

Notes on visit to IKO/NIKHEF Institute, Amsterdam, Holland
on the 4th July, 1985.

Persons present : CERN : M. Hourican
NIKHEF : Mr. A. Vogel, Head of Mechanical Design Office.
Mr. H. Boerrookhuizen, Mechanical Engineer.

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The visit which took place on the 4th July, 1985 was to confirm the signing of the new CERN/NIKHEF contract for the final septum and also to discuss the design and manufacture of the final magnet.

It was confirmed that the contract (agreement No. K001/PS) had been approved and officially signed at NIKHEF and was on its way back to CERN.

The design and manufacture of the final injection septum was discussed under 3 main topics,

1. Provisional drawings and modifications.
2. Schedule of manufacture.
3. Material situation.

1. Provisional Drawings and modifications

The provisional drawings put forward by NIKHEF were received at CERN in early June. They were checked and corrected accordingly and discussed with NIKHEF. The outcome being that a new set of drawings will be completed incorporating all corrections and modifications, and these should be available at CERN in early August.

The modifications (with respect to prototype magnet) include :-

- a) Decreased curvature of the magnet to provide better horizontal centralisation of the beam, within the gap.
- b) Incorporation of a 1 mm gap in the strip line connection to enable extra insulation to be inserted.
- c) Modification of water connection to enable use of "Walther" type, quick fit couplings.
- d) Manufacture of mild steel template to carry out accurately the drilling of the magnet blocks for mounting the mu-metal magnetic screen. Previously, the screen had been found to have a poor fit on the magnet due to large tolerances when drilling the magnet blocks. The laminations (0.5 mm thick) allowed a hole position accuracy of ± 0.25 mm and since there are 26 fixing points it was necessary to improve the method.

- e) Alignment marks were (previous to visit), fixed on the theoretical axis of the beam. However, after discussions the surveyors at CERN will be consulted to advise on the optimum position for these points.
- f) The position of the supports is to be determined after discussions with M. Zanolli regarding the table and support design in the ACOL machine.

2. Schedule of manufacture

An approximate timetable of production etc. will be forwarded to CERN along with the new drawings within the first 2 weeks in August. This timetable will be for information only and no deadlines (official) will be based on it.

3. Material Situation

NIKHEF confirmed that enough material is in stock to produce the final magnet, apart from a small amount of ARMCO which is required to manufacture 4 thin end shims.

M. Hourican

Distribution :

B. Boileau
D.C. Fiander
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