

Cencorp 1000 OF EVO2 Odd-form

Placement flexibility and agility

When you need high speed through hole placement combined with state-of-the-art process control and flexibility our new 1000 OF EVO2 machine is the right choice.

Cencorp's 1000 OF EVO2 represents the 4th generation of our odd-form component placement machines. The machine can use a full range of Cencorp feeders to provide the highest flexibility and best price/performance ratio in odd-form component placement.

The machine can be equipped both with a traditional single placement head or with a dual head for increased placement speed. Servo grippers are used in both configurations providing the best possible process control.

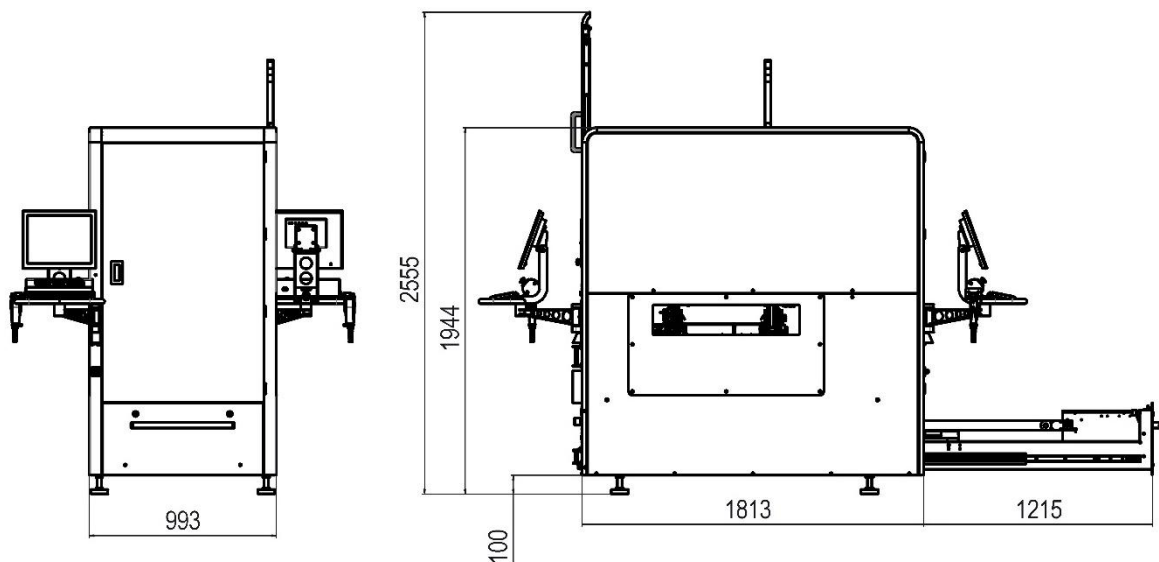
The new feeder trolley allows almost unlimited component mix and flexibility. Feeders for the next production batch can be set up outside the machine and changed within minutes during product changeover.

Equipped with extensive software options covering on-line CAD import, MES connectivity and traceability, it meets the toughest quality demands in the electronics industry today. Flexible machine configuration with dynamic programming features will cover your ever-changing production needs for years to come.



Cencorp 1000 OF EVO2

Technical Data



Pick & Place Work Envelope

X-travel: 570 mm (610mm in dual head)
 Y-travel: 1225 mm
 Z-travel: 200 mm (150mm in dual head)
 W-travel: 360 deg

Active Clincher Work Envelope

X-travel: 438 mm
 Y-travel: 634 mm
 Z-travel: 50 mm
 W-travel: 360 deg
 Clinching pitch: 2,5 – 45 mm
 Clinching possible in all directions

Repeatability

Repeatability (x,y,z): ± 0.02 mm [3 s]
 Repeatability (W): $\pm 0.05^\circ$ [3 s]

Pick & Place Performance

Average placement speed (single head): 1,7s
 Average placement speed (dual head): 1,4s
 Average clinching time: < 1s
 Cycle times indicated with a 400 mm pick&place cycle using radial components.

Board Handling (panel)

PCB size: min 75x75 mm, max 500x400 mm
 Max clinching area: 430x400 mm
 Max PCB weight and thickness: 3 kg, 4 mm
 Transfer protocol: SMEMA
 Transfer height: 900+25mm
 PCB conveyor type: 3-segment
 • Long boards run in 1-segment mode.
 Top clearance: 100 mm
 Bottom clearance: 50 mm
 Edge clearance top: 3mm
 Edge clearance bottom: 5mm
 Width adjustment: Programmable
 PCB stopper pos.: Programmable

Component Handling

Servo gripper 70 (single head) with automatic finger change, programmable pusher force, component presence and collision detection

- Gripper movement: 70 mm
- Maximum component dimensions: 100 x 50 mm
- Maximum component weight: 200 g
- Pusher force programmable (15%-100%)

Servo gripper 20 (dual head) with automatic finger change, adjustable pusher force, component presence and collision detection

- Gripper movement: 16 mm
- Maximum component dimensions: 50 x 50 mm
- Maximum component weight: 100 g
- Pusher force programmable (15%-100%)

Tool rack for gripper finger: 8 positions

Vacuum gripper: Optional

Force sensing available as option for machines with active clinching unit

- Force measurement area: 50-120 N
- Resolution: 20 N

Feeders

Fixed feeder bench: standard

- Available feeder space: 800 mm
- Maximum component pick area 570mm
- Feeder Ports: 16

Feeder trolley: optional

- Available feeder space: 540mm
- Feeder ports 12

Available Feeder Types

- Axial, radial, tube, tape

- tray, bowl, custom (only available with fixed feeder bench)

Graphical User Interface

Operating system: Windows
 USB memory: Standard
 Touch screen: Standard
 Second user interface on rear side: Optional
 Network connection: Optional
 Local language support

Machine Vision

CATS and Active vision: Standard
 Q-scan system: Optional
 Q-check system: Optional
 Process cameras mounted to gripper and clinching unit: Standard

Software Options

MES connection
 CVS, Component Validation System
 Automatic program change
 CiS Program suite
 Off-Line programming

Machine Dimensions

Width: 993 mm
 Depth: 1813 mm + feeders + monitor
 Height: 1944 mm
 Weight: 2200 kg

Electrical Service Requirements

Voltage (EU/USA): 16A, 400 VAC 50Hz or 16A, 208 VAC 60Hz

Average power cons.: 2 kW / phase

Pneumatics Service Requirements

Pressure: 5-7 bar $\pm 10\%$, dry clean air
 Approx. air consumption: 85 l/min

Environmental Requirements

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