HL - TANB & coffrets de prises

EDMS# 2221435

Pablo Santos Diaz
Miguel Lino Diogo dos Santos
María Luque Porras

Reunion ICL Machines LHC – SPS

on behalf of HL-LHC WP8

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OVERVIEW

1. Introduction
2. Electrical boxes
3. Scintillators
4. BLMs
5. BPM region supports relative position
6. Roll angle and slope of the tunnel
7. Survey marking & references
Introduction

- The TANB has been installed on both sides of point 8 between D2 and the TCTPH and, in consequence, the BPMs have been displaced next to the Y-chamber.
ELECTRICAL BOXES [I]

Before LS2 (09-02-2018)

After LS2 (As per ECR)
Today (14-08-2019)

<table>
<thead>
<tr>
<th>LEFT</th>
<th>RIGHT</th>
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<tbody>
<tr>
<td>ECR location of the electrical boxes not possible due to interference.</td>
<td>Boxes Installed according to ECR location</td>
</tr>
<tr>
<td></td>
<td>Support structure changed and boxes turned 180°</td>
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</tbody>
</table>

Cables touching the BPM support and limited space!
ELECTRICAL BOXES [III] LEFT

Proposed location

Pictures courtesy of N. Latif & Y. Maurer
Before LS2 (09-02-218)

Dismounted in the beginning of LS2. Not in the present layout. No plan for reinstalling during LS2

Today (14-08-2019)

New ECR Proposed by WP15 to be made for the scintillators removal
BLM’s

**Before LS2**

**After LS2 (As per ECR)**

- Bake-out jacket (20mm thickness)
- Min. distance needed: 100 mm
- BLM really close to the new BPM position for LS2 layout
BLM’s
today (14-08-2019)

The installation foreseen until the end of the year

BLM’s dismounted in the beginning of LS2.

New configuration proposed keeping the support positions and rotating the BLM’s 180°

The installation foreseen until the end of the year
BPM REGION SUPPORTS RELATIVE POSITION

Today (14-08-2019)

Integration models relative position between supports:
ST1056902_01 C4L8 LS2 - 41mm
ST1023706_01 C4R8 LS2 - 65mm

Real relative position between supports:
L- 5mm
R- 15mm
Positioning of supported components is apparently correct.
There is a deviation in the support position from the scans post LS2 to integration models as per ECR.
ROLE ANGLE AND SLOPE OF THE TUNNEL

The roll angle was not taken into account in the design phase. Was given to the BPM’s and TANB using the WePlate capabilities. → Ok from Survey

Is the Roll angle to be taken from design phase? → Standardization of Procedure?

SURVEY MARKING & REFERENCES

Formalization of alignment references might help to the simplicity of the marking operation in the cases of BPMs

BPMs reference - BPM Length flange to flange – Design
Survey reference - Magnetic Length of BPM
Integration - Provides both references one for MADX other For Mechanical design

BPM REGION LEFT 13-06-2019

BPM REGION LEFT 19-06-2019
CONCLUSIONS

- TANB has been successfully installed on both sides of point 8.
- The layout modifications have been completed.
- The two sectors are under vacuum.
- BLMs, electrical boxes and PMIL displacements are to be completed during LS2.
THANK YOU!!!

Many Thanks to EHN1 Atelier, EN/SMM, TE/VSC, BE/BI, EN/HE and all WP8 Collaborators!!!