

One versatile platform.  
**Twice the possibilities.**

MYPro series MY700™ Jet Printer and Dispenser



**THE FUTURE** of SMT production is anything but predictable. With rapidly changing build schedules. A proliferation of new materials and dispensing media. And more advanced components to locate, load, mount and trace—every day. As these high-mix challenges go mainstream and into higher volume production, real productivity and throughput suffer. And we've only just seen the beginning.

At Mycronic, we've devoted decades of experience to solving precisely these challenges. With the world's most flexible electronics assembly solutions. And the industry's fastest, most precise jet printing and dispensing systems.

With the new MYPro series, we've created our most advanced production line to date. Fully software-driven, it ensures higher productivity in a smaller footprint, opening your factory up to a range of new possibilities.

It's all part of the highly automated, just-in-time production that we call Mycronic 4.0. Designed to enable 100% stock accuracy, full visibility planning, automated replenishment and more, Mycronic 4.0 is our fully integrated solution to the challenges of today's most demanding production environments.

Whatever your ambitions, the future is already here. In fact, it's **JUST IN TIME.**

## Introducing the new MYPro series

# The future of intelligent productivity

The MYPro series makes it possible to do more than ever before within a 40% smaller footprint than previous generations. Mount any component on any board. Handle any batch or series with zero changeover times. And jet solder paste and adhesives with high precision at record speeds. Simply put, it's the smartest way to boost quality and utilization across a vast range of challenging applications.

- 1 More capabilities in less factory space
- 2 More process steps with less equipment
- 3 Handle a wider range of products and components
- 4 Less manual operation
- 5 Achieve higher real speed and utilization



# The new MY700

## Double up on speed, versatility and precision

Whether your factory faces increasing cost pressures, shorter production series or higher quality standards, the MY700 stands out as the most efficient solution for tomorrow's electronics production. With optimal solder joints for every component, pad and package. High-precision assembly fluid dispensing at the industry's highest speeds.

Screen printing has long been the go-to solution for long series production. But as batch sizes shrink and component complexity grows, PCB defects pose a major challenge. Add to this the utilization bottlenecks caused by increasingly advanced dispensing applications, and it becomes more apparent than ever: traditional screen printing and outdated adhesive dispensers have both reached their limits.

### **BOOST QUALITY AND UTILIZATION FOR ANY PCB**


Used to replace a screen printer, jet printing allows you to respond rapidly to customer demands and changes with superior accuracy for every solder joint. As an add-on technology, it relieves your volume production line for on-the-fly revisions,

small-batch jobs or difficult applications. And forget about additional process steps for adhesives – the MY700 vastly increases fluid dispensing throughput as well, all within the same compact machine.

### **HIGH-PRECISION, HIGH-THROUGHPUT DUAL HEADS**

Key to this performance are two state-of-the-art non-contact jetting heads that travel over the board with 3G acceleration forces, guided by advanced software and high-resolution optical encoders. At speeds of more than one million dots per hour, the two ejectors can be used to cover the widest possible range of solder paste dot volumes for very small and large components. They can also



-  100% software-driven and operator-independent
-  State-of-the-art motion system with 3G acceleration
-  Versatile dual-head, dual-lane design
-  Automatic board stretch compensation
-  Complete volume control and dot consistency

be used to handle multiple process steps like SMA and pin-in-paste. Or bring together high-precision solder paste jet printing with high-speed dispensing of adhesives. Whichever model you choose, you'll have a wider range of capabilities for even the most demanding production sites.

### **DUAL LANES ELIMINATE BOTTLENECKS**

Thanks to a new dual-lane conveyor system and optional extended buffer zone, the next board is always ready and in jetting position, thus reducing board transfer time to a bare minimum. Together with faster on-the-fly fiducial search and laser height measurement, this means that cycle times are substantially shorter than ever before.

### **ERGONOMIC DESIGN WITH A SMALLER FOOTPRINT**

The new MY700 platform adds all these enhanced capabilities within a significantly reduced footprint. The 30% narrower design decreases your line length, while dual hoods provide fast access to all service points. An improved adjustable display makes the design easy to operate.



