



MYSmart™ series MYD In-line Dispensers



Precise and flexible  
**dispensing systems**

**MYCRONIC**  
When passion meets innovation ●

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# Introducing the MYD series **Fully Automated Compact Dispensing**

The MYSmart series offers a wide range of in-line dispense solutions together with a comprehensive portfolio of valve technologies. The compact MYD10X enables highly advanced non-contact jetting for enhanced dispensing uniformity, throughput and material utilization. For higher-precision applications such as complex chip packaging, the powerful MYD50S platform further boosts productivity with linear motor motion control. The MYSmart in-line dispensing solutions, proven in the most advanced production environments, make it possible to handle a vast array of current and emerging products, assembly fluids and package types.

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1. Unsurpassed value by combining high-end technology with low total cost of ownership.
  2. From underfill to solder paste the MYD series offers many unique jetting technology, offering enhanced flexibility for high volume manufacturing.
  3. Built-in-AVI capabilities enable automatic inspection of dispense results.





- Unmatched production value
- Non-contact jetting technology
- Semi- or full automation
- Low maintenance and long service life
- High-precision dispensing volume control

MYD series automated in-line dispensing systems can handle a wide range of dispensing applications.

### **FLEXIBLE**

MYD series can handle different substrate sizes and compositions to meet specific process requirements. A lot of different applications can be achieved through possibilities such as tilt and rotate, contact and non-contact heating and dual head configurations.

