

Summary of discussion held on 2.5.1983

Present : B. Boileau, F. Hoekemeijer, J. Schnuriger, P. Pearce,
A. Poncet, R. Valbuena.

Subject : Study of tank for ejection septum EPA.

- Tank design should start immediately.
- Design to be carried out through PS/ML channels: requirement which becomes compulsory if one thinks of applying the design for the PS.
- Every effort should be made to ensure standardization of this tank for EPA, future installation in PS, etc.
- The vacuum section strongly recommends the design of a round tank with standard flanges (particularly the end flanges, 400 mm Ø Wheeler?). Among other things this makes easier the appliance of vacuum firing (950 °C - 2 h) and will allow future baking in situ (if necessary).
- Pumping port for 400 l/s ion pump below, pumping port for turbomolecular pump on the side, 2³/₄" CF flanges for BAG and RGA, NW 40 KF for Penning gauge and NW 16 KF for Pirani gauge should be incorporated in design.
- The tank will be lifted up and sideways from beam line for installation, repair and adjustments on the septum magnet.
- Joint développement of a UHV compatible magnet.

The vacuum and septasections have agreed on the following points:

1. Magnet cores prior to final mounting should be vacuum degassed at highest permissible temperature.
2. A priori, provision should be made in the design for eventual in situ bake-out.

In the light of these two points, the following tests are under way; outgassing rates are or will be obtained in accordance with the following matrice.

	Magnet sample with Kapton foils	Magnet sample isolated with Carlite	Copper conductor Kapton isolated (with PTFE bonding)
no pre-treatment	done $3.5 \cdot 10^{-6}$ t1/s after 100 h of pumping	X	X
pre-treatment 150 °C 24 hrs	done $1.7 \cdot 10^{-7}$ t1/s after 100 h of pumping		
pre-treatment 300 °C 24 hrs	to be done X	X	X

F. Hoekemeijer

A. Poncet

Distribution :

Participants

P.L. Riboni

B. Szeless