

MPR MEDIUM PANEL ROUTER

TOTAL SOLUTION FOR ROUTER BUSINESS

As a world leader in PCB Depaneling systems, GETECH presents MPR. An in-line machine designed for high-speed routing and high-volume production of Medium-sized PCB panels (450 mm x 400 mm).



FEATURES

DUAL TABLES

HIGH ACCURACY & QUALITY CUT

HIGH-SPEED ROUTING & THROUGHPUT

READY FOR IN-LINE AUTOMATION

HIGH-RESOLUTION CAMERA

AUTOMATIC TOOL CHANGE

SAFETY PROTECTION

POWERFUL DUAL VACUUM SYSTEM

USER-FRIENDLY SOFTWARE

CE CERTIFICATION (OPTION)

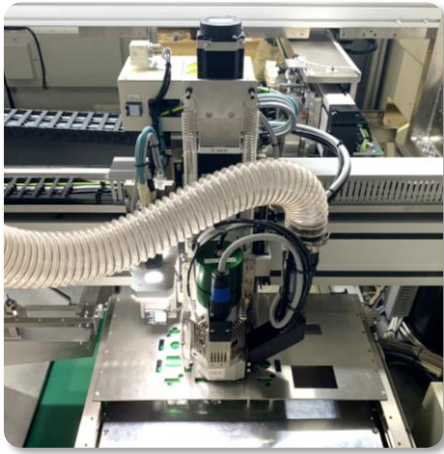


ISO 9001: 2015

Cert.No 622220

MEDIUM PANEL ROUTER

Local Agent:



The MPR is an in-line router machine specially designed to route (depanelize) medium-size panels with PCB sizes up to 450 mm x 400 mm into individual units. It is a fast, space-saving, and accurate machine designed for high-volume production with minimal operator participation. It has two worktables. While one of the worktables is in high-speed routing operation, the other worktable works with the robotic P&P module to unload boards and load the new PCB panel.

This gives us 100% operational uptime without the load/unload time issue.

Using a high-resolution CCD camera and MPR user-friendly Windows-based software allows users to program the routing paths in minutes. There are also no limitations on the number of programs stored. MPR uses high-quality components and a welded steel structure to ensure rigidity and high performance. All the axes and linear guides are protected from dust and dirt to increase lifespan and performance.

SPECIFICATIONS

Routing Capability	Non-routing Speed	: 1500 mm/sec
	Routing Speed	: 100 mm/sec max (depending on the material, cutting quality & tool diameter)
	Repeatability	: Typical ± 0.1 mm for straight lines, curves, et al. Under controlled conditions, ± 0.05 mm
Manipulators	Configuration	: X, Y, W, Z, E, & F axis
	Manipulator Motors	: AC brushless servo motors
	Manipulator Repeatability	: ± 0.02 mm
	Resolution	: ± 0.01 mm
Workstation	Design	: Dual workstation with dedicated pin fixtures
	Panel Positioning	: Located by tooling holes or edges of PCB
	Panel Loading	: Automatic (In-line Automation ready)
	Panel Size	: 450 x 400 mm (Vacuum P&P) 315 x 230 mm (Multi-gripper P&P)
	Panel Thickness	: 0.5 mm – 8.0 mm
	Component Height	: Top max. 17 mm, Bottom max. 40 mm
P&P Maximum Payload	: 3 Kg	
Spindle System	Spindle Motor	: 0.5 kW (60,000 rpm) spindle with ESD / Ceramic bearings
	Tool Change	: Auto-Tool Change
	Cooling	: Ambient cooled
	Router Bit	: Shank size 3.175 mm (1/8")
Dust Filtration System	Power	: 2 x 2.55 kW rotary vane vacuum blower
	Filtration	: 3-stage filtrations with disposable filter bag (10 microns)
	Vacuum Location	: Top vacuum on the spindle
	Extraction Hose (X2)	: ID 51 mm (2"), L= 4M
Noise Level	: <78 dB	
Vision System	Video Camera	: High-resolution CCD video camera
Programming	System Platform	: Windows® based Industrial PC (Win 11)
	Product Setup	: Vision-assisted point-to-point manual teaching; Vision-assisted editing function; Test-run mode
	Variable Functions	: Tool life optimization, Barcode support (1D or 2D), Autoloading of the last product, Tool bit diameter compensation, and Fiducial alignment. Other options are available.
Operation Monitor	Router Bit	: Tool life tracking, Tool breakage detection, Routed board count
	Vacuum	: Vacuum filter change alarm
	Machine	: Machine error history
Maintenance	Router Bit	: 100 to 300 M cutting distance before the next tool change (depending on PCB)
	Filter Bag	: 1000 to 1500 M before the next filter bag change
	Cleaning Hose	: Extra hose for periodic internal cleaning included
Conveyor System	Incoming Conveyor	: Belt-type edge conveyor (Left to Right or Right to Left)
	Conveyor Width Adjustment	: Manual (Front rail – Fixed, Back rail – Manual adjust); Option: Auto-adjust
	Outgoing Conveyor	: Flat Belt - exposed length of 625 mm (default, options available)
	Offload Module	: Customer specifications
	Communication	: SMEMA
Safety Features	E-stops, Spindle stop, Spindle motor overheat & Servo overload detection, Enclosed work area with safety doors	
Dimensions & Utilities	Machine Size	: 1740 W (1860 W with side cover) x 2100 D x 1750 H mm
	Vacuum Tank Size	: 2 x 400 \varnothing x 800 H mm
	Weight (Main + 2 Tanks)	: Approx. 1690 kg + 50 kg
	Power Supply	: 3+N+E, 380–415V 50Hz, 11.5 kW (CE Option) or 3+E, 208–240V 60Hz, 11.5 kW (Non-CE)
	Air Supply	: 6 bars