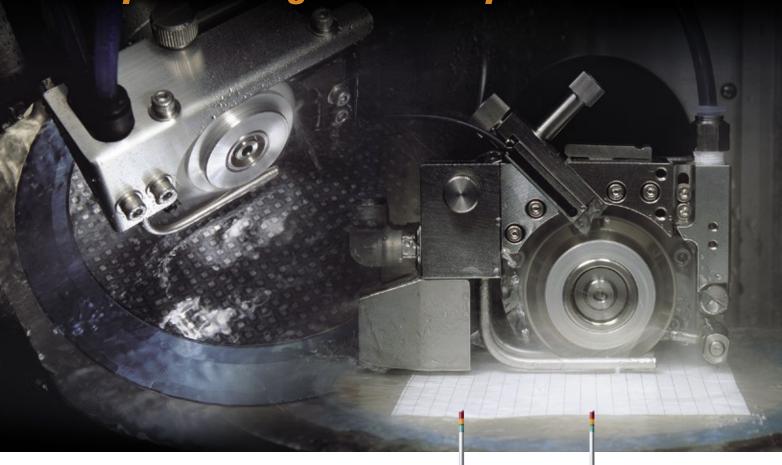




### **Automatic Dicing Saw**

# DAD3220/3230/3430

### Compact Dicing Saw Lineup for 6" Wafers



#### **Full Lineup Serves Wide Variety of Processing Needs**

Building upon the worldwide success of the DAD300/500 Series single-spindle automatic dicing saws, the DAD3220/3230/3430 have been added to the 3000 Series for the processing of 6" round and 6" x 6" 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.











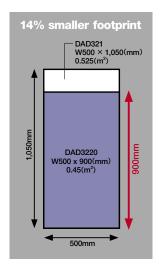
Control screen

#### **Special Features of Each Model**

- •With a footprint approximately 14% smaller than that of predecessor DAD321, DAD3220 is extremely compact.
- •DAD3230 features an expandable design ideal for customization.
- •DAD3430, based upon the DAD3230 design, is a highprecision dicing saw with an air slide on the X-axis.

#### **Advanced Options**

- •The coolant 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.



#### **Automatic Dicing Saw**

## DAD3220/3230/3430



#### DAD3220/3230/3430 Specifications

	·		DAD3220	DAD3230	DAD3430
Workpiece Size -		-	ø6", 6"square (*1)	6"square (*1) 220 x 160 mm (*2 optional)	
X-axis	Cutting range	mm	160	220	
	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/160		
Z-axis	Max. stroke	mm	32.2 (for ø2"blade)		
	Moving resolution	mm	0.00005		
	Repeatability accuracy	mm	0.001		
	Max. blade size	mm	ø58 (for 1.5kW spindle)		
θ-axis	Max. rotating angle	deg	320		
Spindle	Output	kW	1.5 at 30,000 min <sup>-1</sup>		
	Rated torque	N-m	0.48		
	Revolution speed range	min-1	3,000 ~ 40,000		
Applicable Tape Frame -		-	2-6-1		
Utilities	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	0.5 (for reference)		
	During warm-up	kW	0.4 (for reference)		
	Max. power	kVA	3.5		
	Air pressure	MPa	0.5 ~ 0.8		
	Air max. comsuption	/min(ANR)	170 200		
	Cutting water, Cleaning water	er			
	Water pressure	MPa	0.2 ~ 0.4		
	Max. consumption flow ra	te L/min	0.2 ~ 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	m³/min	1.5 2.5		
	Machine dimensions (W×D×H	) mm	500 x 900 x 1,670 730 x 900 x 1,670		
	Machine weight	kg	Appox. 550 Approx. 600 (without transformer for overseas use)		
			Approx. 600		ox. 650

#### (\*1) A special jig is required for this function. (\*2) $\theta$ -axis rotating angle is limited.

#### **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, 20 ~ 23 °C for
- 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.



