

# where ideas become technology



## Inline fixtureless Router

Neorouter Modula is the solution for inline mechanical separation of PCB's.

The high flexibility in terms of configuration and fast setup make Neorouter Modula perfectly suitable for mass production volume but also for high mix lots.

The gripper fingers can be changed manually (it takes just a few seconds) or in automatic mode (optional item). After that, once the right routing program is loaded, the machine is ready to start a new production lot.

Routing bits are automatically changed, without any intervention from the operator and the bit presence monitoring is always active.

A cleaning station with ionized air can be integrated for PCB cleaning after routing, in order to remove dust particles.

The separated PCBs can be unloaded on trays, tape conveyor or magazine racks.

Neorouter Modula can also be connected to your test equipment (ICT or AOI) or to your traceability system in order to automatically sort the PCBs between KO and OK.

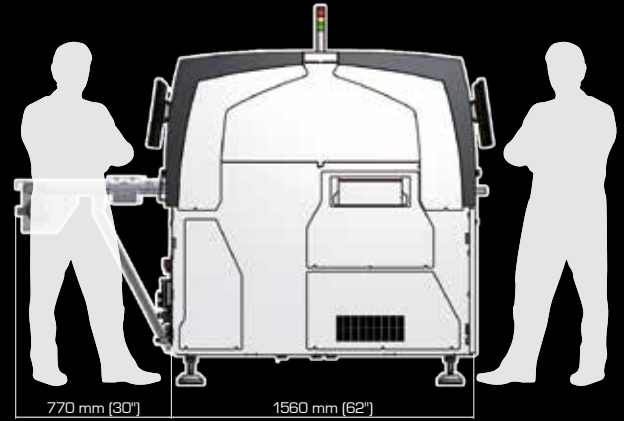
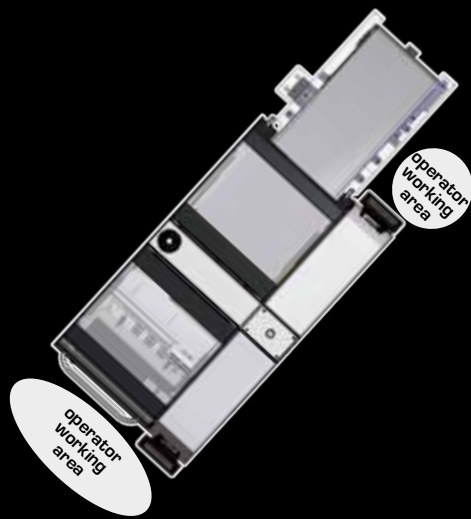
Thanks to the software operation interface, developed internally at Osai, creating router programs is fast and easy.



**NEOROUTER**  
modula

Features that make Neorouter Modula a very efficient system with low ownership cost:

- Fixtureless
- Inline automatic system
- Up to 3,5mm PCB depaneling
- Multiple options of PCB unloading
- PCB bowing correction
- Routing bit presence and break check during the whole cycle, in real time
- Optimized use of routing bit height



### MACHINE CONFIGURATION

Transp.	SMEMA compliant
Max. conveyor width	350mm with automatic adjustment
Interface	SMEMA
Flow sense	Left to right (right to left or pass-back optional)
Operating side	Front side

### PANEL DIMENSIONS

Panel length	70mm to 300mm (2.8" to 12") with second stopper up to 480mm (19")
Panel width	50mm to 350mm (2" to 13.8")
Panel weight	Up to 3kg (6.6lbs)
PCB conveyor	3mm flat belt
Panel thickness	0,5mm to 3,5mm (19.7mils to 137mils)
Panel clearance	Up 100mm (4") - Down 40mm (1.5")
Working area	300mm (12") x 350mm (13.8")
Cutting area (Width)	320 mm (Up to 12,5")

### INSTALLATION REQUIREMENTS

Power supply	CE 400V	208/240/277/440/480/575V
Power supply system	CE 3P+N+PE - 50/60 Hz, +/- 10%	3Ph+GND 3 Wire - 50/60 Hz, +/-10%
Power consumption	Typical 4 kW at work	
Air pressure	6 bar (87 p.s.i.)	
Average consumption	<110 NI/min. (29 gpm)	

### MACHINE DESCRIPTION

Dimensions (LxWxH)	900mm x 2.765mm x 1.924mm (35.5" x 109" x 76")
Readable Codes	Data Matrix ECC200, Code 39, Code 128, 2/5 Interleaved, QR Code
Repeatability	+/- 5µm (0.19mils)
Accuracy	+/- 10µm (0.39mils)
Top axis speed (X-Y-Z)	9.000mm/s - 9.000mm/s - 3.240mm/s
Bottom axis speed (CX - CY)	700mm/s - 1.100mm/s
Weight	1.500kg (3.307lbs)
Color	RAL 9018, RAL 7016
Noise Level	< 70dB

### UPGRADES AND OPTIONS

- Vision System for programming
- 2D code and fiducial recognition
- Second head
- Cleaning station with ionized air
- Handling modules for automatic panel loading and unloading
- Exhauster
- DB Connection

The specifications given in this document represent the state of engineering at the time of publishing. Osai reserves the right to make modifications on the specifications and materials.