



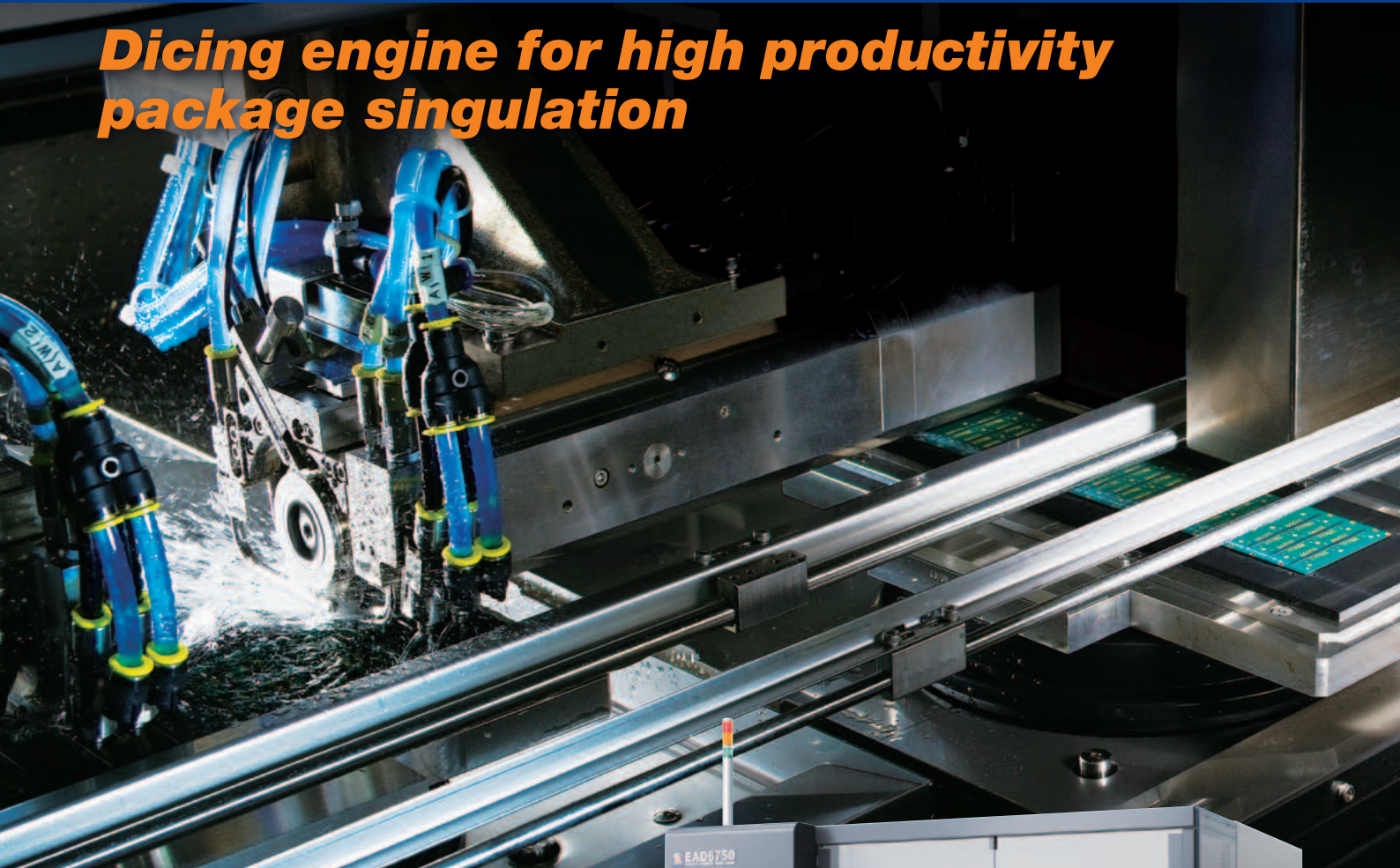
DISCO

Kiru · Kezuru · Migaku Technologies



Automatic Dicing Engine **EAD6750**

Dicing engine for high productivity package singulation



Next-generation dicing engine featuring dual chuck tables for improved productivity

The EAD6750 is a dicing engine that provides significantly higher productivity than the DFD6340 package singulation performance. 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 waiting time for higher productivity. The return speed of each axis is increased for improved throughput.

