MYSmart™ series MYD10™/MYD50™ in-line dispensers

Precise and flexible **dispensing systems**

MYCRONIC

When passion meets innovation

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 MYD10 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 MYD50 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.

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 technologies offering enhanced flexibility for high volume manufacturing.
3. Built in AVI capabilities enables 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.

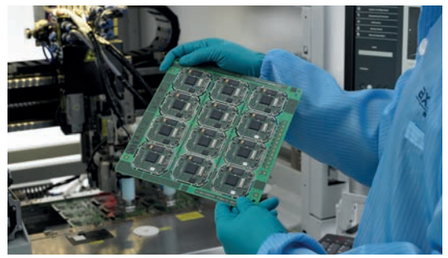
IMPROVED PRODUCTIVITY
Precise temperature controls, on-the-fly fiducial search, robust vision algorithms, low motion Z axis and non-contacting dispensing are some of the feautures included to increase productivity.

MYD series
Cross-industry capable platform

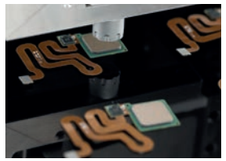
The MYD series automatic in-line dispensing system is proven across many industries with different materials such as electronics, medical devices, optics and industrial assembly to name a few.

KEY APPLICATIONS, CONSUMER ELECTRONICS

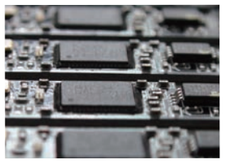
- Hot melt
- Underfill
- Pin encapsulation
- Conformal coating
- Edge/corner bonding
- Surface mount package
- Package on package
- Dam and fill
- SMA
- FPC component
- Reinforcement materials



CONSUMER ELECTRONICS

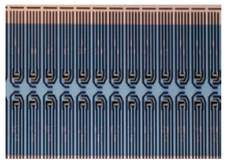



SMT ELECTRONICS




AUTOMOTIVE ELECTRONICS


LED AND MEDICAL INDUSTRY

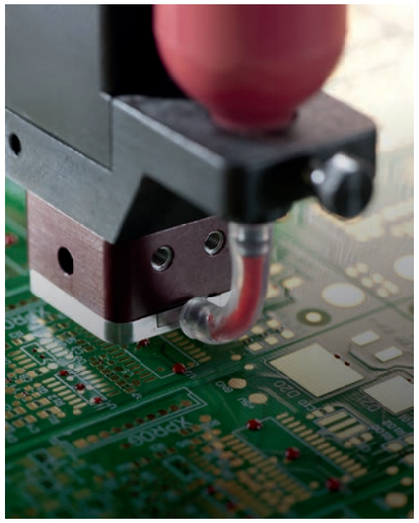
MYD series core components
Highest throughput, lowest cost of ownership

This jet's secret is a novel diaphragm design. A single, easily replaceable diaphragm eliminates dynamic fluid seals common in all other jets. No need to disassemble, clean and replace worn seals, saving time and money. The diaphragm allows fast cycle rates because of its very small mass. There is no large sliding valve stem slowing down the process. With this novel diaphragm design, the energy needed to eject a drop can be adjusted providing wider process windows. The MYD jet valve dispenses a wide range of fluids and applications.

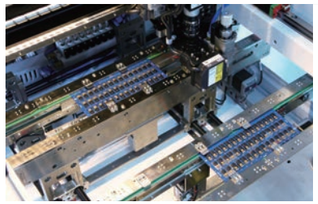
UNIQUE CAPABILITIES
The MYD jet valve can produce high drop velocity, allowing a wide range of fluids and applications. It is easy to change the drop velocity to fine tune the dispensing process and achieve a high process capability.

PRECISE CONTROLS
The MYD jet valve does not need to use an external controller. Smart electronics inside the pneumatic valve reduces voltage when idle to minimize heating effects.

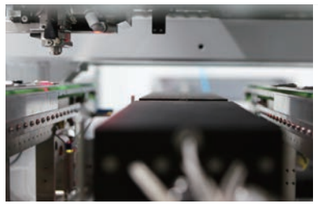
SIMPLE MAINTENANCE
The MYD jet valves are designed with simplicity and ease of use in mind. There is no disassembly and wear-parts are easily replaced.



MYD series
Key features

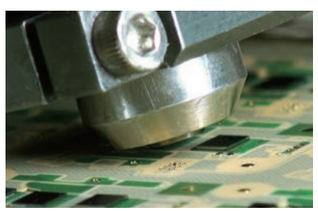


DUAL LANE CONVEYORS
Dual lanes help in maximizing your production line and optimizing throughput. Two different jobs can run on each line.

