

# CLASSIC OVEN VERTICAL CAROUSEL

## AUTOMATIC VERTICAL CONVECTION THERMAL SYSTEM



## SAVE ENERGY AND FLOOR SPACE

Designed for coating processes, post-dispensing backend processes, and intended to address operational needs.



### UNIQUE CONCEPT

#### CONFIGURATION FLEXIBILITY

- Photoelectric sensor.
- Lifting.
- Perfect width adjustment mechanism.
- Fiber optic sensor.
- Dual lane option.

#### PRODUCTIVITY

- Improving temperature uniformity.
- Unique horizontal + up & down air.
- Embedded trend analysis.
- High thermal efficiency and uniformity.
- Heating layers: up to 65.
- Dual lane option.
- 130 positions.

#### TRACEABILITY (SMARTBOX OPTION)

- Process tracker.
- Live process parameters log.
- Embedded trend analysis.

#### OPTIMIZATION

- Floor space & facility savings.
- Energy efficient.

## FEATURES

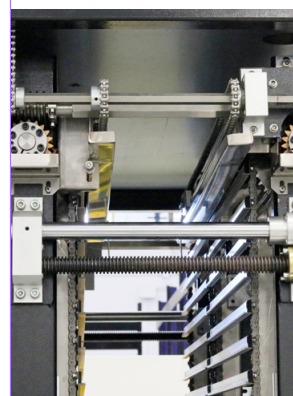
- **PCB size:** 600x500 mm (LxW).
- **Conveyor:** Bottom and return.
- **Distance between slots:** Adjustable: ex. 25 mm (64 layers) - 75 mm (16 layers).
- **Numbers of slots:** front 32 cages, rear 32 cages.
- **Weight:** More than 5 kg per layer.
- **Heating control:** PID closed-loop control + high-frequency pulse.
- **Photoelectric sensor:** Detects the PCB position.
- **Fiber optic sensor:** Detects the PCB position.
- **Lifting limit:** Fiber detection.
- **Width-adjusting device:** The movable rail is used to adjust the width.
- **Safety:** CE-compliant safety measures and protection devices.

### PCB EXIT DEVICE



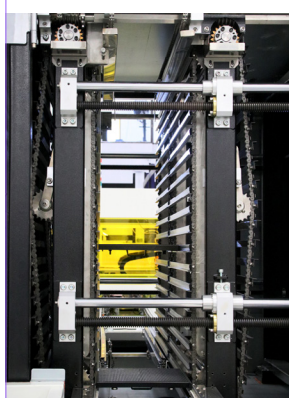
Two parallel chains at the side exit with a pusher device on each chain.

### CONTROL OF LIFTING DEVICE



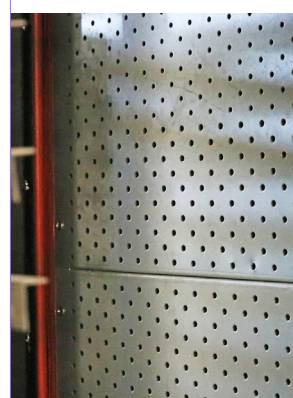
The lifting mechanism is driven by a servo motor.

### CONTROL OF PCB ENTRY DEVICE



The limit photoelectric sensor detects the correct PCB position.

### HEATING DEVICE

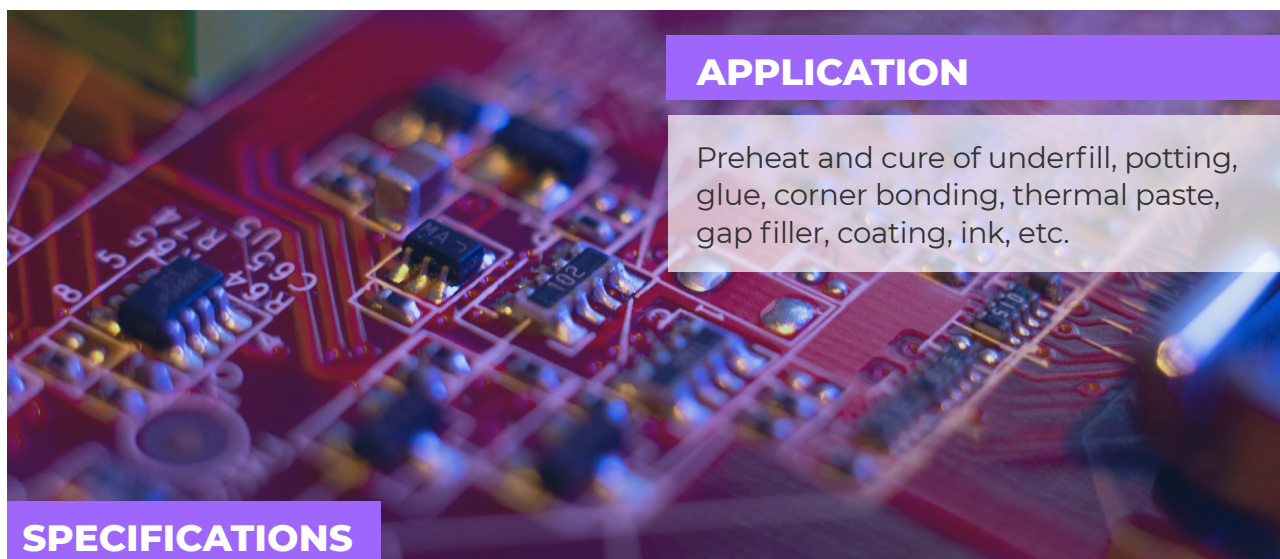


The wind wheel in the heating box delivers heat to the interior.

