

Education  
R&D

ACCURA  
Flip-Chip Bonder  
100



## Automatic Flip-Chip Bonder

± 0.5  $\mu\text{m}$   
POST-BOND  
Accuracy\*  
1 to 1000 N

### High repeatability & low to high force

#### Applications

- Optoelectronics
- Photonics
- High frequency
- Flip-chip, die attach
- Chip-to-chip, chip-to-substrate, chip-to-wafer
- Laser diode, laser bar
- VCSEL, photodiode
- LED
- Micro assembly
- MEMS, MOEMS, MCM

#### Markets

- Medical
- Telecommunication, 5G, 6G
- Scientific
- Automotive
- Defense
- AI
- VR

#### Materials

- Gold
- Gold/Tin
- Indium
- Copper
- Adhesive

#### Bonding processes

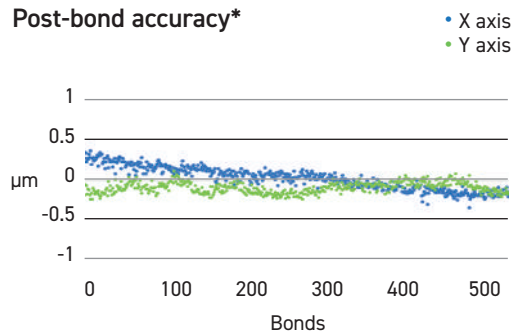
- Flip-chip bonding
- Die bonding, Pick-and-place
- Thermocompression
- Thermosonic
- Reflow
- UV curing
- Adhesive bonding
- Sintering

# Automatic Flip-Chip Bonder

# ACCURA

Flip-Chip Bonder  
**100**

## Post-bond accuracy\*



## User benefits

0.5 µm post-bond accuracy thanks to 0.1 µm alignment accuracy

Open platform associated to an intuitive interface results in a quick set-up for new applications

Robust design and closed loop systems guarantee a high repeatability in operations

High precision and low to high force for multiple applications and processes

## Specifications

### Machine

Footprint	900 x 1300 mm
Height	2080 mm
Weight	~ 600 kg

### Component size

Chip (Upper die)	0.2 x 0.2 - 50 x 50 mm
Substrate (Lower die)	0.2 x 0.2 - Ø 200 mm
Total thickness	0.03 to 10 mm

### Bonding arm

Alignment accuracy*	± 0.1 µm
Post-bond accuracy*	± 0.5 µm
Force	1 to 1000 N

### Alignment stage

XY stage	Motorized
Theta travel	± 5°

### Bonding heads

Room temperature	Sq. 22 or 50 mm
Heating	Sq. 22 or 50 mm, 450°C
Ultrasonic	90 kHz
UV	80 mW / cm <sup>2</sup> @ 365 nm

### Substrate chuck

Room temperature	Sq. 22, 50, 100 or Ø 200 mm
Heating	Sq. 50 mm (450°C), 100 mm (350°C) Ø 200 mm (350°C)

### Optics

High resolution microscope	Superimposed images
Field of view	900 x 700 µm

### Options

Dispenser	Ionizer bar
UV Curing system	Flux or dipping station
Face up station	Automatic calibration
Process recording	Automatic alignment

\*Depending on configuration, application and operator

Data, design and specifications depend on individual process conditions and can vary according to equipment configurations. Not all specifications may be valid simultaneously. Illustrations, photos and specifications in this datasheet are not legally binding. Specifications are subject to change without prior notice.

**set**   
Smart Equipment Technology

**SET Corporation S.A.**  
131, impasse Barteudet  
74490 Saint-Jeoire - France  
+33 (0)450 35 83 92  
info@set-sas.fr  
[www.set-sas.fr](http://www.set-sas.fr)