



Automatic Dicing Saw

DISCO

# DAD3220/3230/3430

## Compact dicing saw lineup for 6" wafers

### Full lineup serving a wide variety of processing needs

The DAD3220/3230/3430 are single spindle dicing saws capable of handling workpieces up to a maximum of  $\varnothing 6''$  or 6" square workpiece with a user-specified specification. The DAD3220 is just 500 mm wide, which helps to conserve valuable cleanroom space. The DAD3230, designed for high performance and expandability, is ideal for processing electronic component materials such as glasses and ceramics.

The DAD3430 is designed for extra-high precision and process quality for cutting and grooving optical components, magnetic heads, and similar workpieces with extremely strict tolerances.

### Improved usability and performance

Each model features an LCD touch panel with a 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, which is standard on every model, features a shaft lock function for easier blade changing. A reduced-expansion spindle (option) manufactured with special expansion-resistant materials is available for even greater precision during processing.



DAD3220

### Special features of each model

- The DAD3220 is extremely compact with a footprint approximately 14 % smaller than that of its predecessor, the DAD321.
- DAD3230 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.

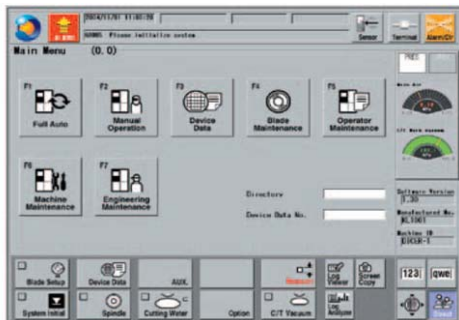


DAD3230

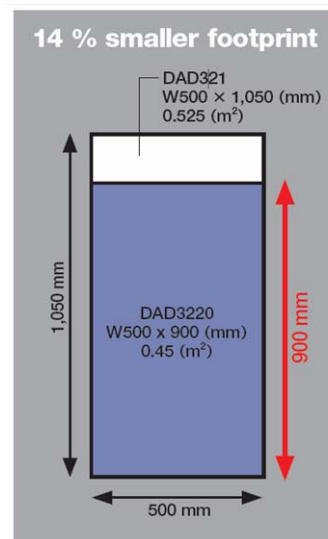
DAD3430

## Advanced options

- The cutting water flow rate controller, programmable for each device data, helps prevent operator error while providing 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 for a transformer or UPS to be installed internally in the DAD3220, and a transformer and UPS to be installed on the DAD3230 and DAD3430.



Control screen



Specification		Unit	3220	3230	3430
Workpiece size		-	φ 6" / □ 6" (DPR)	φ 6" / □ 6" (DPR) (220 x 160 optional accessory)	
X-axis	Cutting range	mm	160	160 / 220 (optional accessory)	
	Cutting speed	mm/sec	0.1 - 500	0.1 - 300	
Y-axis	Cutting range	mm	162		
	Index step	mm	0.0001		
	Index positioning accuracy	mm	0.005/160 (Single error) 0.003/5	0.0015/160 (Single error) 0.0005/5	
Z-axis	Max. stroke	mm	32.2 (φ 2" blades)		
	Moving resolution	mm	0.00005		
	Repeatability accuracy	mm	0.001		
θ-axis	Max. rotating angle	deg	320		
Spindle	Rated output	kW	1.5		
	Rated torque	N·m	0.48		
	Revolution speed range	min <sup>-1</sup>	3,000 - 40,000		
Machine dimensions (W×D×H)		mm	500 x 900 x 1,670	730 x 900 x 1,670	
Machine weight		kg	Approx. 550	Approx. 600	

## 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.