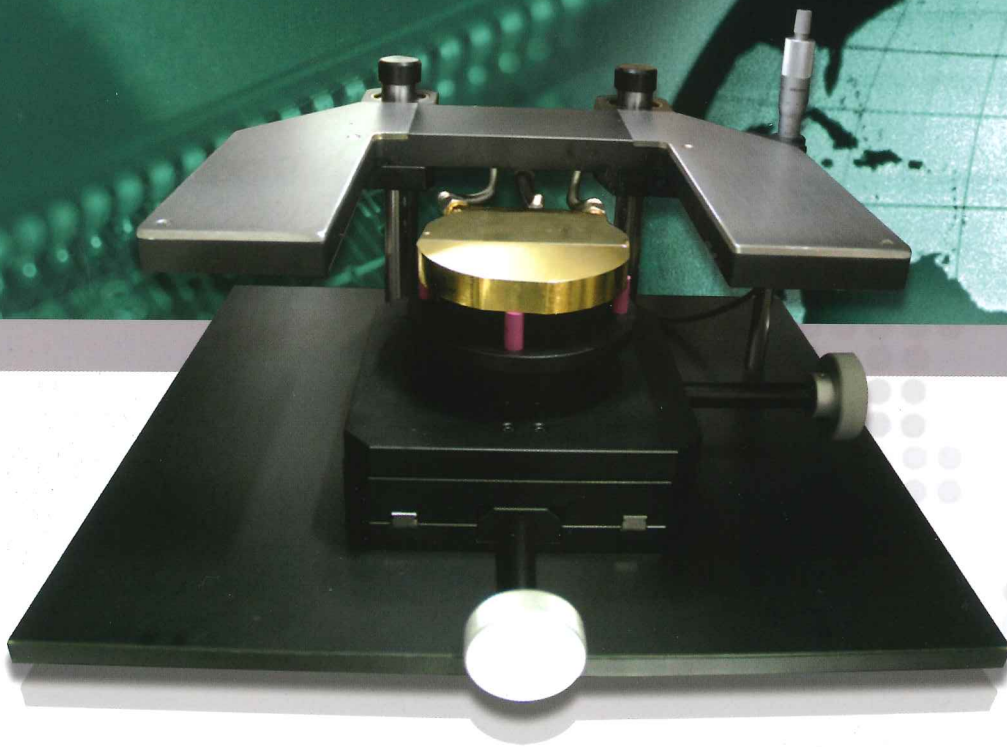


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Probe Station



Probe Station is test system which is used to get the electrical characteristics of semiconductor samples , such as I-V and I-R properties of semiconductor wafer or device.

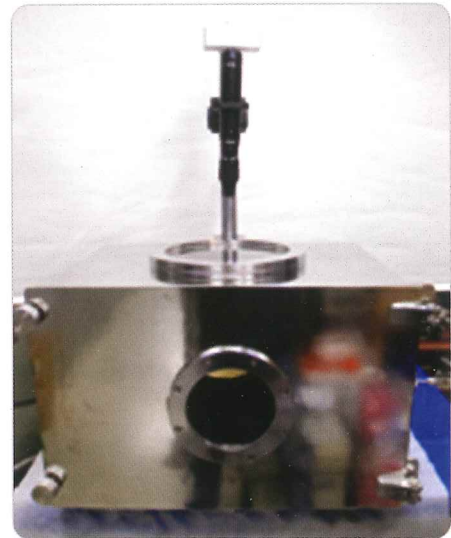
It can make it possible to probe even micro distance and contact on semiconductor sample by using microscope and manipulator.

