



Specifications

MY700™

Jet Printer and Jet Dispenser

April 2017

MYCRONIC

When passion meets innovation ●

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/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 nI ⁽³⁾	5-1000 nI
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 nI. 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	•	•	•
Foot SMEMA - spacer for SMEMA height	•	•	•
Vacuum clamping	•	•	•
Stop pin	•	•	•
Weigh station	•	•	•

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	880-925 mm (34.6” – 36.4”)
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		Indexing	Buffer	Dimensions
	Length	No	Yes	200 mm
			No	400 mm
		Yes ⁽⁶⁾	No	510 mm
	Width	Single Lane Mode		580 mm
		Dual Lane Mode		310 mm
Minimum	Length			70 mm
	Width			40 mm

(6) Requires Board Indexing option.

WORK AREA WITH BUFFER SIZE 250 MM				
Maximum		Indexing	Buffer	Dimensions
	Length	No	Yes	250 mm
			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 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
Fiducial recognition on-the-fly
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

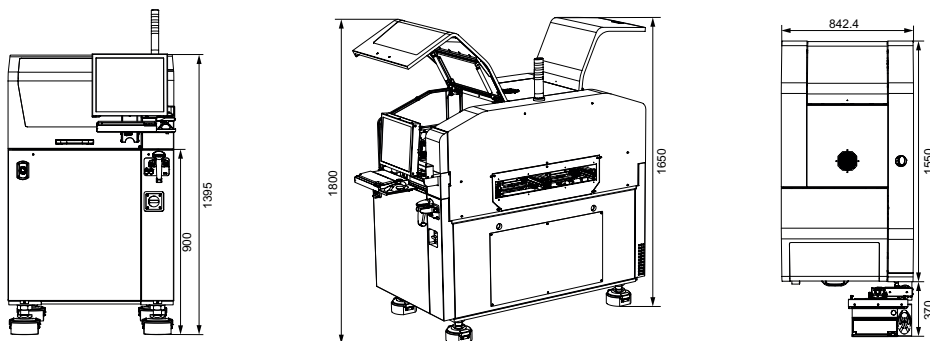
INSTALLATION REQUIREMENTS

Machine weight	1600 kg (3,530 lbs)
System Footprint	843x1550 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) ⁽⁷⁾
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	Class 10,000
Altitude	Lower than 1000 m above sea level
Sound level	68 dB(A)

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

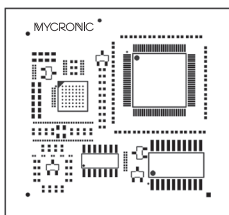
DIMENSIONS MY700 JET PRINTER AND JET DISPENSER

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.

SWEDEN
Mycronic AB
PO Box 3141
Nytörpsvägen 9
SE-183 03 Täby
Sweden
Tel: +46 8 638 52 00

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

UK
Mycronic Ltd.
Tel: +44 1202 723 585

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

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

USA
Mycronic Inc.
Tel: +1 978 948 6919

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

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

SINGAPORE
Mycronic Pte Ltd.
Tel: +65 6281 7997

JAPAN
Mycronic Technologies KK
Tel: +81 42 433 9400

www.mycronic.com

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