



MPE

Commercial tray sealing solutions



For over 20 years, MPE UK has been at the forefront of **THE FOOD PACKAGING INDUSTRY**, setting new standards in **tray sealing, sandwich sealing, conveyors, and custom integration.**

Built on innovation and trust, we have earned a reputation as the partner of choice for businesses seeking reliability, efficiency, and future-ready solutions.

Our mission is clear: **to be the most technologically advanced and innovative company in THE FOOD PACKAGING INDUSTRY.**

From design and testing to manufacturing, build, and global distribution, we deliver the world's leading machinery.

We also provide specialist tooling inserts compatible with all competitor machines, giving our customers unrivalled flexibility and choice.

We proudly serve industries including fruit & vegetables, growers, meat, poultry, fish, desserts, and convenience foods/food-to-go, supporting their growth with cutting-edge technology.

What sets MPE UK apart is our **commitment to innovation and energy efficiency.**

Our groundbreaking airless machines represent the future of this industry, delivering performance while significantly reducing environmental impact.

Every machine we build is a testament to **quality and precision.**

Our rigorous testing has shaped some of the most advanced systems available - systems that others in the industry follow.

With two decades of expertise, a proven track record, and an unrivalled dedication to innovation, **we don't just keep up with the industry - we lead it.**

At MPE UK, we put our customers first.

From expert advice to fully tailored solutions, we ensure every client receives the support and partnership they need to succeed.

And our story is only just beginning.

With our recent move into a purpose-built facility offering **200% more design, manufacturing, and build capacity**, we are firmly focused on the future - for MPE UK, for our partners, and for the packaging automation industry worldwide.

MPE TRAY SEALING MACHINERY

THE I-SERIES

High throughput, reliable, simple to operate. The **MPE** range of tray sealing machines lead the way in throughput capability, reliability and technological advancement in sectors such as Meat & Poultry, Seafood, Ready Meals, Fresh Produce, Dairy, Pet foods and Pharmaceutical.

Ranging from 20 to 140 packs sealed per minute, there is an **MPE Tray sealer to suit all requirements.**

- ✓ Gas Flush or Vacuum and Gas for extended shelf life
- ✓ Printed Film Compatible
- ✓ Continuous Motion technology for maximising throughput
- ✓ Quick change tooling - product changeover completed in seconds
- ✓ Online Monitoring for instant engineer support
- ✓ High force Electric Seal



www.mpe-uk.com



Advanced Automatic Inline Tray Sealer



www.mpe-uk.com



The **MPE i-3** inline heat sealing machine is built on years of extensive experience in the heat-sealing industry. The **i-3** represents the culmination of this experience.

