



Specifications

MY700™

Jet Printer and Jet Dispenser

February 2020

Specification MY700 Jet Printer and Jet Dispenser

MACHINE PLATFORM	
Jet frequency	720 000 DPH / 1 080 000 DPH ⁽¹⁾
Gantry type	X / Y linear motor
Servo	Advanced DSP motion control
Gantry acceleration, max	3g (30 m/s ²)
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	MY700JX	
	MY700JP	MY700JD
Media	Solder paste	SMA and other adhesives
Applicator type	Piezo ejector	Pneumatic valve
Droplet size	1.9 - 35 nI ⁽³⁾	5-1000 nI
Min dot diameter	210 μm ⁽³⁾	250 μm
Nozzle sizes	N/A	50-400 μm
Syringe size	30 cc	5, 10, 30 cc

(3) Please contact a Mycronic representative for specific details.

OPTIONAL FEATURES	MY700JX	
	MY700JP	MY700JD
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	•	•
AI2 - active inspection interface, repair loop	•	
E-mapping - external information; "bad board" and "fiducial"	•	•

Available options per product model.

BOARD HANDLING	
Board thickness range ⁽⁴⁾	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 ⁽⁵⁾	± 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

		Indexing	Buffer	Dimensions
				Maximum
	No	No	400 mm	
	Yes ⁽⁶⁾	No	510/915 ⁽⁷⁾ mm	
	Width	Single Lane Mode		580 mm
		Dual Lane Mode		310 mm
Minimum	Length			70 mm
	Width			40/80 ⁽⁸⁾ mm

(6) Requires Board Indexing option.

(7) Requires Extended Internal Conveyor.

(8) Minimum Width with stop pin.

WORK AREA WITH BUFFER SIZE 250 MM

		Indexing	Buffer	Dimensions
				Maximum
	No	No	300 mm	
	Yes ⁽⁶⁾	No	410 mm	
	Width	Single Lane Mode		580 mm
		Dual Lane Mode		310 mm
Minimum	Length			70 mm
	Width			40/80 ⁽⁸⁾ mm

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

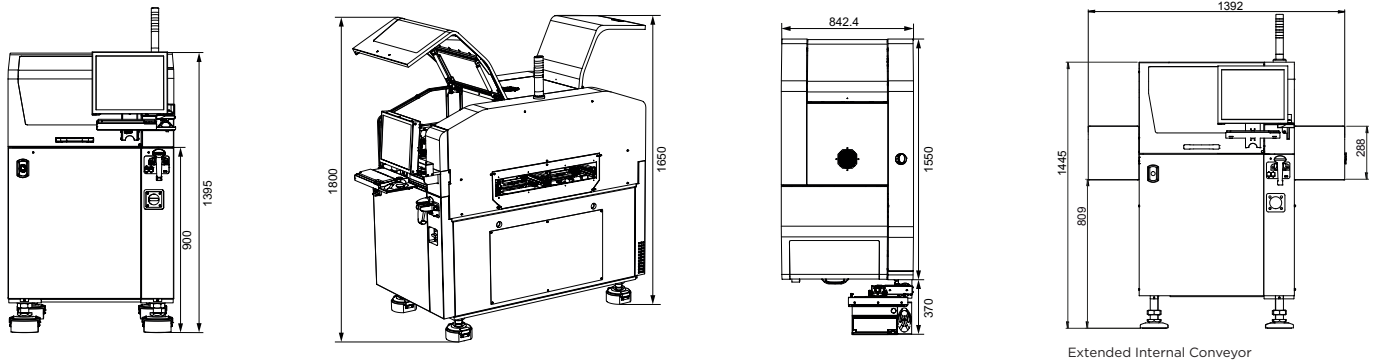
INSTALLATION

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) ⁽⁹⁾
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.

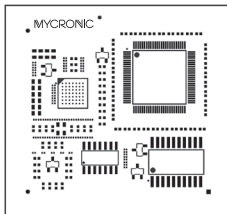
DIMENSIONS MY700 JET PRINTER AND JET DISPENSER

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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