Collimator Design Meetings

Minutes of the meeting 58 (10/02/2005)

Present: Aberle, Assmann, Bertarelli, Calatroni, Kadi, Losito, Mayer, Perret

Minutes # 57: no remarks given

PURCHASING PROCEDEURE

1. Orders for C/C and Dispersion Strengthened Copper shall pass through the Finance Committee.
2. Roller screw: order is ongoing.
3. For other main items the standard procedure is foreseen.
4. A status table for component orders has to be prepared by Oliver (**action**)

MOTOR TORQUE MEASUREMENTS

1. According to Roberto it is not possible to perform mechanical measures because of safety concerns.
2. Electronic measures will be done as soon as the adapting pieces are ready (being manufactured at central workshop).

TEMPERATURE SENSOR MOUNTING AND CONNECTION

1. As a solution to the issue, Roger presented a duplex insulated cable, ceramics shielded with a stainless steel external braid from the standard catalogue of a Cern supplier. This solution would perfectly fit to electric feedthroughs.
2. Alessandro is checking for minimum allowable banding radius of the cable.
3. Roberto will contact Roger to discuss about the terminations to choose.
4. Roberto will check if RTD PT100 are mandatory or can be replaced by thermocouples. (**action**)

INSTALLATION AND HANDLING ISSUES

1. Keith being absent, the question was not discussed in detail.
2. Ralph / Oliver will contact Keith for to check status / follow-up

VACUUM RECOMMENDATIONS

1. According to preliminary bake-out results, no NEG coating was explicitly required (see minutes39.pdf). A conclusive recommendation will be given by JM. Jimenez in two weeks.

ELECTICAL PLUG-IN

1. The final design has been chosen and already integrated in the layout. Roger is adding an auto-aligning pivoting mechanical system to complement the auto-centering capability of the plug-in system.

WATER PLUG-IN

1. M. Brugger (SC/RP) confirmed that the EPR seal of the water plug-in may withstand expected radiation doses for at least 10 years.
2. The selection procedure for the choice of water quick-connection is being followed-up by Manfred.

STATUS OF 3RD PROTOTYPE MANUFACTURING

1. Alessandro informed that the EB welding of P3 top and bottom covers has been completed. Unfortunately, significant warp of the 18mm-sheets has been detected.
2. Corrective measures are being identified in order to tackle the problem. In case of severe problems we could revert to the tested brazed solution.

AOB

1. In order to store P1 prototype (from LSS5) in building 252, a INB area has to be prepared. In the meanwhile P1 might be placed in AT/VAC premises (Jimenez). The prototype retrieval is foreseen in 1 week (at least).
2. A general description of the cooling system is being prepared by Rosario.

ACTION LIST to be followed up:

Play between motor spindle and jaw	#34	Roger
Radiation issues – heat evacuation, air duct, space, shielding		Ralph
New Fluka simulation for 0.45/7TeV accident case (**URGENT**)	#47	Vasilis
Updated calculation on beam optics during transient	#49	Ralph
Acceptable RF design by RF people	#50	Ralph
Summary table for component orders	#55	Oliver
Control scenario of motors, number and type of linear measuring devices	#57	Roberto
PT100 or thermocouples?	#58	Roberto