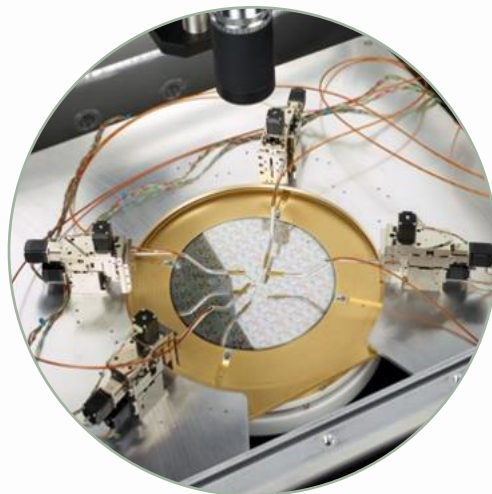


SUCCESSFUL APPLICATION: HIGH VOLTAGE VACUUM - 1220



Specific Requirements:

The customer needed a highly flexible, multi-purpose 300 mm manual vacuum probing system that would get used for device characterization in open air and under vacuum applications up to 10 kV. It would be used to test lateral and vertical devices.

SemiProbe Solution:

- PS4L M-8 manual 300 mm probe system:
 - Triaxial 300 mm gold plated chuck – can be used in triaxial mode up to 3 kV or in coaxial mode up to 10 kV. It supports both lateral and vertical devices.
 - Universal mechanical clamping mechanism for single die, partial wafers, and whole wafers up to 300 mm.
 - PILOT Software Suite – Navigator, Wafer Map and Autoalign
 - TMV vibration isolation table
- Vacuum chamber:
 - Large chamber door for easy wafer loading and unloading
 - Removable chamber top plate for open-air device characterization applications
 - Agilent vacuum pump and MKS control system allowing a vacuum level of 10^{-5} torr
- Microscope:
 - Large travel gantry
 - Programmable long working distance optics with 300 mm working distance
 - CCTV system
- Four programmable manipulators with coaxial, triaxial and high voltage (10 kV) probe arms:
 - Manipulators can be controlled remotely via software or the joystick controller
 - Designed to be used in an open air as well as in a vacuum environment
 - Designed to accommodate a variety of probe arms – coaxial, triaxial, kelvin, high frequency, high power (high voltage, high current), optoelectronic and more
 - Small footprint