

VELO UPGRADE MECHANICS MINUTES

Attendees: Freek, Wolfgang, Themis, Kieran, Paula, Victor, Wiktor, Oscar

ACTION LIST

- No actions listed

DISCUSSION

1.1 MODULE HANDLING @LIV

This issue is still a concern for LIV. Paula agreed to present at the next meeting, how it was done for the old VELO.

1.2 TRANSPORT OF THE DETECTOR TO CERN AND DUMMY PRE-INSTALLATION

The company is now happy with the frame design. We want to overdesign the system, since the less vibration we have, the better. Mass and COG calculation are now being doublechecked. Proposed schedule for dummy transport and dummy pre-installation with A-side Base (+ dummy weight, isolation volume and valves) is fine for LIV (KW 12/2020, 16-20/3).

1.3 BASE METROLOGY AT LIV

VSTAR measurements are now being written up.

For the travelling microscope, design work for cover and rails is done. The system will be useable for A and C side. The system will only be able to measure in Z direction. Positioning is a challenge, likely will measure distance of tip of module compared to tip of others. Still ongoing, short lead time for order of microscope and rails. Cover to be produced in the workshop in LIV.

John was asked to produce a plot with x (slot number) and y (distance between tip of a perfect module to a perfect foil position) with this base to see deviation from the 890mu nominal distance. Then we could choose for installation shorter modules where the margin is smaller etc.. Vinicius is doing math.

1.4 BEEP MODULE FOR FOIL TO TIP OF THE MODULE MEASUREMENTS

The pieces to be produced in LIV on the dummy frame for the beep module are in the workshop. Rails are done, side pieces ongoing, ready for end of the year.

1.5 CABLING FOR PT100 IN SECONDARY AND ISOLATION VOLUME

Cables will be partially delivered before Xmas, rest end of January. A little piece of cable will be sent to CERN for halogen content test.

I.6 FILLER INSIDE SAFETY VALVES

Kieran: to place pieces one day of Kieran plus one helper needed.

I.7 AOB

Possible transport issues of VELO detectors from LIV to CERN after Brexit? Be prepared: name given by Wolfgang: Stephanie.Krattinger@cern.ch. We are now in contact with the customs service of CERN

Themis: Schedule for testing @LIV will be produced and uploaded to the indico page.

Fine machining of A-side hood ongoing, 6 weeks more.

Vacuum tests of C-side with new pump end of January, A-side then afterwards.

Installation schedule: 13/12 etching of half-box

13/1 Start of NEG coating of C1 (as test, since 250mu)

20/1 Start of NEG coating of C2

27/1 Start of NEG coating of A2

10/2 Start of RF box replacement

17/2 SMOG2 pre-installation

24/2 Start of RF box re-installation

Next meeting 7th of January