

Precise and flexible **dispensing systems**

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



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 and dispensing technologies offering enhanced flexibility for high volume manufacturing.
- 3 Built in AVI capabilities enables automatic inspection of dispense results.

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.

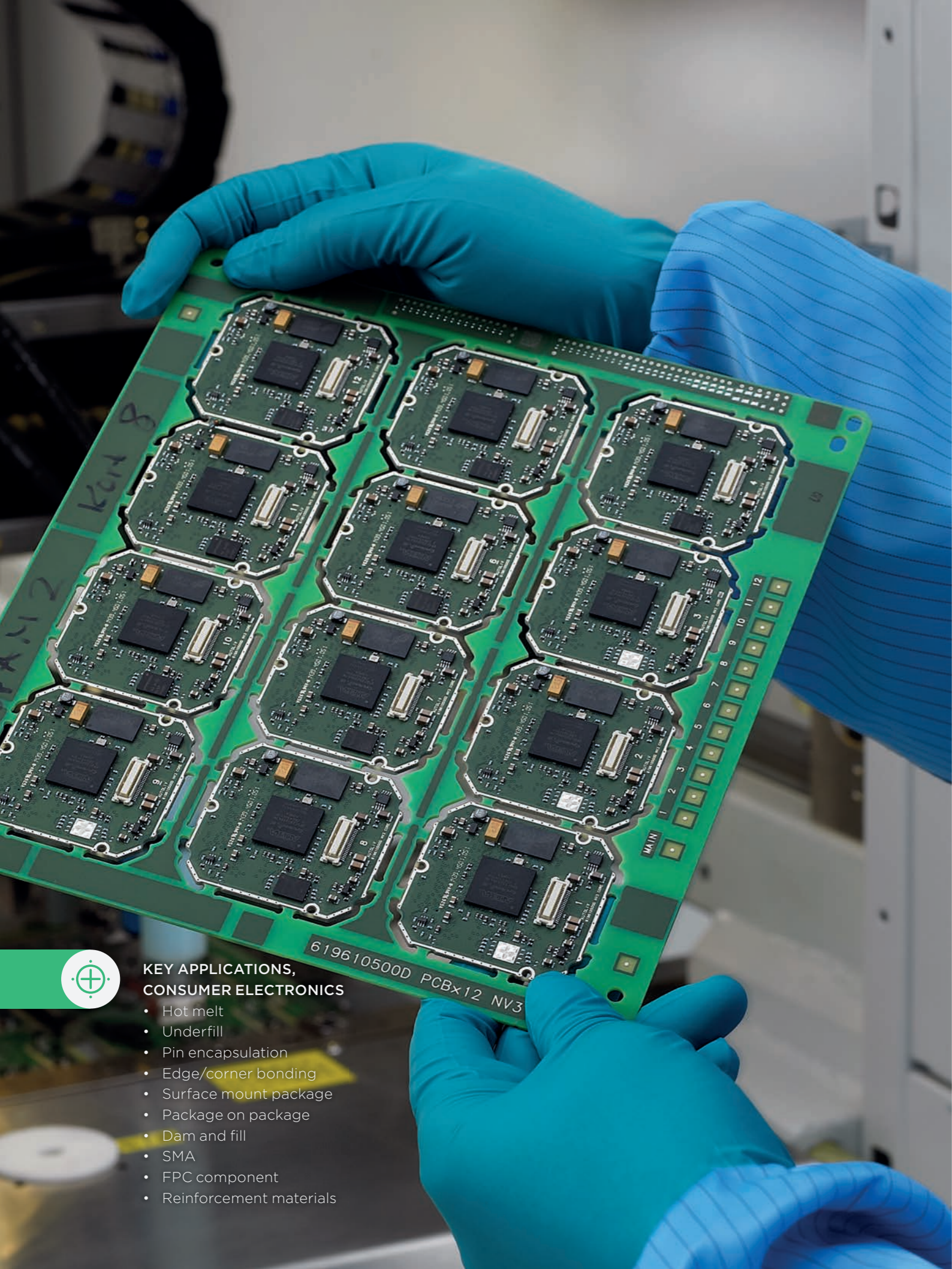
COST-EFFICIENT

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 included to increase productivity.

