MULTIVAC product overview Solutions for processing and packaging food





MULTIVAC offers a comprehensive range of systems for the processing, packing, labelling, inspection and secondary packaging of food. Our solutions are designed to meet the widest range of requirements with regard to production quantities and flexibility. Reliability, durability, and comprehensive service make MULTIVAC a resilient link in your production chain.



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Our trademark: Complete cleanliness

The MULTIVAC Hygienic Design™ sets the benchmark in the hygienic operation of lines for food. All materials used and the machine construction are designed in such a way, that food residue or dirt can either not adhere or can be easily removed. This ensures optimum hygiene and consumer safety. Those machine parts, which are relevant to hygienic operation, are manufactured from stainless steel. Dirt traps, such as small gaps and recesses, are systematically avoided. Large vertical or angled surfaces simplify cleaning and allow the cleaning water to drain easily.







Thermoforming packaging solutions

MULTIVAC is the world's leading supplier of thermoforming packaging solutions. With our thermoforming packaging machines you can pack a wide range of products efficiently and economically.

Our range covers the widest spectrum of products on the market as regards size, output and equipment level:

- · Compact machines for small batches
- · High-output machines for large batches
- · Machines for special applications such as MultiFreshTM, FormShrink® and others



Compact thermoforming packaging machines

The compact thermoforming packaging machines are designed to run flexible and rigid films, and they meet MULTIVAC's high standards of technology and quality. These models with their standard configurations and pre-defined basic formats offer an excellent price-performance ratio. In addition to this, the models can be configured in a modular way to precisely suit your individual requirements.



High-output thermoforming packaging machines

Our high-output thermoforming packaging machines are designed for maximum output and for use under industrial-scale production conditions. They offer the most extensive range of equipment options and set the benchmark for output as well as process and machine reliability. They can also be equipped with a variety of sensor devices for continuous monitoring of packaging materials, packs and machine parameters.



X-line thermoforming packaging machine

The MULTIVAC RX 4.0 stands for maximum pack security combined with consistent pack quality and high output. Thanks to its groundbreaking and innovative features such as Multi Sensor Control and its X-tools, this thermoforming packaging machine enables a highly efficient and above all very reliable packaging process to be achieved. With our MULTIVAC Pack Pilot we have developed a digital and multifunctional set-up wizard, which enables MULTIVAC X-line packaging machines to be set up without in-depth expert knowledge.



Thermoforming packaging machines for special applications

MultiFresh™

The complete solution for perfect vacuum skin packs

We offer four thermoforming packaging machines for MultiFresh™ applications. They differ primarily in regard to their format size, available equipment options and output.

When combined with MultiFreshTM films, they produce vacuum skin packs of outstanding quality and perfection.

FormShrink®

The thermoforming packaging solution for efficient shrink packing

FormShrink® is a cost-effective and automated alternative to packing with shrink bags. Thermoforming films with special shrink properties, which are activated in a shrink tunnel, are used for the FormShrink® packaging process.

The result is attractive packs which envelop their products like a second skin.





Tray packaging solutions

MULTIVAC traysealers can be used flexibly and are simple to operate, as well as allowing the widest range of trays and upper webs to be run.

Our portfolio includes semi-automatic traysealers for small to medium-sized batches as well as fully automatic traysealers for industrial-scale production volumes.



Semi-automatic traysealers

Thanks to their compact dimensions, semi-automatic traysealers are highly flexible and can be used in many production environments. The range of applications covers sealed packs with and without modified atmosphere (MAP), vacuum skin packs and FreshSAFE packs.

User-friendly machine controls with graphics display guide the operator safely through all the stages of the packaging process. The die can be changed easily for running different trays.



Compact, automatic traysealers

MULTIVAC's automatic traysealers are individually designed to meet your requirements with regard to tray and product infeed, discharge of packs, labelling or marking and quality inspection. They dovetail seamlessly into your new or existing production environment, either as a stand-alone machine or as part of a fully automated packaging line.

The quick and easy change of the film and die ensures that there is maximum flexibility.



