



# Automatic Dicing Saw DAD324

**World's smallest\* footprint and improved functionality**

## Support for a variety of applications from semiconductor wafers to electronic parts

- Support for workpieces as large as 6-inch square wafers
- Incorporation of the Y-axis scale specification (option) enables high accuracy index control
- Equipped with a high torque 2.0 kW spindle as a standard feature

The DAD323 is highly versatile with support for glass, ceramics and other difficult-to-cut materials. In addition, a high revolution speed 1.8 kW spindle (max revolutions: 60000 min-1) is also selectable as an option.

## High productivity

With the implementation of a high performance MCU, the speed of software operation and operation response times have been improved.

### Built-in PC

- Communication control operations (option)

Improved measurement accuracy and reduced measurement time using a new NCS (Non-Contact Setup) sensor.

Servo motors introduced for all axes (X, Y, and Z)

- Maximum return speed for each axis:  
X-axis: 800 mm/s, Y-axis: 200 mm/s,

## World's smallest footprint\*

Compact design with a width of 490 mm

he reduced profile contributes towards a large increase in terms of productivity per unit area, especially when multiple.

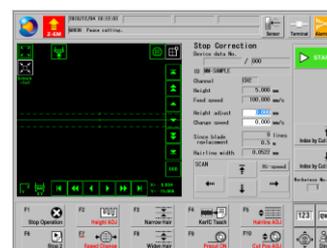
\* Investigated internally



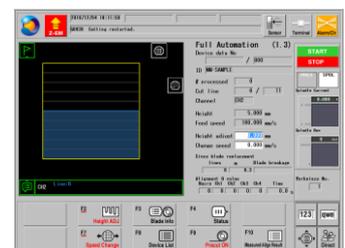
## Ease of operation

- XIS (Extended Interface System)  
Operation buttons are consolidated on the microscope screen.
- Wafer mapping  
The processing status is displayed visually in the same way as fully automatic equipment.
- Log viewer  
Analog data is displayed in a graph and equipment data is more easily visualized.
- Help viewer  
Troubleshooting is displayed when an error occurs to achieve quick and accurate recovery support.
- Automatic alignment
- Autofocus
- Automatic kerf check

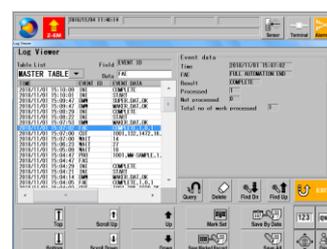
### ◆Operation interface



XIS



Wafer Mapping



Log Viewer



Help Viewer

| Specifications                |                            |                   |                                    |
|-------------------------------|----------------------------|-------------------|------------------------------------|
| Specification                 |                            | Unit              |                                    |
| Workpiece size                |                            | -                 | φ6" (□6" DPR)                      |
| X-axis                        | Cutting range              | mm                | 160                                |
|                               | Cutting speed              | mm/sec            | 0.1 ~ 800                          |
| Y-axis                        | Cutting range              | mm                | 162                                |
|                               | Index step                 | mm                | 0.0001                             |
|                               | Index positioning accuracy | mm                | 0.005/160<br>(Single error)0.003/5 |
| Z-axis                        | Max. stroke                | mm                | 32.2                               |
|                               | Moving resolution          | mm                | 0.00002                            |
|                               | Repeatability accuracy     | mm                | 0.001                              |
| θ-axis                        | Max. rotating angle        | deg               | 320                                |
| Spindle                       | Output                     | kW                | 2.0at40,000min-1                   |
|                               | Rated torque               | N·m               | 0.48                               |
|                               | Revolution speed range     | min <sup>-1</sup> | 3,000~40,000                       |
| Machine dimensions(W × D × H) |                            | mm                | 490 × 870 × 1,670                  |
| Machine weight                |                            | kg                | Approx.420                         |

#### ■ Environmental Conditions

- Use clean, oil-free air (dew point between -10 - -20 , residual oil: 0.1 ppm, and filtration rating: 0.01μm/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.