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## Specifications

# MY700™

# Jet Printer and Jet Dispenser

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October 2018

# Specification MY700 Jet Printer and Jet Dispenser

MACHINE PLATFORM	
Jet frequency	720 000 DPH / 1 080 000 DPH <sup>(1)</sup>
Gantry type	X / Y linear motor
Servo	Advanced DSP motion control
Gantry acceleration, max	3g (30 m/s <sup>2</sup> )
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) <sup>(2)</sup>	±35 μm
Single dot accuracy, Cpk=1.0 (X,Y) <sup>(2)</sup>	±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 <sup>(3)</sup>	5-1000 nl
Min dot diameter	330 μm <sup>(3)</sup>	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	•	•	•
Weigh station	•	•	•

Available options per product model.

BOARD HANDLING	
Board thickness range <sup>(4)</sup>	0.4 - 6.0 (0.016" - 0.24")
Overboard clearance	35 mm (1 3/8")
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 <sup>(5)</sup>	± 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

(4) Contact Mycronic sales for thin board applications below 0.4 mm.

(5) +/- 0.4 % of PCB diagonal or 2 mm, whichever is lowest.

WORK AREA WITH BUFFER SIZE 200 MM				
Maximum	Length	Indexing	Buffer	Dimensions
		No	Yes	200 mm
		No	No	400 mm
		Yes <sup>(6)</sup>	No	510/915 <sup>(7)</sup> mm
Minimum	Width	Single Lane Mode		580 mm
		Dual Lane Mode		310 mm
		Length		70 mm
		Width		40/80 <sup>(8)</sup> mm

WORK AREA WITH BUFFER SIZE 250 MM				
Maximum	Length	Indexing	Buffer	Dimensions
		No	Yes	250 mm
		No	No	300 mm
		Yes <sup>(6)</sup>	No	410 mm
Minimum	Width	Single Lane Mode		580 mm
		Dual Lane Mode		310 mm
		Length		70 mm
		Width		40/80 <sup>(8)</sup> mm

(6) Requires Board Indexing option.

(7) Requires Extended Internal Conveyor.

(8) Minimum Width with stop pin.

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

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

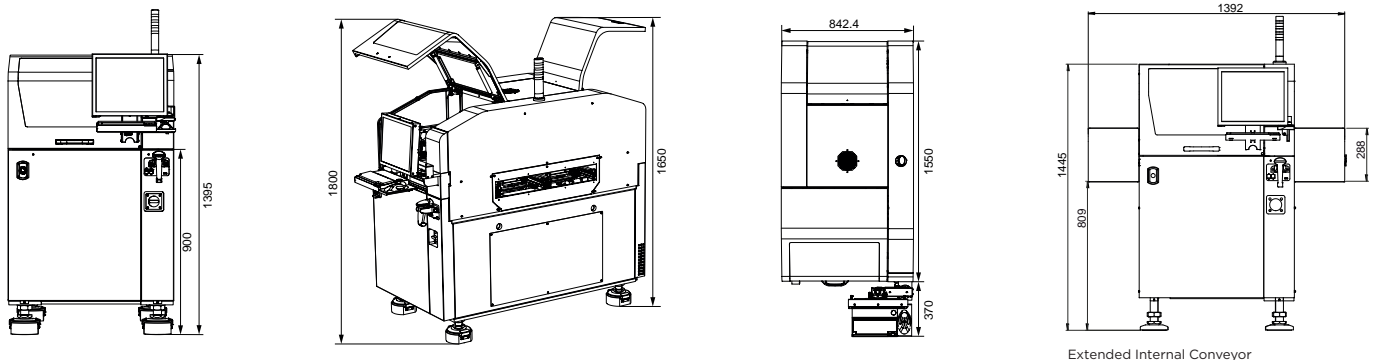
## INSTALLATION

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

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

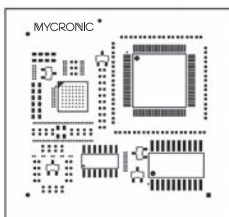
## DIMENSIONS MY700 JET PRINTER AND JET DISPENSER

in mm.



## 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.



### Component list

0201	65 pcs
0402	73 pcs
0603	12 pcs
BGA49	1 pcs
SO14	1 pcs
SO20	1 pcs
SOT23	5 pcs
TQFP100	1 pcs

No. of pads 498

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

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