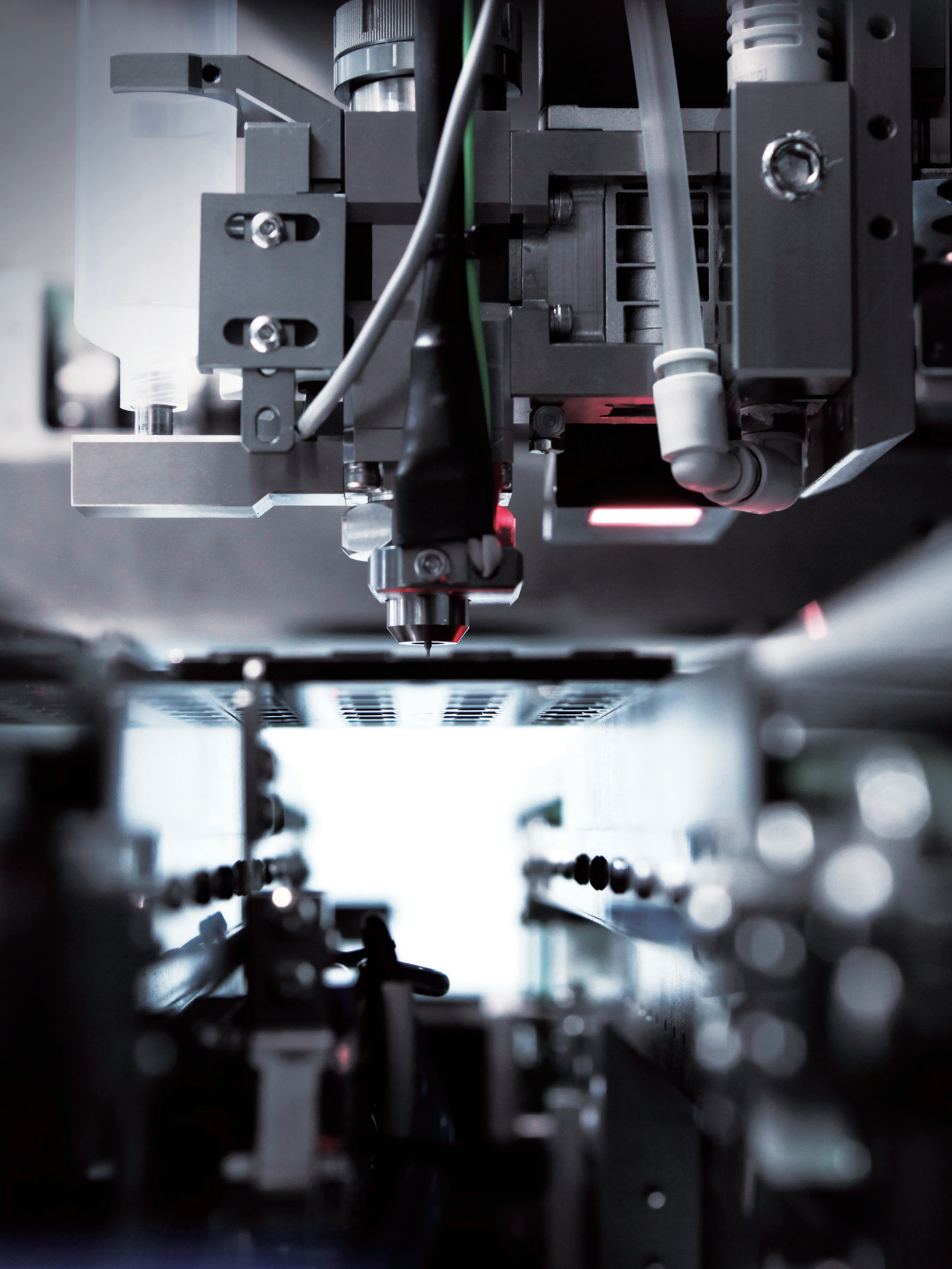
### **COST-EFFICIENT**

Smaller machine dimensions, high quality build and streamlined mechanical design allow the system to run for longer periods of time with less maintenance

and lower downtimes. The reduced amount of wear parts in our jets further reduce cost of ownership making the MYD series a cost-effective dispensing machine.

### **IMPROVED PRODUCTIVITY**

Precise temperature controls, on-the-fly fiducial search, robust vision algorithms, low motion Z axis and non-contacting dispensing are some of the features embedded to increase productivity.



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# MYD series

# Cross-Industry Capable Platform

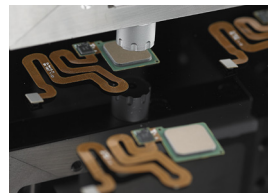
The MYD series automatic inline dispensing system has been proven across many industries such as electronics, medical devices, optics and industrial assembly to name a few.

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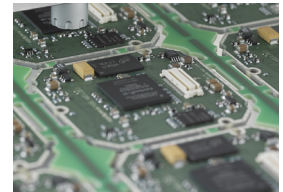
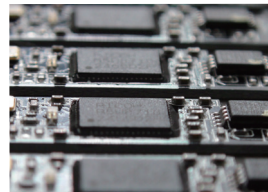
## KEY APPLICATIONS, CONSUMER ELECTRONICS

- Hot melt
- Underfill
- Pin encapsulation
- Conformal coating
- Edge/corner bonding
- Surface mount package
- Package on package
- Dam and fill
- SMA
- FPC component
- Reinforcement materials

## CONSUMER ELECTRONICS



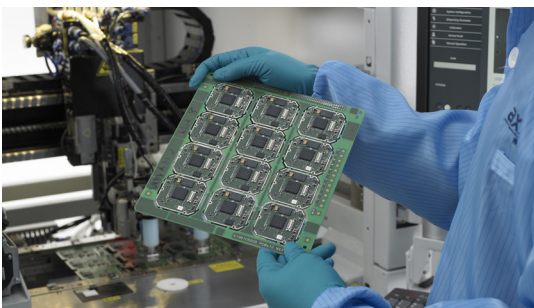
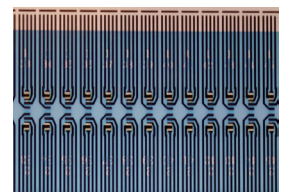
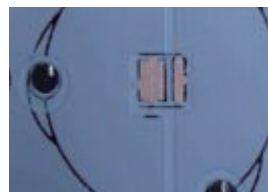
## SMT ELECTRONICS



## AUTOMOTIVE ELECTRONICS



## LED AND MEDICAL INDUSTRY





axxon  
syringe pump

0120690533E

APJ1500

OUT

IN



NH-50

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# MYD Series

## Core Components

### Jetting valve

Non-contact jetting :Piezo jetting

### High speed

No Z axis movement, The piezo max jetting speed can be 1000 dots/s , 3-5 times faster than traditional contacting dispensing.

