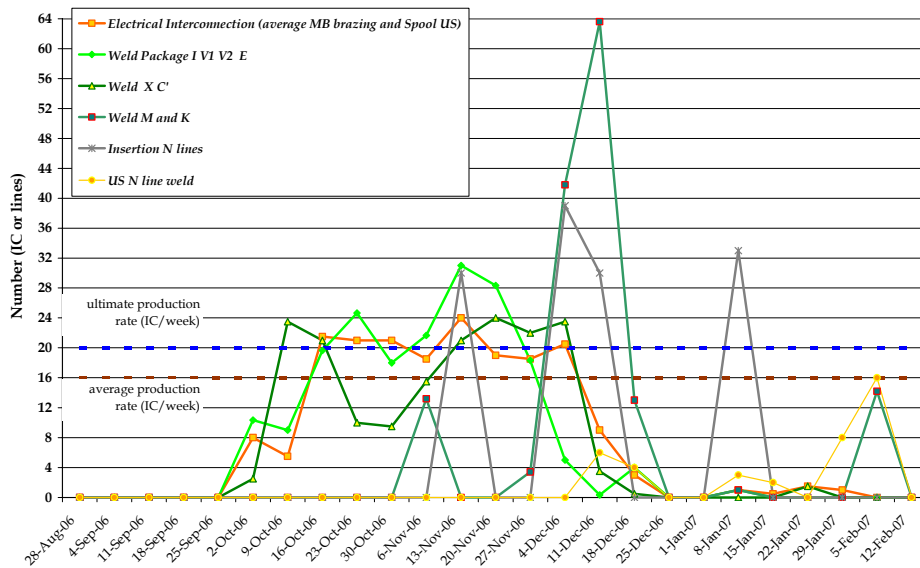


Fig. 3: Production rates in sector 3-4.

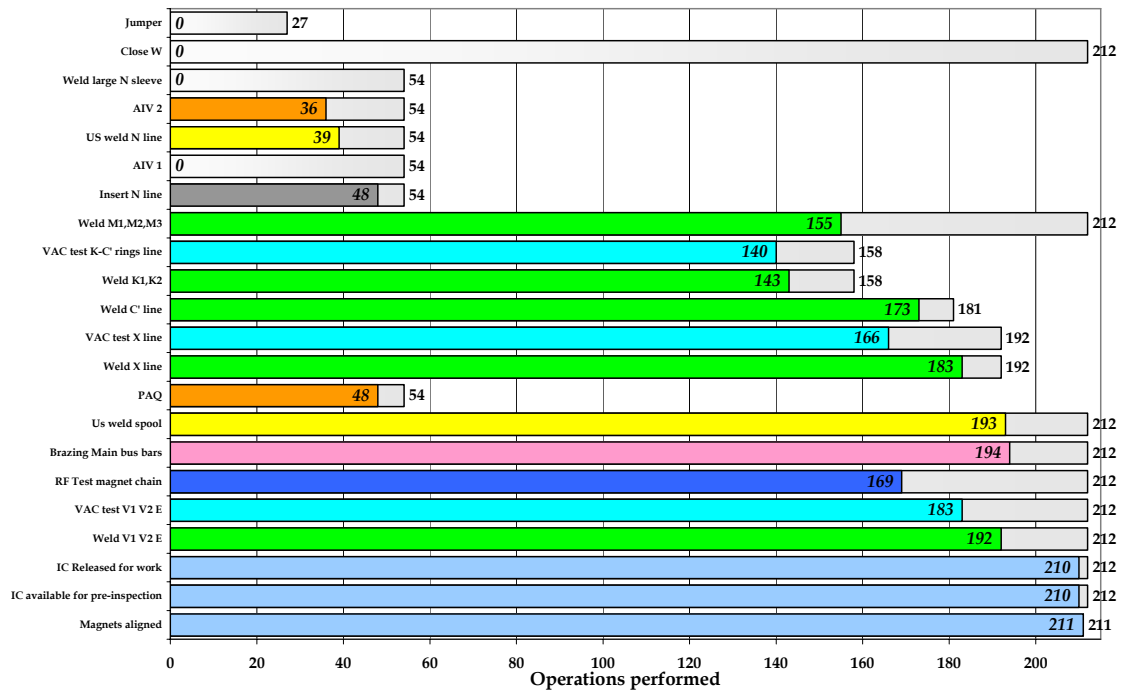


Fig. 4: Snapshot of work progress in sector 3-4 showing the number of operations achieved in total with respect to the total number of operations necessary.