## High-precision flexibility

The dual-lane design, combined with flexible options for different types of dual-head paste or glue ejectors, allows you to achieve on-the-fly precision for even the most complex boards.

# Three high-speed models. One state-of-the-art platform.

Equipped with one or two ejectors, the new compact MY700 models make it easier than ever before to find the right fit for even the most complex high-mix, high-volume or prototyping production environments.



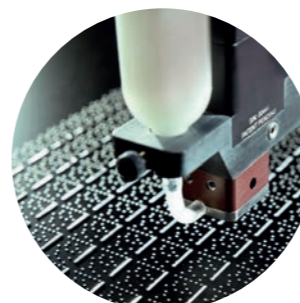
### **MY700JX** Solder paste and adhesive jetting in one platform

Now you can eliminate the need for both screen printers and glue dispensers. The MY700JX enhances both speed and precision, allowing you to jet the most challenging solder paste and dispensing applications with the highest quality. There is simply no better way to apply both solder paste and assembly fluids for mixed production, or to stay prepared for your next NPI, new components or an expanding product mix.



### **MY700JP** Perfect solder joints at more than one million dots per hour

The MY700 Jet Printer ensures perfect solder paste deposits with full volume and diameter control at extremely high speeds. Use a combination of fine-pitch and big-dot ejectors to print boards for extremely small and large components. And prepare a new job from any CAD or Gerber data in minutes, ensuring the leanest possible production environment.



### **MY700JD** The highest throughput in a range of dispensing applications

The MY700 Jet Dispenser is the fastest and most precise jet dispensing platform on the market. Its proven ability to jet a wide range of adhesives, UV materials and epoxies on-the-fly at high speed makes it perfect for SMA, encapsulation and more. And with dual jet valves capable of dispensing two different dispensing fluids in the same process step, you'll see a dramatic increase in productivity in a wide range of applications.

# MY700JX

## The all-in-one solder paste and assembly fluid solution

In mixed production environments, the MY700JX allows you to combine operator-independent solder paste jet printing with high-speed jet dispensing of adhesives, UV materials, epoxies and more. With both capabilities in the same machine and process step, there's virtually no board, package or component you can't handle.

The MY700JX is without question the most flexible way to produce complex boards at speeds of more than one million dots per hour. It handles flexible substrates, LED boards, cavities and package-on-package applications with ease. And a non-contact nozzle precisely jets solder paste deposits with complete volume control, ensuring repeatable quality and higher throughput with less re-work. With the same machine you can dispense glue or other assembly fluids for encapsulation, selective coating, dots and lines at the industry's absolute highest speeds.

### MORE CAPABILITIES. LESS EQUIPMENT.

Extremely versatile and compact, the MY700JX is an ideal fit almost anywhere on your factory floor. From perfect fine-pitch solder deposits to long connectors and flux dots, you can achieve higher precision than with stepped stencils and higher speeds than with general dispensers.

### SMART BOARD HANDLING

Adjustable conveyor rails make it easy to switch between single- or dual-lane setups, while two internal buffering options provide optimized work area and loading times. The dual-lane configuration virtually eliminates board loading time by ensuring that while one board is printing, the other is already being loaded and in jetting position in the second lane. Whatever applications your operations might demand, the MY700's best-in-class machine depth guarantees a large work area with generous top and bottom side clearance.

### THE ULTIMATE IN SPACE PRODUCTIVITY

With the MY700JX platform, you'll be able to cover a wider range of challenging applications with one fully software-driven solution — all within just one-and-a-half square meters of floor space. No matter how complex your production schedule, the ability to combine high-precision solder paste and assembly fluid applications in a single machine gives your factory a decisive advantage for any future challenge.



### Unique dual-head ejectors

Solder paste? Or glues and adhesives? With optional dual-head ejectors, you can do both at the same time, in the same process step.

