# Wafer hotplate system

Hot Plate Dedicated Solution Designed for R&D, Laboratories and Small Scale Production.QICEQUIP manual hot plate HP8 has been developed specifically to meet the requirements of R&D work and small scale production. The 220 mm hot plate (QC-220) offers homogeneous temperature distribution as well as heating ramps with high repeating accuracy to ensure constant and stable process results.The Hot Plate is a table-top, semi-automatic baking system for single-sided baking of wafers for Pre-bake, Soft Bake, Primer Vapor and Hardbake processes.

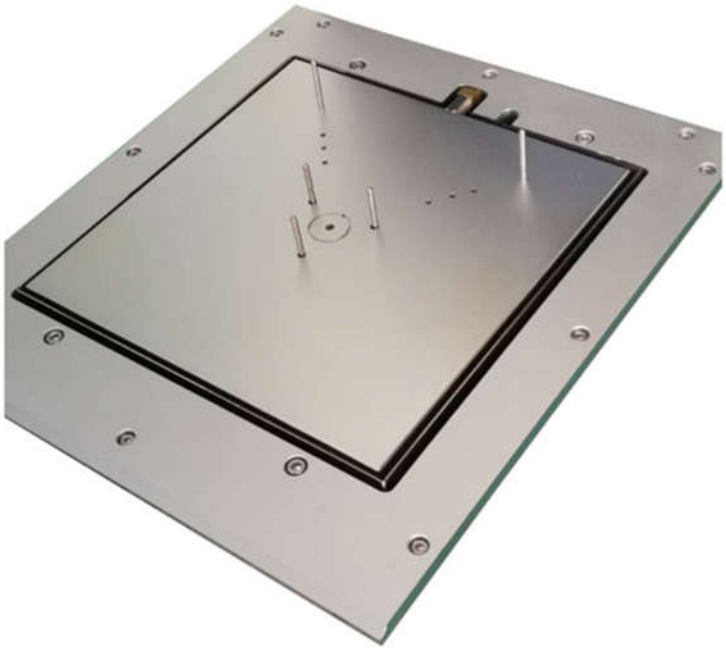
## Highlights

1.Up to 200 mm substrates round or 6″ square

2.Homogeneous temperature distribution

3.Fast heating

4.High-performance protection coating of hot plate surface



Heating plate module[/caption]

5.Easy to use graphical touch screen interface

6. Programmable heat-up rate (via dedicated touch panel controller)

7. Vacuum baking glue: reduce photoresist organic combination of voids, improve the electrical characteristics of the product and bonding performance, vacuum environment can also reduce the risk of oxidation of the product and glue, further enhance the quality of baking glue.

8.Multi-station design for simultaneous heating of multiple wafer, the piece through the PIN lift to achieve the same heating time for all wafer, to overcome the process instability caused by manual clamping wafer.

## Technical parameters

1. Substrate size: up to Ø220 mm (Ø 8”) or 220 x 220 mm (8 x 8 inch)

2. Temperature Range: up to 400° C*, adjustable in 1° C steps

3. Accuracy of temp.: < ±1° C at 100° C

4. Lifting pins (one set): Ø50 mm (Ø2”) up to Ø220 mm(Ø8”) or 220 x 220mm (8 x 8 inch)

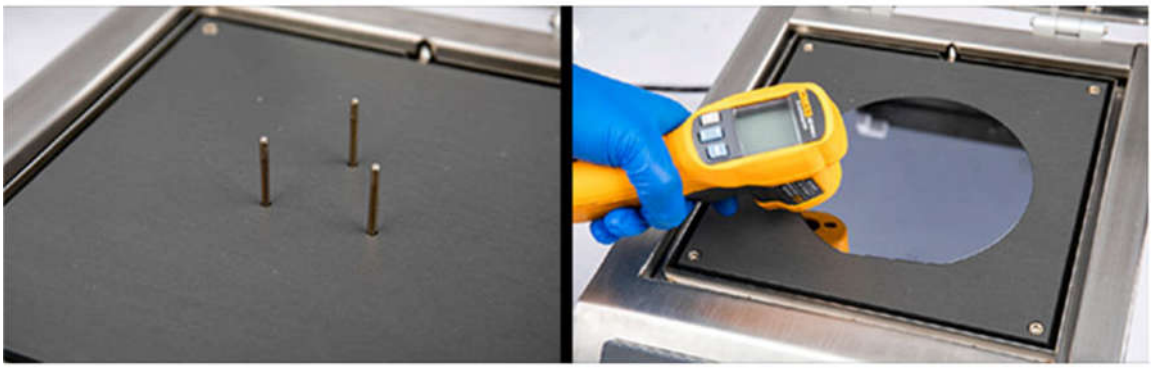
5. Hotplate surface: made of hard anodized aluminum

