

GBR Bottom Router Machine



GBR is an in-line bottom router machine specially designed to route (depanelize) printed circuit board assemblies (PCBA) into individual assemblies.

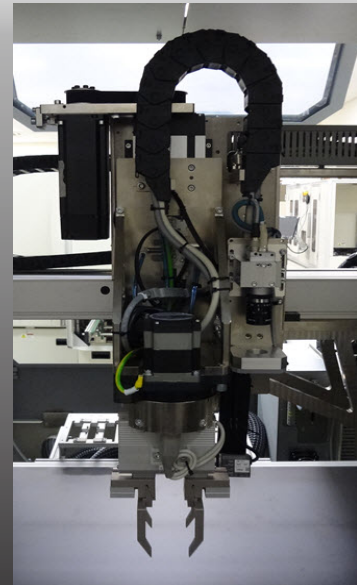
PCB is received in the incoming conveyor and is located and clamped. The Gripper Finger Station securely handles the PCB. The bottom spindle router precisely routes the PCB.

After routing, the PCB is accurately placed in the outgoing conveyor while the frame is dropped onto the waste conveyor.

A new Graphical User Interface (GUI) with Getech's "Move, Teach & Cut" advanced control software provides user friendly "visual" programming for rapid and accurate online programming.

FEATURES

- Large range of panel size up to 500 mm x 400 mm
- Powerful servo motors powered axis
- Auto conveyor width adjustment
- Auto Gripper finger change (option)
- Automatic program changeover (option)
- Good / Bad board segregation (option)
- Flat Belt or Bridge Axis outgoing conveyor



SPECIFICATIONS :

Routing capability

Non Routing speed	: 1000 mm/sec
Repeatability	: +/- 0.1 mm
Cutting Speed	: 100 mm/sec max

Manipulator

Configuration	: 9 axis
Manipulator Motors	: AC brushless servo motors
Manipulator Repeatability	: ±0.02mm
Resolution	: ±0.01mm

Spindle System

Spindle motor	: 0.5 kW spindle with ESD Ceramic bearings
Cooling	: Ambient cooled
Router bit	: Shank size 3.175 mm (1/8")

Dust Filtration System (External)

Power	: 2 x 2.5 kW rotary vane vacuum blower
Filtration	: 3 stage filtration with disposable filter bag (10 microns)

Vision System

Video camera	: CCD video camera
	: Fiducial Mark Verification / Confirmation

Programming

On line	: Vision assisted point to point manual teaching
Editing Function	: Dry run vision assisted / test run mode
Variable Functions	: Tool bit diameter compensation, Filter change interval (distance) setting. Other options available.

Safety Feature

"E" Stops, Spindle stop, Spindle motor overheat & Servo overload detection, Tool broken/dropped detection, Enclosed work area and doors with sensors.

Conveyor System

Incoming Conveyor	
Front Rail	: Fixed
Back Rail	: Auto width adjustment
PCB Conveyor Height	: 940 mm to 965 mm (37" ~ 38")
PCB Flow Direction	: Left to Right
Communication	: SMEMA
Outgoing Conveyor	: Flat Belt or Bridge Axis module

SPECIFICATIONS :

Machine size	: 1250mm x 1940mm x 1910mm
Weight	: 1200kg
Power Supply	: (options available)