



MYPro series MY300™ pick-and-place



Specifications

MY300HX™

pick-and-place

March 2019

MYCRONIC
When passion meets innovation ●

MYPro series specification – MY300HX

PLACEMENT SPEED AND ACCURACY

| PLACEMENT SPEED AND ACCURACY – MY300HX-9/13 | |
|--|---|
| Rated speed ⁽¹⁾ | 45 000 CPH |
| IPC 9850 chip net throughput ^(2, 3) | 33 000 CPH |
| IPC 9850 chip tact time ⁽³⁾ | 0.097 s |
| IPC 9850 chip repeatability 3σ (X, Y, Theta) ⁽³⁾ | 30 μm, 1.8° ⁽⁵⁾ 45 μm, 1.8° |
| IPC 9850 chip accuracy @ Cpk = 1.33 (X, Y, Theta) ⁽⁴⁾ | 50 μm, 2.6° ⁽⁵⁾ 75 μm, 2.6° |

The IPC 9850 net throughput and accuracy numbers are obtained simultaneously, with the same machine settings. The rated speed value is obtained under conditions optimized for speed.

- (1) Optimal conditions.
- (2) According to IPC 9850. Net throughput = (no of parts x 3600) / (board build time + board transfer time).
- (3) According to IPC 9850 0402C verification panel.
- (4) According to IPC 9850 Cpk 1.33 = 4σ + offset.
- (5) Small chip settings, recommended for 0201 (0.6 x 0.3 mm) and below.

SYSTEM FEATURES

| SYSTEM FEATURES MY300HX |
|--|
| On-the-fly mount order optimization |
| Vision autoteach with snap-to-grid |
| Automatic illumination settings |
| Intelligent feeder concept – Agilis |
| Automatic feeder and component recognition |
| On-the-fly feeder loading |
| Dynamic feeder positions |
| Automatic board stretch compensation |
| Automatic conveyor width adjustment |
| Intelligent surface impact control |
| Tool collision avoidance |
| Multi-user, multi-tasking system software |
| Open software interfaces for factory integration |
| SQL database engine |
| Programmable light settings fiducial camera |

COMPONENT RANGE

| HIGH SPEED MOUNTHEAD – HYDRA Z8 | |
|---------------------------------|--|
| Component range | Chip (from 01005), SO28, SOT223, SOJ20, PLCC32, MELF, SOD, TSOP |
| Component specification | Min: 0.4 x 0.2 mm (0.016" x 0.008") (01005) Max: 18.6 x 18.6 x 5.60 mm (0.73" x 0.73" x 0.22") (PLCC44) |

| ELECTRICAL VERIFIER (OPTIONAL) | |
|--------------------------------|--|
| Component range | Resistor, capacitor, unipolar capacitor, diode (forward voltage, reverse current), Zener diode (voltage drop), transistor (current gain) |

FEEDER CAPACITY

| FEEDER CAPACITY 8 MM TAPE | | |
|---------------------------|------|------|
| | T460 | T640 |
| MY300HX-9 | 96 | N/A |
| MY300HX-13 | 160 | 144 |

BOARD HANDLING

| INLINE CONVEYOR | | |
|--|--|------------------------------|
| | T460 | T640 |
| Maximum board size | 460 x 510 mm (18" x 20") | 640 x 510 mm (25" x 20") |
| Minimum board size ⁽¹⁾ | 70 x 50 mm (2.7" x 2") | 70 x 50 mm (2.7" x 2") |
| Board thickness range ⁽¹⁾ | 0.4 – 6.0 mm (0.016"– 0.24") | 0.4 – 6.0 mm (0.016"– 0.24") |
| Board edge clearance top | 3.2 mm (0.13") | 3.2 mm (0.13") |
| Board edge clearance bottom ⁽²⁾ | 3.2 mm (0.13") | 3.2 mm (0.13") |
| Top side clearance (max) | 5.6 mm (0.22") | 5.6 mm (0.22") |
| Bottom side clearance (max) ⁽³⁾ | 32 mm (1.25") | 32 mm (1.25") |
| Maximum board weight | 4 kg (8.8 lbs) | 4 kg (8.8 lbs) |
| Board transfer height | Conforms to SMEMA standard for board transfer height. Height adjustable from 880 to 975 mm (34.6" to 38.4"). | |
| Operation mode | Inline, manual, inline odd-board, left-to-right / right-to-left. | |

