

A Time Projection Chamber (TPC) is a candidate for the central tracker for the ILC detectors because of its very good performance in past collider experiments. In order to obtain an order-of-magnitude improvement in momentum resolution and the highest possible track-recognition efficiency, the Linear Collider TPC (LCTPC) groups are pursuing R&D to find the best state-of-the-art technology for the TPC.

Three MPGD TPCs described in the ILC Reference Design Report have the dimension of 2.8 - 4 m in diameter and 3 - 4.6 m in length. They are to provide 200 space points along a particle track with the  $R\phi$  spatial resolution of 100  $\mu\text{m}$  or better. The momentum resolution of  $\delta(1/p_t) \leq 0.5 \times 10^{-4}(\text{GeV}/c)^{-1}$  is envisaged in the magnetic field of 3-4 T.

To realize the excellent space resolution of 100  $\mu\text{m}$ , a TPC with Micropattern Gaseous Detector (MPGD) readout instead of the Multiwire Proportional Chamber (MWPC) readout is needed. The MPGD under consideration are Gas Electron Multiplier (GEM) and Micromesh Gas detector (Micromegas).

A Large Prototype (LP) of a TPC is being constructed, which will have a diameter of about 750 mm and a length of about 600 mm, which allows to measure tracks with up to 50 space points. This prototype will fit into a superconducting magnet, installed in a DESY test beam area.

A description of the setup as well as the production and commissioning of the LP will be given.