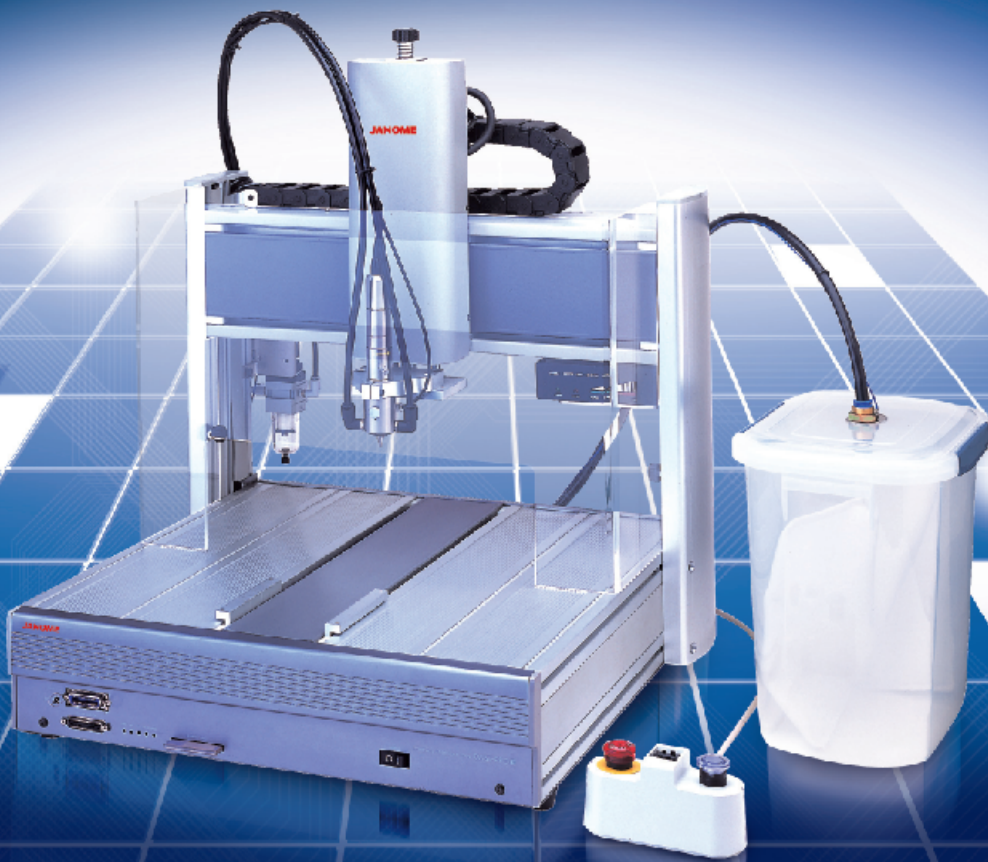


PC board depaneling robot
CAST-CR3

JANOME

Compact and precise — The new CAST separator for M-size PWBs



CAST

**High-precision, desktop size separator to handle small to M-size boards.
Integrated displacement detector function for improved success rates**

- A cutting method using an electric router that places little stress on mounted PWBs
- The spindle motor load indicator unit included as standard
- A unique vacuum suction unit to pick up cutting residue
- Compact size that can be easily incorporated into the workplace

Janome Sewing Machine Co., Ltd.

Unit Specifications

Movement range	X axis	350 mm
	Y axis	350 mm
	Z axis	100 mm
Maximum speed*1	X axis	700 mm/s
	Y axis	700 mm/s
	Z axis	300 mm/s
Positioning repeatability (accuracy)*2	X axis	± 0.01 mm
	Y axis	± 0.01 mm
	Z axis	± 0.02 mm
Maximum load	Work piece (Y axis)	10 kg
Supplied air		0.5 MPa (5 kgf/cm ²) Dry air*3
		Air consumption 200 NI/min*4
Unit mass		Approx. 47 kg
Ambient operating temperature		0 - 40 °C
Transport and storage temperature		- 10 to 60 °C
Power supply voltage		AC 100 - 120 V ± 10%, AC 200 - 240 V ± 10%, 50/60 Hz
Power consumption		300 VA
Grounding		Type D grounding

*1. Speed can be set. May not reach the specified value depending on the travel distance. *2. Conditions: Temperature 20 ± 0.2 °C measured from one direction. *3. Use dry air to prevent damage to air devices. *4. Supply 200 NI/min or more to avoid drop in vacuuming capability.