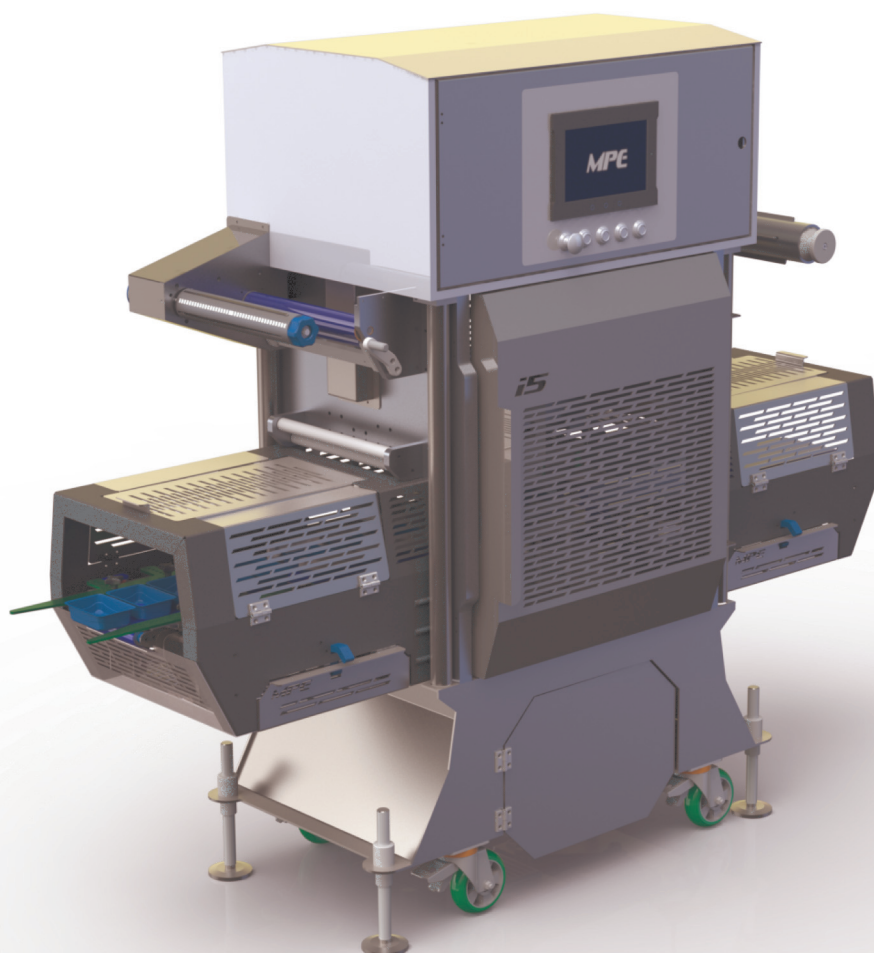
Standard design features and benefits

- ✓ E-RAM Sealing Technology
- ✓ On-line Systems and technical support via modem link, also allows direct software upgrades.
- ✓ RFID swipe card security access. With different level access for operators and engineers.
- ✓ Recipe driven automatic machine set-up.
- ✓ Process control monitoring.
- ✓ All Electric Machine (no pneumatics)
- ✓ Category 4 Safety System
- ✓ Up to 18 Cycles per min none-Gas
- ✓ Gas Flushing as standard (Modified Atmosphere)
- ✓ 1-7 Impression Tooling
- ✓ Easy and quick Tool Change
- ✓ High force Electric seal
- ✓ Fully automatic machine
- ✓ Robust machine simple, reliable, efficient
- ✓ Small footprint design saves valuable floor space
- ✓ Rapid changeover between tray sizes
- ✓ Self- tray guides.
- ✓ Maintenance friendly
- ✓ Advanced AI temperature control system for thin packaging.
- ✓ Film Snap detection.
- ✓ Active film torque system.
- ✓ Food industry approved construction
- ✓ Intuitive HMI system design.
- ✓ Can be operated from both sides.
- ✓ Tray crush avoidance system.
- ✓ Quick release conveyor system. For ease of cleaning and maintenance.
- ✓ Continues motion tray transfer system.
- ✓ Ancillary equipment Integration (Coders / Printers/ Depositors etc)
- ✓ MADE IN UK





All Electric Advanced Automatic Inline Tray Sealer



www.mpe-uk.com



The **MPE i-5+** Inline heat-sealing machine is built on MPE's many years of extensive experience in the heat-sealing industry. The **i-5+** represents the culmination of this experience.

