Specifications

MY700™
Jet Printer and Jet Dispenser

October 2018
Specification MY700 Jet Printer and Jet Dispenser

**MACHINE PLATFORM**
- **Jet frequency**: 720,000 DPH / 1,080,000 DPH
- **Gantry type**: X / Y linear motor
- **Servo**: Advanced DSP motion control
- **Gantry acceleration, max**: 3g (30 m/s²)
- **Position resolution**: 0.2 μm
- **Active field of view**: 16 x 16 mm

(1) Requires optional high-speed option.

**PRODUCTION PERFORMANCE**
- Single dot repeatability, 3σ (X,Y) (2) ±35 μm
- Single dot accuracy, Cpk=1.0 (X,Y) (2) ±40 μm

(2) Single applicator solder paste, 722 dot pattern, 3 mm pitch.

**CAPABILITY MY700JP/JX MY700JD/JX**
- **Media**: Solder paste, SMA and other adhesives
- **Applicator type**: Piezo ejector, Pneumatic valve
- **Droplet size**: 5-35 nl (3) 5-1000 nl
- **Min dot diameter**: 330 μm (3) 250 μm
- **Nozzle sizes**: N/A 50-400 μm
- **Syringe size**: 30 cc 5, 10, 30 cc

(3) Optional capability 215-260 μm / 2-3 nl. Please contact a Mycronic representative for specific details.

**OPTIONAL FEATURES MY700JP MY700JD MY700JX**
- 2D inspect and repair - paste present detection •
- High speed - 1,080,000 dph •
- SMD adhesive - jet printing of SMA •
- Fine pitch - jet printing for fine pitch components •
- Shared databases •
- PCB ID - board traceability •
- Serial start - automatic start •
- Dual layout •
- Dual heads •
- Board indexing •
- Cleaning station for ejector •
- Cleaning station for applicator •
- Internal buffering 200 mm •
- Internal buffering 250 mm •
- Extended Internal Conveyor - For boards up to 915 mm in length •
- Foot SMEMA - spacer for SMEMA height •
- Vacuum clamping •
- Fiducial recognition on-the-fly •
- Stop pin •
- Weight station •

(4) Contact Mycronic sales for thin board applications below 0.4 mm.
(5) +/- 0.4 % of PCB diagonal or 2 mm, whichever is lowest.
(6) Requires Board Indexing option.
(7) Requires Extended Internal Conveyor.
(8) Minimum Width with stop pin.

**BOARD HANDLING**
- **Board thickness range**: 0.4 – 6.0 (0.016” - 0.24”)
- **Overboard clearance**: 35 mm (1.38”)
- **Underboard clearance**: 25 mm (1”)
- **Board edge clearance, top**: 3 mm (1/8”)
- **Board edge clearance, bottom**: 4 mm (5/32”)
- **Board warp / bow / twist, max**: ± 2 mm (±0.08”)
- **Board weight, max**: 5 kg (11 lbs)
- **Board transport height**: 880-930 mm (34.6” - 36.6”)
- **Board transport height (SMEMA)**: 930-975 mm (36.6” - 38.4”)
- **Transport direction**: R→L, L→R, R→R, L→L, Pass
- **Lane configuration**: Dual lane with optional dual layout

**SOFTWARE**
- Factory level programming software - Factory Logix Express (PnP interface available)
- Advanced Gerber import - MYCenter

**SYSTEM FEATURES**
- Individual deposit programming - optimizing quality for every solder joint
- Quick mode programming - automatch
- Handling multi-level boards - editable jetting height
- Automatic board stretch and board warpage compensation
- Automatic verification of paste type and due date
- CAD / Gerber import, all common formats
- On-the-spot revisions
- No stencils required
- Automatic conveyor width adjustment
- Closed system for solder paste - clean process
- Operator independent quality
- Compact footprint
- Internal buffering
- Good accessibility, front and rear hoods
- Online Editor
- Bad board exclusion, using mark or fiducial
- Program lifecycle management

