**Automatic Dicing Saw**

**DAD3431**

**Adopted an air slide on the X-axis to support high precision processing needs**

**Able to support wide range of applications**
Supports workpieces up to ø6-inch or 150 X 150 mm with user-specified specification. In addition, the standard 2.0 kW high torque spindle enables processing of difficult-to-process materials. The structure includes a wide water case for a longer X-axis stroke.

**Able to support high precision / high quality processing**
X-axis adopts a structure that makes use of the air slider characteristics to achieve improved straightness. In addition, a linear scale mounted on the Y-axis as standard enables stable axis control and higher positioning accuracy. This supports fine processing needs which require high accuracy, including optical parts and magnetic head cutting and grooving.

**Improved throughput**
High Z-axis feed speed

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**Improved functions and operation**

- **New non-contact setup (optional)**
  Shortens blade height measurement time by 74%. Measurement accuracy is improved for more stable processing quality.

- **Microscope optimization**
  Adopted CMOS digital camera
  Supports three-channel switching in the ring illumination lighting direction for improved kerf check visual confirmation.

- **Supports SECS/GEM (Optional)**

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**High maintainability**
Installation of microscope lens shutter and scope blow function reduces maintenance frequency while improving equipment operation ratio.

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◆ Ring light three-channel switching specification

![Ring light three-channel switching specification](image)
Easy operation

- **XIS (Extended Interface System)**
  Operation buttons consolidated on microscope screens
- **Wafer mapping**
  Graphic processing condition display similar to full automation equipment.
- **Log viewer**
  Graphic analog data display and equipment data visualization
- **Help viewer**
  Displays instructions when error occurs for quick, accurate recovery.

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### Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workpiece size</td>
<td>Ø6” inch</td>
</tr>
<tr>
<td></td>
<td>Square die 200 mm (user-specified specification) Can cut 220 x 160 mm (option)</td>
</tr>
<tr>
<td>X axis</td>
<td>Cutting range mm</td>
</tr>
<tr>
<td></td>
<td>Cutting speed mm/s</td>
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<tr>
<td>Y axis</td>
<td>Cutting range mm</td>
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<tr>
<td></td>
<td>Index step mm</td>
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<tr>
<td></td>
<td>Positioning accuracy mm</td>
</tr>
<tr>
<td>Z axis</td>
<td>Max. stroke mm</td>
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<tr>
<td></td>
<td>Movement resolution mm</td>
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<tr>
<td></td>
<td>Repeatability accuracy mm</td>
</tr>
<tr>
<td>Θ axis</td>
<td>Max. rotation angle deg</td>
</tr>
<tr>
<td>Spindle</td>
<td>Rated torque N·m</td>
</tr>
<tr>
<td></td>
<td>Revolution speed range min-1</td>
</tr>
<tr>
<td>Machine dimensions (W × D × H)</td>
<td>mm</td>
</tr>
<tr>
<td>Machine weight</td>
<td>kg</td>
</tr>
</tbody>
</table>

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**Environmental Conditions**

- Use clean, oil-free air at a dew point of -15 °C or less. (Use a residual oil: 0.1 mg/m³ or less. Filtration rating: 0.01 µm/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.

* 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.