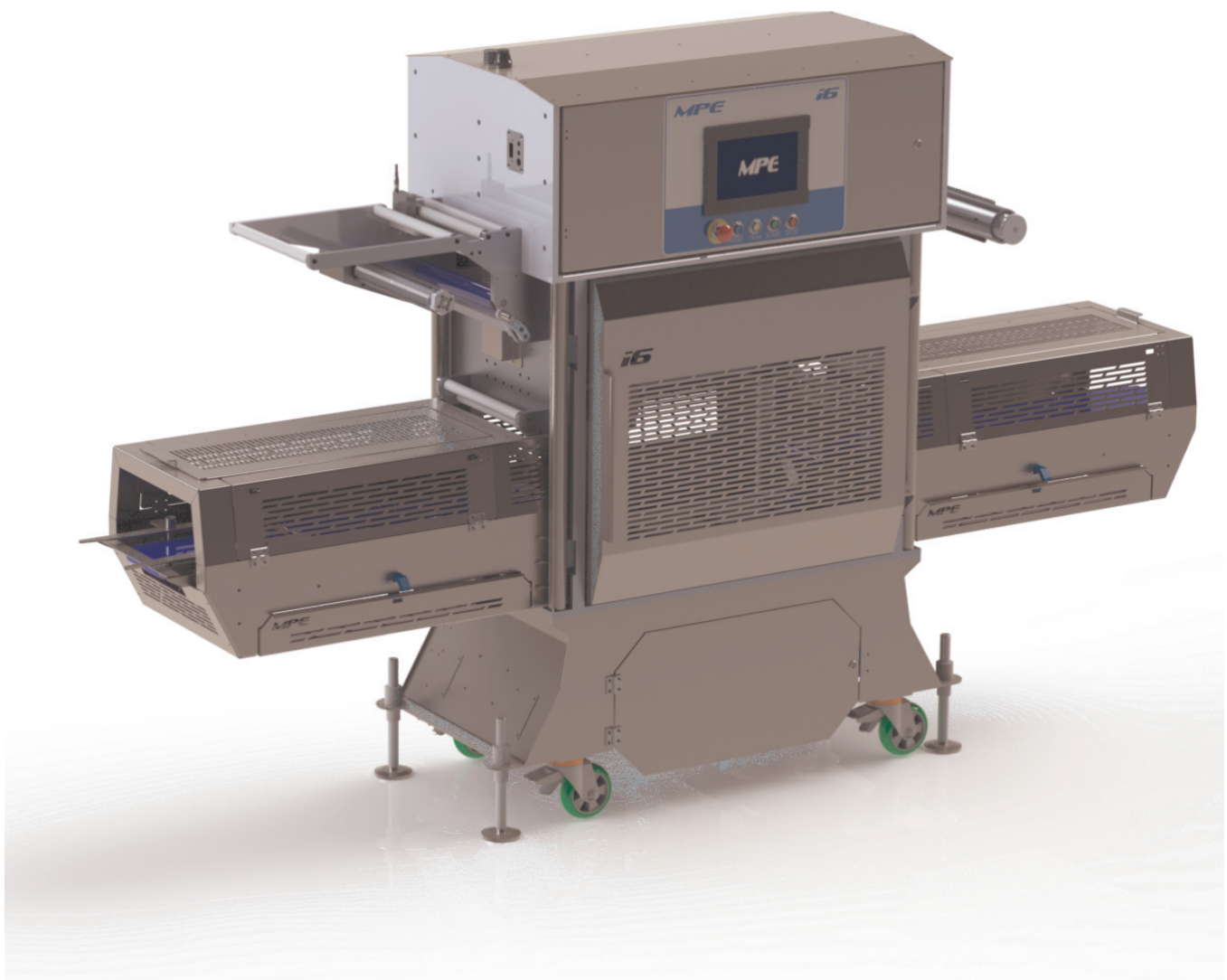
Standard design features and benefits

- ✓ E-RAM Sealing Technology, designed specifically to give maximum seal force with minimum maintenance and superior reliability/life-span
- ✓ Environmentally Friendly ALL ELECTRIC machine designed to reduce energy consumption
- ✓ MAX-PACK system that preempts tray anomalies prior to transfer
- ✓ Remote viewing and technical support via wireless modem link
- ✓ FREE direct software upgrades upon release
- ✓ User customizable RFID security access
- ✓ Recipe driven automatic machine set up
- ✓ Process control monitoring
- ✓ Category 3 Safety System
- ✓ Up to 20 Cycles per minute with seal only applications
- ✓ Gas Flushing ready (cycles depending on product)
- ✓ 1-4 Impression Tooling with optional colour coding
- ✓ Simplistic manual tool change
- ✓ Static tray guides and exterior transition plates
- ✓ Tray size check to stop machine for incorrect tray orientation
- ✓ Film snap detection system
- ✓ Active film torque system
- ✓ Intuitive and customizable HMI design
- ✓ Simplistic front & rear operation with right to left configurations available
- ✓ Tray crush avoidance system with advanced design specifications
- ✓ Quick release, modular conveyor system for cleaning and maintenance
- ✓ Ancillary Equipment Integration (Coders, Printers, Depositors, Vision Systems etc.)
- ✓ Phase monitoring protection to prevent surge damage to electrical components





All Electric Advanced Automatic Inline Tray Sealer





The **MPE i-6** Inline heat-sealing machine is built on MPE's many years of extensive experience in the heat-sealing industry. The **i-6** represents the culmination of this experience.