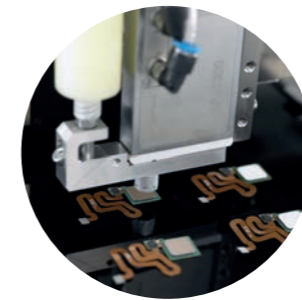
-  Unmatched production value
-  Non-contact jetting technology
-  Semi- or full automation
-  Low maintenance and long service life
-  High-precision dispensing volume control



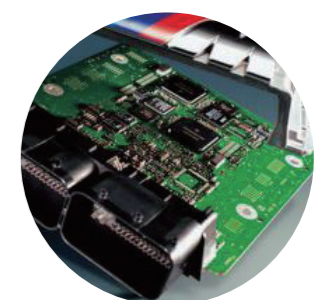
MYD series Cross-industry capable platform

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

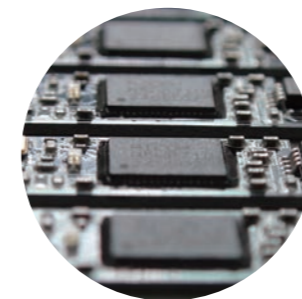
Consumer electronics



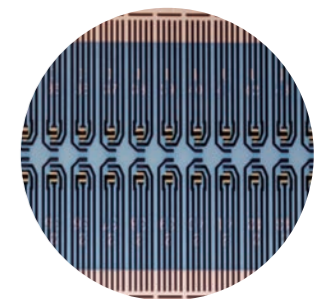
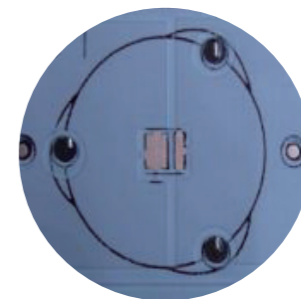
Automotive electronics



SMT electronics



LED and medical industry



KEY APPLICATIONS, CONSUMER ELECTRONICS

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

MYD series core components

Fully automated compact dispensing

Different types of jet valves provide wide range of capabilities to optimize your process based on your specific materials. For large flow applications, auger valves and positive displacement pumps decrease cycle time while maintaining tight process controls. All jets, valves and pumps are designed with speed, durability and precision in mind.

UNIQUE CAPABILITIES

The MYD jet valves and pumps can produce high drop velocity, allowing a wide range of fluids and applications.

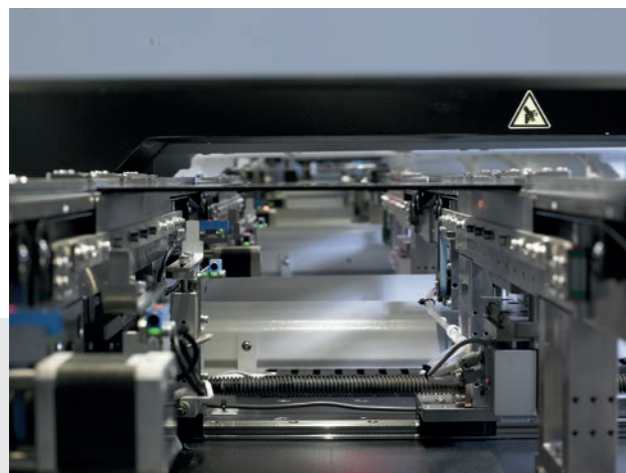
It is easy to change the drop velocity to fine tune the dispensing process and achieve a high process capability.

PRECISE CONTROLS

Closed loop controls and system feedback are key for higher yields. Focus on smart jetting controls, closed loop substrate heating, user specified temperature spot checks and closed loop material dispense are the foundation of quality output.

SIMPLE MAINTENANCE

The MYD jet valves are designed with simplicity and ease of use in mind. Minimal disassembly required and wear parts are easily replaced.



Configurable conveyors. Modular design enables transfer and handling of any PCB, carrier or other unique substrate.



Continuous improvement

Jetting technology that is constantly adapting to new market requirements, enabling more materials, smaller dots, higher accuracy and faster processes.

MYD series Key features



Dual lane conveyors

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



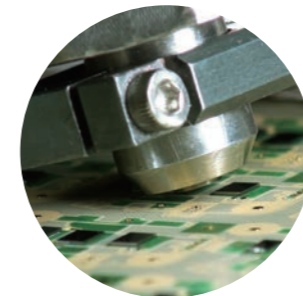
Configurable conveyor stations

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



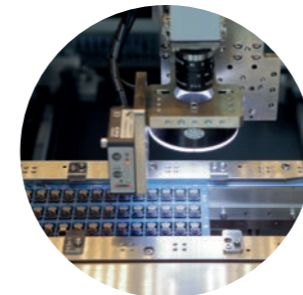
Dual valve configurations

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.



