

Cencorp 1000 BR



The best choice for PCB

The PCB depaneling phase should never be a bottleneck in your production, not in terms of quality, cycle time, change-over time or maintenance. Then the right choice is the Cencorp 1000 Bottom Router (BR), chosen by world-class manufacturers to improve their production throughput. Over 15 years of experience in depaneling has been built into this 4th generation solution.

Cencorp 1000 BR provides flexibility and efficiency

The system is extremely easy to program and operate thanks to its graphical user interface with integrated teach mode. Automated tasks such as automatic rail adjust and automatic program

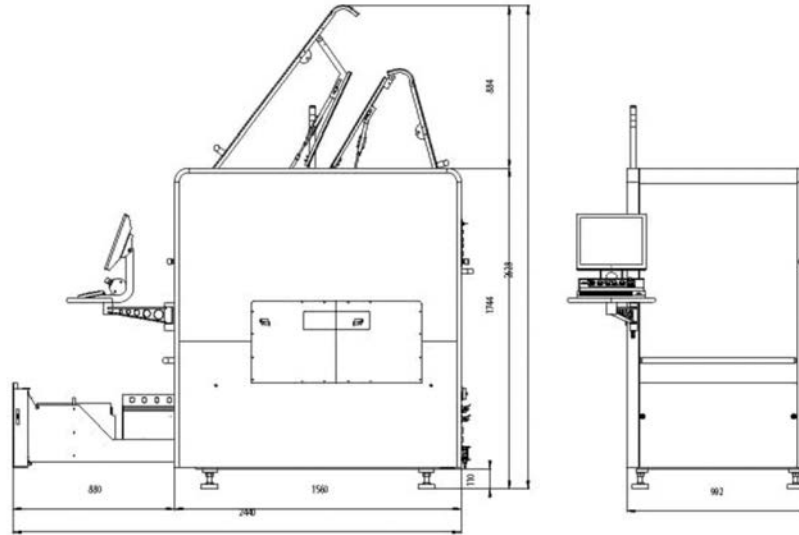
change as well as the servo gripper mechanism eliminate the need for any manual intervention or the need to use special tools in product change-over.

The Cencorp 1000 BR is both efficient and flexible; the same machine can also be used as a stand-alone router. Due to the high capacity and short change-over time, you can replace several stand-alone machines with one Cencorp 1000 BR.

One single platform

Our standard solutions are based on one platform and module strategy. However, customer specific modules can be built when required to meet the manufacturing process requirements.

Technical data 1000 BR



Pick & Place Work Envelope

X-travel: 645 mm
Y-travel: 940 mm
Z-travel: 150 mm
W-travel: 360 deg

Router Work Envelope

X-travel: 450 mm
Y-travel: 415 mm
Z-travel: 50 mm

Accuracy

Repeatability (x,y,z): ± 0.03 mm [3 s]
Repeatability (W): $\pm 0.05^\circ$ [3 s]

Pick & Place Performance

Max. axis speed: 2000 mm/s
Max. acceleration: 15000 mm/s²
Rec. routing speed: 20–50 mm/sec
Machine cycle time, min*: 4 sec

Board Handling (panel)

Min PCB size: 50x50 mm
Max PCB size: 450x350 mm
Thickness, max: 5mm
Transfer protocol: SMEMA
Optional: WMV
Transfer height: 900+-25mm
PCB conveyor type: Two segment
Top clearance: 70 mm
Bottom clearance: 20mm
Conveyor speed up to: 16m/min adjustable
Width adjustment**: Programmable
Locking pins adj.: Programmable
PCB stopper pos.: Programmable

Base Standards

Teach In (CATS): Camera assist
Broken bit detection: Optical
Routing bit storage: 10+10 pcs
Dust extraction support: Air ionisation

Gripper System

PCB pick & place: Servo gripper
Gripper finger width: Programmable
Gripper finger change: Automatic
Gripping identification: Standard
Tool rack f. gripper finger: 3–4 positions
Pneum. multiple gripper: Optional

External Vacuum System

ULT 200 Ec: Optional
DustAway: Optional
Others: Optional
Dust Flow Control: Optional

Graphical User Interface

Operating system: Windows XP
USB memory: Standard
Touch screen: Optional
Ethernet card: Standard
Dual Monitors: Optional

Machine Vision

CATS: Standard
Active vision, Matrox: Optional
Fiducial reg.time: < 1 s

Software Options

CMS: Local SPC
APCC: Auto Prg. Change
Barcode support: 1D or 2D

Machine Dimensions

Width: 992 mm
Depth: 1560 mm
Height: 1744 mm
Weight: 1700 kg

Electrical Service Requirements

Voltage EU (USA): 400 (208) VAC 10%
Frequency EU (USA): 50 (60) Hz
Branch circuit size: 16 A
Average power cons.: 2 kVA

Pneumatics Service Requirements

Pressure: 5–7 bar
 $\pm 10\%$, dry clean air
Approx. air consumption: 100 l/min

Environmental Requirements

Operating temperature: 10 ... 40°C
Operating humidity (RH): 30% ... 85%

* Machine cycle time is related to PCB layout
** Patented: US6222629,FI105315,Pending EP