Standard design features and benefits

- ✓ E-RAM Sealing Technology, designed specifically to give maximum seal force with minimum maintenance and superior reliability/life-span
- ✓ Environmentally Friendly ALL ELECTRIC machine designed to reduce energy consumption
- ✓ MAX-PACK system that preempts tray anomalies prior to transfer
- ✓ Remote viewing and technical support via wireless modem link
- ✓ FREE direct software upgrades upon release
- ✓ User customizable RFID security access
- ✓ Recipe driven automatic machine set up
- ✓ Process control monitoring
- ✓ Category 3 Safety System
- ✓ Up to 20 Cycles per minute with seal only applications
- ✓ Gas Flushing ready (cycles depending on product)
- ✓ 1-4 Impression Tooling with optional colour coding
- ✓ Simplistic manual tool change
- ✓ Static tray guides and exterior transition plates
- ✓ Tray size check to stop machine for incorrect tray orientation
- ✓ Film snap detection system
- ✓ Active film torque system
- ✓ Intuitive and customizable HMI design
- ✓ Simplistic front & rear operation with right to left configurations available
- ✓ Tray crush avoidance system with advanced design specifications
- ✓ Quick release, modular conveyor system for cleaning and maintenance
- ✓ Ancillary Equipment Integration (Coders, Printers, Depositors, Vision Systems etc.)
- ✓ Phase monitoring protection to prevent surge damage to electrical components



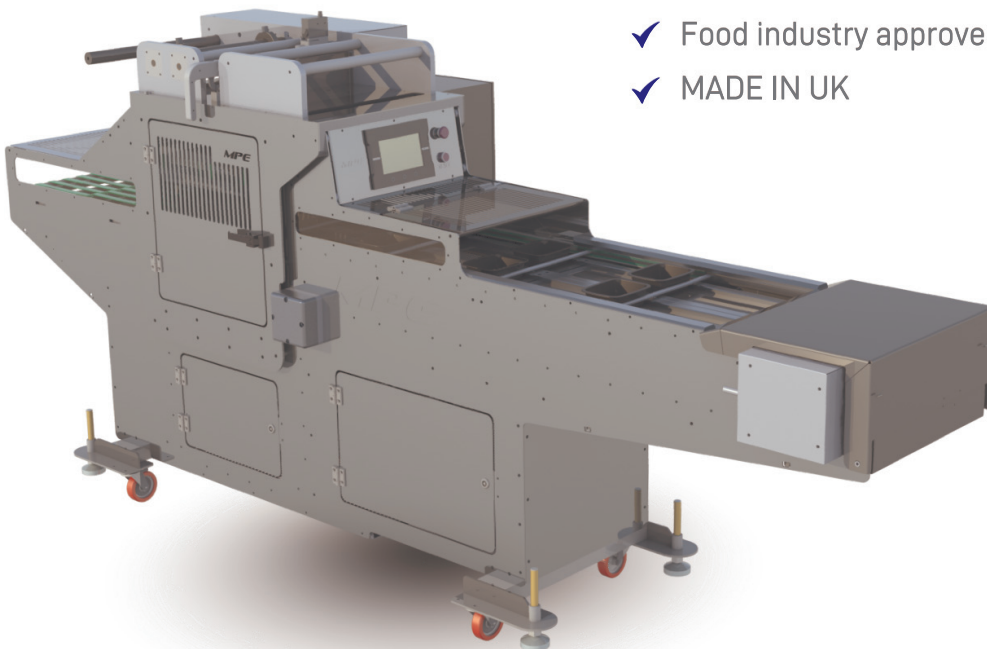


Advanced Inline Tray Sealer

The **MPE i-0** is an inline twin lane all electric indexing push bar sealing system. Single point tray guide adjustment for both lanes. Recipe driven machine set up. Singulating powered outfeed to assist packs into one lane. Once the tooling is installed, recipe selected and the machine started all the operator has to do is load the machine.

Standard design features and benefits:

- ✓ All Electric Machine
- ✓ Simple Intuitive HMI controls
- ✓ Recipe driven machine set-up
- ✓ Easy and quick Tool Change
- ✓ Single Point Self-centering tray guides
- ✓ Active film torque system
- ✓ Film Snap detection
- ✓ Registered / printed film ready
- ✓ MAP as standard (VMAP optional)
- ✓ Up to 16 Cycles per min standard seal
- ✓ On-line Systems and technical support via modem link, also allows direct software upgrades
- ✓ Food industry approved construction
- ✓ MADE IN UK



MPE SANDWICH SEALING MACHINERY

THE S-SERIES

High throughput, reliable, simple to operate. The **MPE** range of Sandwich Sealing Machines lead the way in throughput capability, reliability and seal quality. Although primarily used in Sandwich production, these machines are essentially cardboard packaging sealers and are also suitable for the emerging recyclable or compostable packaging and are now utilised for sealing ready meals, snack foods and the emerging plant based protein sectors.

