Model 802B MDC MERCURY PROBE

1. Set the probe arm (**Load position**) towards the rear of the unit. Both LED’s on the control box should be off. The vacuum pump is off.

2. Load your sample with the side to be contacted **facing down** the sample must completely cover the outer vacuum ring. Please use plastic tweezer when loading or unloading wafer, use of metal tweezer will damage the plastic measurement surface.

3. After loading your wafer, set the probe arm in vertical position (**Purge position**) for ~3second for proper purging. The **Red LED** on the control box should be on and the pump is on.

4. After purging, set the probe arm to the front of the unit (**Measure position**). The **Blue LED** on the control box should be on. The applied vacuum holds the wafer and draws mercury up the capillaries to contact the sample.

5. Check to the vacuum regular is set to 10inch Hg or 0.3Bar.

6. The center contact diameter is calibrated to be 753um.

Since the sample to be measured is placed upside down on the measurement platform, the BNCconnector on the top contact arm is the substrate contact. The lower BNC terminals connect to themercury wells and are the probes. The BNC connector in the center of the base casting makes contact to the mercury dot. The other connector makes contact to the mercury ring. See the diagram below.

![Diagram](image)

Connect the BNC connectors to your CV measurement setup and do the measurement.

After you finish the measure, set the probe arm to (**Load position**) towards the rear of the unit. Unload your wafer with plastic tweezer. **Cover the platform with a piece cleanroom wipe to protect the surface.**