Automatic, high-output traysealers

MULTIVAC TX traysealers are characterised by maximum output with a minimum use of resources, while optimizing the available production space. They are efficient, flexible, durable, and particularly cost-effective as regards investment and operating costs. Together with state-of-the-art die change systems, their ergonomic design ensures quick and easy conversion to other pack formats - and this reduces downtime to a minimum. The pioneering X-tools die concept with its integrated intelligence gives maximum security to format and recipe change, as well as contributing to a consistently high pack quality. All the models can be easily integrated into automated lines, and their small footprint has a particularly positive impact. Thanks to their innovative machine control, comprehensive sensor system and precise servo technology, the X-line traysealers offer a unique level of flexibility, reliability and output.





Packaging in bags

MULTIVAC chamber machines pack quickly and flexibly. They can be used to produce MAP packs as well as vacuum and shrink packs.

Our machine range covers the entire spectrum of size, output and equipment level:

- · Compact tabletop and free-standing models
- · High-output double chamber machines
- · Fully automatic chamber belt machines
- · Integrated shrink packaging lines

Our chamber machines can be equipped with a wide range of accessories.

The machine controls, which can be operated intuitively, ensure that packing is simple and reliable.



Tabletop machines

MULTIVAC tabletop machines are the ideal packaging solution for small batches in butchers' shops, restaurants, hotels, farm shops and direct marketing businesses, as well as in hospitals and institutional providers. They are easy to operate and can be used for a wide range of food.

Free-standing units

MULTIVAC free-standing chamber machines are easy to operate, clean and service. They offer the highest output on the smallest footprint and also provide impressive performance thanks to their pack quality. They can be used very flexibly due to their compact dimensions.





Large chamber machines

The large chamber machines from MULTIVAC are designed for a wide range of large and bulky products. Depending on the product to be packed and the packaging material used, the large chamber machines can be equipped with a variety of sealing systems, chamber and lid heights, vacuum pumps and ancillary equipment.

Double chamber machines

The double chamber machines from MULTIVAC enable high-quality pouch packs to be produced at almost double the output. While the film pouches are being sealed in the closed chamber, the open chamber can be unloaded and refilled with product.





Chamber belt machines

The chamber belt machines from MULTIVAC combine ergonomics with a design that makes the machines easy to clean and service. This enables them to ensure a high level of pack quality and security while providing high throughput. Chamber belt machines can be configured as complete lines with shrink units and drying tunnels.

Vertical chamber machines

The AGV is suitable for packing products in upright film pouches. It is equipped with a vacuum chamber that is opened from the side and a height-adjustable roller conveyor. A pouch holder ensures that the packaging process is performed securely and that there is a crease-free seal seam.









Shrinking and drying units

MULTIVAC offers shrinking and drying units, which can be combined with chamber machines and thermoforming packaging machines. They can be integrated seamlessly into lines and operate in an energy-efficient non-stop mode with high output.



Shrink units

The MULTIVAC portfolio includes semi-automatic shrink tanks as well as automatic shrink tunnels. The shrink tanks operate on the dipping principle and are the ideal complement for MULTIVAC chamber machines. The automatically operating shrink tunnels work on the continuous principle, and they ensure that there is constant product flow with high output. They are intended for use in shrink packaging lines.





Drying tunnels

The automatic drying units enable large batches of products to be dried, as well as bulky or heavy packs. The dried packs can subsequently be transferred to downstream processes such as labelling, marking or packing in boxes.





Packaging materials

MULTIVAC offers a wide range of packaging materials, which are perfectly tailored to our packaging systems and ensure that optimum results are achieved. The range of materials includes films, trays and film pouches, which are made from either mono or multilayer films or alternatively paper fibre-based materials. We only work with leading manufacturers.

All packaging materials from MULTIVAC are produced under the highest international standards for packaging materials in contact with food.







Labelling and marking solutions

The labelling and printing solutions from MULTIVAC cover a large spectrum of inline and offline systems, which are suitable for a wide range of applications. Our diverse range of products extends from cost-effective BASELINE labellers to complex labelling and marking systems, which are designed individually to our customers' requirements. Labelling and marking solutions from MULTIVAC ensure quality, precision and reliability.