Sector 4-5

- Internal and external lines tested in 4 sub-sectors of which 2 are accepted as are. 2 leaks detected in the other 2 subsectors.

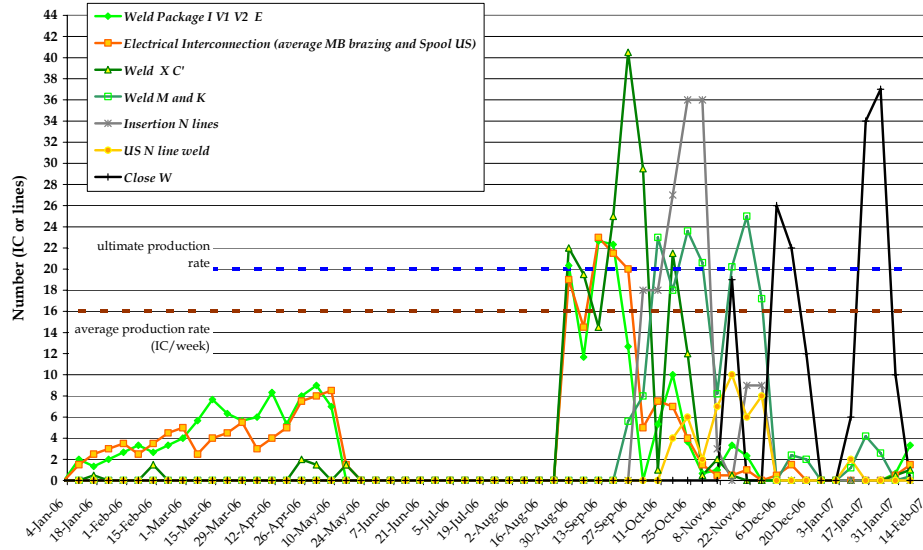


Fig. 5: Production rates in sector 4-5.