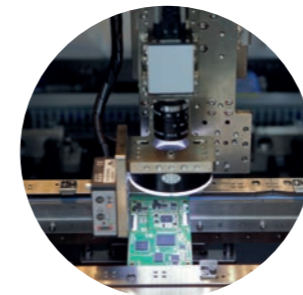
Tilt options

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 increasing yield traceability and visibility.

Specifications MYD50/MYD10/MYD10i in-line

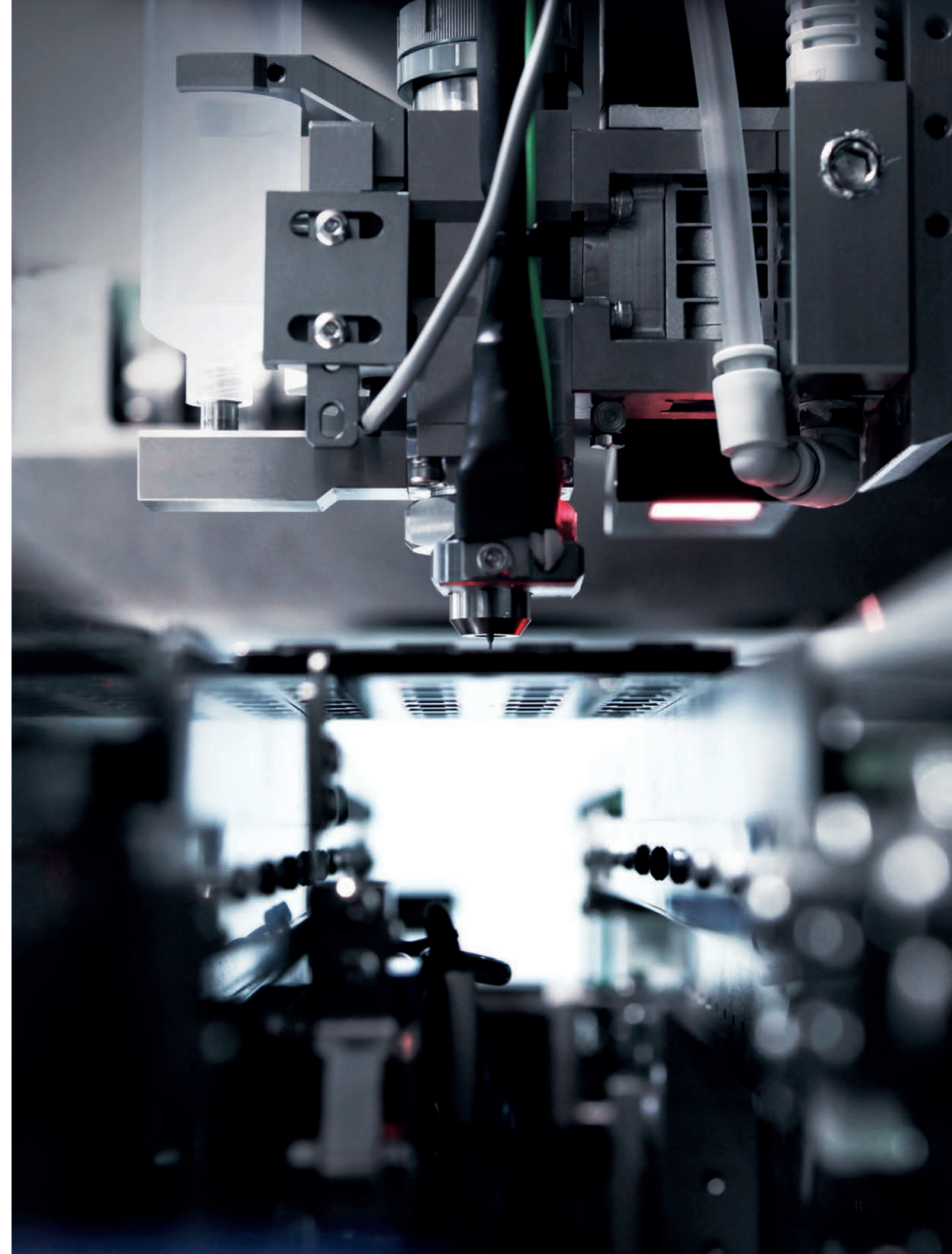
	MYD50	MYD10	MYD10i
FACILITY REQUIREMENT			
Power	220V, 2kW, 10A, 60Hz	220V, 2kW, 10A, 60Hz	220V, 2kW, 10A, 60Hz
Air supply	90psi (6 bar)	90psi (6 bar)	90psi (6 bar)
System dimension (WxDxH)	770x1,260x1,450mm	770x1,200x1,400mm	890x1,500x1,500mm
System weight	900kg	650kg	750kg
Standard compliance	CE	CE	CE

