Minutes of the 2^{nd} mobile crane design for cryo modules

maintenance

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Agenda:

- 2nd meeting to discuss the V2 design of the mobile crane to be used for Cryo Modules maintenance,
- Reporting to the structural analysis of the mobile crane,
- AOB.

1 Presentation of the V2 crane design

Kostas: presented the updated version of the mobile crane named as V2. (Presentation attached)

2 Structural Analysis

Jonathan: the structural analysis of the crane was commented by Jonathan. The structural analysis showed an elastic deformation of the horizontal beam by 6mm which is considered as accepted.

3 AOB

- **Paolo** suggested to proceed with a new engineering solution which will be even more flexible. Paolo suggested to create a design involving the pillars between the cryo modules as the support and in addition with a new movable structure. A new version (V3) will be created by Kostas.
- Nick suggested, and was accepted by Paolo, to continue with the production of the mobile crane V2 in order to provide more flexibility to the project and to be used during the opening of cryo module No.14 which will be available at ESS end of February or starting March.

4 Actions

• Kostas to start the new design by exploring the tunnel for restrictions and equipment that will remain in place. In addition, Kostas to talk again with Henrik to make sure the responsibilities of each side and if extra procedure is needed for the acceptance test etc.

The meaning of the new design is to have the less possible intervention in terms of equipment removal in the tunnel for the cryo module lid opening.

• When the V3 design is ready, Kostas to send the design to Jonathan for a structural analysis as well.