### High precision

The minimum dispensing amount is 1nl, high output consistency. Temperature control system of valve body flow passage and nozzle to ensure consistency of glue temperature.

### High flexibility

Non contact dispensing, to avoid needle collision with product, micro glue dot to handle high precision dispensing application. Slim design.

### Low maintenance cost

Advanced structural design, high resistancy material, easy daily maintenance,

### Possessing independent intellectual property rights

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### Increase production capacity

- Non-contact jetting reduces the Z axis movement time
- Non-contact pneumatic jetting speed of 250 dots /s, piezo jetting 1000dots/s
- Integrated temperature control technology to reduce manual intervention
- Glue automatic compensation, reduce manual adjustment time
- Dual conveyor configuration reduces waiting time
- Automatic visual position recognition and compensation
- Non-contact laser probe height to reduce height detection time
- Bad mark + flight scan, quick positioning and bad board skipping

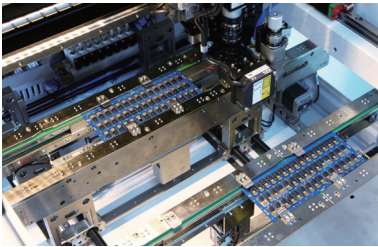


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# MYD series

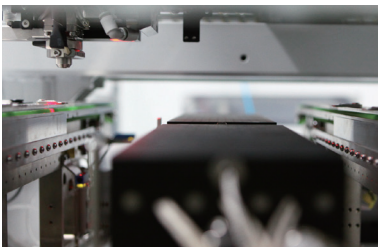
## Key Features

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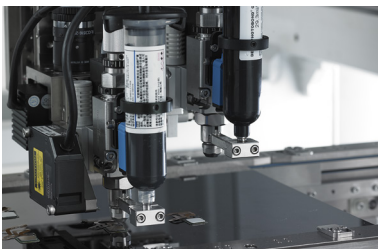
### **DUAL LANE CONVEYORS**

Dual lane help in maximizing your production line and optimizing throughput. Two different jobs can run on each line.



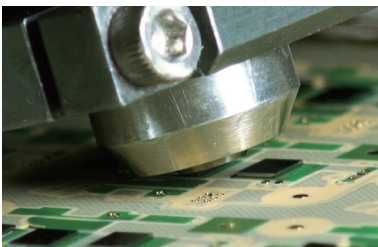
### **CONFIGURABLE CONVEYOR STATIONS**

Edge clamps, vacuum blocks, vacuum heating and non-contact heating modules offer all the potential material handling options for efficient dispensing



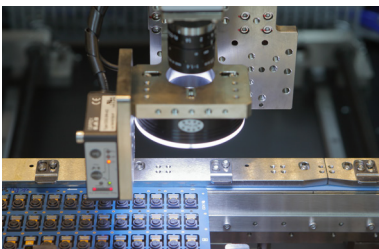
### **DUAL VALVE CONFIGURATIONS**

Synchronous dual valve; two heads work at the same time to save cycle time and improve productivity.  
Asynchronous dual valve; two heads work at different time. Different materials can be used on each valve.



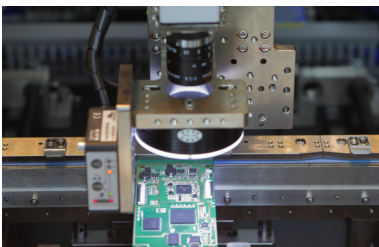
### **TILT OPTIONS**

Pneumatic and electrical tilt and rotate options enable precise material dispense in difficult to reach locations. Individual angle offsets are programmed for precise dispensing.