- (1) Board train specification: 90 x 50 mm (3.5" x 2") min board size, 1.6 mm (0.06") min thickness. Max warpage 1 mm (0.04"). Max board train length 460 mm (18") on both T460 and T640.
- (2) Edge clearance 5.5 mm (0.22") if component taller than 6 mm (0.24"). 14.3 mm (0.56") if taller than 19 mm (0.75").
- (3) 15 mm (0.59") with support pins.

VISION CAPABILITY

| LINESCAN VISION SYSTEM – 2K RESOLUTION | | |
|--|------------------|-----------------|
| COMPONENT TYPE | MIN PITCH | MIN LEAD WIDTH |
| Leaded components | 0.20 mm (8 mil) | 0.10 mm (4 mil) |
| Bumped components | 0.25 mm (10 mil) | 0.13 mm (5 mil) |

SOFTWARE

SOFTWARE MODULES (OPTIONAL)

| |
|---------------------|
| Shared databases |
| Line mode |
| PCB ID (2D barcode) |
| Barcode software |
| PRM software |

OFFLINE SOFTWARE TOOLS (OPTIONAL)

| |
|---|
| Data preparation - MYCenter |
| Optimization and scheduling - MYPlan |
| Inventory management and kitting - MYCenter |
| Traceability - MYTrace |

MISCELLANEOUS

INSTALLATION REQUIREMENTS

| | |
|--------------------|---|
| Power requirements | Three phase AC 6.6 kVA (3 x 2.2 kVA) |
| Power consumption | 1.5 kW (average) |
| Voltages | 3 x 200, 210, 220, 230, 240, 250 +/-10%, Y or Delta |
| Air supply | No air required |
| Noise | 70 dBA |
| Air temperature | +18 to +35 °C (65 to 95 °F) |
| Air humidity | <95% RH non condensing |

MACHINE WEIGHT (1)

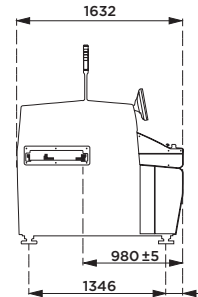
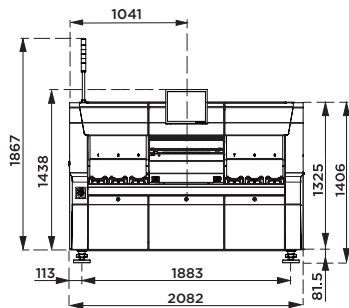
| | |
|------------|----------------------|
| MY300HX-9 | 1 500 kg (3 300 lbs) |
| MY300HX-13 | 1 600 kg (3 500 lbs) |

(1) Total machine weight excluding magazines.

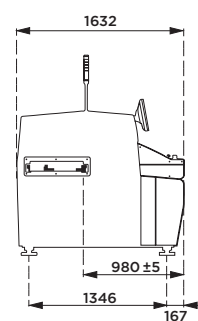
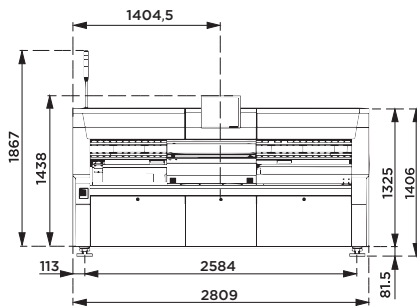
DIMENSIONS

in mm.

MY300HX-9



MY300HX-13



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