

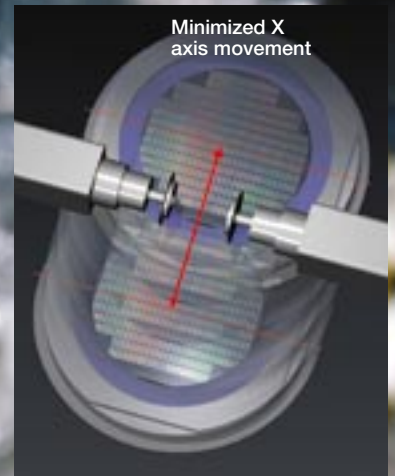
Fully Automatic Dicing Saw

DFD6361

Advanced performance for 300 mm dicing



Facing dual-spindle



Enhanced Dicing Throughput

DFD6361 enhances throughput in two distinct ways. A reduction in distance between the blades and Disco's facing dual design help manage total cut time, while high-magnification microscopes (standard) and non-contact setup sensors (option) for both Z1 and Z2 reduce the time required for non-dicing sequences such as kerf check and blade setup.

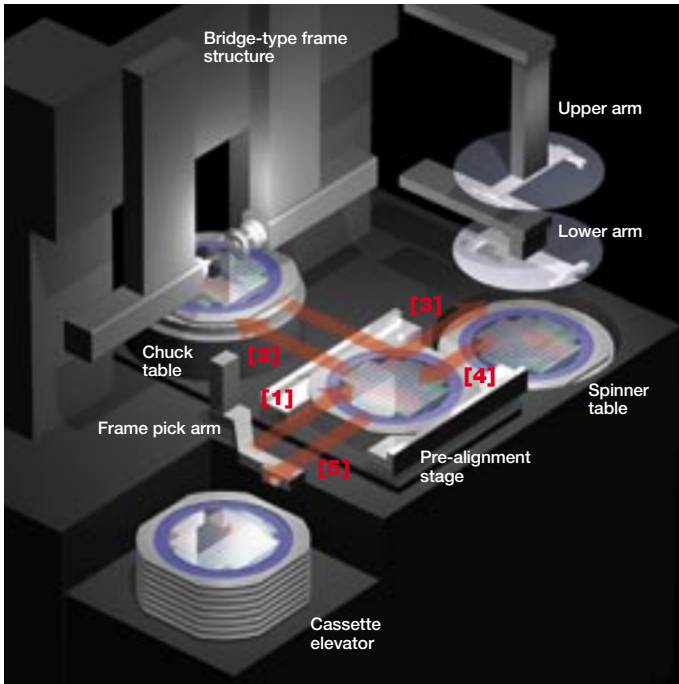
Consistent Cut Quality

DFD6361 offers highly consistent and dependable cut quality through the new Synchro Spindle™ featuring superior radial rigidity. The coolant water flow rate controller, programmable via the touch-panel display, sets the flow rate for each process recipe. The spinner cleaning unit, where it yields exceptionally clean wafers after dicing (option, patented in USA, Japan and other countries).



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Workpiece Flow System

- [1] Frame pick arm moves workpiece from cassette to pre-alignment stage →
- [2] After centering at pre-alignment stage, lower arm moves workpiece to chuck table → **cutting** →
- [3] Upper arm moves workpiece to spinner table → **cleaning and drying** →
- [4] Lower arm moves workpiece to pre-alignment stage →
- [5] Frame pick arm returns workpiece to cassette

Improved Usability

- Spindle shaft-lock feature and auto-open/close wheel cover make blade changes easy and quick.
- Condition monitor function relays processing status and key machine information in real time.
- Adjustable touch-panel display supports an easy-to-use graphical user interface.



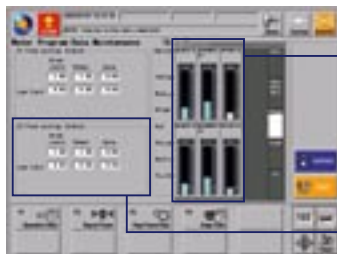
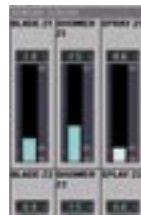
Adjustable LCD

Small Footprint

The bridge-type structure and improved wafer handling system contribute to the compact size and small footprint of DFD6361.

Spindle Lineup

- Newly developed 1.2 kW spindle (standard) features superior rigidity.
- Center thrust design gives 1.8 kW spindle (option, uses 2" blades) and 2.2 kW spindle (option, uses 3" blades) extra rigidity for processing glasses, ceramics, and other high-load materials.



LCD touch screen



Condition monitor screen

Control screen

DFD6361 Specifications

Workpiece size	mm	Max. ϕ 300
X-axis	Cutting range	mm 310
	Cut speed	mm/s 0.1 ~ 600
Y1-axis and Y2-axis	Cutting range	mm 310
	Index step	mm 0.0001
Z1-axis and Z2-axis	Single error	mm 0.002/5
	Positioning accuracy	mm 0.003/310
	Scale resolution	mm/s 0.0001
	Max. stroke	mm 10 (for 2" blade)
θ-axis	Moving resolution	mm 0.00005
	Repeating accuracy	mm 0.001
	Max. blade size	mm ϕ 58
Spindle	Max. rotating angle	deg. 380
	Output	kW 1.2 at 60,000min ⁻¹
	Rated Torque	N·m 0.19
	Revolution speed range	min ⁻¹ 6,000 ~ 60,000
Applicable tape frame		2-12
Utilities	Power supply	200 ~ 240 V AC \pm 10%, 3-phase (without transformer) 380 ~ 415 V AC \pm 10%, 3-phase (with transformer)
	Power consumption	
	When processing	kW 2.2(for reference)
	During warm-up	kW 1.8(for reference)
	Max. power	kVA 6.9
	Air pressure	MPa 0.5 ~ 0.8
	Air max. consumption	L/min (ANR) 378.0
	Clean air pressure	MPa 0.5 ~ 0.8
	Clean air max. consumption	L/min (ANR) 216.0
	Water pressure	
	Cutting water, cleaning water	MPa 0.2 ~ 0.4
	Cooling water	MPa 0.2 ~ 0.4
	Water flow rate	
	Cutting water, cleaning water	L/min 12.0
	Cooling water	L/min 3.0
	Spinner cleaning water	L/min 1.0
	Water curtain	L/min 1.0
	Exhaust duct capacity	m ³ /min 5.0
	Machine size (W x D x H)	mm 1,200 x 1,550 x 1,800
	Machine weight	kg Approx. 2,000 (without transformer for overseas use) Approx. 2,100 (with transformer for overseas use)

Environmental conditions

- Use clean, oil-free air at a dew point of -15 °C or less. Use a residual oil: 0.1 ppm 1 Wt/Wt. Filtration rating: 0.01 μ m/99.5% or more.
- Keep room temperature fluctuations within \pm 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 \pm 1 °C).
- Keep spindle cooling water the same as room temperature (20 - 25 °C, fluctuations within \pm 1 °C).
- The machine should be used in an environment free from external vibrations. Do not install machine near a ventilation opening, heat-generating equipment, or oil mist-generating equipment.
- 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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