Cross web labellers

MULTIVAC cross web labellers are used for labelling packs on thermoforming packaging machines. The labels are precisely applied to the top and/or bottom of a pack. A wide range of label formats and materials can be run. The cross web labeller is operated using the HMI of the thermoforming packaging machine.

Conveyor belt labellers

MULTIVAC's modular constructed conveyor belt labellers offer the highest level of flexibility for labelling a wide range of packs, such as for example cartons, jars, bottles, pots, thermoformed packs or trays. Labels can be applied to the top or bottom of products, to one or more of their sides, as well as on the leading face or over the edges of the pack. It is even possible to apply both front and back labels, or wrap-around labels (full wrap labelling) as well as sealing labels.





Inline labellers

MULTIVAC inline labellers can be integrated flexibly and efficiently in existing production or packaging lines. Thanks to their modular construction and wide range of mounting systems, they can be easily installed on transport units or packaging machines. They are easy to operate and can be integrated into various control environments via a wide range of communication interfaces.

Tabletop labellers

MULTIVAC tabletop labellers are a reliable, cost-effective and convenient solution for applying self-adhesive decorative or information labels from the roll. They ensure that the dispensing process is rapid and fluid, thereby optimising procedures at manual work stations or service counters. Depending on the particular version, the label strip is pulled by hand or advanced by means of a synchronous motor.





Direct web printers

Thanks to their compact design, MULTIVAC direct web printers can easily be installed on thermoforming packaging machines or traysealers. They print variable data, such as texts (use-by dates, batch numbers) or barcodes, directly onto the packaging film. The operation of the direct web printer is integrated into the control terminal (HMI) of the packaging machine.

Possible installation positions:

- · Upper web before the sealing station (film infeed)
- · Top of pack (outfeed)
- · Bottom of pack (outfeed)



Thermal transfer printers

MULTIVAC TTO thermal transfer printers are suitable for the direct web printing of packaging film on thermoforming packaging machines and traysealers, as well as for the printing of labels on cross web labellers and conveyor belt labellers.

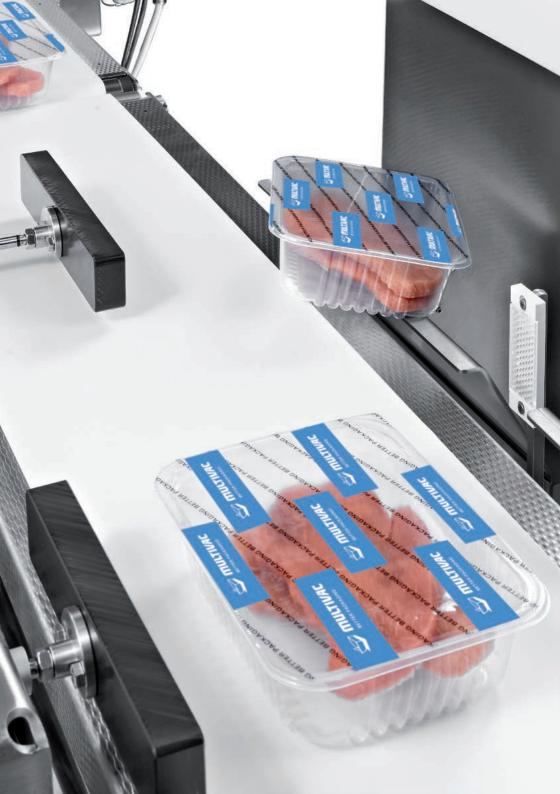
Thanks to their complete integration in the machine control of the packaging machine or labeller, they offer significant benefits with regard to efficient and reliable operation.

Thermal inkjet printers

MULTIVAC TIJ printers can be used on the entire range of MULTIVAC labelling and marking systems, which are equipped with the HMI 2 user interface. They are suitable for the direct printing of film on thermoforming packaging machines and traysealers, as well as for the printing of labels on labelling systems.

The thermal inkjet printers are operated via the control terminal of a MULTIVAC packaging machine or MULTIVAC labelling system. A separate operating panel for the printer is therefore not required, and many of the operating procedures are automated.