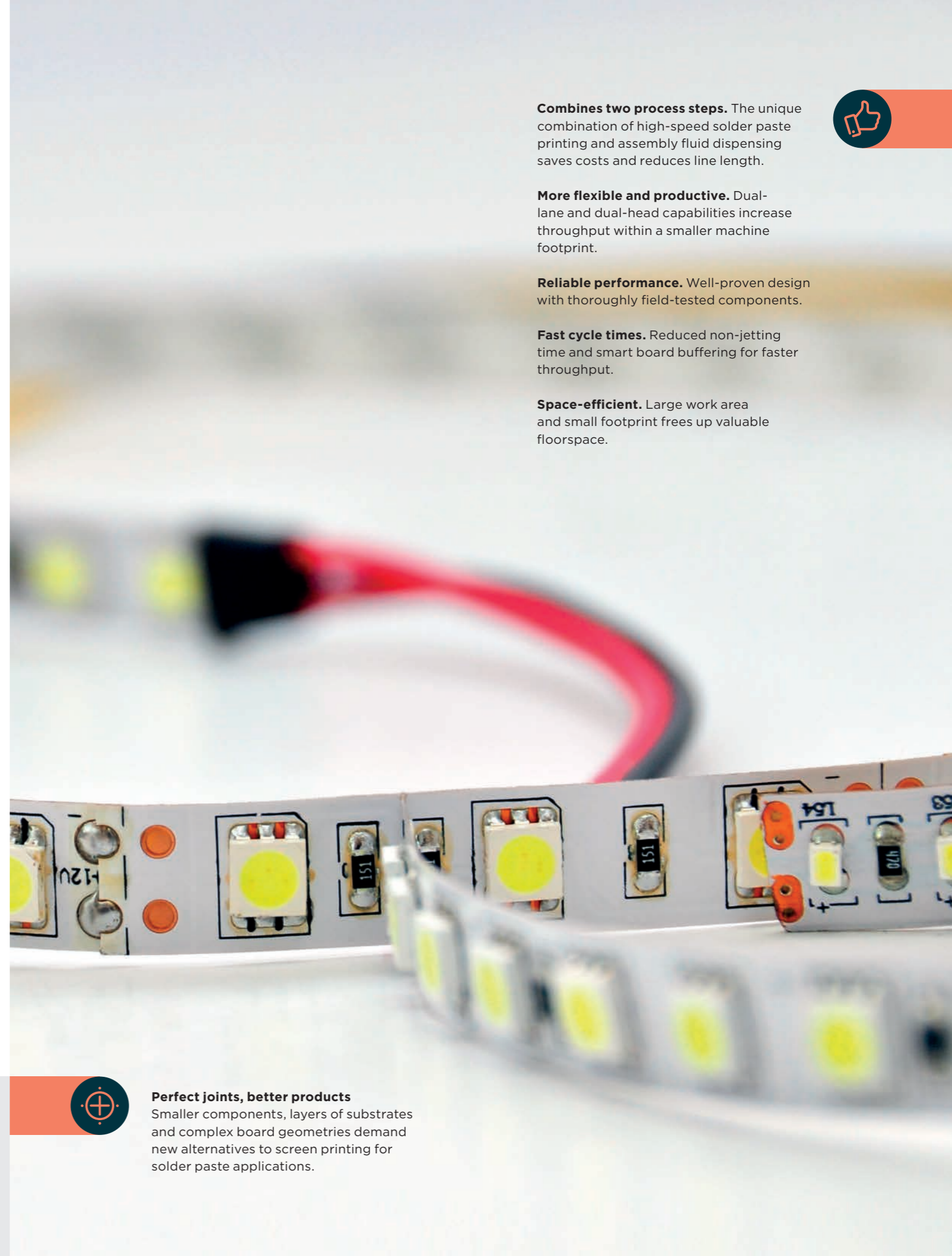
**Combines two process steps.** The unique combination of high-speed solder paste printing and assembly fluid dispensing saves costs and reduces line length.

**More flexible and productive.** Dual-lane and dual-head capabilities increase throughput within a smaller machine footprint.