Model No: ETCP-1000

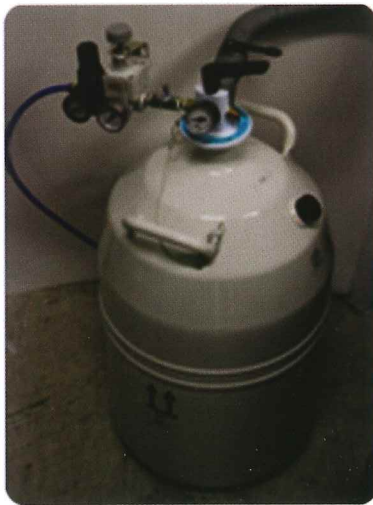
Heating and Cooling System



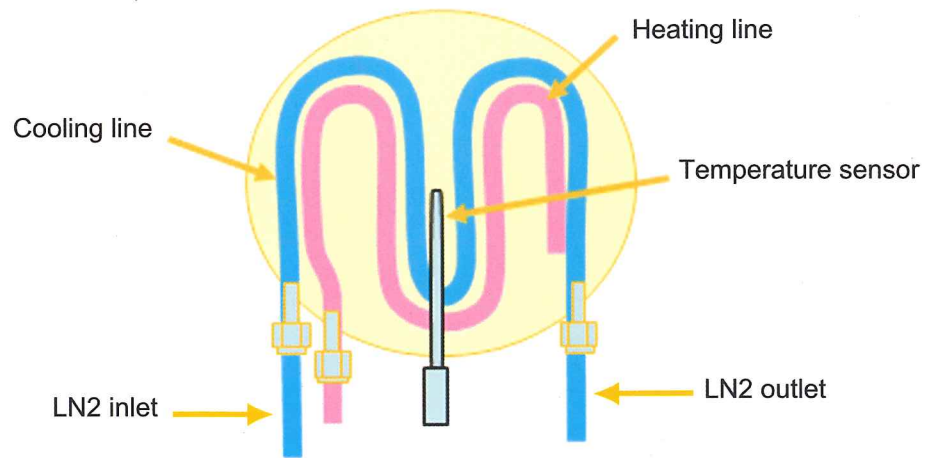
Probe station and chamber inside



Vacuum chamber view



LN2 container

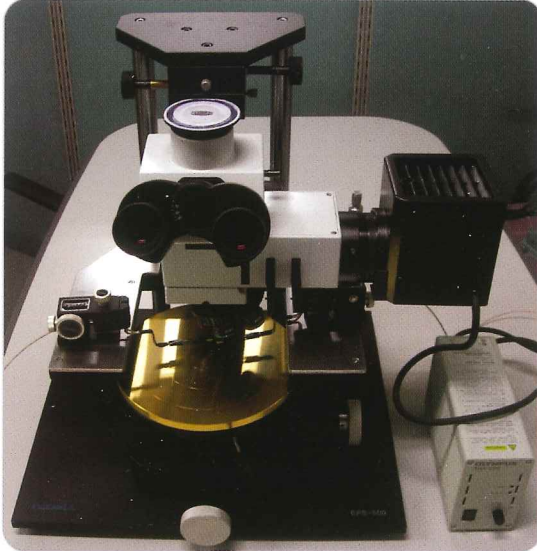


Heating and cooling chuck



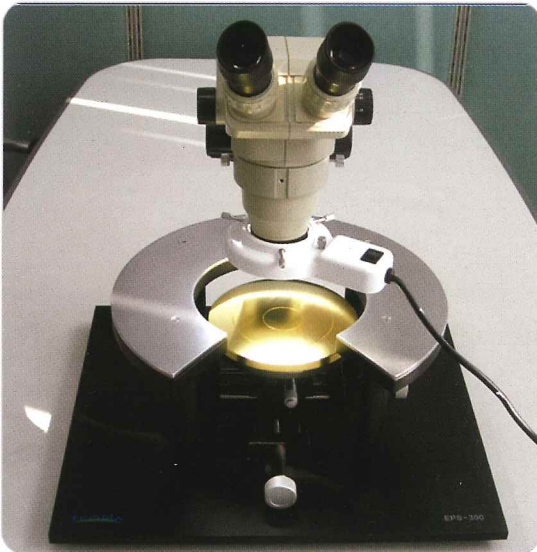
Temperature controller

- 1) Heating & Cooling Chuck
 - Variable Temp : 80K~500K),
 - Resolution : +/- 0.1°C
- 2) Vacuum Chamber to have enough room to make LED testing system inside of chamber.
- 3) Semi-Auto type Manipulator operated by motorizing system (Option)
- 4) Glass window that make it easy to see through in Vacuum chamber.
- 5) Useful connector that installed at the chamber wall, to make feed-through which can make it easy to apply DC,RF signal.



Model No : EPS500 (High quality microscope)

- Reasonable price and compact design
- 4~ 8 inch chuck can be installed.
- RT ~ 300°C heating chuck as option.
- 0 °C ~ 300 °C heating and cooling chuck as option
- High quality BXM microscope (Olympus) was installed.



Model No : EPS300

- Reasonable price and compact design
- 4 inch, 6 inch chuck alternatively.
- RT ~ 300°C heating chuck as option.
- 0 °C ~ 300 °C heating and cooling chuck as option
- Max 6 manipulator can be installed.

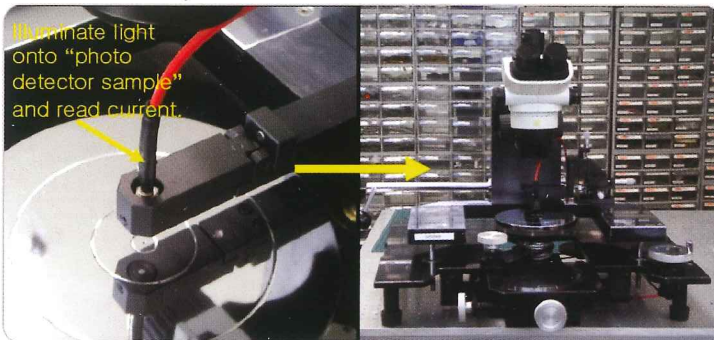
Microscope

- We can provide more various microscope as per customer's request, from reasonable price to high quality microscope, such as Olympus.
- Magnification : x 90 ~ x 1,000
- CCD (option)

