Full lineup serves wide variety of processing needs
DAD3220, 3230 or 3430 is a one-axis dicing saw for ø6-inch (6-inch square) workpieces. DAD3220, just 500 mm wide, helps conserve valuable cleanroom space. DAD3230, designed for high performance and expandability, is ideal for processing such electronic component materials as glasses and ceramics. DAD3430, designed for extra-high precision and process quality, cuts and grooves optical components, magnetic heads, and similar workpieces to extremely strict tolerances.

Improved usability and performance
Each model features an LCD touch panel with Graphical User Interface for easy and intuitive operation. In addition, all models include auto-alignment, auto-focus, and auto-kerf check functions for enhanced productivity. The newly developed 1.5 kW spindle, standard on each model, features a shaft lock function for easier blade changes. A reduced-expansion spindle (option) is made with special expansion-resistant materials for even greater precision during processing.
Special features of each model
• With a footprint approximately 14% smaller than that of predecessor DAD321, DAD3220 is extremely compact.
• DAD3320 features an expandable design ideal for customization.
• DAD3430, based upon the DAD3230 design, is a high-precision dicing saw with an air slide on the X-axis.

Advanced options
• The cutting water flow rate controller, programmable for each device data, helps prevent operator error while supporting a stable and consistent flow of cutting water. The macro microscope allows for a greater field of view and can improve usability during alignment.
• Overall machine layouts have also been improved, allowing either a transformer or UPS to be installed internally in the DAD3220, and both a transformer and UPS to be installed DAD3230 and DAD3430.

DAD3220/3230/3430 Specifications

<table>
<thead>
<tr>
<th>Workpiece size</th>
<th>DAD3220</th>
<th>DAD3230</th>
<th>DAD3430</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø6&quot;</td>
<td>6&quot;square (1)</td>
<td>6&quot;square (1)</td>
<td></td>
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<tr>
<td>220 x 160 mm (2 optional)</td>
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</table>

X-axis
- Cutting range mm 160 160 / 220 (optional)
- Transfer speed input range mm/s 0.1 - 500 0.1 - 300

Y-axis
- Cutting range mm 162
- Index step mm 0.0001
- Positioning accuracy mm 0.005 or less 0.0015 or less
- Max. blade size mm ø58

Z-axis
- Max. stroke mm 32.2 (for ø2"blade)
- Moving resolution mm 0.00005
- Repeatibility accuracy mm 0.001

II-axis
- Max. rotating angle deg. 320
- Output kW 1.5 at 30,000 min⁻¹
- Rated torque N·m 0.48
- Revolution speed range m⁻¹ 3,000 - 40,000

Applicable tape frame
- 2-6-1

Utilities
- Power supply V 200 - 240 V AC ±10 %, 3-phase (50/60 Hz)
- For other than the above voltages, a transformer is necessary.
- Power consumption kVA 0.5 (for reference)
- During warm-up kW 0.4 (for reference)
- Max. power kW 3.5
- Air pressure MPa 0.2 - 0.4
- Max. consumption flow rate m³/min 0.2 - 4.0
- Spindle water pressure MPa 0.2 - 0.4
- Consumption flow rate L/min 1.5 at 0.3 MPa
- Exhaust duct capacity m³/min 1.5 2.5
- Machine dimensions (W x D x H) mm 500 x 900 x 1,670 730 x 900 x 1,670
- Machine weight kg 595 645
- Machine weight (without transformer for overseas use) kg 550 600
- Machine weight (without transformer for overseas use) kg 550 600

Environmental conditions
• Use clean, oil-free air at a dew point of -15°C or less, (use a residual of 0.1 ppm. 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, 20 - 23 °C for DAD3430).
• Keep cutting water 2°C above room temperature (fluctuations within ±1°C).
• Keep spindle cooling water the same as room temperature between 20 - 25°C (fluctuations within ±1°C).
• The machine 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.

(1) A special jig is required for this function.
(2) A-axis rotating angle is limited.

* All the pressures are described using a gauge pressure.
* The above specifications may change due to technical modifications. Please confirm when placing your order.
* For further information please contact your local sales representatives.

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2011.12