To complement the printing technology, we also supply solvent- and water-based MULTIVAC inks, which are perfectly matched to the printer.



Inspection solutions

MULTIVAC's inspection systems support efficient quality control and ensure that packs and their labelling are faultless. From foreign object detection to weight inspection and right up to final pack inspection, we can offer you a wide range of solutions for meeting statutory regulations and maintaining the highest quality standards.



Automatic checkweighers

Automatic checkweighers calculate the pack weight precisely and reliably as well as automatically ejecting underweight and overweight packs, and they make a significant contribution to meeting internal quality guidelines and statutory requirements.

MULTIVAC checkweighers are available as single-track and twin-track versions, and they can also be equipped with metal detectors.

Metal detectors

MULTIVAC metal detectors reliably detect and eject products with metal contamination. They contribute substantially to complying with standards such as HACCP, IFS or BRC, and they ensure that a consistently high level of packaging output and quality is maintained.



X-ray inspection systems

MULTIVAC inspection systems detect reliably and safely the smallest foreign bodies such as metal, glass, stone, bone fragments and high-density plastics. In addition to providing seamless quality control, they also enable the shape, thickness and integrity of products to be inspected, as well as ejecting any reject packs.

Visual inspection

Visual inspection systems are used for checking the quality of packs and their labels or printed data. The scope of the tasks in these areas is wide-ranging and extends from inspection of labels and their printed data through to checking for completeness of packs.

The portfolio ranges from sensors and code readers for simple inspection tasks up to the MULTIVAC camera inspection system (MVS MULTIVAC Vision System) for meeting complex requirements.





Slicing of the highest quality and hygiene

MULTIVAC slicers and slicer lines are very impressive in their consistently high portion control and packaging quality. In addition to offering the optimum hygiene standards, the other features of MULTIVAC slicers are their very high throughput and an unrivalled level of user-friendly handling. Thanks to innovative slicing technology and seamless integration of a wide variety of loading solutions, these high-performance lines are particularly compact and user-friendly.



Slicers

MULTIVAC slicers impress with their perfect slicing results at high output, their rapid make-ready and conversion, as well as their particularly ergonomic and reliable operation. The MULTIVAC slicing system offers outstanding slicing quality within a large temperature range. Improved yield, a high level of weight accuracy, reduction of give-away, and consistent portioning are additional benefits of our innovative technology.

In addition to offering the optimum hygiene standards, the other features of MULTIVAC slicers are their very high throughput and an unrivalled level of user-friendly handling. Rapid product and format changes ensure maximum flexibility is achieved. Thanks to their space-saving integration and uniquely reliable linking with the packaging machine, MULTIVAC slicers make a major contribution to accelerating the slicing and packaging process.



Belt loaders

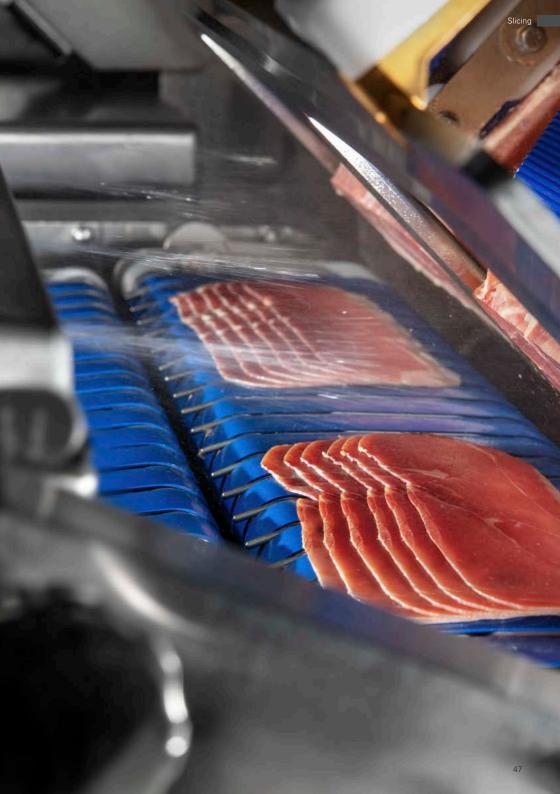
Our automatic belt loaders provide a reliable solution for linking slicers to thermoforming packaging machines, and they can also be used in conjunction with traysealers. The belt loaders can transport the portions to the loading area over the forming station of the thermoforming packaging machine, and they are therefore able to be retrofitted to customers' existing packaging machines. They can even be fully integrated into a MULTIVAC thermoforming packaging machine and designed as a completely horizontal version - something that brings even more benefits.





