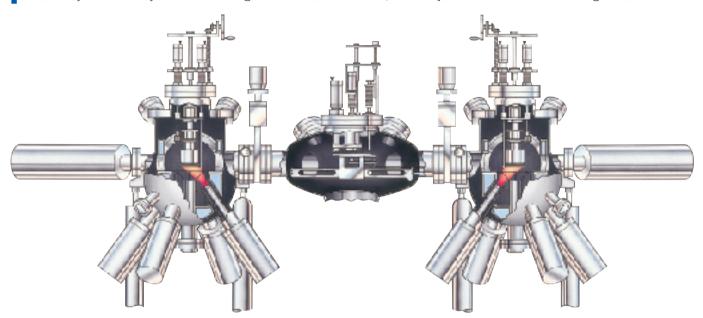
MBE system

Extension for Multi-Chamber

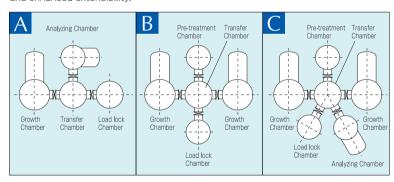
Combined system of multi-chamber MBE (RC2100M) plus MOCVD (SH2001)

An ultra high vacuum transfer chamber incorporating a three-step extendable arm transfer system is equipped at the center. Connected around the transfer chamber are multiple independent growth chambers, which constitute a consistent ultra high vacuum system. The system allows the growth of hetero materials, and analysis and evaluation in ultra high vacuum.



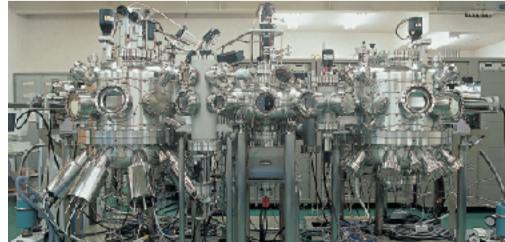
Extension for Multi-Chamber

The use of the arm transfer system enables the upgrade of the system to the multi- chamber of a satellite configuration, thereby contributing to the space-saving and enhanced extensibility.



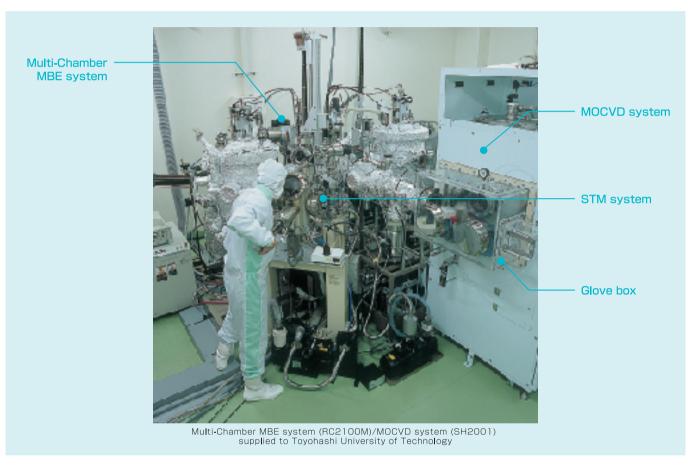


This arm transfer system for ultrahigh vacuum is based on the EpiQuest's know-how accumulated for years. It has three-step arm, which can rotate, expand and contract in an ultrahigh vacuum, and convey samples in every direction (360-degrees). The system has been adopted in commercial production facilities and it has also been proven in a number of research laboratories.



Multi-chamber MBE system for GaN, supplied to Sophia University

In this system, an MBE system for Si MBE growth and a compound semiconductor MBE system are connected by means of the transfer chamber that incorporates rotation, expansion and contraction arm transfer system, and further, they are connected to the compound semiconductor MOCVD system by means of a vacuum lorry. This configuration enables growth of different types of materials that uses both MBE and MOCVD systems without exposing the materials to the atmospheric air. In addition, an STM chamber is also connected to the transfer chamber located on the multi-chamber side, and thus we can analyze the surface immediately after the growth.



System layout