Ranging from 10 to 80 packs sealed per minute, there is an **MPE Sandwich sealer to suit all requirements.**

- ✓ Gas Flush or Vacuum and Gas for extended shelf life
- ✓ Adjustable tooling to suit any size of cardboard packaging



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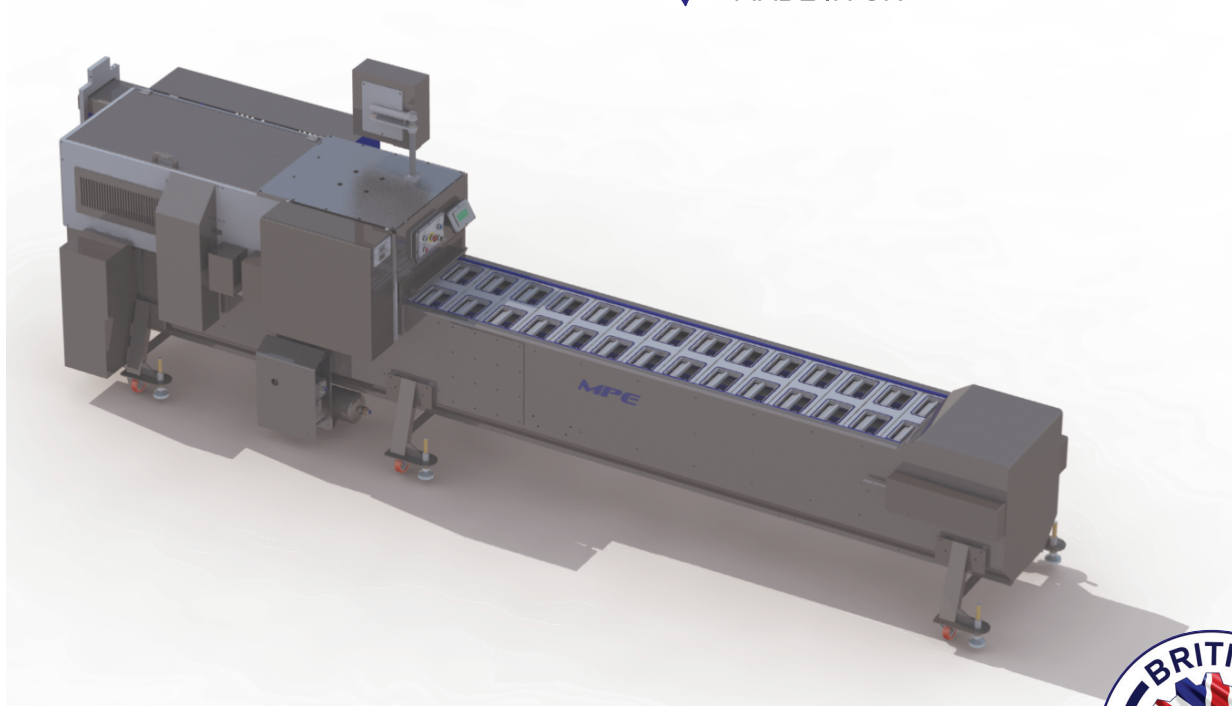


Automatic Inline Twin Lane Heat Sealer

The **MPE SL1500** is an automatic inline twin lane heat sealing machine. Designed for high capacity production and bespoke customer specification. It has an indexing conveyor and a central seal station. The integrated coding has mounting brackets for print heads, encoders and sensors. The customer can choose from a singulating eject or a powered twin system for seamless down-stream integration. Simple operator controls with an intuitive HMI. Ideal for the sandwich industry which requires high throughput and extended production times.