DISCO CORPORATION 13-11 Omori-Kita 2-chome, Ota-ku, Tokyo 143-8580, Japan Tel:03-4590-1100 Fax:03-4590-1075 • www.disco.co.jp ASIA: DISCO HI-TEC (SINGAPORE) PTE., LTD. BIk 2 Kaki Bukit Ave.1 #03-06/08 Kaki Bukit Industrial Estate Singapore 417938 Phone: 65-6747-3737 Fax: 65-6745-0266 Priorie: 60-67/47/37/ Fax: 60-67/45-0200 DISCO HI-TEC (MALAYSIA) SDN. BHD. Phone: 60-3-8024-6588 Fax: 60-3-8024-1311 Penang Regional Office Phone: 60-4-644-5502 Fax: 60-4-645-2285

**DISCO HI-TEC (THAILAND) CO., LTD.** Phone: 66-2-618-8441 Fax: 66-2-618-8440 Priorie: 162-2-161-3441 | Fax: 163-2-618-3440 | DISCO TECHNOLOGY (SHANGHAI) CO, LITD. Area E, 3rd Floor, Building A1 No.381 Fuliskyii Road, WalGaoQiloo Free Trade Zone, Shanghai 20131 PR. CHINA Phone: 86-21-58662516 | Fax: 86-21-58662517 | Tanjin Service & Technical Support Center Phone: 86-022-24381973 | Fax: 86-022-24381837 | Dongguan Service & Technical Support Center Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-86334981 | Fax: 86-769-86334559 | Custos Chiff China Phone: 86-769-8634559 | Custos Chiff China Phone: 86-769-863459 | Custos Chiff China Phone: 86-769-863459 | Custos Chiff Chiff Chiff Chif

Suzhou Office Phone: 86-512-67629081 Fax: 86-512-67629082

Chengdu Office Phone: 86-28-86528592 Fax: 86-28-86528591

Prione: 86-28-86028992 Fax: 86-28-86028991 **ASIA AGENT: New Tronics Co., Ltd.** Flat F, 11th Floor, Valiant Ind. Bldg. 2-12 Au Pui Wan Street, Fotan Shartin, N.T. HONG KONG Phone: 852-26871431 Fax: 852-26874283

Prione: 852-2691/431 Fax: 852-2681/4283 Happy Pole, Ltd. 8F-1, No.41 Section 2, Roosevelt Road Taipei, Taiwan R.O.C. Phone: 886-2-23980661 Fax: 896-2-23943943 Aurotech Corporation 2021 Buencamino Sireet Alabang, Muntinglupa PHILIPPINES Phone: 63-2-809-0155 Fax: 63-2-807-7419

DHK Solution Corporation

13F, Sanhak Jaedan Building, 1337-31, Seotho-dong, Seotho-gu, Seoul, Korea
Phone: 82-2-3415-1122 Fax: 82-2-3415-1441

U.S.A.: DISCO HI-TEC AMERICA, INC. 3270 Scott Blvd. Santa Clara,CA 95054-3011 U.S.A. Phone: 1-408-987-3776 Fax: 1-408-987-3785

Eastern Regional Sales & Service Office Phone: 1-602-656-9019 Fax: 1-602-656-9018 Southeastern Regional Sales & Service Office Phone: 1-919-468-6003 Fax: 1-919-468-6004 Central Regional Sales & Service Office Phone: 1-972-267-9900 Fax: 1-972-267-5612 Southwestern Regional Sales & Service Office Phone: 1-602-431-1412 Fax: 1-602-431-1437 Northwest Regional Sales & Service Office Phone: 1-503-644-0323 Fax: 1-503-643-8108

EUROPE : DISCO HI-TEC EUROPE GmbH

DISCO HI-TEC EUROPE GmbH
Libeligstrass B D-85551 Kirchheim b Muenchen Germany
Phone: 49-89-90903-0 Fax: 49-89-90903-199
DISCO HI-TEC FRANCE SARL Provence Head Office
Phone: 33-4-42-91-00-20 Fax: 33-4-42-91-00-29
DISCO HI-TEC UK. LID.
Frome: 44-1342-31316- Fax: 44-1342-313177

DISCO HI-TEC MOROCCO SARL Phone: 212-6-136-94-04 Fax: 212-22-97-38-88