



Fully Automatic Dicing Saw

DFD6750

Highly productive dicing saw for precise cutting

Next generation dicing engine featuring dual chuck tables for improved productivity

The DFD6750 is a dicing engine that provides significantly raised productivity. It also incorporates two chuck tables to enable one table to perform cutting while the other is simultaneously transferring, aligning, and cleaning. This results in a substantial reduction in spindle processing wait time for higher productivity. The return speed of each axis is also increased for improved throughput.

Increased processing quality

An improved vacuum mechanism is used to provide stronger workpiece suction in order to reduce workpiece warpage and achieve higher quality.

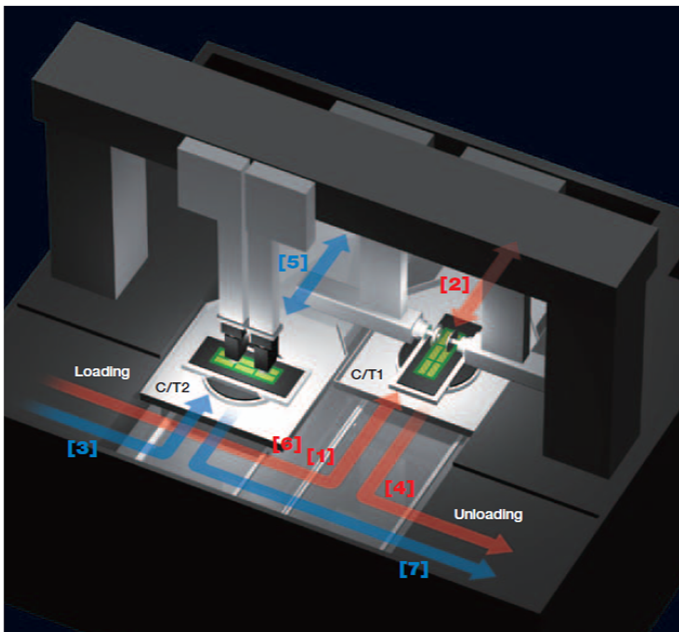
Improved countermeasures for remnants

To better handle remnants, a high durability stainless steel cover is used instead of a bellow to reduce the risk of remnants damaging the bellow. A brush unit is also used to enable easy collection of any remnants.



Process flow comparison with existing model





DFD6750 Operation flow

- [1] After transferring the workpiece to Chuck Table 1, alignment is performed. →
- [2] Dicing is performed on Chuck Table 1. →
- [3] While alignment for the first workpiece is being performed on Chuck Table 1, the next workpiece is transferred to Chuck Table 2, and alignment is performed. →
- [4] When dicing is completed on Chuck Table 1, the workpiece is transferred away. →
- [5] Dicing is performed on Chuck Table 2. →
- [6] While the workpiece is diced on Chuck Table 2, the next workpiece is transferred to Chuck Table 1, and alignment is performed. →
- [7] When dicing is completed at Chuck Table 2, the workpiece is transferred away.

Specifications			
Specification		Unit	1.8 kW 2.2 kW
Max. rotation diameter		mm	340
Example: Max jig size		mm	300 × 160 / 280 × 140 *
X-axis	Cutting range	mm	300 *
	Cutting speed	mm/sec	0.1 - 1,000
Y1·Y2 -axis	Cutting range	mm	300
	Index step	mm	0.0002
	Index positioning accuracy	mm	0.003/660 (Single error)0.002/5
Z-axis	Max. stroke	mm	19 19 (For $\phi 2''$ Blade) (For $\phi 3''$ Blade)
	Moving resolution	mm	0.00005
	Repeatability accuracy	mm	0.001
θ -axis	Max. rotating angle	deg	215
Spindle	Rated torque	N·m	0.29 0.7
	Revolution speed range	min ⁻¹	6,000 - 60,000 3,000 - 30,000
Machine dimensions(W×D×H)		mm	1,510 × 1,554 × 1,800 (excluding scrap box)
Machine weight		kg	Approx.2,200

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.