#### **TEMPERATURE SPOT CHECK**

User programmable location where exact temperature is measured and verified with programmable go/no-go logic.



#### **AUTOMATIC VISUAL INSPECTION**

AVI-Automatic Visual Inspection, improves inspection quality and helps automate the production line. The AVI can be set to warn, flag and log production results for increasing yield traceability and visibility.

# SPECIFICATIONS

Parameters	MYD10X	MYD50S	MYD50X
Power supply	AC 200-240V,11A,50/60Hz, 2.5kW(Without conveyor heating)	AC 200-240V,8A,50/60Hz, 1.8kW,Bottom heating 1.8kW	AC 200-240V,8A,50/60Hz, 1.8kW(Without conveyor heating)
Air supply	90psi(6bar)	90psi(6bar)	90psi(6bar)
Dimension	770*1200*1400mm(W*D*H)	1050*1300*1450mm(W*D*H)	770*1300*1450mm(W*D*H)
Weight	650kg	1370kg	1350kg
Standard compliance	CE	CE	CE
<b>Motion systems</b>			
XYZ positioning accuracy	XY: $\pm 30\mu\text{m}@3\sigma$ Z: $\pm 10\mu\text{m}@3\sigma$	XY: $\pm 25\mu\text{m}@3\sigma$ Z: $\pm 10\mu\text{m}@3\sigma$	XY: $\pm 25\mu\text{m}@3\sigma$ Z: $\pm 10\mu\text{m}@3\sigma$
Repeatability	XY: $\pm 15\mu\text{m}@3\sigma$ Z: $\pm 5\mu\text{m}@3\sigma$	XY: $\pm 10\mu\text{m}@3\sigma$ Z: $\pm 5\mu\text{m}@3\sigma$	XY: $\pm 10\mu\text{m}@3\sigma$ Z: $\pm 5\mu\text{m}@3\sigma$
Max speed	1000mm/s(XY)	1500mm/s(XY)	1500mm/s(XY)
Acceleration	1.0g	1.5g	1.5g
Drive system	Servo motor	Linear motor(XY) / Servo motor(Z)	Linear motor (XY) / Servo motor (Z)
<b>Machine parameters</b>			
Conveyor payload	3kg	3kg	3kg
Conveyor width adjusting range	50-475mm	35-500mm	50-500mm
Board thickness	0.5-6mm	0-6mm	0.5-6mm
Operating system	Windows 10	Windows 10	Windows 10
Communication protocol	SMEMA	SMEMA	SMEMA
Mini edge clearance	3mm	5.5mm	4mm
Max top clearance	26mm	20mm	35mm
Max bottom clearance	23mm	6mm	23mm
Z travel	40mm	40mm	40mm
<b>Dispensing area</b>			
Max dispensing area (single lane/dual lane)	350*475mm/350*210mm (X*Y)	350*500mm/350*195mm (X*Y)	350*500mm/350*215mm (X*Y)
Synchronized dual valve – manual adjustment (single lane/dual lane)	330*450mm/ 330*185mm (X*Y)	330*445mm/330*170mm (X*Y)	330*445mm/330*180mm (X*Y)
Synchronized dual valve – automatic adjustment (single lane/dual lane)	330*435mm/330*180mm (X*Y)	330*430mm/330*160mm (X*Y)	330*430mm/330*170mm (X*Y)
Asynchronized dual valve (single lane/dual lane)	295*445mm/295*195mm (X*Y)	295*440mm/295*165mm (X*Y)	295*440mm/295*185mm (X*Y)
Tilt & rotation (single lane/dual lane)	280*410mm/280*175mm (X*Y)	280*405mm/280*150mm (X*Y)	280*405mm/280*170mm (X*Y)
High precision tilting (single lane/dual lane)	245*430mm/245*185mm (X*Y)	245*425mm/245*160mm (X*Y)	245*425mm/245*180mm (X*Y)