**Reliable performance.** Well-proven design with thoroughly field-tested components.

**Fast cycle times.** Reduced non-jetting time and smart board buffering for faster throughput.

**Space-efficient.** Large work area and small footprint frees up valuable floorspace.



### Perfect joints, better products

Smaller components, layers of substrates and complex board geometries demand new alternatives to screen printing for solder paste applications.

# MY700JP

## Millions of high-precision dots. Now with twice the versatility.

The MY700 Jet Printer makes it possible to handle the most challenging boards and components with micrometer accuracy, maximum speed and perfect quality solder joints. The smallest and largest dots are now possible to combine with higher throughput than ever before, thanks to dual heads for continuous jetting of nanoliter and large deposits.

### PERFECT PRECISION WITH ULTIMATE DESIGN FREEDOM

As boards and components become smaller, smarter and more complex, jet printing stands out as the most efficient solution for the modern electronics industry. Fully software-driven and with complete solder paste volume control, the MY700JP is the optimal way to ensure perfect quality solder joints at high speed – even in the industry’s most challenging applications. From pin-in-paste to package-on-package, flexible substrates and board cavities, even stepped stencils have begun to reach their limits. With the MY700JP you can handle all these jobs and more with total control of solder paste deposit size, volume, shape and position.

### DOUBLE UP ON SPEED, VERSATILITY AND PRECISION

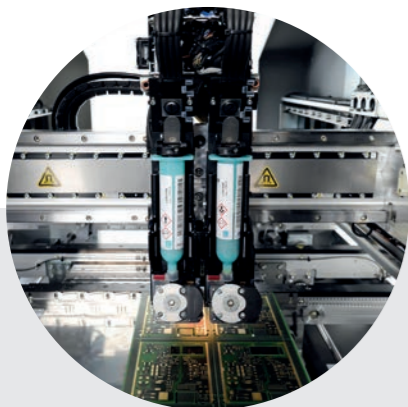
The MY700 Jet Printer ensures excellent volume repeatability and solder joint quality to reduce rework. The dual head option also make it possible to combine fine-pitch jet printing for the smallest BGAs and 01005 components on the same board as larger-volume deposits for QFNs and connectors. The result is a substantial increase in productivity in a wide range of applications.

### EASY SETUP AND ERROR-PROOF AUTOMATION

State-of-the-art software and vision systems combine to make the MY700JP one of the market’s most error-free solutions. Simply set up and generate a new job offline from CAD or Gerber data in minutes. Depend on fast, accurate scanning and tracing of the smallest fiducial marks and bar codes. And rely on automatic board warpage compensation, stretch compensation and advanced height measurement to scan the entire boards for cavities, plateaus and warpage. Pre-set parameters for all types of challenging applications will then optimize and jet deposit volumes at a rate of more than one million dots per hour, giving you the highest possible quality and yield for the industry’s most demanding boards and components.

### Complete design freedom

100% software-controlled, the non-contact ejectors can be instantly adjusted to accommodate board stretch, preferred dot volume and design changes.



### High quality and yield

Automatic board stretch compensation, operator-independent production and excellent volume repeatability.

### Unrivalled flexibility

100% software-driven, enabling quick changeovers and board revisions on-the-fly.

### Complements/replaces stencils

Reduce cycle times with 3g acceleration, on-the-fly fiducials, laser height measurement and jetting.

### Enables lean production

Reduce costs and manual work with no stencil handling, cleaning or storage.

### Operator-independent

Cassettes and syringes equipped with ID and bar codes to ensure correct setup for every job.



# MY700JD

## The world's fastest fluid dispensing system

Low- and high-viscosity adhesives. Selective coating, capillary underfill and encapsulation. The MY700 Jet Dispenser handles it all at substantially higher speeds than any other dispensing system — no matter what type of board you are producing.

### MAXIMUM PRODUCTIVITY

With a throughput rate vastly higher than traditional glue dispensers, the MY700JD is the market's fastest dispensing platform. Its dual-head, dual-lane design with faster board loading and on-the-fly fiducials makes it ideally suited for operator-free, high-volume manufacturing where the absolute highest levels of speed and precision are a necessity. The platform's advanced motion system makes quick work of complex SMA and random dot patterns as well as long travel distances.

