

## Automatic Dicing Saw

# DAD3350

*Flexibility for diverse processing needs*



### Flexible Design

The DAD3350 (maximum workpiece size  $\phi 8"$  [standard], 250 mm square [optional]) has been designed to process a wide variety of materials with either a 1.8 kW spindle (standard; supports 2" blades) or 2.2 kW high-torque spindle (optional; supports 3"-5" blades). Whether your material is ultra-thin to several millimeters thick, single wafer or multiple panel (optional), straight cut or optical angle cut (optional), the DAD3350 can be customized for your applications needs.

### Process Quality

The field proven bridge-type frame structure optimizes rigidity and stability. To reduce transient vibration the DAD3350 utilizes cast iron for the bridge-type frame resulting in superior and consistent cut quality.

### Machine Utilization

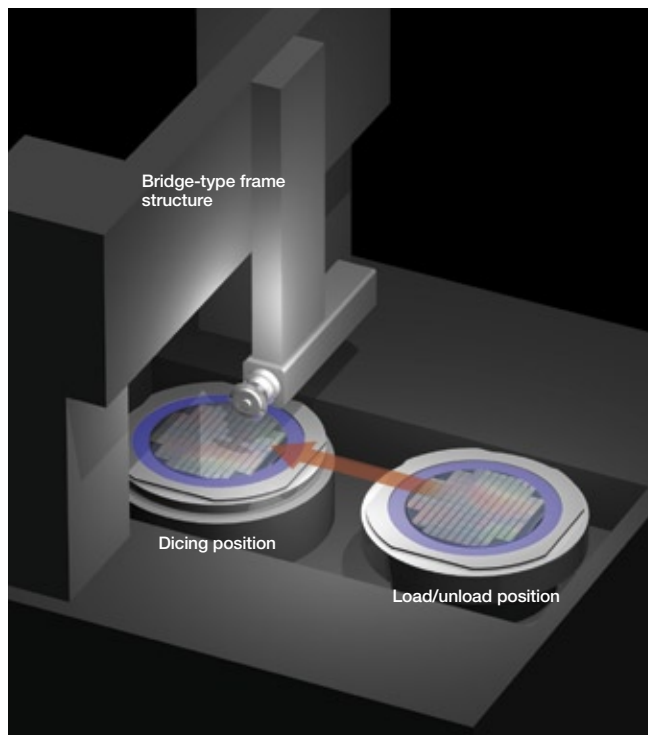
With a return speed of 600 mm/s, theta speed of 180 degree/s, and Y-axis speed of 200 mm/s the DAD3350 spends more time cutting and less time preparing to cut.

### Operation

The Graphical User Interface (GUI) operates via an LCD touch screen. While improving the ease of use, the GUI also features on screen real time display illustrating process details.



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## Process Controls

Auto alignment, auto focus, and auto kerf check features - all standard - directly improve productivity. In addition, the microscope includes a positive air pressure mechanism and a lens shutter to prevent contamination. The DAD3350 also includes advanced process control features such as a cutting water flow control and spindle current monitoring to support process analysis. As an option, a dual-magnification microscope is available to help reduce alignment times.

## Small Footprint

The bridge-type frame structure reduces footprint while increasing performance. Suspended from the bridge is a front-mounted spindle, which provides greater space to process large area substrates.



LCD touch screen

11% smaller footprint

DAD341(1.07m<sup>2</sup>)

DAD3350 (0.945m<sup>2</sup>)



## DAD3350 Specifications

<b>Spindle</b>		-	1.8kW	2.2kW (option)
<b>Workpiece Size</b>		-	Max. ø8"	Max. 250 mm square (*1)
<b>X-axis</b>	Cutting range	mm	260	
	Max. cutting speed	mm/s	600	
<b>Y-axis</b>	Cutting range	mm	260	
	Index step	mm	0.0001	
	Positioning accuracy	mm	0.003 or less/260 (Single error) 0.002/5	
<b>Z-axis</b>	Max. stroke	mm	32.2	31.4
	Moving resolution	mm	0.00005	
	Repeatability accuracy	mm	0.001	
	Max. blade size(*2)	mm	ø58	ø127
<b>θ-axis</b>	Max. rotating angle	deg.	380	
<b>Spindle</b>	Output	kW	1.8 at 60,000 min <sup>-1</sup>	2.2at 30,000 min <sup>-1</sup>
	Rated torque	N·m	0.29	0.7
	Revolution speed range	min <sup>-1</sup>	6,000 ~ 60,000	3,000 ~ 30,000
<b>Applicable Tape Frame</b>		-	2-8-1	
<b>Utilities</b>	Power supply	-	200 ~ 240 V AC±10 %, 3-phase (50/60 Hz)	
		-	For other than the above voltages, a transformer is necessary.	
	Power consumption	-	-	
	When processing	kW	0.9 (for reference)	
	During warm-up	kW	0.8 (for reference)	
	When idling (in standby)	kW	0.3 (for reference)	
	Max. power	kVA	When 1.8 kW spindle installed: 4.9 When 2.2 kW spindle installed: 4.5	
	Air pressure	MPa	0.5 ~ 0.8	
	Air max. consumption	L/min(ANR)	200	
	Cutting water	-	-	
	Water pressure	MPa	0.2 ~ 0.4	
	Max. Consumption flow rate	L/min	4.0	
	Cooling water	-	-	
	Water pressure	MPa	0.2 ~ 0.4	
	Consumption flow rate	L/min	1.5 at 0.3 MPa	
	Exhaust duct capacity	m <sup>3</sup> /min	5.0	
	Machine dimensions (W x D x H)	mm	900 x 1,050 x 1,800	
	Machine weight	kg	Approx. 1,200 (without transformer for overseas use) Approx. 1,268 (with transformer for overseas use)	

(\*1) A special jig is required for this function.  
(\*2) When selecting optional specification.

## Environmental conditions

- Use clean, oil-free air at a dew point of -15 °C or less. (Use a residual oil: 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).
  - 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 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 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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