# CONFIGURATIONS

Standard configurations	
Vacuum cleaning module	Standard operating software
Audible and visual alarm	Calibration platform
Vision system	IPC
XYZ motion platform	Nozzle heating module
30cc/55cc feeding syringe	Single lane/single lane (with 3 stage heating) – standard only for MYD50S

Parameters	MYD10L	MYD10i	MYD10iL
Power supply	AC200-240V,11A, 50/60Hz,2.5kW	AC 200-240V,11A,50/60Hz, 2.5kW(Without conveyor heating )	AC 200-240V,11A,50/60Hz, 2.5kW(Without conveyor heating )
Air supply	90psi(6bar)	90psi(6bar)	90psi(6bar)
Dimension	1450*1300*1550mm(W*D*H)	890*1500*1500mm (W*D*H)	1000*1500*1550mm (W*D*H)
Weight	1320kg	950kg	1000kg
Standard compliance	CE	CE	CE

Motion systems			
XYZ positioning accuracy	XY: ±50um@3σ Z:±10um@3σ	XY: ±50um@3σ Z:±10um@3σ	XY:±50um@3σ Z:±10um@3σ
Repeatability	XY: ±25um@3σ Z:±5um@3σ	XY: ±25um@3σ Z:±5um@3σ	XY: ±25um@3σ Z:±5um@3σ
Max speed	800mm/s(XY)	1000mm/s(XY)	1000mm/s(XY)
Acceleration	0.8g	1.0g	1.0g
Drive system	Servo motor	Servo motor	Servo motor

Machine parameters			
Conveyor payload	3kg	3kg	5kg
Conveyor width adjusting range	60-535mm	40-760mm	Single lane 40-760mm , Dual lane 40-350mm
Board thickness	0.5-6mm	0.5-6mm	0.5-6mm
Operating system	Windows 10	Windows 10	Windows 10
Communication protocol	SMEMA	SMEMA	SMEMA
Mini edge clearance	6mm	3.5mm	3.5mm
Max top clearance	25mm	45mm	45mm
Max bottom clearance	8mm	23mm	23mm
Z travel	40mm	60mm	60mm

Dispensing area			
Max dispensing area (single lane/dual lane)	890mm*535mm (X*Y)	440*760mm/440*350mm (X*Y)	550*760mm/550*350mm (X*Y)
Synchronized dual valve - manual adjustment (single lane/dual lane)	/	420*690mm/420*310mm (X*Y)	530*690mm/530*310mm (X*Y)
Synchronized dual valve - automatic adjustment (single lane/dual lane)	/	420*670mm/420*300mm (X*Y)	530*670mm/530*300mm (X*Y)
Asynchronized dual valve (single lane/dual lane)	/	385*695mm/385*320mm (X*Y)	495*695mm/495*320mm (X*Y)
Tilt & rotation (single lane/dual lane)	/	370*660mm/370*300 mm (X*Y)	480*660mm/480*300mm (X*Y)
High precision tilting (single lane/dual lane)	/	335*680mm/335*305mm (X*Y)	445*680mm/445*305mm (X*Y)

Optional Configurations	
Low fluid level sensor	Auto loader / unloader
Weighing system (weighing in contact or non-contact mode)	Barcode & QR code & DMC scanning
Laser height detecting system	SECS/GEM
Piezo jet valve	Automatic visual inspection (only for certain applications)
Valve for contact dispensing (auger valve/needle valve/metering valve)	Bottom heating for waiting and dispensing area
Dual valve (Synchronized dispensing/ asynchronized dispensing)	Vacuum platform
Tilt dispensing (tilting in two directions / in four directions)	Dual lane/Dual lane (with 3 stage heating) - option only for MYD50S

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