

17th Summary of Meeting for S1-Global module design, Cryomodule and Cryogenics (20090721)

Date: 2009/07/21

Time: 22:00-23:00 (Japan Time)

Attendant: Jim Kerby, Tug Arkan, Paolo Pierini, Serena Barbanotti, Eiji Kako, Hirotaka Nakai, Hitoshi Hayano, Norihito Ohuchi

Agenda

1. Updated construction status of Module-C (Paolo Pierini)
2. Report of the meeting between FNAL and KEK for the S1-G FNAL delivery components (Jim Kerby)

Discussion

(1) Updated construction status of Module-C (Paolo)

- The gas return pipe is going to the milling machine.
- For including the additional parts of the cryomodule, T-shape pipes, the production has been arranged and confirmed.

• The A and B flanges attached to the T-shape pipe will be provided by INFN/Zanon.

Q: Where should these flanges be shipped, FNAL or KEK?

A: Once the flanges should be shipped to FNAL.

C: The procedure on the exports of T-shape pipes and flanges will be checked.

Q: How many are the T-shape pipes prepared?

C: Four.

(2) Report of the meeting between FNAL and KEK for the S1-G FNAL delivery components (Jim)

- See the Jim's meeting report.

• 14th sentence:

C: The connection adaptor between the FNAL LHe supply pipe and the KEK components locates at the upstream of FNAL cavities. The right situation is described with the slide by Norihito.

• 20th sentence:

Q: Is it possible that the INFN personnel would like to join the HTS testing of cavities AES1 and AES4?

A: Everybody is welcome.

Q: Can you describe the test schedule in detail?

A: Tug is now working on the schedule, and the schedule will be informed to the concerned people.

C: For the HTS test, August is too short, and September is reasonable.

Q: How is the present status of AES1 and AES4?

A: The AES1 is in the high pressure rinsing, and next week, the cold end of coupler will be installed. The AES1 will be installed in the HTS in August and be tested for collecting the technical data. In September, we can remove it from the HTS. The cavity will have the fixtures and it will be sent to KEK in October.

C: This cavity is useful for checking the various items in the STF infrastructure by KEK.

• 5th sentence:

Q: At shipping the cavities with the cold end of the main coupler, how do you support the cold end including a bellow?

C: There is a protection for the bellow. There already exists the procedure, and the procedure data can be down load from the web-page of Tug. Tug will distribute the drawings.

Q: Is there the experience of the vertical test of the cavity with helium jacket in FNAL?

A: The test is originally possible, and the study for this test in FNAL is no problem to complete this type of test. But at this meeting, there is no personnel for the FNAL cavity for discussing the details.

C: KEK cavity peoples would like to discuss the detail procedure of this vertical test with FNAL peoples.

• 16th and 17th sentences:

Q: FNAL will prepare the associated feed-throughs, and INFN will prepare the T-shape pipes and flanges. Is the feed-through welded to the flange?

A: The flanges are delivered from Zanon. The connector of the feed-through has an O-ring,

and these connectors are used in CM1 and CM2. The connectors, the cables and the flanges are very complicated, and then we need more discussion and communication in detail.

Q: How is it going in the DESY side?

C: We need the instrumentation document for DESY cavities.

• 21th sentence:

Q: How is the status of CM1 and CM2 ?.

A: CM1 is waiting for cooling, and the cool down of cavities will be done just before the end of 2009 calendar year. CM2 has the INFN blade tuner for cavities which are different from CM1. The blade tuner assembly will be planned from November to December this year.

C: Could you describe the schedule by documents?

C: At the next Webex meeting, it will be described with the test schedule of AES1 and AES4.

• 10th sentences:

C: We need the discussion about the alignment procedure for the cavity-string in the clean room.

Next meeting date

Meeting Date: 4 August 2009 22:00 (Japan time), 8:00 (FNAL), 15:00 (INFN and DESY)

Discussion items

- Report of works at Zanon (Norihito Ohuchi).
- Schedule of CM1, CM2, AES1 and AES2 (Tug Arkan)
- The others.