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Preparation for the new phase of EST production at LPI, Moscow

- LPI group agrees with the changed sizes of the holes and notches on the EST boards and hopes they will help to solve present problems of relative shrinkage of kapton and Cu.

- LPI group starts this new phase of EST production in the framework of cutting technology (planning to produce electrodes for 3 front and 3 rear modules) with gradual transition in future to the elements of punching technology.

- Modification of tooling at LPI accounting for the enlarged sizes of the holes on EST boards with the goal of using first cutting technology can be done rather quickly (2-3 weeks) that is practically by the end of December, beginning of January.

- Possible begining of the new EST production can be planned for the second part of January 2000.

- To ensure the quality check of the EST board shrinkage in cold (with respect to Cu) we are building now at LPI a special bath (with Cu-plate placed at its bottom) to be filled with liquid nitrogen for the full size electrode testing. Cu-plate (cut in size) and corresponding spacers will be provided by Dubna.

- The bath is in a well advanced state and will be finished in about 10 days. The bottom of the bath (underneath the Cu-plate) will be equipped with two openings (taps) to fill in and empty the bath. Several temperature sensors are envisaged to control the cooling down and heating the bath. For the last operation a small heater will be installed. Temperature sensors will be provided by Dubna.

- As a first step to test the bath and check to what extent new sizes of EST board match the real geometry of the module in cold we plan to carry out experiments with the previously produced EST boards (made from DuPont kapton) deliberately enlarging their hole sizes. In future this bath will be periodically used for QC for each new party of glue covered kapton.

- The planned production rate at LPI will be 40 EST boards/week or 48 EST boards/week, if we work 6 days per week.
  We assume that the possible recipients of the electrodes will be in the beginning Protvino and Dubna groups.

- Our possible reserve in the production rate - the increased number of simultaneously glued EST boards (using extra rubber mats recently received from TRIUMF). This regime is not yet tested.