GETECH

"Performance, Value, Integrity"

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OVER 25 YEARS IN THE INDUSTRY

SPR SMALL PANEL ROUTER

THE SOLUTION FOR HIGH VOLUME SMARTPHONE PCBs

As a world leader in PCB Depaneling systems, **GETECH** presents **SPR**. An in-line machine designed for high-speed routing and high volume production of Small PCB panels (190mm x 190mm).

FEATURES

- HIGH-SPEED ROUTING & THROUGHPUT
- DUAL TABLES
- READY FOR IN-LINE AUTOMATION
- SPACE SAVING LENGTH 890MM
- HIGH-RESOLUTION CAMERA
- AUTOMATIC TOOL CHANGE
- SAFETY PROTECTION
- HIGH ACCURACY QUALITY CUT
- POWERFUL VACUUM SYSTEM
- USER FRIENDLY SOFTWARE

GUARDIAN INDEPENDENT CERTIFICATION GiC

UKAS MANAGEMENT SYSTEMS 045

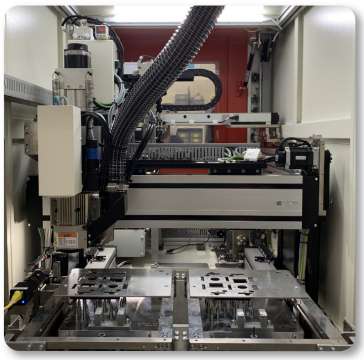
ISO 9001 : 2015 Cert. No.: 622220

SMALL PANEL ROUTER

Local Agent:

The SPR is an in-line router machine specially designed to route (depanelize) small panels with PCB size up to 190mm x 190mm 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 SPR 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. SPR 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.



Vacuum Assembly

SPECIFICATIONS

Routing Capability	Non-Routing Speed	: 1200 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, & G 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 (L x W)	: 190mm x 190mm
	Panel Thickness	: 0.5 mm – 3.0 mm
	Component Height	: Top max. 11 mm, Bottom max. 23 mm
Spindle System	Spindle Motor	: 0.5 kW (60,000 rpm) spindle with ESD / Ceramic bearings
	Tool Change	: Auto-Tool Change (Option)
	Cooling	: Ambient cooled
	Router bit	: Shank size 3.175 mm (1/8")
Dust Filtration System	Power	: 3.0 kW rotary vane vacuum blower
	Filtration	: 3 stage filtrations with disposable filter bag (10 microns)
	Vacuum Location	: Top vacuum on spindle
	Vacuum Brush Solution	: Spring Loaded Holder (NEW!)
Vision System	Video camera	: High resolution CCD video camera
	Options available	: PCB Fiducial capturing, Barcode Reading, Debris Detection, and Toolbit Diameter Measurement
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 bit diameter compensation, Filter change interval (distance) setting.
Operation Monitor	Router Bit	: Tool life tracking, Tool breakage detection, Routed board count
	Vacuum	: Vacuum filter change alarm
	Misload Detection	: Height check by Laser Sensor (Option)
	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	: Automatic width adjustment (NEW!)
	Outgoing Conveyor	: Flat Belt - exposed length of 200 mm (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)	: 890 mm x 1600 mm x 1750 mm
	Vacuum Assy Size (W x D x H)	: 650 mm x 700 mm x 890 mm
	Weight (Main + Vacuum)	: Approx. 870kg + 123kg
	Power Supply	: 3+N+E, 380~415V, 50 Hz or 3+E, 208~240V, 60 Hz
	Air Supply	: 6 bars

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