MOTION SYSTEM			
Positioning accuracy	XY: $\pm 25\mu\text{m}$ @ 3σ Z: $\pm 10\mu\text{m}$ @ 3σ	XY: $\pm 30\mu\text{m}$ @ 3σ Z: $\pm 10\mu\text{m}$ @ 3σ	XY: $\pm 30\mu\text{m}$ @ 3σ Z: $\pm 10\mu\text{m}$ @ 3σ
XYZ repeatability	XY: $\pm 10\mu\text{m}$ @ 3σ Z: $\pm 5\mu\text{m}$ @ 3σ	XY: $\pm 15\mu\text{m}$ @ 3σ Z: $\pm 5\mu\text{m}$ @ 3σ	XY: $\pm 15\mu\text{m}$ @ 3σ Z: $\pm 5\mu\text{m}$ @ 3σ
Max speed	1,300mm/s (X, Y)	1,000mm/s (X, Y)	1,000mm/s (X, Y)
Acceleration	1.3g	1.0g	1.0g
Resolution	640 x 480px (30W)	640 x 480px (30W)	640 x 480px (30W)
Drive system	Linear motor	AC servo	AC servo

BOARD HANDLING			
Conveyor type	Belt	Belt	Belt
Tool payload capacity	3kg	3kg	3kg
Min board/carrier width	50mm	50mm	50mm
Max board/carrier width	500mm	475mm	475mm
Min board/carrier length	50mm	50mm	50mm
Max board/carrier length	350mm	350mm	440mm
Operating system	Windows 10	Windows 10	Windows 10
Board thickness range	0.5-0.6mm	0.5-6mm	0.5-6mm
Communication protocol	SMEMA	SMEMA	SMEMA

DISPENSE AREA			
Single lane	350x500mm	350x475mm	440x760mm
Dual lane	350x215mm	350x210mm	440x350mm

MYD50/MYD10/MYD10i	
STANDARD FEATURES	OPTIONAL FEATURES
Single lane	Dual lane
Vision module	Non-contact heating module
Vacuum cleaning	Vacuum absorption platform
CCD vision system	Dual valve module
Audible alarm	Low fluid level sensor
Nozzle heating	Tilt and rotate
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)
Conveyor orientation: Left-Right or Right-Left (defined at time of order)	Laser height detecting module ($30 \pm 4\text{mm}$)
	Jet valve
	Temperature spot check



Bringing tomorrow's electronics to life

MYCRONIC

MYCRONIC.COM

SWEDEN

Mycronic AB
PO Box 3141
Nytorpsvägen 9
SE-183 03 Täby
Sweden

Tel: +46 8 638 52 00

NETHERLANDS

Mycronic B.V.
High Tech Campus 10
5656 AE
Eindhoven
Netherlands

Tel: +31 402 62 06 67

FRANCE

Mycronic S.A.S.
1 rue de Traversière
CS 80045
94513 Rungis Cedex 1
France

Tel: +33 1 41 80 15 80

SOUTH KOREA

Mycronic Co. Ltd.
3rd Floor, Jung-San Bldg.
163 LS-ro Gunpo-Si
Gyeonggi-Do, 15808
South Korea

Tel: +82 31 387 5111

SINGAPORE

Mycronic Pte., Ltd.
9 Tagore Lane,
#02-08/09
9@Tagore
Singapore 787472

Tel: +65 6281 7997

GERMANY

Mycronic GmbH
Biberger Straße 93
D-82008 Unterhaching
bei München
Germany

Tel: +49 89 4524248-0

UK

Mycronic Ltd.
Unit 2, Concept Park
Innovation Close
Poole, Dorset, BH12 4QT
UK

Tel: +44 1202 723 585

CHINA

Mycronic Co., Ltd.
Unit 106, E Block
Lane 168, Da Duhe Road.
Putuo District, 200062
Shanghai P.R. China

Tel: +86 21 3252 3785/86

JAPAN

Mycronic Technologies KK
KDX Chofu Bldg.7th floor
1-18-1 Chofugaoka,
Chofu-shi
Tokyo 182-0021
Japan

Tel: +81 42 433 9400

USA

Mycronic Inc.
554 Clark Road
Tewksbury
MA 01C876-1731
USA

Tel: +1 978 495 9799