Sustainable Liquid Interleaving

Innovative MULTIVAC Sustainable Liquid Interleaving makes plastic or paper interleaves between slices superfluous. The functioning principle is quite ingenious and perfectly tailored to the particular product characteristics: a liquid food release spray is applied evenly via atomising nozzles to the underside of the slices, so that their adhesion is reduced. Even where the sliced product has strong adhesion, such as in the case of thin cheese slices, raw ham or vegan products, the individual slices can be removed easily and without damage by the consumer. And this also applies to extremely delicate products as well as wafer-thin cut portions, where a classic interleaver is not suitable. The MULTIVAC Sustainable Liquid Interleaver can be easily integrated into existing slicer lines as well as new equipment





Automation

MULTIVAC develops and produces solutions for product handling that increase process efficiency and ensure optimum product flow. They can be used for product infeed and discharge as well as for end-of-line applications.

Our portfolio extends from simple transport conveyors to handling modules, palletising systems and fully automatic lines.



Belt systems

MULTIVAC belt systems automate the transport, converging and ejection of packs efficiently and hygienically.

MBS belt systems - precise track converging

MBS converging systems converge two or up to six parallel pack tracks into one track. They can also be used to regulate product flow.

MCS conveyor systems - reliable transport

MCS transport conveyor systems can be used in a versatile way, particularly for the infeed of products or trays to packaging machines, for feeding packs to downstream modules, and for discharging boxes at the end of line.



Handling modules

Handling modules from MULTIVAC are used to automate a wide spectrum of handling tasks quickly and precisely, and these include:

- · Loading products into packs
- · Orientating or turning over packs, converging them or putting them into boxes
- · Ejecting products or packs

They are very flexible in the way they can be used for a variety of products, pack formats, weights and cycle times.



Pack stackers

The pack stacker automatically creates pack stacks and therefore simplifies manual loading of packs into boxes.

It is suitable for thermoformed packs and tray packs, which have a flat top and bottom and which are fed to the pack stacker as a single track.

Centrifuge feeder

The centrifuge feeder is an efficient and gentle converging solution in the area of product infeed. It is particularly suitable for uniform products, such as for example sausages, burgers, cheese sticks and chicken nuggets. In combination with an inclined conveyor, the centrifuge feeder generates a constant one-track and correctly oriented product flow. A handling module typically loads the products into the downstream packaging system. Thanks to a robust and hygienic design, the centrifuge feeder can be cleaned on a completely wet basis.



Line solutions

MULTIVAC Line Control (MLC) is used for the end-to-end coordination of lines. It ensures that procedures are rapid, precise, reproducible and transparent, and it is also very easy to operate.

Your staff can operate the line centrally, reliably and efficiently at any control terminal on the line:

- · Running the line up to full operation
- · Starting and stopping the line
- · Recipe change throughout the whole line
- · Running the line empty
- · Overview of line status





Digital solutions

With MULTIVAC's digital products and services, we offer our customers innovative solutions for monitoring, controlling and optimising production – even networked across all locations to facilitate comparison. Simple, convenient and "live". For new equipment as well as retrofitting to existing machines.

This means our customers benefit in all operational and strategic matters to the same extent, from the convenient customer portal to a transparent supply of spare parts and online quick help for faults – our digital products and services help ensure the optimum operation of your line.





Innovative and attractive meat portioning

High-tech lines from TVI start with the tempering of the raw product right up to the transfer of the finished portions to the packaging machine. Whether it is steaks, cutlets, roulades, chops, grill sticks or kebabs - customers throughout the world portion their meat efficiently, economically, hygienically and reliably with the high-performance solutions from TVI. In both the retail trade and catering. Day after day and without compromise.



