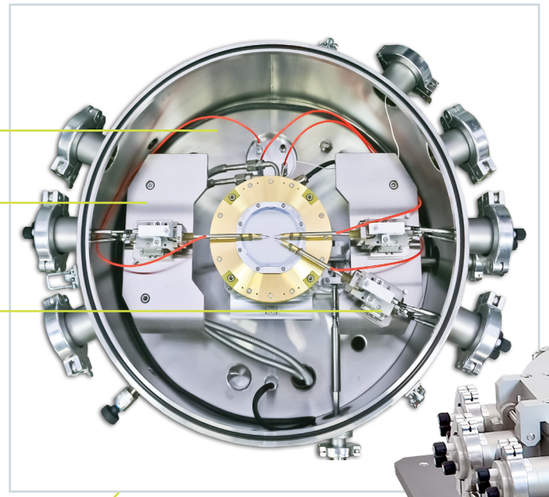
Cascade

PLV50

Cost-effective Manual Wafer Probing in High-vacuum Environment



Probe platen
- Contact-separation z-movement for step and repeat capability
- Accommodates up to six positioners

Chuck stage
- High-precision, linear two-axis stage for high throughput
- XY travel up to 100 mm
- Easy to control from outside the chamber
- Wafer/sample size up to 150 mm
- Optional triax add-on for accurate measurements over chuck

Positioners
- Placed in the chamber chamber for excellent mechanical stability
- Easy to operate from outside of the chamber
- Linear backlash-free movement
- Reliable and repeatable contact

Measurement setup
- Configurations available with the following options
  - Four RF and two DC probes for RF measurements
  - Four DC probes for I-V measurements
  - Two DC probes for C-V measurements
  - Optical fiber
- SIGMA™ integration for excellent measurement accuracy

Thermal chuck system
- Thermal chuck controller ensures temperature accuracy
- Thermal chuck chiller unit for temperature range from -60°C up to 300°C

Microscope
- Zoom microscope on boom stand with camera and illumination
- Video monitor

Vacuum chamber
- Wide pressure range from atmospheric to high vacuum (< 1 x 10^{-4} mbar)
- Hinged chamber lid for easy access
- Space for cabling and additional electronics inside
- DC and RF electrical feed through flanges

Vacuum control
- High-vacuum pump unit for pump and controller
- Turbo-molecuar pump directly connected to the chamber

Vibration-isolated mainframe
- Pneumatic vibration dampening
- Rigid framework and base plate