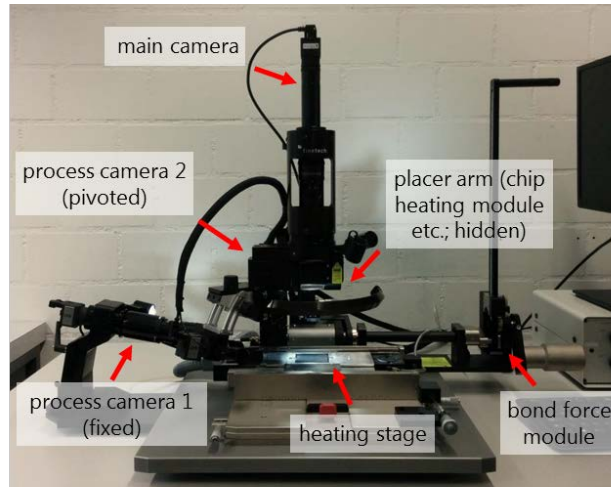
Empa
Materials Science and Technology

Manual flip chip bonder (Fineplacer® pico ma)

Empa Department 202, Joining Technologies and Corrosion

Typical Applications

- Development of novel joining procedures
- Process development (thermo-compression, thermosonic bonding, etc.) for follow-up automated processes

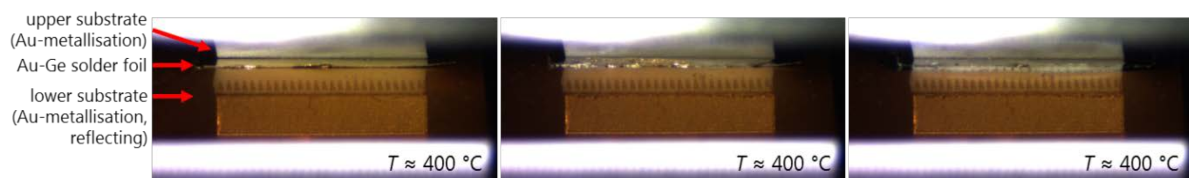


manual flip chip bonder

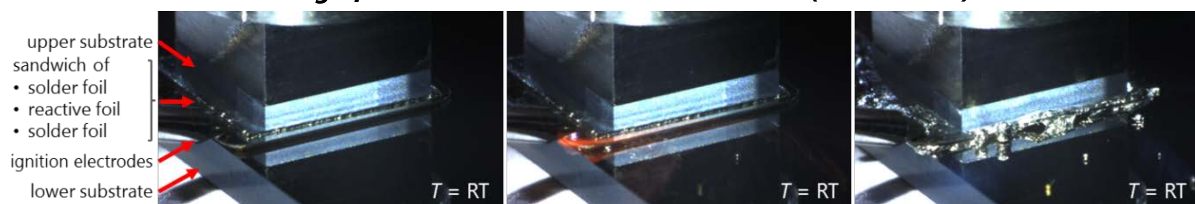
Specifications

- Lateral accuracy down to 5 µm
- Substrate heating stage & chip heating module (each up to 480 °C with max. 20 K/s)
- Bond force module (max. 100 N)
- Ultrasonic module
- Protective gas atmosphere
- Several process cameras

Application examples



soldering of Al2O3 with Au-Ge solder at 400 °C (Te = 361 °C)



joining of borosilicate glass with reactive foils at room temperature

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