**BOARD HANDLING WITH BUFFER SIZE 200 MM**

**WORK AREA WITH BUFFER SIZE 250 MM**

**REQUIRED SOFTWARE**
- Factory Logix interface
- MYCenter
- Database server

**OPTIONAL FEATURES**
- Available options per product model.
## INSTALLATION

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine weight</td>
<td>1600 kg (3,530 lbs)</td>
</tr>
<tr>
<td>System Footprint</td>
<td>843 x 1550 mm</td>
</tr>
<tr>
<td>Power requirements</td>
<td>4 kW (peak)</td>
</tr>
<tr>
<td>Power consumption</td>
<td>3 kVA</td>
</tr>
<tr>
<td>Voltage</td>
<td>3 phase AC 200 / 220 / 240 / 380 / 400 / 420 V +/- 10%</td>
</tr>
<tr>
<td>Air pressure</td>
<td>5 - 10 bar (70 - 140 PSI)</td>
</tr>
<tr>
<td>Air quality</td>
<td>ISO 8573-1 4 4 4</td>
</tr>
<tr>
<td>Air consumption, max</td>
<td>250 l/min (9 CFM)</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>+18°C to +32°C, 30 - 80% RH</td>
</tr>
<tr>
<td>Clean room</td>
<td>Fulfills class 10,000</td>
</tr>
<tr>
<td>Altitude</td>
<td>Lower than 1000 m above sea level</td>
</tr>
<tr>
<td>Sound level</td>
<td>68 dB(A)</td>
</tr>
</tbody>
</table>

(9) Min recommended 7 bar (100 PSI) for JD and JX model with applicator HV-2000JD.

## REFERENCE BOARD, SOLDER PASTE

Panel of 6 PCBs with a total of 954 components. Reference board throughput includes board transfer, fiducial search, height measurement and jet printing of solder paste.

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>0201</td>
<td>65 pcs</td>
</tr>
<tr>
<td>0402</td>
<td>73 pcs</td>
</tr>
<tr>
<td>0603</td>
<td>12 pcs</td>
</tr>
<tr>
<td>BGA19</td>
<td>1 pcs</td>
</tr>
<tr>
<td>SO14</td>
<td>1 pcs</td>
</tr>
<tr>
<td>SO20</td>
<td>1 pcs</td>
</tr>
<tr>
<td>SO23</td>
<td>1 pcs</td>
</tr>
<tr>
<td>TQFP100</td>
<td>1 pcs</td>
</tr>
</tbody>
</table>

No. of pads 498

Throughput of 49 000 CPH with dual heads in dual lane mode.

## DIMENSIONS MY700 JET PRINTER AND JET DISPENSER

in mm.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
</tr>
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<tbody>
<tr>
<td>900</td>
<td>1395</td>
<td>1650</td>
<td>842.4</td>
</tr>
<tr>
<td>1800</td>
<td>1392</td>
<td>288</td>
<td>1445</td>
</tr>
</tbody>
</table>

## SWEDEN
Mycronic AB
PO Box 3148
Nytorpsvägen 9
SE-183 03 Täby
Sweden
Tel: +46 8 638 52 00

## GERMANY
Mycronic GmbH
Tel: +49 89 45 24 24 8-0

## FRANCE
Mycronic S.A.S.
Tel: +33 1 41 80 15 80

## NETHERLANDS
Mycronic B.V.
Tel: +31 402 62 06 67

## SOUTH KOREA
Mycronic Co. Ltd.
Tel: +82 31 387 5111

## JAPAN
Mycronic Technologies KK
Tel: +81 42 433 9400

## CHINA
Mycronic Co., Ltd.
Tel: +86 21 3252 3785/86

## SINGAPORE
Mycronic Pte Ltd.
Tel: +65 6281 7997

www.mycronic.com