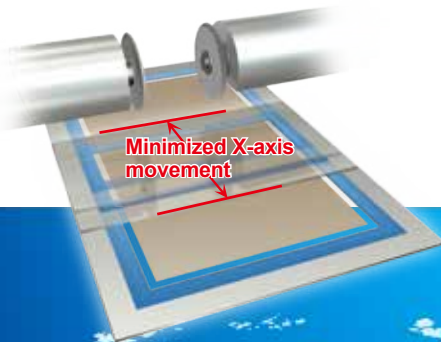




## FULLY AUTOMATIC DICING MACHINE

# AD3000TW

Fast, refined and innovative



**TWIN Dicing concept with two opposing Spindles**

### Large packaging substrate Dicing Machine

- Designed for dicing of larger packaging substrates, including Fan-out WLPs
- Selecting a special dicing frame or square table allows for dicing of multiple layers of packaging substrates, helping to enhance productivity and reduce costs

### High-performance, high-power spindle as standard equipment

Rotation of up to 60,000 rpm with a rated output of 1.8 kW

Capable of dicing various types of materials from Si to hard-to-cut materials by combining with our blades

### High productivity equipment

Servo motors used for all X, Y and Z axes, for faster spindle speed

Optimized control software + 3-axis synchronized control helps to reduce machining time

### Easy operation

17-inch touch panel with GUI (Graphical User Interface)  
Easy and comfortable operation enabled by touching of iconized buttons



Tokyo Seimitsu developed Japan's first wafer dicing machine, Model A-WD-75A, in 1970, making a tremendous contribution to the success of the semiconductor industry in its early days by providing more precise and more efficient die separation process technology. A wealth of technological resources we have accumulated over five decades enables us to lead the world in dicing technology with our next-generation dicing machine, Model AD3000TW, which combines the latest fluidics, mechatronics, and energy conservation techniques.

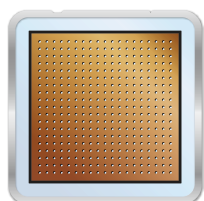
**TOKYO SEIMITSU CO., LTD.**

## Main Features

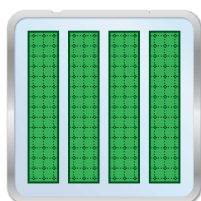
**1 Capable of processing the industry's largest size substrates**

Capable of dicing large panel substrates up to 315 x 315 mm in size. Selecting a special dicing frame or square table allows for dicing of multiple layers of packaging substrates, helping to enhance productivity and reduce costs.

- ① Capable of dicing large panels up to 315 mm x 315 mm
- ② Multiple substrates can be mounted (example of mounting four 315 mm x 65 mm substrates)



① 315mm x 315mm



② Example of mounting four 315 mm x 65 mm substrates

**2 High-performance, high-power spindle as standard equipment**

Rotation of up to 60,000 rpm with a rated output of 1.8 kW  
High-torque spindle with a rated output of 2.2 kW is also available as an option

**3 Enhanced productivity (throughput)**

The two opposing spindle design ensures minimal X-axis movement for dicing without wastage.

Servo motors used for all X, Y and Z axes, for faster spindle speed.  
Optimized control software + 3-axis synchronized control helps to reduce machining time.

Two Optical Cutter-Set units (called OPC) included as standard.  
Dual setup helps to reduce standby time.

**4 Dressing stage included as standard**

Equipped with two 75 mm x 75 mm dressing boards.  
Each spindle blade can be dressed with dedicated board.

**5 17-inch touch panel with GUI (Graphical User Interface)**

Easy and comfortable operation enabled by touching of iconized buttons.

This provides operation that is common with the AD/SS series.



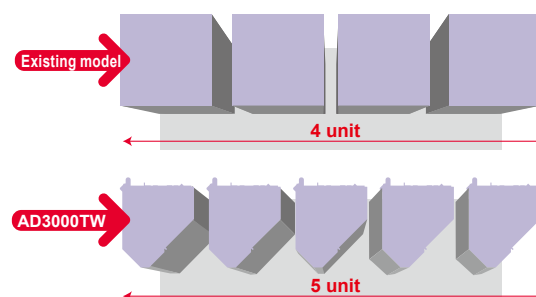
▲ NEW Graphic User Interface

## Specifications

Max. work size		Φ 305 mm, 315 mm x 315 mm
Max. number of frames		Up to 12-inch frame (SEMI G74-0699), special frame within rotation diameter φ 530 mm
Spindle	Rotation	60,000 rpm
	Max. blade diameter	Φ 60 mm (2-Inch) Φ 80 mm (3-Inch) (Option)
	Rated Output	1.8 kW
X axis	Available cutting range	330 mm
	Max. Speed	1,000 mm/s
Y1/Y2 axes	Available cutting range	330 mm
	Max. Speed	300 mm/s
	Resolution	0.078 μm
	Accuracy	0.002 mm / 330 mm
Z1/Z2 axes	Stroke	35 mm
	Resolution	0.002 μm
	Max. Speed	80 mm/sec
	Repeatability	0.001 mm
θ axis	Range of rotation	380°
Specification	Voltage	3 Phase AC200 to 220 V ±10 % (Transformer adoptable)
	Power consumption	6.0 kVA (MAX)
	Air pressure	0.55 ~ 0.7 MPa
	Avg. Air consumption	210 L/min (0.55 MPa)
	Avg. Clean air consumption	140 L/min
	Supply water pressure (Cutting water, and others)	0.3 ~ 0.5 MPa
	Supply water Max flow	Cutting water: 10.0 L/min Water curtain: 3.0 L/min Others: 0.6 L/min
	Cooling water pressure	0.3 ~ 0.5 MPa
	Cooling water flow	3.7 L/min (0.3 MPa)
	Required exhaust flow	5.0 m³/ min more
Size (W*D*H)		1,560 mm x 1,670 mm x 1,900 mm
Weight		1,700 kg

## Set up space

**Inherits the angled layout of the AD Series of machines for better frontal access, including for maintenance work.**



## Maintenance

Replacing blades and maintenance work that are part of daily operations can all be conducted from Frontal access (means from the front of the machine).



ACCRETECH

Japan / Head Office Tokyo Seimitsu Co., Ltd.  
2968-2, Ishikawa-machi, Hachioji-shi, Tokyo, 192-8515 Japan  
TEL: (042) 642-1701 FAX: (042) 642-1798  
<https://www.accretech.com/en/>

Contact  
information