Standard design features and benefits

- ✓ Coding / Printer Integration
- ✓ Powered eject system
- ✓ Up to 78 packs per min standard seal
- ✓ Fully automatic machine
- ✓ Maintenance friendly
- ✓ Food industry approved construction
- ✓ Ancillary equipment Integration (Coders / Printers)
- ✓ MADE IN UK





Automatic Inline Twin Lane Heat Sealer

The **MPE SL1400VG** is an automatic vacuum MAP inline heat-sealing machine. It has an indexing conveyor and a central seal station with upper and lower vacuum hoods. The integrated coding has mounting brackets for print heads, encoders and sensors. A powered eject system for seamless down-stream integration. Recipe driven machine set up through an intuitive HMI.

Ideal for sandwiches industry which require extended shelf life. Options for a film feed system to allow other styles of packaging. Remote access for customer support and software updates.

Standard design features and benefits

- ✓ Recipe driven automatic machine set-up
- ✓ Coding / Printer Integration
- ✓ Powered eject system
- ✓ Up to 10 Cycles per min VMAP
- ✓ Fully automatic machine
- ✓ Maintenance friendly
- ✓ Food industry approved construction
- ✓ Ancillary equipment Integration (Coders / Printers)
- ✓ MADE IN UK





Automatic Inline Heat Sealer

The **MPE SL1200** is an automatic inline heat-sealing machine. It has an indexing conveyor and a central seal station.

The integrated coding has mounting brackets for print heads, encoders and sensors.

A powered eject system for seamless down-stream integration.

Simple machine operation with an intuitive HMI.

Ideal for the sandwich industry.

Standard design features and benefits

- ✓ Coding / Printer Integration
- ✓ Maintenance friendly
- ✓ Powered eject system
- ✓ Food industry approved construction
- ✓ Up to 38 packs per minute standard seal
- ✓ Ancillary equipment Integration (Coders / Printers)
- ✓ Fully automatic machine
- ✓ MADE IN UK





Semi Automatic Tray Sealer

The **MPE TT800** is a semi-automatic tray-sealing machine with a sliding base mounted on a frame for portability. It has double the capacity of the TT600. Designed to seal a wide range of cardboard packaging producing the same quality seal as machines higher up in the range. Ideal for short production runs and product development.



Standard design features and benefits

- ✓ Flexible tooling packages
- ✓ High seal force
- ✓ Simple operator controls
- ✓ Semi automatic operation
- ✓ Up to 6 Cycles/min standard seal
- ✓ Food industry approved construction
- ✓ MADE IN UK





Semi Automatic Table Top Tray Sealer

The **MPE TT800** is a semi-automatic tray-sealing machine with a sliding base mounted on a frame for portability. It has double the capacity of the TT600. Designed to seal a wide range of cardboard packaging producing the same quality seal as machines higher up in the range. Ideal for short production runs and product development.

Standard design features and benefits

- ✓ Flexible tooling packages
- ✓ High seal force
- ✓ Simple operator controls
- ✓ Semi automatic operation
- ✓ Up to 6 Cycles/min standard seal
- ✓ Food industry approved construction
- ✓ MADE IN UK



MPE

ASSOCIATED EQUIPMENT

A wide range of equipment is available to compliment our sealing machinery including Automatic Denesters to place trays or cardboard packs onto conveyors in a controlled manner, conveyors of all types designed to customer specifications, Pre heat stations, tooling trolleys and racks to ensure safe storage and quick product changeover. In addition, MPE design and manufacture bespoke machinery to suit customer requirements. Some examples of these are Potato coring machines, Automatic tray erectors, Pastry Spreading Machines and tooling to suit most Tray Sealing Machine types.

- ✓ Gas Flush or Vacuum and Gas for extended shelf life
- ✓ Printed Film Compatible
- ✓ Continuous Motion technology for maximising throughput
- ✓ Quick change tooling - product changeover completed in seconds
- ✓ Online Monitoring for instant engineer support
- ✓ High force Electric Seal





Single Lane Indexing Chain Conveyor

The **MPE iC1** is a precision-engineered, hygienic, modular single lane chain conveying system designed to integrate and control associated equipment such as automatic fillers, tray de-nesters and multi-head weighers. It delivers filled trays in a controlled, efficient and clean manner with industry-leading accuracy and reliability. The conveyor can either feed directly into a tray sealer or operate independently as part of a larger production line.