Higher processing quality

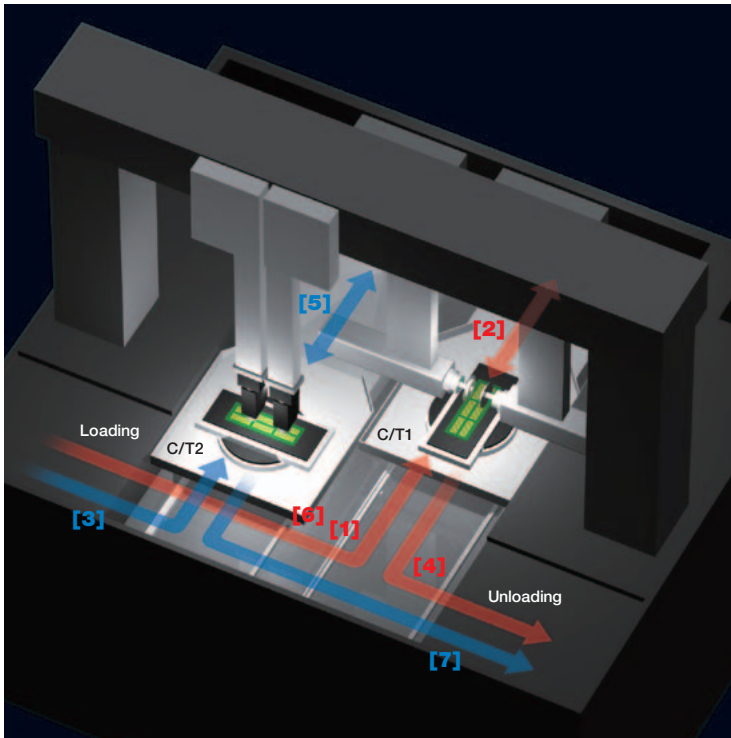
An improved vacuum mechanism is used to provide stronger workpiece suction in order to reduce workpiece warpage and achieve higher quality.

Improved measures for remnants

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



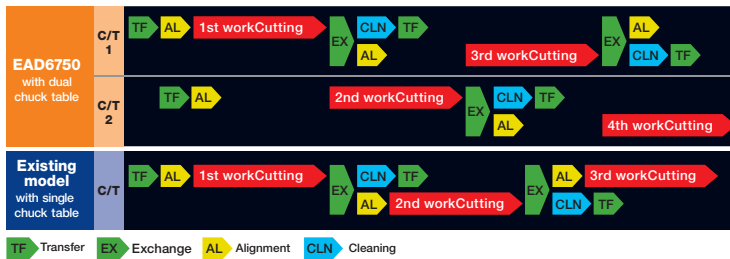
Automatic Dicing Engine EAD6750



EAD6750 Operation flow

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

Process flow comparison with existing model



EAD6750 Specifications

	1.8 kW	2.2 kW
Max. rotation diameter	mm	340
Example: Max. jig size	mm	300 × 160
Max. workpiece size	mm	280 × 140
X-axis	Cutting range	mm
	Max. cutting speed	mm/s
		0.1 - 1,000
Y1-Y2-axis	Cutting range	mm
	Index step	mm
		0.0002
	Index positioning accuracy	mm
		0.003 or less/660 (Single error) 0.002 or less/5
Z-axis	Max. stroke	mm
		19 (for ø2"blade) 20 (for ø3"blade)
	Moving resolution	mm
		0.00005
	Repeatability accuracy	mm
		0.001
θ-axis	Max. rotating angle	deg
		215
Spindle	Output	N·m
		0.29 0.7
	Revolution speed range	min ⁻¹
		6,000 - 60,000 3,000 - 30,000
Utilities	Machine main body dimensions (W × D × H)	mm
		1,510 × 1,554 × 1,800 (excluding protruding parts)
	Machine main body weight	kg
		Approx. 2,200

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).
- Keep cutting water and cleaning 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 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.



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