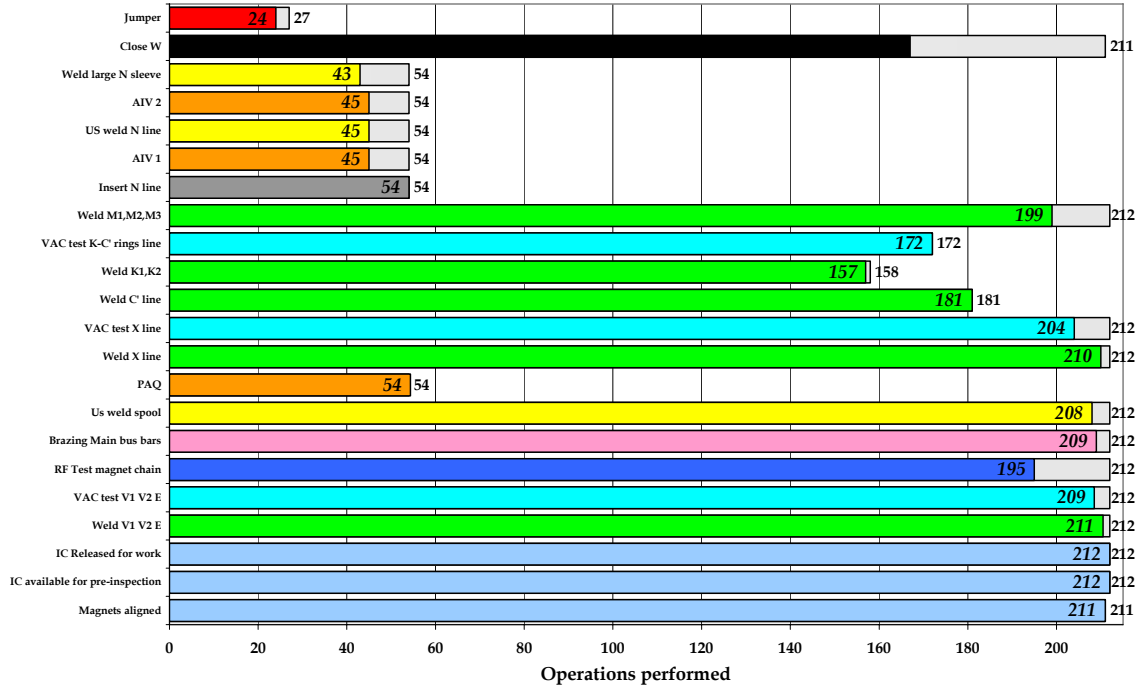


Fig. 6: Snapshot of work progress in sector 4-5 showing the number of operations achieved in total with respect to the total number of operations necessary.

Sector 5-6

- N-line cabling started. HVQN and AIV tests started.

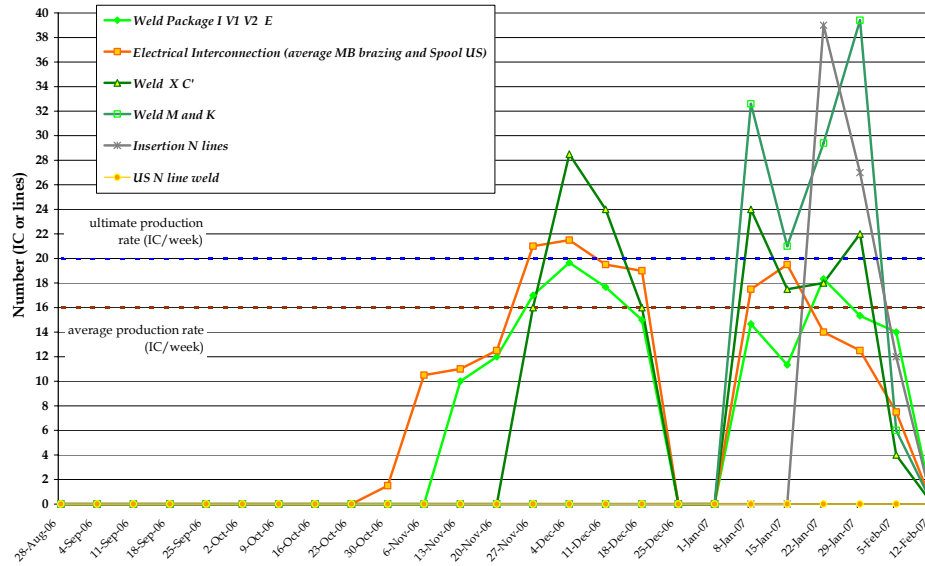


Fig. 7: Production rates in sector 5-6.

