

Panasonic IC Assembly System catalog

2015

FLIP CHIP BONDER



- Contributing to cost-effective production (high yield, high throughput) of high value-added devices
- Easy bonding tool exchange by customer for process exchange
- Achieving high-speed and high-accuracy bonding through low-gravity point and weight saving of bonding head
- Flip chip bonder for $\phi 300$ mm wafer supply

Model ID
MD-P300
Model No. NM-EFF1C

| | |
|-----------------------|---|
| Model ID | MD-P300 |
| Model No | NM-EFF1C |
| Productivity *1 | C4 : 0.67s/IC (including dipping motion), Thermosonic : 0.70s/IC (including US process time of 0.2s) |
| Placement accuracy *1 | XY (3 σ at PFSC conditions) : $\pm 5 \mu\text{m}$ |
| Substrate dimensions | L 50 mm \times W 50 mm to L 330 mm \times W 330 mm (Heating specifications : L 330 mm \times W 220 mm) |
| Die dimensions | L 1 mm \times W 1 mm to L 25 mm \times W 25 mm (Thermosonic : L6 mm \times W 6 mm) |
| Number of die types | Up to 12 product types (AWC specifications) * 1 nozzle type |
| Die supply | Wafer frame 12 inches (Option : 6 inches, 8 inches) |
| Bonding load | VCM head : 1N to 50 N (Option : 2 N to 100 N) |
| Head heating | Thermosonic : Up to 300°C |
| Substrate heating *2 | Constant heating, Up to 200°C (Heating bonding stage specifications:Max. substrate size L 330 mm \times W 220 mm) |
| Power source *3 | 3-phase AC 200V \pm 10V, 50/60 Hz, Up to 4 kVA (Up to 7 kVA for heating specification) |
| Pneumatic source | 0.5 Mpa, 30L/min (A.N.R.) (Up to 150 L/min for full-featured machine including cooling air) |
| Dimensions | W 1 380 mm \times D 1 640 mm \times H 1 430 mm (without loader / unloader) |
| Mass | 2 300 kg (without loader / unloader) |

*1:The described productivity and placement accuracy may differ depending on the conditions of use.

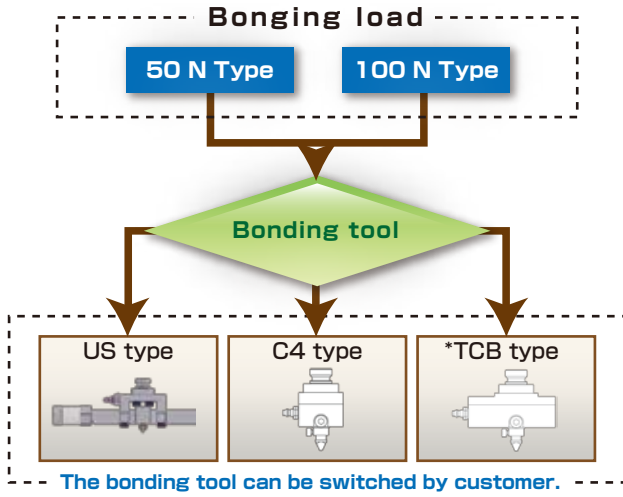
*2:Maximum setting temperature differ depending on the maximum substrate size. Please contact us individually.

*3:3-phase 208 / 220 / 380 / 400 / 415 / 480

For details, please refer to the specification sheet.

Easy process exchange

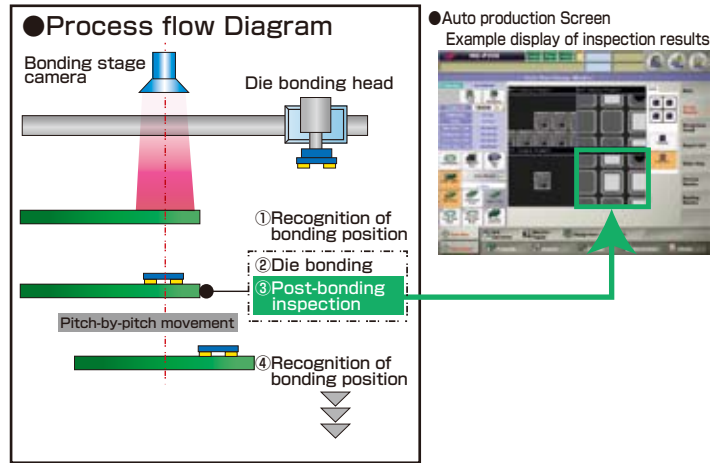
Bonding processes are available by switching the bonding tools, which can be done by the customer under the configuration of C4 dipping unit.



*Constant heating : Please contact us individually.

Real-time Inspection

The Bonding stage camera enables post-bonding inspection right after the die bonding. (OP)
This system allows you to realize manufacturing with real-time quality-inspection.



Friendly Operation

The large-sized touch panel and the interactive software realize an easy and reliable operating environment for all users from beginners to experts.

● Example screens of the interactive software

Graphics screens will guide you to the next step automatically



● Recognition Teaching Examples

Intuitive teaching is possible with friendly operation



● Ultrasonic monitoring data sample

Process parameters during ultrasonic bonding can be viewed in real time



⚠ Safety Cautions

● Please read the User's Manual carefully to familiarize yourself with safe and effective usage procedures.

● To ensure safety when using this equipment all work should be performed according to that as stated in the supplied Operating Instructions. Read your operating instruction manual thoroughly.

eco ideas Panasonic Group products are built with the environment in mind.
<http://panasonic.net/eco/>

ISO 14001 Panasonic Group builds Environmental Management System in the factories of the world and acquires the International Environmental Standard ISO 14001:2004.

Inquiries...

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