



SEMIPROBE®

Test • Inspect • Innovate

SUCCESSFUL APPLICATION: DEVICE CHARACTERIZATION - 0215



Specific Requirements:

The customer is a wafer foundry and required a modular, flexible and configurable 300 mm fully automatic probe system that could test small and large lots of 200 mm and 300 mm wafers. The designed probe system would be used in applications ranging from R&D to production. The system was completely enclosed and equipped with a HEPA filtration system. The system had to have high magnification optics with a camera system. The system had to provide the ability to use probe cards and individual programmable manipulators.

SemiProbe Solution:

- PS4L FA-12 Fully automatic 300 mm probe system:
 - 305 mm x 305 mm programmable X, Y, Z and theta stage and control electronics
 - 300 mm standard wafer chuck with retractable lift pins
 - PILOT Software Suite – Navigator, Wafer Map and Autoalign
- Compound microscope bridge with programmable microscope movement (50 mm x 50 mm) X, Y and Z with an additional 50 mm of a pneumatic Z
- Compound optics and CCTV system
- Four programmable manipulators with a variety of probe arms: coax, triax and high frequency
- Probe card holder
- Dark box with a pneumatic door opening for the MHU and a HEPA filtration system
- Material handling unit (MHU): two 300 mm FOUPS and 200 mm cassettes. MHU has a pre-aligner, scanner, a paddle and an enclosure.