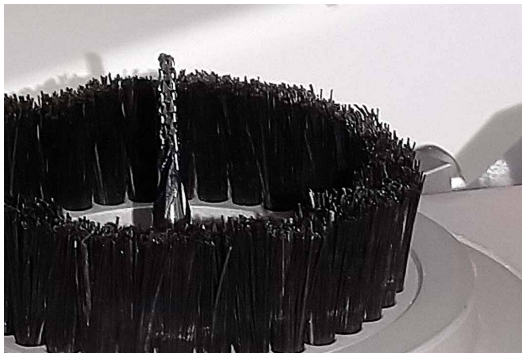
High-Speed Router

Lightning fast depaneling for high volume production.

The High Speed Router is designed to cut PCBs from large panels quickly, safely and without stressing the products. With its high speed milling capabilities and cutting tool wear control, the High Speed Router is your go-to choice for high production volume depaneling needs.

The High Speed Router features a short setup time, built-in multi-language support, integrated dust suction nozzle and an ionizator.



FAST AND ACCURATE.

The compact footprint, fast operation and accurate and clean cuts make the High-Speed Router perfect for demanding high volume production.

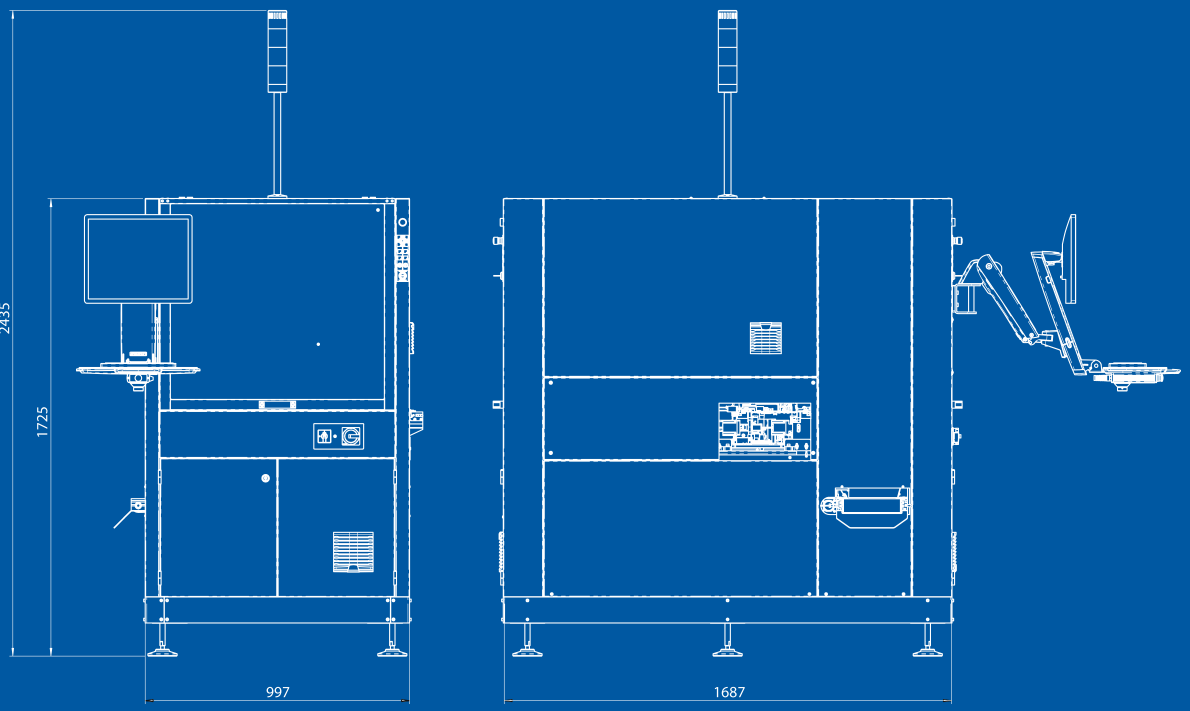
High-Speed Router MIL-2250

www.jotautomation.com

DESCRIPTION

The High Speed Router is designed to separate PCBs from large panels quickly, safely and without stressing the products. With its high speed milling capabilities, easy and precise cell teaching and cutting tool wear control, the High Speed Router is your go-to choice for high production volume depaneling needs.