Control Specifications

Drive method	5-phase pulse motor (open loop control)
Movement method	PTP, CP
Control axis count	Simultaneous control of 3 axes
Speed control	For cutting 1 - 100 mm/s (linear, circular arc interpolation)*5
Interpolation function	3D linear interpolation, 3D circular arc interpolation
Teaching method	Direct teaching using teaching pendant (optional) Off-line teaching using a personal computer (optional)
Program capacity	Max. of 40 work programs*6
Point data storage capacity	Max. of 2,500 points*7
Programming method	Standard accessory memory card (A-Card)

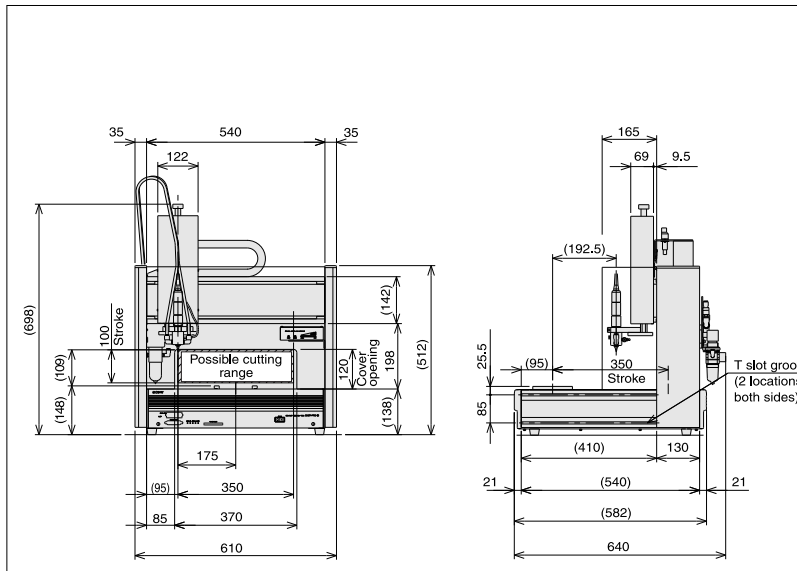
*5. Max. speed may vary depending on cutting conditions such as the board material. *6. Work program is a program of point data of different work positions. *7. At max. of 40 work programs, the number of available point data is 60, not the number of max. points.

Depaneling Specifications

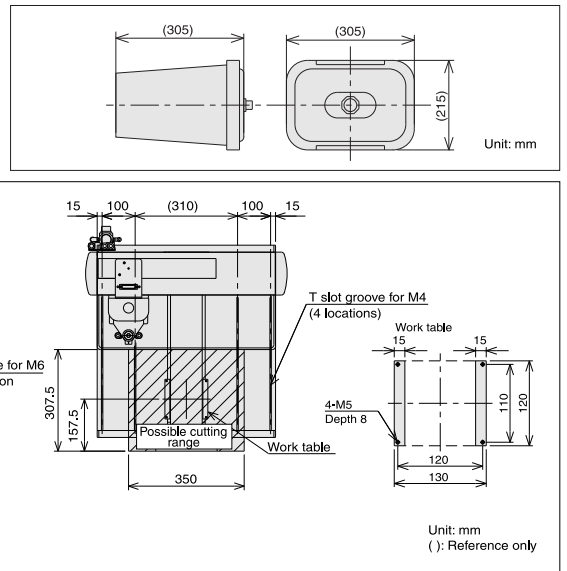
Spindle motor	Drive method	DC brushless motor
	Rated output	21 W
	Rated rotation rate	40,000 r/min (fixed)
	Fastener	Collet chuck (φ 3.175 mm)*8
Bit diameter (router bit diameter)		Standard φ 0.8 mm, Left twist*9
Collection method		Vacuum ejector method
Cutting range		Collection filter capacity 6,000 cm ³ (filter exchange method)
Supported PWB thickness		307.5 x 350 mm (maximum)
Supported PWB material		1.6 mm (maximum)
Cutting trace precision		Glass epoxy, paper phenol laminate, etc.
		0.2 mm (target value)

*8. One-touch-lever enables replacement of the bit without use of any tools. *9. Ten bits provided as standard. These are consumables therefore warranty is not applicable.

External Dimensions



Filter Box Dimensions



Safety Notice: For your safety, please read the operation manual carefully before using the product.

● Specifications and appearance are subject to change without prior notice.

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