## SMARTBOX OPTIONS

- » Process related sensors:
  - ESD impurity sensor.
  - Humidity and temperature.
  - More on demand.
- » Dispensed geometry element trend analysis with up-stream communication.
- » Local process supervision display.
- » Industry 4.0 - SECS/Gem, UAC, Hermes, Opcon, IPC-CFX, Process Tracker & more on demand.

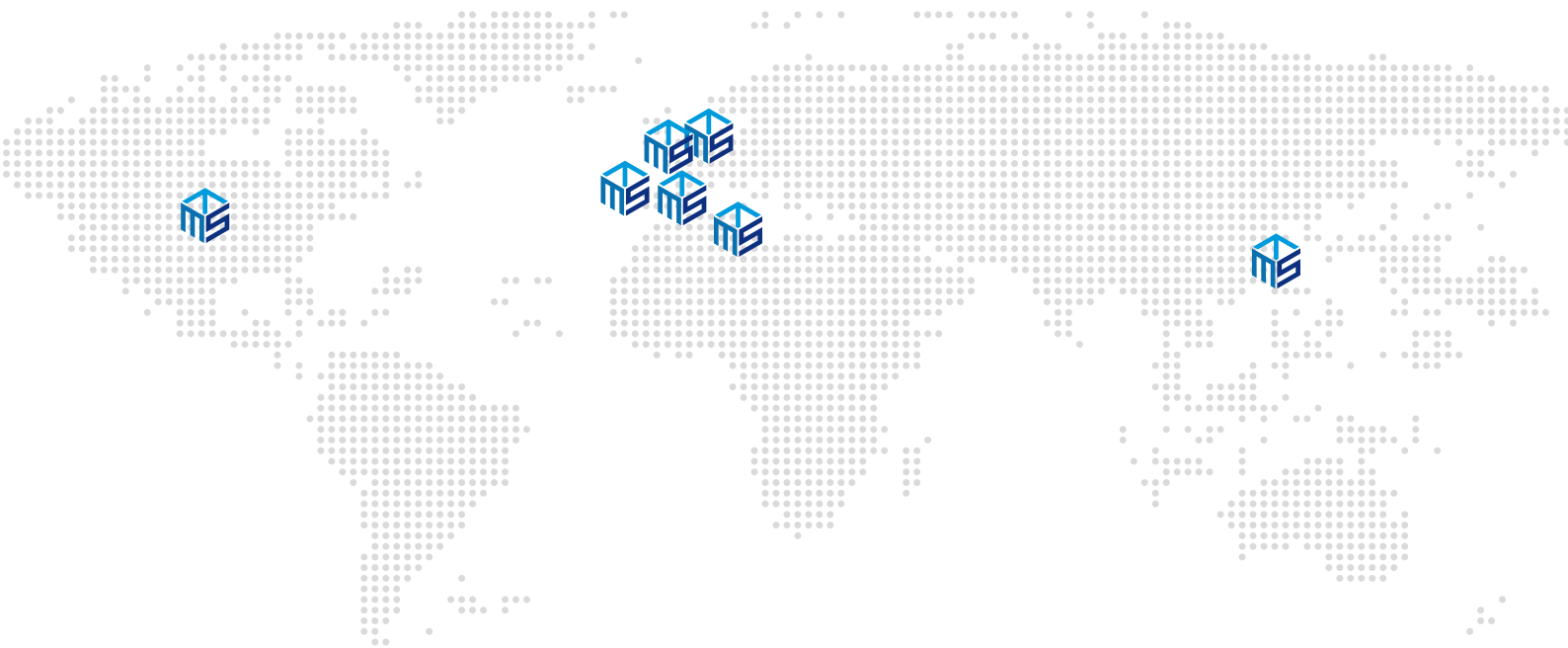




| General specifications         |  |
|--------------------------------|--|
| Dimension (LxWxH)              | 2200 x 1550 x 2200 mm  |
| Weight                         | Approx 1800 kg   |
| Heating zone qty               | Top 2, bottom 2  |
| Direction                      | Left to right  |
| Power requirements             | 3P 380V/220/480 50/60Hz  |
| Total power                    | 35 kW  |
| Power consumption              | 7 kW   |
| Conveyor                       |  |
| PCB width                      | 600x500 mm   |
| Pallet support edge            | ≥5mm   |
| Conveying height               | 900±20 mm  |
| Gap height adjustable          | Ex. 25 mm (64 layers) - 50 mm (32 layers) - 75 mm (16 layers)                |
| Conveying method               | Support strip  |
| Conveying speed                | 0-2000 mm/min adjustable   |
| Bearable weight                | 5 kg/layer   |
| Conveyor return bottom height  | 350±20 mm  |
| Property                       |  |
| Heating modular                | 4pcs   |
| Heating time                   | 18 min   |
| Oven surface temp.             | ≤65°C (under room temp.)   |
| Controllable temp              | Indoor 200°C   |
| Heating compensation temp      | ±3°C   |
| Control accuracy               | ±3°C   |
| Software                       |  |
| Control method                 | Touch screen+ PLC / industrial computer+ PLC                                 |
| Data monitor                   | Computer data record and enquiry   |
| Authorization                  | Can be set   |
| Safety                         |  |
| In accord to national standard | Yes  |
| Abnormal temp. stop            | Signal of PCB enter and exit, trigger device                                 |
| Heat radiation system          | Yes  |
| Protection device              | Safe guardrail, emergency stop, safe marks                                   |
| Safe device                    | Open the safety door to alarm and automatically shift to temp. dropping mode |
| Over temp. protection device   | Heating stops, PCBs inside come out  |
| Service                        |  |
| Warranty                       | 2 years  |
| Scene training                 | Yes  |
| SMARTBOX                       | Available  |



# GLOBAL NETWORK



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