



Fully Automatic Dicing Saw DFD6341

New standard dual spindle dicing saw

Offering improved productivity of fully automatic dual spindle dicing saws by introducing measures to increase throughput with proven records in the field

- The DFD6341 is the latest fully automatic dual spindle dicing saw for $\varnothing 8$ -inch wafers. It incorporates the throughput enhancement technologies pioneered in the DFD6362 for $\varnothing 300$ mm wafers.
- A new axis mechanism increases the X-axis feed speed to 1,000 mm/sec. Improved acceleration and deceleration performance for each axis increases the distance where the axis moves at the maximum speed for substantially improved throughput.
- Optimization of the parts used increases the speed of the major transport units.
- A shorter distance between the spindles allows for less processing time during dual cut.



Space - saving design

The footprint is reduced by 3% from the DFD6340. Four different accessories: the transformer, UPS (uninterruptible power supply), CO2 injector, and booster pressure pump can be included internally without expanding the footprint.

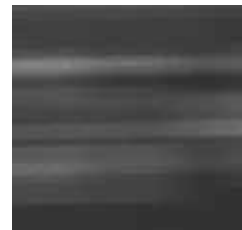
Easy operation

A GUI (graphical user interface) which has been recognized as easy to use on existing models has been included on the DFD6341. Combined with an LCD touch panel, the DFD6341 offers stress-free operation for operators.

High speed flash alignment (optional)

High speed flash alignment combines a xenon flash lamp and a high speed CCD shutter for high speed

Combines a xenon flash lamp and a high-speed CCD shutter to perform high speed alignment without the need to stop the chuck table, which reduces alignment time and increases throughput.

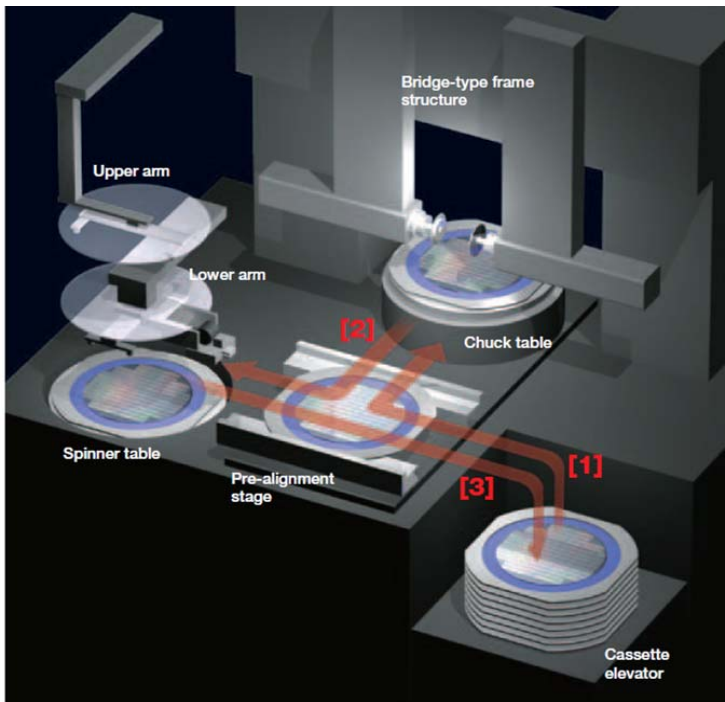


Conventional type: 100mm/sec



High speed type: 600 mm/sec

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DFD6341 Operation flow

- [1] Lower arm moves workpiece from the cassette to the pre-alignment stage. Lower arm moves the workpiece to the chuck table → **cutting** →
- [2] Upper arm moves the workpiece to the spinner table → **cleaning & drying** →
- [3] Lower arm returns the workpiece to the cassette

Specifications

Specification		Unit	1.2, 1.8 kW ,Highspeed rotation	2.2 kW
Workpiece size		-	$\phi 8''$	
X-axis	Cutting range	mm	210	
	Cutting speed	mm/sec	0.1 - 1,000	
Y1·Y2 -axis	Cutting range	mm	210	
	Index step	mm	0.0001	
	Index positioning accuracy	mm	0.002/210 (Single error)0.002/5	
Z-axis	Max. stroke	mm	19.22 (For $\phi 2''$ blade)	19.9 (For $\phi 3''$ blade)
	Moving resolution	mm	0.00005	
	Repeatability accuracy	mm	0.001	
θ -axis	Max. rotating angle	deg	380	
Spindle	Rated torque	N·m	0.19(1.2kW/High speed rotation) 0.286(1.8 kW)	0.7
	Revolution speed range	min ⁻¹	6,000 - 60,000 (1.2 kW/1.8 kW) 20,000-80,000 (High speed rotation)	3,000 - 30,000
Machine dimensions (W×D×H)		mm	1,180 × 1,080 × 1,820	
Machine weight		kg	Approx.1,500	

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 $\pm 1^\circ\text{C}$ of the set value. (Set value should be between 20 - 25 $^\circ\text{C}$).
 - Keep cutting water and cleaning water 2 $^\circ\text{C}$ above room temperature (fluctuations within $\pm 1^\circ\text{C}$).
 - 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.