



Automatic Dicing Saw DAD3660

Dual spindle automatic dicing saw for large packaging substrates

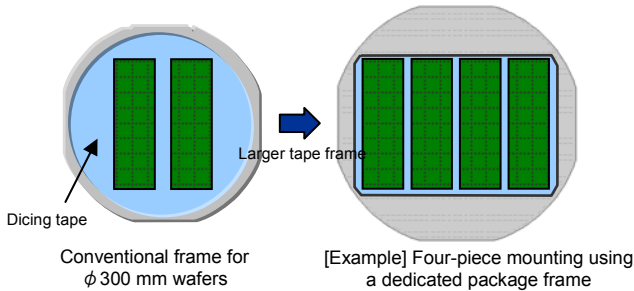
Support for workpiece sizes up to 360 × 360 mm

By selecting a user-specified dicing frame or jig table, the DAD3660 can support dicing for large packaging substrates including Fan-out WLP.

Support for multiply mounted packaging substrates

The DAD3660 can process multiple packaging substrates mounted on the same tape frame. This improves productivity through a reduction in the workpiece replacement time and dicing tape costs.

Example of a multiple workpiece mounting process
(Substrate size = 75 mm × 250 mm)



Improved throughput

With dual cut, a cutting mode where the dicer performs dicing with both spindles at the same time, throughput can be improved by up to 90% compared to conventional equipment (DAD3350, single axis dicer with φ300 mm support as a user-specified specification). *Throughput varies depending on workpiece size and processing conditions.

Stabilization of processing quality

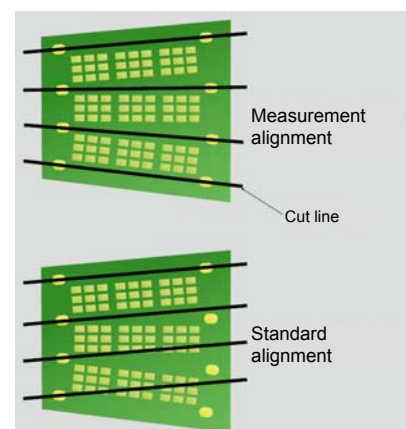
By selecting the sub-chuck table specification, blade dress is possible during processing (supports full size dresser boards, 75 x 75 mm). This mid-process blade dress can help to stabilize process quality when processing hard and brittle materials, such as glass substrates, and ductile materials, including resin and metal, which often cause blade loading.

Measurement alignment

For resin substrates and other materials which have irregular expansion, performing alignment at multiple locations can help to maintain high accuracy processing.

2.2 kW spindle

By selecting the high torque and rigidity 2.2 kW spindle, high load processing, including the grooving of hard and brittle materials, such as glass or ceramics, and grooving using thick blades can be supported.



Easy operation

- User friendly

A 19-inch large monitor and large buttons provide ease of use.

- Condition monitoring functions

Monitoring of utilities, spindle current and more

- Operator assist functions

- Auto-alignment

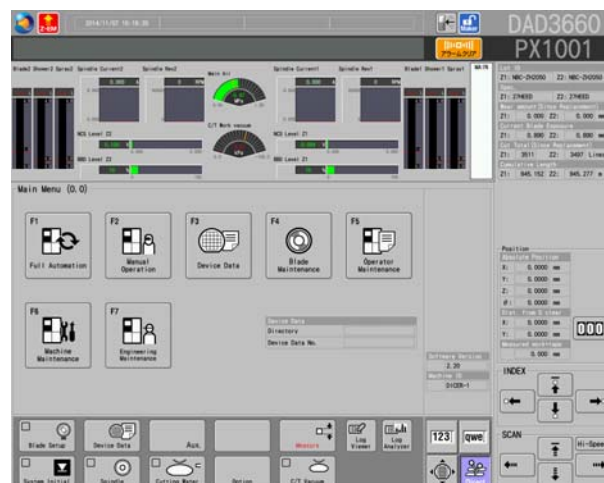
By performing teach (procedure to register the cutting position) in advance for each device, auto-alignment is possible by only selecting the device data.

- Kerf checking

Automatic measurement of cut line deviations and kerf width to manage cut quality.

Efficient use of space

Auxiliary equipment (UPS, transformer for use outside of Japan, CO2 injector, booster pump unit) has typically been external, but the DAD3660 allows many of these units to be installed internally to save space.



Large 19-inch monitor

| Specification | | Unit | 1.8kW | 2.2kW (option) |
|----------------------------|----------------------------|-------------------|------------------------------|----------------|
| Workpiece size | | - | φ300 (360 mm square: DPR) | |
| X-axis | Cutting range | mm | 400 | |
| | Cutting speed | mm/sec | 0.1 ~ 1,000 | |
| Y-axis | Cutting range | mm | 400 | |
| | Index step | mm | 0.0001 | |
| | Index positioning accuracy | mm | 0.003/260 | |
| Z-axis | Max. stroke | mm | (Single error)0.002/5 | |
| | Moving resolution | mm | 32.2 | 31.4 |
| | Repeatability accuracy | mm | 0.00005 | |
| θ-axis | Max. rotating angle | mm | 0.001 | |
| Spindle | Output | deg | 320 | |
| | Rated torque | N·m | 0.29 | 0.70 |
| | Revolution speed range | min ⁻¹ | 6,000-60,000 | 3,000-30,000 |
| Machine dimensions (W×D×H) | | mm | 1,350×1,200×1,890 | |
| Machine weight | | kg | Approx.1,500 | |

Environmental Conditions

- Use clean, oil-free air (dew point between -10 - -20 , residual oil: 0.1 ppm, and filtration rating: 0.01 μ m/99.5 % or more).
- Keep room temperature fluctuations within ±1°C of the set value. (Set value should be between 20 - 25 °C).
- Keep cutting water and cleaning water 2 °C above room temperature (fluctuations within ±1 °C).
- The machines should be used in an environment, free from external vibration. Do not install machine near a ventilation opening, heat generation equipment or oil mist generating parts.
- This machine uses water. In case of water leakage, please install the machine on the floor with sufficient waterproofing and drainage treatments.

- * All pressures specified above are gauge pressures.
- * As the above specification may change due to technical modifications. Please confirm when placing your order.
- * For further information, please contact your local sales representative.