### MINIMAL MAINTENANCE

The non-contact jetting nozzles are robust and durable, and require minimal maintenance thanks to an integrated valve cleaning station. Applicator heads have few wetted parts, all of which are easily accessible, which means the unit can remain on the machine during maintenance to ensure low running costs and minimal stoppage time. Whenever machine cleaning is required, the MY700JD's compact format and dual hoods allow easy access from either the front or back of the machine.

### INTELLIGENT GUIDANCE

To ensure error-free operations, each applicator includes an ID chip and barcode on the cartridge, which guarantees that the right applicator for the job is used. With a vast and expanding range of approved fluids, the MY700JD gives you enormous versatility for future applications, together with vastly improved throughput and minimal operator intervention.



### Dispensing goes high speed

Robust and durable, optional dual applicators offer vastly superior throughput rates compared to standard dispensing systems.



**Significantly boosts throughput**  
Maintains high positional accuracy at throughputs at least three times higher than general dispensers.



**Low cost of ownership**  
Replaces multi-head solutions with one machine. Applicator with low parts count simplifies service and maintenance.

**Unmatched flexibility**  
Dual-head option allows dispensing of two different assembly fluids in one process step.

**Ergonomic & operator-independent**  
Applicator is easily accessible from front and rear. Applicator ID code ensures correct setup for every job.

**Proven reliability**  
Well-proven design, compatible with a wide range of industry fluids.

# Smarter software for intelligent automation

At the heart of the MY700 is an advanced self-learning data preparation system — one that stores your process knowledge to improve speed and quality with every job. An integrated part of the Mycronic 4.0 intelligent factory and the new MYPro series, it ensures centralized programming and data-sharing across all MY700, MY300 and MYTower line configurations. In today's digitally driven production environment, there's no better way to boost performance across your entire factory floor.

## SELF-LEARNING DATA PREPARATION

The MY700's data preparation tool lets you create a new program in minutes and perform changeovers in seconds. Just import data, drag, drop and adjust to optimize deposits, and press start. An automatch function ensures quick startup with improved repeatability, and all the latest settings are stored for each pad and component, making it easier to achieve a perfect process result every time.

## ENHANCED SOFTWARE AUTOMATION

Now, with multi-machine line balancing, you can combine two or more MY700s with automatically optimized process settings to ensure continuously high utilization across your production line.

The software-driven technology dynamically optimizes dot size during a job. This maximizes throughput and secures correct dot volume for each and every pad on the board.

## 100% CLOSED-LOOP AND SOFTWARE-DRIVEN

These advanced automation features completely remove the need for parameter settings such as paste volume, needle size and temperature control. In addition to almost completely eliminating the risk for human errors, the MY700's closed-loop, software-driven system allows your entire data set to be easily integrated with the rest of your production environment to ensure the absolute highest level of factory-wide automation.



Create new programs in minutes

Offline programming lets you import all common CAD/Gerber formats and then use Quick mode programming with automatch to edit online as needed.



FOR DECADES, Mycronic's innovations have been changing the face of the high-mix SMT industry — from stencil-free jet printers and the world's fastest jet dispensers, to fast-loading intelligent feeder systems, automated near-production storage and advanced software solutions.

All one-of-a-kind technologies. And all with one goal in mind: to simplify and streamline an increasingly complex production environment with a single integrated intelligent factory solution.

With Mycronic 4.0, all of this collective knowledge and innovation amounts to a complete, agile manufacturing environment that masters the complexities of modern electronics production.

The result is one highly automated, intelligent factory for just-in-time production, with 100% stock accuracy. One that adapts to meet your needs and solve future challenges — before they arrive.

At Mycronic, we believe that future of SMT production is already here.

IS YOUR FACTORY PREPARED?

Fully integrated with the MYTower automated material handling system, MYCenter software suite and award-winning Agilis feeder systems, the new MYPro series is designed for full compatibility with the Mycronic 4.0 intelligent factory.



# Bringing tomorrow's electronics to life

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