BLUEPRINT



KEY FEATURES

- Separates PCB modules from the panel
- Accurate and clean cut
- Built-in multi language support
- Compact footprint
- High production volumes
- Short product set-up time
- Easy and precise cell teaching

Machine name and code:

MACHINE IDENTIFICATION

High Speed Router Cell

MIL-2250

WIDTH 997 mm | 39.25"

PRODUCT SPECIFICATION

Material: FR4, FR4 with copper layers

Maximum dimensions (W x L) if 2 upper manipulators used: 225 mm x 240 mm (8.9" x 9.5")

Maximum dimensions (W x L) if 1 upper manipulator used: 225 mm x 285 mm (8.9" x 11.2")

Minimum width: 55 mm (2.2")

Thickness: 0.6 – 3.2 mm (0.02" – 0.12")

Maximum components height

- **On top side of PCB:** 10 mm (0.4")
- **On bottom side of PCB:** 5 mm (0.2")

DIMENSIONS

W 997 mm (39.25")
H 2435 mm (95.8")
D 1687 mm (66.4")

FEATURES

	STANDARD	OPTIONAL
Servo driven X-, Y-, Z-axes	▪	
Product milling from bottom side	▪	
Product handling by upper manipulator	2 pcs. upper manipulators	
HF-motor spindle	▪	
Cutting tool breakage/wear control	▪	
Integrated dust suction nozzle	▪	
Ionizator	▪	
Conveyor width adjustment method	Automatic	
PC-based machine control software	▪	
Graphical User Interface	▪	
Touch screen	▪	
DXF file support for teaching cutting points	▪	
Camera for teaching cutting points		
Transport direction:	From left to right	From right to left
Flat belt PWB output conveyor		depth same as router cell
Flat belt PWB output conveyor		depth extended 1000 mm
Other output solutions		As per request
Automatic tool exchange system		▪
External dust extractor		▪
Code reader		▪
Dedicated grippers		▪

ESD
SAFE DESIGN

CE
SAFE COMPLIANT

SMEMA
ELECTRICAL INTERFACE

TECHNICAL CHARACTERISTIC

Machine dimensions (L x D x H):
1100 x 1700 x 2300 mm
(43" x 67" x 90") mm with light beacon

Weight of router approx.
1600 kg (3526 lbs)

Axes' stroke, speed and repeatability:

X-axis: 550 mm, 1000 mm/s max., ±0.01 mm (21.5", 39"/s, ±0.4 mils)

Y-axis: 1190 mm, 1000 mm/s max., ±0.01 mm (46.9", 39"/s, ±0.4 mils)

Z-axis: 125 mm, 600 mm/s max., ±0.1 mm (5", 23.6"/s, ±4 mils)

Spindle speed:
5.000 – 50.000 rpm

Chuck diameter:
3.175 mm (1/8")

Product cutting accuracy:
±0.15 mm (±0.006")

Conveyor track height options:
800/850/900/950 mm ±25 mm
(31.5"/33.5"/35.4"/37.4" ± 1")

Conveyor track speed:
12 m/min (39.4 fpm)
Adjustable at User interface

Fixed edge:
front

Conveyor belts:
3 mm (0.12") carrying edge

Noise level:
<73dB(A)

INSTALLATION REQUIREMENTS

Power supply: 3P+N+PE 400VAC, 50/60Hz, 16A

Air pressure: 0.6 MPa (6 bar)
Air consumption: 100 l/min (3.5 cfm)