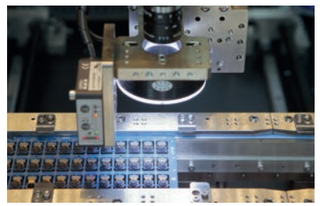


CONFIGURABLE CONVEYOR STATIONS
Edge clamps, vacuum blocks, vacuum heating and non-contact heating modules offer all the potential material handling options for efficient dispensing

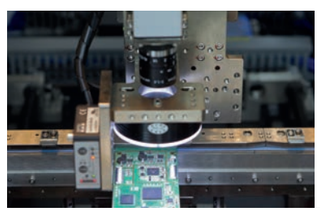
DUAL VALVE CONFIGURATIONS
Synchronous dual valve; two heads work at the same time to save cycle time and improve productivity. Asynchronous dual valve; two heads work at different time. Materials tend to be different on each valve.



TILT OPTIONS
Achieves 30 degrees inside tilt dispensing to be applied below 0.4 mm overflow width. Suitable for precise dispensing of 3 mm components or higher and other special assemblies.



BODY RECOGNITION FUNCTION
Body recognition is used instead of fiducial search for better accuracy on high precision applications such as odd shaped PCBs or when dispensing on very small components.



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 the production result enabling better visibility of the production quality.

MYD10 in-line **specification**

FACILITY REQUIREMENT	
Power	220 V, 2 KW, 10 A, 60 Hz
Air supply	90 psi (6 bar)
System dimension (Wx Dx H)	1200 x 770 x 1400 mm (D x W x H)
System weight	650 kg
Standard compliance	CE

MOTION SYSTEM	
Positioning accuracy	XY: ±30 um @ 3σ Z: ±10 um @ 3 σ
X,Y,Z Repeatability	XY: ±15 um @ 3 σ Z: ±5 um @ 3 σ
Max speed	1000 mm/s (X, Y)
Acceleration	1.0g
Resolution	640 x 480 px (30 W)
Drive system	AC servo

BOARD HANDLING	
Conveyor type	Belt
Tool payload capacity	3 kg
Min. board/carrier width	50 mm
Max. board/carrier width	475 mm
Min. board/carrier length	50 mm
Max. board/carrier length	350 mm
Operating system	Windows 7
Board thinckness range	0.5-6 mm
Communication protocol	SMEMA

DISPENSE AREA	
Dispensing area	475 x 350 mm (D x W)

STANDARD FEATURES	OPTIONAL FEATURES
Single lane	Dual lane
Vison module	Non-contact heating module
Vacuum cleaning	Vaccum absorbtion platform
CCD vision system	Dual valve module
Audible alarm	Low fluid level sensor
Nozzle heating	Rotation and tilting (V-6500 only)
Supports 30 cc / 50 cc syringe	Electronic scale
Dispensing software	Automatic needle calibration
X, Y, Z fiducial calibration platform	Barcode reading function module (with camera)
IPC	Barcode reading function module (with barcode reader)
Left-right. Right-left conveyor	Laser height detecting module (30 ± 4 mm)
	Jet valve

MYD50 in-line **specification**

FACILITY REQUIREMENT	
Power	220V, 2KW, 10A, 60 Hz
Air supply	90 psi (6 bar)
System dimension (W x D x H)	1260 x 770 x 1450 mm (D x W x H)
System weight	900 kg
Standard compliance	CE

MOTION SYSTEM	
Positioning accuracy	XY: ±25 um @ 3 σ Z: ±10 um @ 3 σ
X, Y, Z Repeatability	XY: ±10 um @ 3 σ Z: ±5 um @ 3 σ
Max speed	1300 mm/s (X,Y)
Acceleration	1.3g
Resolution	640 x 480 px (30 W)
Drive system	Linear motor

BOARD HANDLING	
Conveyor type	Belt
Tool payload capacity	3 kg
Min. board/carrier width	50 mm
Max. board/carrier width	500 mm
Min. board/carrier length	50 mm
Max. board/carrier length	350 mm
Operating system	Windows 7
Board thinckness range	0.5-6 mm
Communication protocol	SMEMA

DISPENSE AREA	
Dispensing area	500 x 350mm (D x W)

STANDARD FEATURES	OPTIONAL FEATURES
Single lane	Dual lane
Vison module	Non-contact heating module
Vacuum cleaning	Vaccum absorbtion platform
CCD vision system	Dual valve module
Audible alarm	Low fluid level sensor
Nozzle heating	Rotation and tilting (V-6500 only)
Support 30 cc / 50 cc syringe	Electronic scale
Dispensing software	Automatic needle calibration
X,Y,Z fiducial calibration platform	Barcode reading function module (with camera)
IPC	Barcode reading function module (with barcode reader)
Left-right. Right-left conveyor	Laser height detecting module (30±4 mm)
	Jet valve

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