

April 2010

# MY500 Jet Printer Specification

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# SPECIFICATION MY500 JET PRINTER

## JET PRINTING SPEED AND ACCURACY

JET PRINTING SPEED AND ACCURACY – SOLDER PASTE	
Rated speed (cph equivalent) <sup>(1)</sup>	30 000 cph
Reference board throughput <sup>(2)</sup>	28 000 cph
Single dot repeatability $3\sigma$ (X, Y) <sup>(3)</sup>	54 $\mu\text{m}$
Single dot accuracy @ Cpk=1.33 (X, Y) <sup>(3)</sup>	80 $\mu\text{m}$
Deposit accuracy @ Cpk=1.33 (X, Y) QFP100C <sup>(4)</sup>	33 $\mu\text{m}$
Deposit accuracy @ Cpk=1.33 (X, Y) 0603 <sup>(4)</sup>	40 $\mu\text{m}$
Deposit repeatability $3\sigma$ (X, Y) QFP100C <sup>(4)</sup>	19 $\mu\text{m}$
Deposit repeatability $3\sigma$ (X, Y) 0603 <sup>(4)</sup>	24 $\mu\text{m}$

(1) Keeps pace with a P&P machine rated at 30 000 cph. Application dependent.

(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	
Minimum dot diameter <sup>(5)</sup>	0.33 mm (0.013")
Maximum dot diameter	0.47 mm (0,019")
Minimum dot volume <sup>(5)</sup>	5 nl
Maximum dot volume	15 nl
Single dot volume repeatability (5 nl dots)	12%
Single dot volume repeatability (15 nl dots)	8%
Deposit volume repeatability, QFP100C <sup>(6)</sup>	4,0%
Deposit volume repeatability, 0603 <sup>(6)</sup>	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 MY500 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

## BOARD HANDLING

MY500 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 - 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")
Max board warp / bow/ twist <sup>(7)</sup>	+/- 2 mm (0.08")
Max board weight	5 kg (11 lbs)
Board transport height	Conforms to SMEMA standard for conveyor height; height adjustable from 880-975 mm (34.6" - 38.4")
Operation mode	Inline, manual, inline odd-board, right-to-left, left-to-right

(7) +/- 0.4 % of PCB diagonal or 2 mm, whichever is lowest.

## SOFTWARE

OFFLINE SOFTWARE MODULES (OPTIONAL)
Line automation – FlowLine
Factory level programming software – MYCam
MYDATA P&P interface – MYCam Express
Advanced Gerber import – MYCenter

## OPTIONAL FEATURES

SMT ADHESIVE	
Reference board throughput <sup>(2)</sup>	36 500 cph
Dot diameter range	0.43 - 0.54 mm (0.017" - 0.021")

INSPECT AND REPAIR	
Inspection type	Paste present
Active field of view	11 x 15 mm (0.43" x 0.59")
Inspection speed	200 mm <sup>2</sup> / s
Repair	Auto / Manual

## MISCELLANEOUS

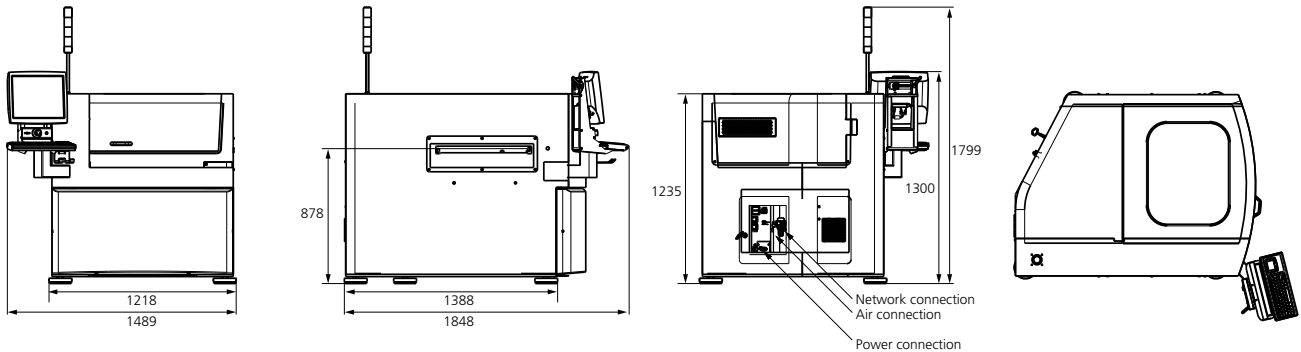
INSTALLATION REQUIREMENTS	
Power Requirements	Single phase AC 1 700 VA
Power Consumption	1 200 W
Voltage	200-240V +/-10%, 50/60 Hz, (100-120V +/-10%, 50/60 Hz)
Air Supply	6 bar, 250 l/min
Ambient Temperature	+18°C to +30°C, 30-80% RH non condensing

MACHINE WEIGHT	
Weight	2 000 kg (4 400 lbs)

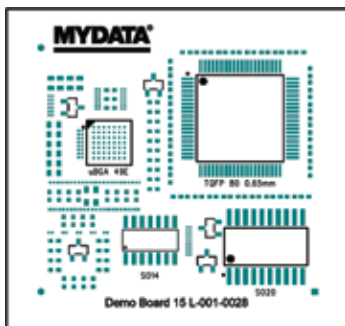
## DIMENSIONS MY500 JET PRINTER

in mm.



## REFERENCE BOARD

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



### Component list

Q201	65 pcs
Q402	73 pcs
Q603	12 pcs
SOT23	5 pcs
SO14	1 pcs
SO20	1 pcs
BGA49	1 pcs
QFP80	1 pcs

No. of pads 478



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