

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 (450mm x 400mm).



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

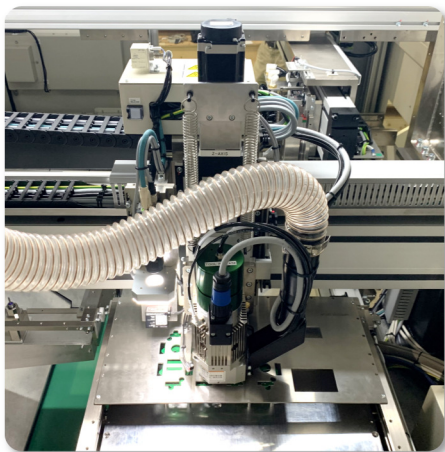
CE CERTIFICATION (OPTION)



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 size up to 450mm x 400mm 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 issue of load/unload time.

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 in 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 used 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 material, cutting quality & tool diameter) |
| | Repeatability | : ±0.05 mm straight lines, curves, and interpolated profiles |
| Manipulator | 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 | : L450mm x W400mm |
| | Panel Thickness | : 0.5 mm – 8.0 mm |
| | Component Height | : Top max. 11 mm, Bottom max. 40 mm |
| 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 3.0 kW rotary vane vacuum blower |
| | Filtration | : 3 stage filtrations with disposable filter bag (10 microns) |
| | Vacuum Location | : Top vacuum on 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 10) |
| | 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 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 next tool change (depending on PCB) |
| | Filter Bag | : 1000 to 1500 M before 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 620mm (default, options available) |
| | Communication | : SMEMA |
| | Offload module | : Customer specifications |
| Safety Features | E-stops, Spindle stop, Spindle motor overheat & Servo overload detection, Enclosed work area with safety doors | |
| Dimensions & Utilities | Machine Size (W x D x H) | : 1740 mm x 2100 mm x 1750 mm |
| | Vacuum Tank Size (Ø x H) | : 2 x 400 mm x 800 mm |
| | Weight (Main + 2 Tanks) | : Approx. 1690kg + 50Kg |
| | Power Supply | : 3+N+E, 380~415V, 50 Hz or 3+E, 208~240V, 60 Hz; 11.5kW |
| | Air Supply | : 6 bars |