Custom-made system

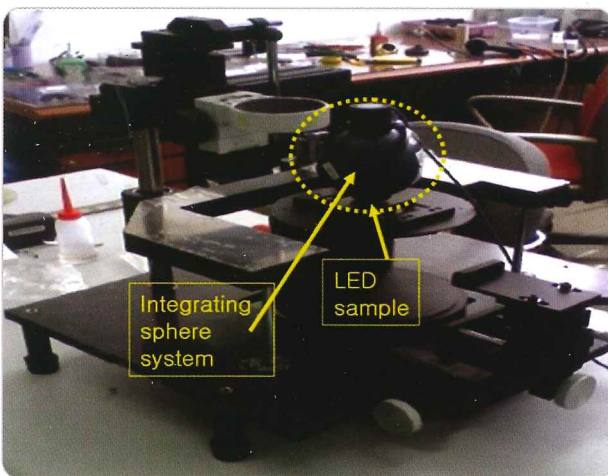
We have made and installed various "custom-made" systems, and we introduce below two systems, although below two systems are not the all that we have, and we have mores...

If you are interested in decorating your own system to meet your needs, please do not hesitate to contact us.



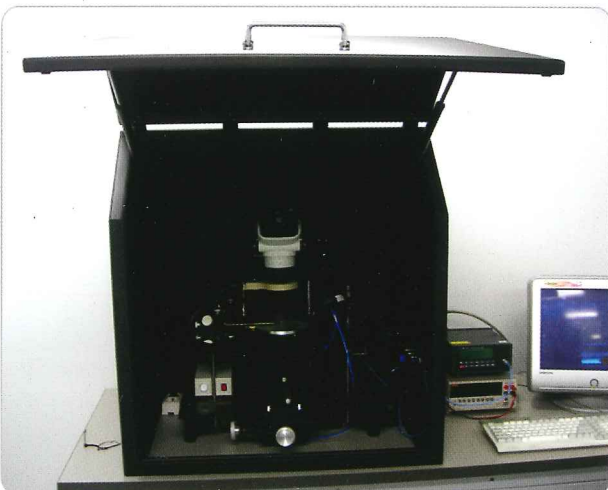
"Photo detector" test system with probe station

- By using Optical power and cable.
- Illuminate light onto "photo detector sample" and read "current".



Integrating sphere system with probe station.

- Integrating system can be put on either sample's above or below as per user's request.
- Very useful testing system for optical characteristics (Spectra, Light Intensity) of the LED chip, Lamp, SMD Type



Dark Box

- Size : 750 x 660 x 660 mm
- Material : Steel
- We can provide various size of dark box as required customer's needs.

Isolation table

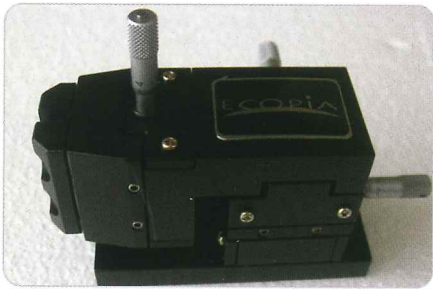
- Anti-vibration table
- We also can provide anti-vibration table as required customer's needs, although the image was not loaded in this page.

Manipulator

As one of the most important part in Probe_Station, manipulator is an accurately probing system that can probe even micro distance(μm) and contact on the electrode of semiconductor wafer, device. ECOPIA's Manipulator is very easy to use and probe arm's elastic plate function as protecting sample's surface, from damage during Z axis movement.



Model No: EMP-7



Model No: EMP-9



Probe arm with BNC cable



Probe arm with Triaxial cable

- ① X.Y.Z travel: 10 x 10 x 10mm
- ② Probe arm Holder
- ③ X, Y, Z Fine motion control($5\mu\text{m}$ /pitch)
- ④ Manipulator frame body
- ⑤ Probe Arm (Elastic plate)
- ⑥ Magnets for firmly fixing manipulator onto probe station's base unit.
- ⑦ Probe tip assembly
- ⑧ Electrical noise: Less than 300fA.



Probe tip



Technical specs comparison among standard models

	EPS300	EPS500	EPS1000	Remark
1) Chuck size	4inch (100mm)	6inch (150mm)	6inch (150mm)	8 inch (200mm) chuck is option
2) Microscope Mount X.Y Stage	O	O	O	Option
3) Microscope	X 90 ~ X 1,000	X 90 ~ X 1,000	X 90 ~ X 1,000	Option
4) CCD camera	O	O	O	Option
5) Chuck rotation	N/A	360° rotation	360° rotation	
6) X,Y, Z travel	X : 50mm Y : 50mm Z : 12mm	X : 100mm Y : 100mm Z : 25mm	X : 100mm Y : 100mm Z : 40mm	
7) Heating chuck (RT~300°C)	O	O	O	Option
8) Heating chuck (0°C~300°C)	O	O	O	Option. Heating & Cooling capability.
9) Size and Weight	Similar with EPS500	450 x 500 x 550 (mm) 13~15KG	575 x 485 x 430 (mm) 27KG	It may differ as per option specs.