LHC Arc interconnection status

MARIC

23/05/07
Summary

• Interconnection cockpit
• Sector by Sector
• Limiting factors
• SSS 500 repair status
The image contains several pie charts and tables with data on various processes completed in different months.

- **Magnet to magnet electrical interconnection**
  - Completed in February: 3-4 6
  - Completed in March: 5-6 2
  - Completed in April: 2-3 10
  - Completed till 17/05: 6-7 26
  - To be completed: 1-2 90

- **W closures**
  - Completed in February: 65%
  - Completed in March: 11%
  - Completed in April: 7%
  - Completed till 17/05: 5%
  - Remaining: 6%

- **PIM installations**
  - Completed in February: 49%
  - Completed in March: 8%
  - Completed in April: 4%
  - Completed till 17/05: 2%
  - Remaining: 17%

- **Cryogenic lines interconnects**
  - Completed in February: 32%
  - Completed in March: 11%
  - Completed in April: 9%
  - Completed till 17/05: 4%
  - Remaining: 34%

- **N line segments welds**
  - Completed in February: 47%
  - Completed in March: 17%
  - Completed in April: 9%
  - Completed till 17/05: 11%
  - Remaining: 8%

- **Jumpers closed**
  - Completed in February: 32%
  - Completed in March: 45%
  - Completed in April: 32%
  - Completed till 17/05: 11%
  - Remaining: 13%
Vacuum Subsector status
(courtesy P. Cruikshank)

<table>
<thead>
<tr>
<th>Sector</th>
<th>7R</th>
<th>11R</th>
<th>15R</th>
<th>19R</th>
<th>23R</th>
<th>27R</th>
<th>31R</th>
<th>31L</th>
<th>27L</th>
<th>23L</th>
<th>19L</th>
<th>15L</th>
<th>11L</th>
<th>7L</th>
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<tbody>
<tr>
<td>7-8</td>
<td>lk,c'k</td>
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<td>4-5</td>
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<td>lk,c'k?</td>
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<td>8-1</td>
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Legend:
- **Green**: Subsector pressure & leak tested
- **Red**: Subsector leak tested at 1 bar
- **Orange**: Subsector evacuated
- **Yellow**: On-going leak repairs
- **Blue**: New subsectors

Short circuit Q5R4, resistance decreased from 180Ω to few Ω after pressure test
Investigation being carried out now
Sector 2-3 general advancement view 17-May-2007

- Jumper
- Close W (thermometers MLI, W)
- Long electrical tests (MPAQ, MHVQN)
- N line related electrical tests (AIV1, AIV2, HVQN)
- N line phase II (US welding, insulation and closing)
- N line phase I (insertion cabling and sleeve tack welding)
- Weld M1, M2, M3
- Vac test circuit K-C'
- Weld circuit K-C'
- VAC test X line
- X line weld
- PAQ
- Electrical interconnection (MB brazing, US spool, insulation)
- Vacuum test IV1, V2, E
- Weld V1 V2 E
- Or planning
Sector 6-7 production rates 17-May-2007

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Sector 6-7 production rates 17-May-2007

- Jumper
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- Long electrical tests (MPAQ,MHVQN)
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- Vacuum test IV1, V2, E
- Weld V1 V2 E
- Or planning
## End of sector (arc) limiting factors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Limiting factors</th>
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<tr>
<td>3-4</td>
<td>Repair SSS 500 R3 (repair target 1st week june)</td>
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<td>5-6</td>
<td>Completion of DS L6 (DFBA+PE (07/06/07), Interconnection cryostat)</td>
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<td>2-3</td>
<td>Repair SSS 500 L3 (2nd half june) and replacement of Q11R2</td>
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<tr>
<td>6-7</td>
<td>Completion of DS R6 (DFBA+PE 30/05/07) and W closures</td>
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<td>1-2</td>
<td>W closures and DS L2</td>
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# SSS 500 repair status

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- **7** re-interconnected
- **6** under interconnection
- **5** under repair
- **7** to be repaired
- **1** to be exchanged
- **6** to be repaired with **7-8**