

January 2015

MY600™ Jet Printer Specification



Specification MY600 Jet Printer

SPEED AND ACCURACY

SPEED AND ACCURACY – SOLDER PASTE	
Jet printing frequency	720 000 DPH / 1 080 000 DPH ⁽¹⁾
Reference board throughput ⁽²⁾	33 000 CPH / 40 500 CPH ⁽¹⁾
Single dot repeatability 3σ (X, Y) ⁽³⁾	54 μm (0.0021”)
Single dot accuracy @ Cpk=1.33 (X, Y) ⁽³⁾	80 μm (0.0031”)
Deposit accuracy @ Cpk=1.33 (X, Y) QFP100C ⁽⁴⁾	33 μm (0.0013”)
Deposit accuracy @ Cpk=1.33 (X, Y) 0603 ⁽⁴⁾	40 μm (0.0016”)
Deposit repeatability 3σ (X, Y) QFP100C ⁽⁴⁾	19 μm (0.0007”)
Deposit repeatability 3σ (X, Y) 0603 ⁽⁴⁾	24 μm (0.0009”)

(1) Requires optional high-speed option.
(2) For reference board information, see page 4.
(3) At default jetting height, 0.65 mm over the PCB.
(4) Calculated value from single dot accuracy.

DOT RANGE

DOT RANGE – SOLDER PASTE	
Dot diameter, min ⁽⁵⁾	0.33 mm (0.013”)
Dot diameter, max	0.52 mm (0.020”)
Dot volume, min ⁽⁵⁾	5 nl
Dot volume, max	20 nl
Single dot volume repeatability, 5 nl dots	12,0%
Single dot volume repeatability, 15 nl dots	8,0%
Deposit volume repeatability, QFP100C ⁽⁶⁾	4,0%
Deposit volume repeatability, 0603 ⁽⁶⁾	3,5%

(5) Dot diameter and dot volume required for 0.4 mm QFP, 0.5 mm BGA and 0201 components.
(6) Calculated value from single dot repeatability.

SYSTEM FEATURES

SYSTEM FEATURES MY600 JET PRINTER
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
Bad board mark handling
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
Low paste waste
Closed system for solder paste – clean process
Operator independent quality

MACHINE PLATFORM FEATURES

MACHINE PLATFORM FEATURES	
Gantry type	X / Y linear motor
Servo	Advanced DSP motion control
Gantry acceleration, max	3g (30 m/s²)
Position resolution	0.2 μm

BOARD HANDLING

MY600 BOARD HANDLING	
Maximum board size	508 x 508 mm (20” x 20”)
Minimum board size	70 x 50 mm (2.7” x 2”)
Board thickness range	0.4 ⁽⁷⁾ – 6.0 mm (0.016” – 0.24”)
Board edge clearance, top	3 mm (0.12”)
Board edge clearance, bottom	4 mm (0.16”)
Bottom side clearance	20 mm (0.79”)
Board warp / bow / twist, max ⁽⁸⁾	+/- 2 mm (0.08”)
Board weight, max	5 kg (11 lbs)
Board transport height (SMEMA)	880-975 mm (34.6” – 38.4”)

(7) Contact Mycronic sales for thin board applications below 0.4 mm.
(8) +/- 0.4 % of PCB diagonal or 2 mm, whichever is lowest.

SOFTWARE

OFFLINE SOFTWARE MODULES (OPTIONAL)
Factory level programming software – MYCam
Mycronic P&P interface – MYCam Express
Advanced Gerber import – MYCenter
Shared databases

OPTIONAL FEATURES

SMT ADHESIVE	
Minimum dot diameter	0.33 mm (0.013”)
Maximum dot diameter	0.52 mm (0.020”)
Media	Adhesive

INSPECT AND REPAIR	
Inspection type	Paste present
Active field of view	11 x 15 mm (0.43” x 0.59”)
Inspection speed	200 mm² / s
Repair	Auto / Manual

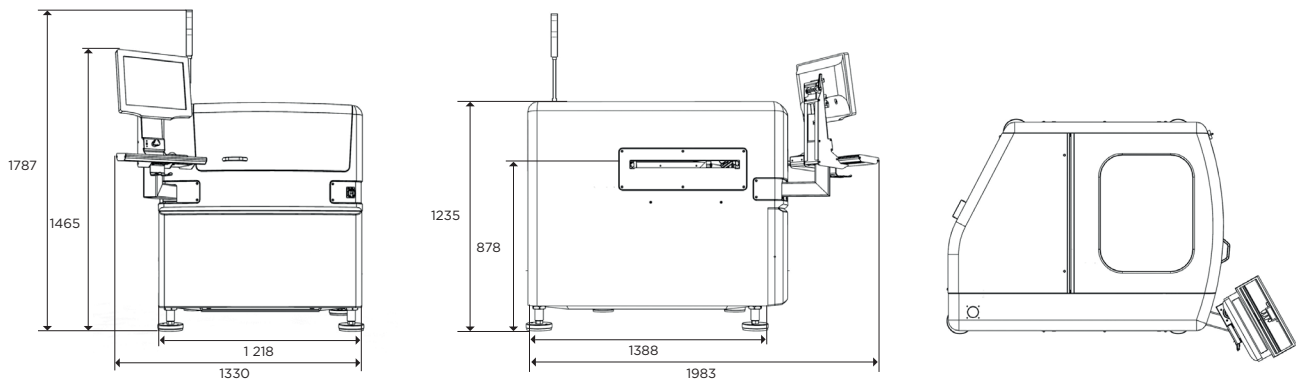
HIGH SPEED	
Dot frequency	1 080 000 DPH
Reference board throughput ⁽²⁾	40 500 CPH
Media	Solder paste, adhesive

INSTALLATION REQUIREMENTS

Machine weight	2 000 kg (4,400 lbs)
Power requirements	Three phase AC 6.6 kVA
Power consumption	1.2 kW
Voltage	3 x 200, 210, 220, 230, 240, 250 $\pm 10\%$, Y or Delta
Air supply	5- 10 bar, 180 l/min
Air quality	ISO 8573-1 4 4 4
Ambient temperature	+18°C to +32°C, <95% RH non condensing

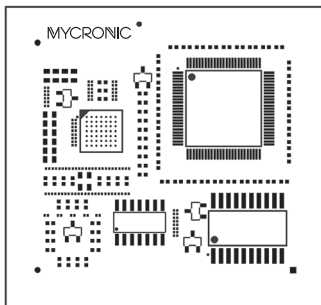
DIMENSIONS MY600 JET PRINTER

in mm.



REFERENCE BOARD

Panel of six PCBs. Reference board throughput includes board transfer, fiducial search, height measurement and jet printing.



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

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