Standard design features and benefits

- ✓ Hygienic Open Washdown Construction: 316L stainless steel frame with IP65 rating, featuring smooth surfaces and minimal crevices for easy cleaning and full CIP (Clean-in-Place) compatibility.
- ✓ Recipe-Controlled Product Setup: Advanced HMI with recipe storage allowing instant changeover between different product configurations with zero manual adjustment.
- ✓ Variable Chain Pitch Technology: Precision-adjustable chain pitch from 100mm to 500mm accommodating specific tray sizes with ± 1 mm positioning accuracy.
- ✓ Full-Length Cantilevered Tray Guides: Self-adjusting guide system ensuring consistent tray alignment throughout the entire conveyor length without manual intervention.
- ✓ Advanced Ancillary Equipment Integration: Seamless integration with coders, printers, depositors, vision systems, and weighing equipment via industry standard communication protocols.
- ✓ i-Series Machine Integration: Fully compatible with MPE's i-Series production line equipment with synchronized control and data sharing capabilities.
- ✓ Secure Remote Access & Monitoring: Real-time performance monitoring, software updates, and KPI tracking via encrypted wireless connection with 24/7 technical support access.
- ✓ Precision Indexing System: Servo-driven chain positioning with ± 0.5 mm repeatability ensuring consistent tray placement for downstream equipment.
- ✓ Energy Efficient Design: Variable frequency drives and optimized motor selection reducing energy consumption by up to 35% compared to conventional systems.
- ✓ MADE IN UK: Manufactured to British engineering standards with local support and rapid parts availability.





Designed to seamlessly integrate with your existing equipment the SD1 is poised to revolutionise tray placement with unmatched precision and efficiency, ensuring seamless operations across various industries, from Ready Meals to Meat and Dairy.

Standard Features Include:

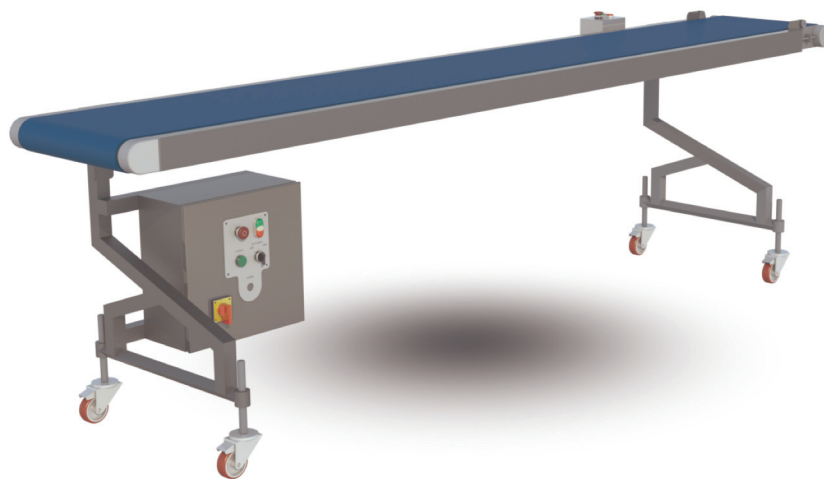
- ✓ Variable Speed Control: Infinitely adjustable speed from 10-80 packs per minute with digital speed control and memory presets for different production requirements.
- ✓ 100% Electric Drive System: Eliminates compressed air dependency, reducing operating costs by up to 30% while achieving 99.9% uptime reliability through elimination of pneumatic failure points.
- ✓ Two-Component Modular Architecture: Universal base unit with interchangeable tray-specific magazines, enabling multi-format production capability on a single platform.
- ✓ Rapid Changeover System: Tool-free magazine exchange in under 30 seconds with foolproof 'handed' design preventing incorrect installation and reducing changeover downtime by 85%.
- ✓ Intuitive Touch Screen Interface: 7-inch colour HMI with recipe storage, diagnostic displays, and multi-language support for operator-friendly operation.
- ✓ Industrial-Grade Construction: Stainless steel 316L contact surfaces with IP65 rating for harsh production environments and easy washdown procedures.
- ✓ CE Marked Compliance: Fully compliant with European machinery directives and food safety regulations.



