Cencorp 850 OF

Designed for mass production environments

The completely new Cencorp 850 OF is now available. Designed to remove manual labor from mass production lines with through hole component placement, this machine brings you excellent return of investment.

Cencorp 850 OF builds on the long tradition of highly reliable odd-form machines from Cencorp. Equipped with a fast and flexible pick and place robot and the highly appreciated user interface of the Cencorp odd form cells this new small platform will be ideal for automation also in low cost countries.

The machine is capable of holding up to 8 feeders of all standard and custom feedertypes offered by Cencorp. Panels are supported from underneath to ensure a high quality process. Component clinching can be done with product specific support fixtures under the board.

Equipped with extensive software options covering on-line CAD import, MES connectivity and traceability it meets the toughest quality demands in electronics industry today.
Cencorp 850 OF

Technical Data

Gantry Work Envelope
- X-travel: 500 mm
- Y-travel: 820 mm
- Z-travel: 80 mm
- W-travel: 360 deg

Accuracy
- Repeatability (x,y): ±0.03 mm [3 s]
- Repeatability (W): ±0.05º [3 s]

Pick & Place Performance
- Max axis speed: 1500 mm/s
- Max. acceleration: 15000 mm/s²

- Average placement speed: 1.4 s/component
  with a 3000 mm pick&place cycle using tube components

Board Handling
- Min. PCB size L x W: 75x75 mm
- Max. PCB size L x W: 400x350 mm
- PCB transfer time: 3 s
- Transfer protocol: SMEMA
- Transfer height: 900 ±25 mm
- Width adjustment: Programmable
- Max. PCB weight: 4 kg
- Top clearance: 40 mm
- Bottom clearance: 20 mm
- Edge clearance top: 3 mm
- Edge clearance bottom: 5 mm

Board Support Module
- Includes one universal support plate with magnetic support pins
- Automatic pin configuration available as option
- Product specific support plates with clinching features available upon request

Component Handling
- Servo Gripper 20 with automatic finger change,
  pneumatic pusher, component presence and collision detection
- Gripper movement: 22 mm
- Maximum component dimensions: 60 x 60 x 40 mm
- Maximum component weight: 100 g
- Comp. teaching: Camera aided
- Finger exchange: Automatic
- Finger slots available: 3+1 (tools)

Feeders
- Available feeder space: 500 mm
- Feeder Ports: 8
- Up to 8 feeder locations at 60mm wide each
- Available Feeder Types
  - Axial, radial, horizontal tube, angular tube,
  - tray, bowl, custom

General
- Graphical User Interface
- Operating system: Windows
- Motion controller Beckhoff
- UPS standard
- Touch screen standard
- Network connection: Optional
- Dual Monitors: Optional
- Local language support

Machine Vision
- 2-camera active vision: Standard
- Correction of PCB position
- Visual bad board detection Optional
- Correction of component position Optional (require additional light)

Software Options
- Cell Statistics
- Component Validation System
- Traceability
- Automatic CAD download
- Off-Line programming
- Barcode support: 1D or 2D

Machine Dimensions
- Width: 865 mm
- Depth: 1558 mm
- Height: 1724 mm
- Weight: 1500 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/phase

Pneumatics Service Requirements
- Pressure: 5-7 bar ±10%, dry clean air
- Approx. air consumption: 100 l/min

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