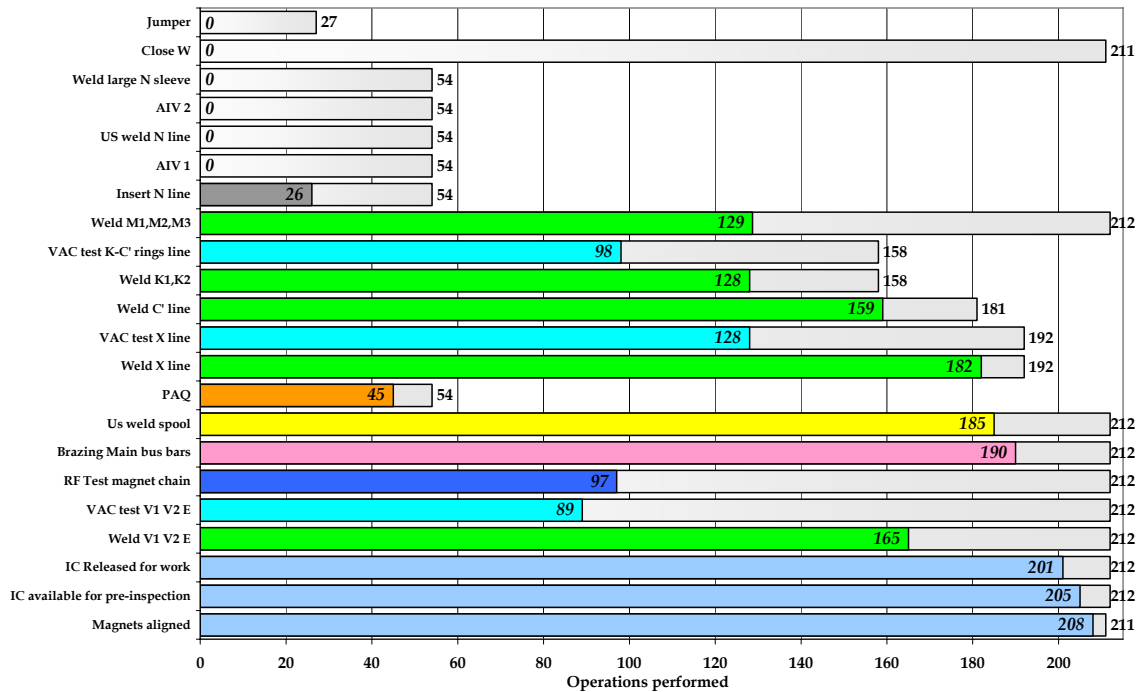


Fig. 8: Snapshot of work progress in sector 5-6 showing the number of operations achieved in total with respect to the total number of operations needed.

Sector 6-7

- Brazing of main busbars started.

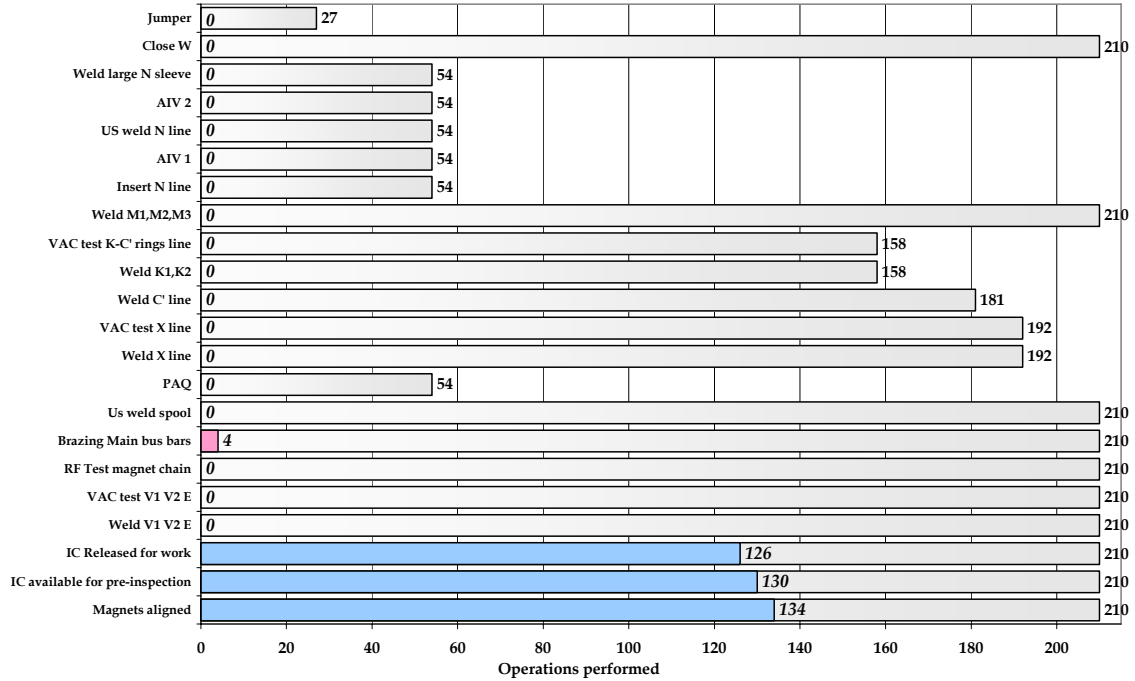


Fig. 9: Snapshot of work progress in sector 6-7 showing the number of operations achieved in total with respect to the total number of operations needed.

Sector 8-1

- Electrical tests AIV 1 ongoing, closing of W-bellows ongoing.

