

Collimator Design Meetings

Minutes of the meeting 39 (12/08/2004)

Present: Aberle, Calatroni, Hänni, Mayer, Perret

WHAT IS THE FINAL NUMBER OF COLLIMATORS TO BE INCLUDED IN THE IT? (Oliver, Ralph)
This point was again on the agenda, but due to the absence of Ralph the answer was postponed

SPS test:

Results from the bake-out (Miguel Jimenez) no information was received but the test was positive, a more detailed statement is expected for the next meeting on August 19. (After the meeting: no NEG coating of the vacuum tank is required – to be confirmed in writing by AT-VAC)

Checklist for installation for cabling, electronics for TT40 and LSS5

Everything is ready for the installation but more measurements and tests have to be carried out in the lab. Tests have been done with the actual length of the control cable. (Stefano, Fabrice)

Measurements of #2

The measurements took 2 complete days (9+10/08) (Stefano, Fabrice).

Results of installation scenario check-up: there were some difficulties with the preparation of the transport due to the absence of the people who will actually do the job (Oliver)

Results of the "dry-run" no mayor problems were encountered, just the lifting of the complete #1 had to be revised due to the fact that on 18.08 there is only one side-loader available in the tunnel and the collimator has to be lifted with ropes. The exercise was extremely useful to assess all steps of the manipulation required (Oliver)

AOB:

Insulation:

All electrical parts of the collimator (motors, switches, measuring device...etc...) should be isolated from the electrical mass of the tunnel. This is a new constraint and fairly easy to implement for the switches, but it looks **very** difficult to "invent" a quick plug-in system which connects the motor mechanically – without any play and via an insulating part, probably ceramic – to the moving mechanism of the jaws. This point needs to be studied more in detail. If this is required we have to envisage to abandon the quick plug-in and have to change the collimator in case of motor failure.

Model for the RF finger contact

Roger proposes to adapt the existing design to build a model for the RF finger contact tests. The motors can be used from the LEP installation; however the control seems to be missing - to be checked by Roger, Fabrice. One could as well imagine using a pneumatic moving mechanism. Sergio will check the availability of such a system.

Movements of the contacts and measurements of resistivity have to be carried under vacuum.

The vacuum tank can be a simple cylinder with a bellow but should have metal gaskets as we want to measure the electrical contact resistance after a bake-out at 250°C.

There will be a **technical stop** of SPS on 6.09