

# heating.

laboratory-hotplate for temperatures from 40° - 200°C

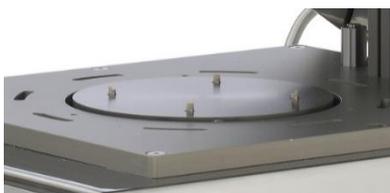
The compact amcoss laboratory-hotplate is the perfect, flexible device for single process steps or for small-lot production of substrates sizes between 2" and 8" in R&D laboratories.



## Beneficial standard highlights\_

The usage of high-quality, standard industry-components ensures reliability in operation, long lifetime, good serviceability and a very attractive price-performance-ratio.

- // One hotplate for different wafer and substrate sizes (2", 3", 4", 5", 6" and 8") and even special substrate specifications (square, rectangular, etc.)
- // Optimal temperature uniformity: 40° - 120°C → +/- 0,5°C and 121° - 200°C → +/- 0,5%
- // Efficient exhaust which can be adjusted manually without difficulty
- // Standard fixed proximity of substrate to the hotplate surface is 150μ



// The hotplate is equipped as standard with 4 lift pins which hoist the wafer by pushing it at the backside. This simplifies removal of the substrate.

// 6 program recipes can be selected and adjusted (nominal temperature and processing time) directly on the integrated touch screen.

// The temperature control display enables monitoring of the process temperature at any time of the heating process. If the hotplate is equipped with additional cover heating, the upper control switch allows flexible setting of the temperature of the cover heating.

# SOPHISTICATED

## Additional features, extra value\_

Knowing about the differing needs and requirements of our customers, flexibility in the configuration of the amcoss laboratory-hotplate is our utmost priority. By offering a multitude of additional features which can be chosen and combined individually each customer will get an individual hotplate device.

- // **Cover heating:** the temperature of the additional cover heating can be set easily and controlled directly through the temperature control module, but it can also be turned off completely with the ON/OFF switch. So our customers get a compact 2-in-1-device for more flexible applications.
- // **Edge handling:** special edge lift pins will touch the wafer only at the outer edge, while lifting it from the hotplate.
- // **Electronic exhaust alarm and display:** serves as a control system for the standard exhaust.
- // **Customized proximity:** each individual substrate proximity is selectable.
- // **Gas-purge:** if an inert gas atmosphere is needed for special processes the gas-purge option can be switched on.
- // **Vacuum chuck:** full contact of substrate to the hotplate with vacuum chucking.
- // **ESD chuck:** clamping of the substrate to the hotplate with an electrostatic chuck.

Different hotplate options:

- // **Multizone hotplate:** improves temperature uniformity noticeably as compared to the standard.
- // **High temperature hotplate:** heats up to a temperature of 450°C.
- // **Ceramic hotplate**



Special ceramic hotplate



Ceramic hotplate with wafer

## COMPONENT OVERVIEW

- 1 Hotplate (optional: multizone, high temperature or ceramic hotplate)
- 2 Cover heating (optional)
- 3 Lift pin impetus
- 4 LCD touch panel for the programming of the 6 recipes
- 5 4 wafer lift pins
- 6 Temperature control module