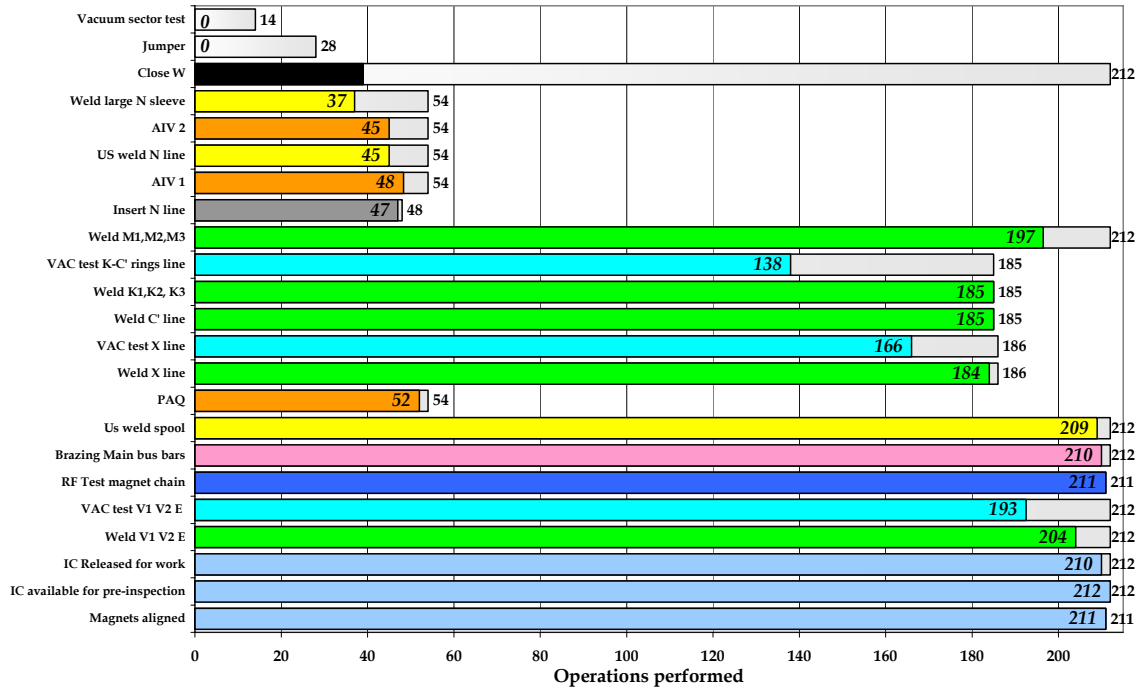


Fig. 10: Snapshot of work progress in sector 8-1 showing the number of operations achieved in total with respect to the total number of operations needed.

Vacuum Tests by Sector

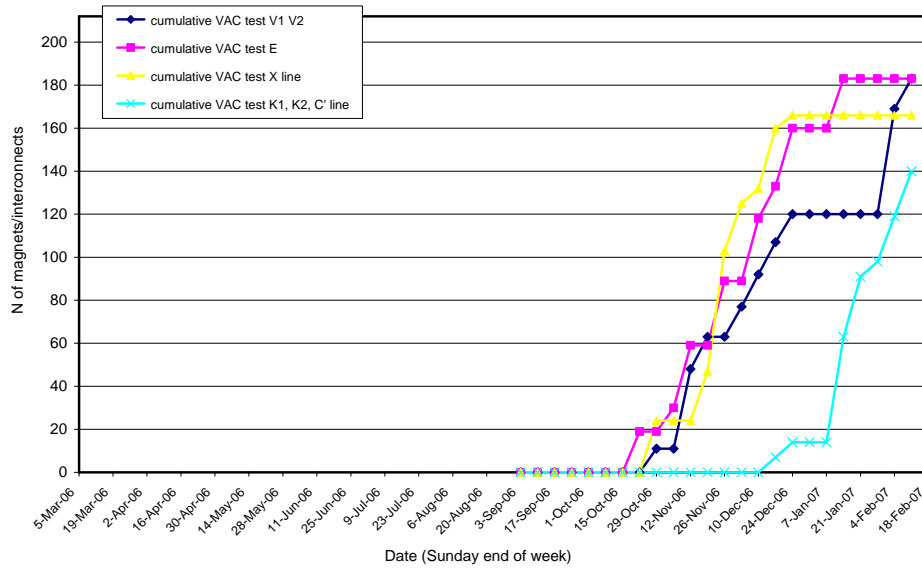


Fig. 11: Status of the VAC tests in sector 3-4.

