GBR MAX — GETECH BOTTOM ROUTER - MAX

TOTAL SOLUTION FOR ROUTER BUSINESS

As a world leader in PCB Depaneling systems, **GETECH** presents the latest model **GBR Max**. An in-line fixtureless machine designed for routing of Large PCB panels (1200mm x 400mm).

FEATURES

- FIXTURE-LESS ROUTER
- HIGH ACCURACY & QUALITY CUT
- IN-LINE AUTOMATION READY
- HIGH-SPEED ROUTING & THROUGHPUT
- AUTOMATIC CONVEYOR WIDTH ADJUSTMENT
- AUTOMATIC TOOL CHANGE AND TOOL MEASUREMENT
- HIGH RELIABILITY PCB GRIPPING SYSTEM
- HIGH-RESOLUTION CAMERA
- POWERFUL DUAL VACUUM SYSTEM
- CE CERTIFICATION

GUARDIAN INDEPENDENT CERTIFICATION
GIC

UKAS MANAGEMENT SYSTEMS
045

ISO 9001 : 2015   Cert. No.: 622220

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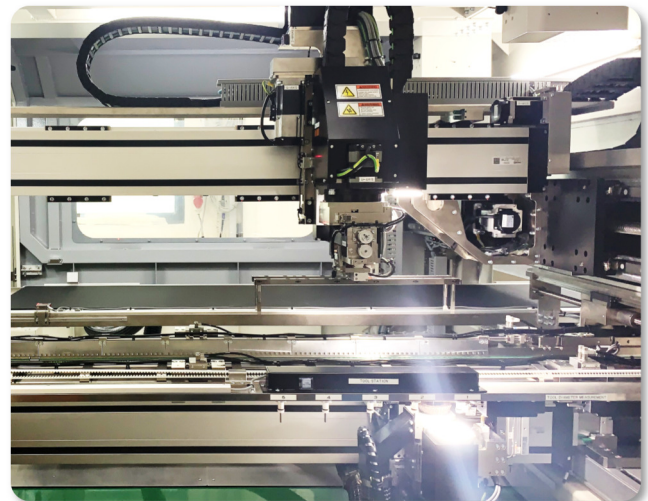
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GBR MAX Getech Bottom Router - Max

The Getech Bottom Router has proven its utility as a PCB Depanelling system and a point of work balance acting as a cutting system, a handling system, a sorting system while keeping the demand for operators to a minimum. As the world of electronics permeates our lives, the demand for miniaturization, smaller and faster, is being complemented by larger and longer form factor panels that exceed the norms of manufacture. Many EV and Solar applications have resulted in larger form factor electronics with extreme dimensions. To meet this need, Getech launches the GBR Max. The GBR Max can accommodate PCBs up to 1200mm in length.

Unlike many machines designed for large format PCBs, the GBR Max is the only one that uses a multi-stage robotic gripping system to handle the PCB. This means the need for Large, Heavy, and cumbersome fixtures is removed. No Fixtures Required !!! The multi-stage handling means the gripper is positioned at the point closest to the cutting location maintaining PCB stability and minimizing any movement during cutting. An under PCB support mechanism stops the PCB from "Sagging under its own weight," The output flat belt is stretched to accommodate the total PCB length.

The GBR Max may very well be the largest PCB router globally, but it is certainly the largest Fixtureless PCB router available today. Another Getech First...

SPECIFICATIONS

Routing Capability	Non-Routing Speed	: 800 mm/sec
	Routing Speed	: 100 mm/sec max (depending on material, cutting quality & tool diameter)
	Repeatability	: Typical ±0.1 mm for straight lines, curves, et al. Under controlled condition ±0.05 mm
Manipulators	Configuration	: 9 axis
	Manipulator Motors	: AC brushless servo motors
	Manipulator Repeatability	: ±0.02 mm
	Resolution	: ±0.01 mm
Workstation	Design	: Fixtureless - Bottom Routing, In-line
	Panel Positioning	: Conveyor rail clamping (Top and Side) and Board gripping
	Panel Size	: L1200 mm x W400 mm (Min. width = 70 mm)
	Panel Thickness	: 0.8 mm – 4.0 mm
	PCB Max. weight	: 5.0 Kg
	Component Height	: Top Max. 70 mm
		: Bottom 12mm. For bottom comp. height up to 30 mm, ask Getech sales
Spindle System	Spindle Motor	: 0.5 kW spindle with ESD / Ceramic bearings
	Tool Change	: Automatic tool change
	Cooling	: Ambient cooled
	Router bit	: Shank size 3.175 mm (1/8")
Gripper System	PCB Pick & Place	: Servo Gripper
	Gripper Finger Change	: Manual
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	: Bottom 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
		: Fiducial mark verification/confirmation, Bad mark recognition
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	: Barcode support (1D or 2D), Autoloading of last product. Other options are available.
Operation Monitor	Router Bit	: Tool life tracking, Tool breakage detection, Routed board count, Tool diameter check
	Vacuum	: Vacuum filter change alarm
	Machine	: Machine error history
Conveyor System	Incoming Conveyor (Lane 1)	: Belt type edge conveyor (Left to Right)
	Conveyor Width Adjustment	: Automatic (Front rail – Fixed, Back rail – Auto adjust)
	Conveyor Height	: 940mm to 965mm (37" ~ 38")
	Outgoing Conveyor (Lane 2)	: Flat Belt - exposed length of 1300mm (default, options available)
	Lane 2 Options	: According to customer demand
	Communication	: SMEMA
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)	: 1980mm x 1940mm x 1820mm
	Vacuum Tank Size (Ø x H)	: 2 x 400 mm x 800 mm
	Weight	: Approx. 2010 kg (Main) + Approx. 140 kg (Conveyor, Waste Bin, 2 Tanks)
	Power Supply	: 3+N+E, 380~415V, 50 Hz or 3+E, 208~240V, 60 Hz; 10kW
	Air Supply	: 6 bars