### 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 φ300mm wafer supply

<table>
<thead>
<tr>
<th>Model ID</th>
<th>MD-P300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No</td>
<td>NM-EFF1C</td>
</tr>
<tr>
<td>Productivity</td>
<td>C4: 0.65s/IC (including dipping motion) / Thermosonic: 0.65s/IC (including US process time of 0.2s)</td>
</tr>
<tr>
<td>Placement accuracy</td>
<td>XY (±3 at PFSC conditions) / ±5 μm</td>
</tr>
<tr>
<td>Substrate dimensions</td>
<td>L 50 mm × W 50 mm to L 330 mm × W 330 mm / Heating specifications: L 130 mm × W 28 mm</td>
</tr>
<tr>
<td>Die dimensions</td>
<td>L 1 mm × W 1 mm to L 25 mm × W 25 mm / Thermosonic: L 7 mm × W 7 mm</td>
</tr>
<tr>
<td>Number of die types</td>
<td>Up to 12 product types (AWC specifications) / *1 nozzle-type</td>
</tr>
<tr>
<td>Die supply</td>
<td>Wafer frame 12 inches (Option: 8 inches)</td>
</tr>
<tr>
<td>Bonding load</td>
<td>VCM head: 1N to 50 N (Option: 2 N to 100 N)</td>
</tr>
<tr>
<td>Head heating</td>
<td>Thermosonic: Up to 300°C</td>
</tr>
<tr>
<td>Substrate heating</td>
<td>Constant heating, Up to 200°C / Heating bonding stage specifications: No. substrate size: L 330 mm × W 28 mm</td>
</tr>
<tr>
<td>Power source</td>
<td>3-phase AC 200V ± 10V, 50/60 Hz, Up to 4kVA (Up to 7kVA for heating specification)</td>
</tr>
<tr>
<td>Pneumatic source</td>
<td>0.4 Mpa, 50L/min (A.N.R.) / Up to 150L/min for full-featured machine including cooling air</td>
</tr>
<tr>
<td>Dimensions</td>
<td>W 1380 mm × D 1640 mm × H 1430 mm (without loader / unloader)</td>
</tr>
<tr>
<td>Mass</td>
<td>2300 kg (without loader / unloader)</td>
</tr>
</tbody>
</table>

*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: Up to 300°C / Up to 7kVA for heating specification
For details, please refer to the specification sheet.
Bonding processes are available by switching the bonding tools, which can be done by the customer under the configuration of C4 dipping unit.

**Easy process exchange**

- 50 N Type
- 100 N Type

**Bonding tool**

The bonding tool can be switched by customer.

*Constant heating: Please contact us individually.

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**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.

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**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

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**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.

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Panasonic Group products are built with the environment in mind.

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All data as of January 5, 2020

Please check the homepage for the details.
panasonic.com/global/corporate/sustainability

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Inquiries:

Changes in specifications and appearance may be made without notice for product improvement.

Homepage: industrial.panasonic.com/ww/ta-jisso