6. Hotplate cover: made of micropolished stainless steel

7. Table-top housing: made of PP white

8. Controller unit: 7inch touch screen

9. with top PEEK tips max. 250° C and HMDS-priming max. 120° C

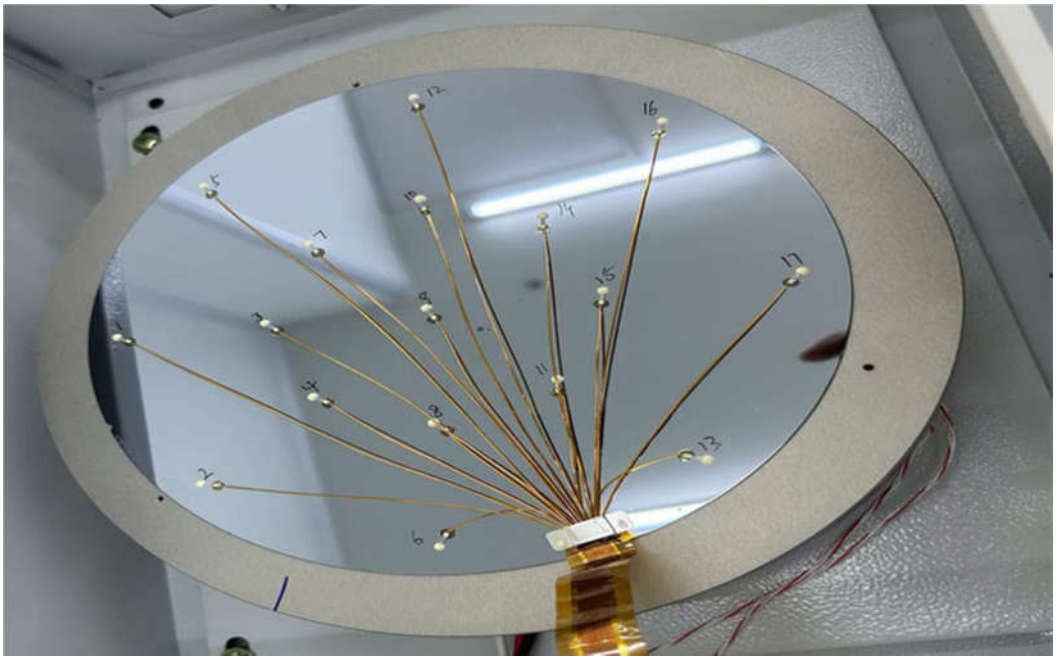


Bake Plates Temperature Test

Programmable heating ramp (with dedicated touch panel controller)

To aim for best in class temperature distribution QICEQUIP QC-220 doesn’t rely on conventional heating cartridges. Instead, several meters of heating coils are arranged within the base plate in a process proven pattern. This avoids hot or cool spots and ensures a uniform temperature distribution. The hot plate is specifically coated for increased mechanical and chemical resistance and easy cleaning.

The tool is offered in three different housings (bench mount, table top and stand alone) and can be conveniently controlled through a dedicated touch screen controller. If combined with the coat and develop platform QC-08, the QC-220 can be optionally controlled using the same touch screen PC as the QC-08. The table top and bench mount version fits the QICEQUIP LabSpin series nicely as well in size and look & feel.



Semiconductor wafer bake plates

Not only the form factor and control possibilities offer high flexibility, but the variety of available options such as lift pins, proximity bake and nitrogen purge perfectly adapt to the daily lab needs.

The hot plate is equipped with lift pins as a standard, which permits convenient and safe substrate handling. The proximity option allows setting of the distance between substrate and hot plate surface by a micrometer, thus, giving a broad capability of processing options. The flow rate of the nitrogen purge option can be manually adjusted and is indicated by a digital display. Nitrogen purge and vacuum suction of the substrate can be individually selected for each step in the recipe editor. The closed double walled lid, ensures stable process conditions and prevents accidental touching of the hot surface by the operator.

Vacuum Baking Tray Equipment

Main Configuration:

Matching vacuum pumps, valves, pressure gauges, temperature control boxes, pipelines and interfaces to ensure stable operation and efficient performance of the equipment.


Spin coater

The temperature modules are desinged for single-sided baking of substrates, used for pre- and post-bake or dehydration-bake processes. Especially for the priming with adhesive (HMDS; Hexamethyldisilazane) osiris offers hotplate modules for vapor priming or vacuum drying. Baking modules with electronic, programmable lifting pins are equipped with a touch screen for operation. The software provides simple and convenient process control and recipe creation. A user-friendly and self-explanatory interface underlines the ease of use and makes process flows controllable at any time. These temperature modules are available in different versions as bench mounted, tabel-top or stand-alone unit.