Blue Belt Conveyor

Standard design features and benefits

- ✓ Variable Speed Control: Infinitely adjustable speed control with digital display to precisely match production throughput requirements from 5-50 metres per minute.
- ✓ Advanced Production Line Integration: External interface with industry standard protocols allowing seamless auxiliary upstream/downstream equipment control and synchronization.
- ✓ Flexible Length Options: Available in standard lengths of 3M, 4M, 5M, 6M or custom specifications up to 20M to suit any production layout.
- ✓ Customizable Belt Width: Standard 500mm belt width or customer-specific widths from 300mm to 800mm to accommodate various product sizes.
- ✓ Food-Grade Stainless Steel Construction: 316L stainless steel frame with IP65 rating ensuring compliance with food safety regulations and easy washdown procedures.
- ✓ Maintenance-Free Bearing System: Sealed-for-life bearings with extended service intervals reducing maintenance costs and downtime.
- ✓ Hygienic Design: Open frame construction with smooth surfaces and minimal crevices for easy cleaning and CIP (Clean-in-Place) compatibility.
- ✓ Energy Efficient Operation: Low power consumption motor with variable frequency drive reducing energy costs by up to 25%.
- ✓ Quick Belt Replacement: Tool-free belt removal system enabling rapid changeovers and maintenance.
- ✓ CE Marked Compliance: Fully compliant with European machinery directives and food safety standards.



Heat Seal Machinery & Tooling

Bespoke Tooling Solutions for Tray Sealing Applications

Precision Engineered for Optimal Performance

MPE designs and manufactures high-quality, bespoke tooling for our entire range of i-series tray sealing machines. Our tooling is engineered to the highest standards of precision and durability, ensuring optimal performance and reliability for your production line. Each toolset is custom-designed to your specific tray type, guaranteeing a perfect seal every time.

A complete toolset from MPE consists of three key components:

Base Tool: The foundation of the sealing process, the base tool securely holds the trays in place during the sealing cycle.

Top Tool: The top tool works in conjunction with the base tool to apply heat and pressure, creating a strong and reliable seal.

Transfer Arms: These dual-purpose arms efficiently transfer trays from the infeed conveyor into the base tool and, after sealing, move the finished trays to the outfeed conveyor.

Advanced Tooling Features

Our tooling can be designed with a range of advanced features to meet the specific needs of your product and process.

Gas Flushing (MAP): For products that require Modified Atmosphere Packaging (MAP) to extend shelf life, our tooling can be designed to be gas flush ready. This process injects a specific blend of gases into the tray before sealing, helping to preserve the freshness, colour, and quality of your food products.

Weld Seal: A strong, permanent seal that provides a secure, tamper-evident closure. Ideal for products that require a high level of protection.

Peelable Seal: A user-friendly seal that allows for easy opening of the package without the need for tools. This is a popular choice for convenience-focused products.

Seal and Trim Types

We offer a variety of seal and trim types to suit your packaging requirements.

Standard Trim: A standard trim leaves a small flange of film around the perimeter of the tray.

Inboard Trim: This trim type provides a clean, neat appearance with no film overhang outside the tray perimeter.

Close Cut Trim: For a premium, barely-there look, our close cut trim is cut to within 1mm of the tray perimeter.



Beyond the i-series: Universal Tooling Solutions

While our tooling is designed to integrate seamlessly with our own i-series machinery, our expertise extends far beyond our own brand. We recognize that you may have a diverse range of tray sealing equipment in your facility. That's why we offer our precision engineering and manufacturing services to create bespoke tooling solutions for other leading OEM machinery.

Leverage our deep understanding of tray sealing technology to enhance the performance and versatility of your existing equipment. Whether you need to accommodate a new tray type, improve seal quality, or simply require a reliable, high quality tooling supplier, MPE is your trusted partner.

Machine Layouts & Throughput Capabilities

Machine	Impressions	Seal ONLY (PPM)	Gas Flush (PPM)
i3	1	18	12
i3	2	36	24
i3	3	54	36
i3	4	72	48
i3	5	90	60
i3	6	108	72
i3	7	126	84

Machine	Impressions	Seal ONLY (PPM)	Gas Flush (PPM)
15+	1	20	14
15+	2	40	28
15+	3	60	42
15+	4	80	56

Machine	Impressions	Seal ONLY (PPM)	Gas Flush (PPM)
i6	1	20	14
i6	2	40	28
i6	3	60	42
i6	4	80	56
i6	5	100	70
i6	6	120	84





Heat Seal Machinery and Tooling

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