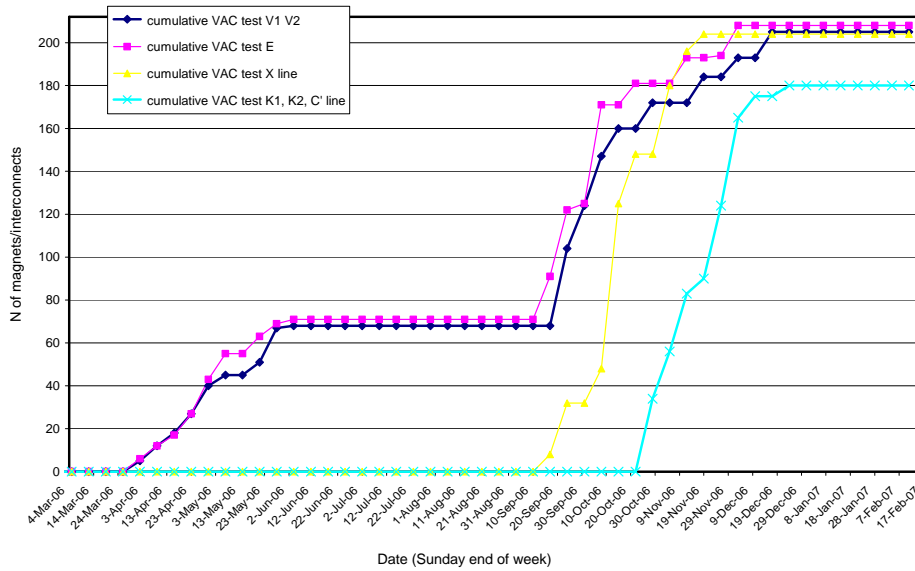


Fig. 12: Status of the VAC tests in sector 4-5.

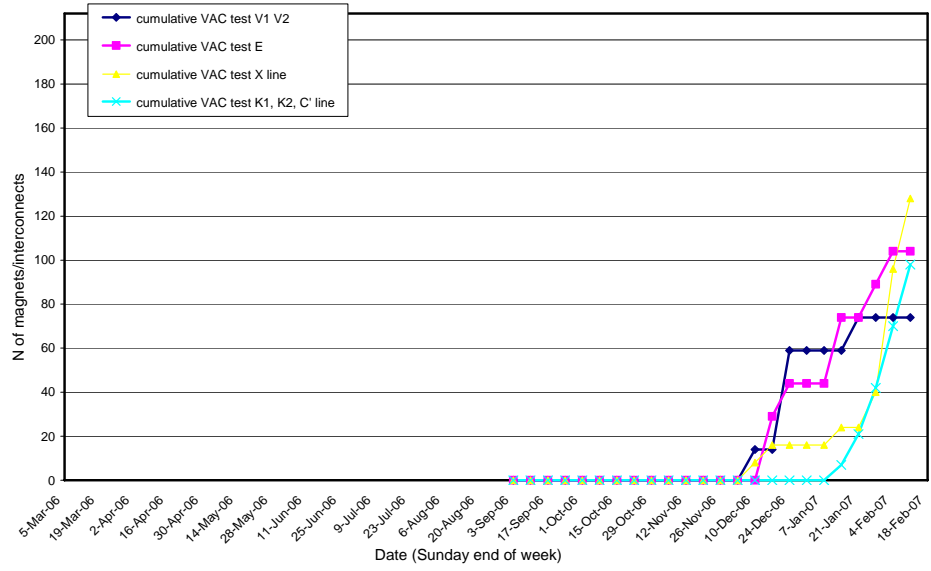


Fig. 13: Status of the VAC tests in sector 5-6.