TVI GMS portioning machines

The flexible GMS portioning machines can process practically any type of meat and fulfil a wide range of portioning tasks - from medallions to cutlets and roulades, from carpaccio to large joints, and either with or without bone. Irrespective of whether it is pork, lamb or calf meat. Thanks to their patented 3D forming system, they offer the highest level of portioning quality for practically every application, as well as trim-free portioning with minimised give-away.

TVI AIR loading systems

The AIR loading systems provide the highest level of line output at the lowest staffing level. They fill trays automatically with fixed-weight or catch-weight fresh meat portions without bone, and they are extremely impressive in their very high level of productivity, flexibility and product hygiene.



Special applications from TVI

The manufacture by hand of popular grill classics such as kebab skewers and grill sticks is expensive and time-consuming. Why not let our automated special machines wind your grill sticks and kebab skewers, so that you can benefit from greater efficiency, more flexibility and productivity, as well as consistently reliable quality?

The unique special machines from TVI are as easy to operate as our classic portioning machines. They provide scope for individual creativity, and can be integrated seamlessly into any line solution.

TVI tempering systems

The more perfect and even the temperature is, the more efficient the portioning. Thanks to the innovative tempering technology from TVI for energy-saving surface freezing, you get the cleanest possible cutting, the most stable forming and a high level of shelf life and yield. Freshness, colour, taste and juice are retained where they belong: in the meat.





Dough processing solutions

Thanks to its high-quality machines, groundbreaking developments, customised solutions and excellent service, FRITSCH offers everything that hand-crafted and industrial-scale bakeries require in order to produce first-class bakery products. Premium quality is the result of a combination of technical knowledge and practical skills. As a specialist in dough processing lines, FRITSCH has excellent engineering expertise and it combines this with its high level of know-how in bakery technology to develop tailored solutions for its customers. And always with the clear premise that the machine has to match the product - and not the other way round. In this way, FRITSCH continues to underpin its position with customers and throughout the sector as a reliable partner, a forge of innovation, and a passionate provider of solutions. This creates machines which understand the handiwork of customers and can master the daily challenges facing creative bakers: the efficient and careful production of a wide range of products in a way that is particularly gentle on the dough.



Dough processing

Thanks to FRITSCH's dough sheet technology, you can manufacture practically all the bakery products in the world. From rustic bread specialities through to precisely wound croissants, and right up to automatically produced pretzels – FRITSCH offers comprehensive solutions in a wide range of output categories. Hand-crafted bakeries benefit from the wealth of experience, which FRITSCH gains from industrial-scale applications, and which flows into its compact and flexible range of equipment. FRITSCH similarly integrates its profound technical knowledge and understanding of hand-crafted products into the development of fully automatic and highly efficient line solutions. These meet virtually every requirement of industrial-scale producers. Working together with its customers, FRITSCH develops new products and recipes in its Development Center, the FRITSCH Bakery World, so that hand-crafted bakeries and industrial-scale producers alike can continue to inspire their markets in future.



More service

Count on the best. Over the entire life cycle of your solution. At MULTIVAC more than 1,000 specialists worldwide support you with consultancy, training, and technical service

Professional consultancy and machine installation

Our packaging specialists analyse your existing packaging concepts and highlight potential for improvement - whether through new types of pack, more sustainable packaging materials, or new equipment. They will develop suitable solutions with you and ensure, that these are put into service without a hitch and fully integrated into your packaging process.

Tests of packaging solutions in the MULTIVAC Innovation Centers

We provide capacity in our Innovation Centers for you to perform application and packaging tests, and also to produce small quantities of packed product for market acceptance trials. Shelf life tests and technical food analysis can also be performed here.

Needs-based training courses

We offer user training courses worldwide for your operators and service personnel - either on-site with you, at the premises of our subsidiaries, or in the MULTIVAC Training & Innovation Centers. We are flexible in matching the content of our training courses to your requirements.

CustomCare after-sales solutions

We are convinced that the overall equipment effectiveness (OEE) of your machine is crucial to the success of your business. We know from our own practical experience, that well maintained and regularly modernised machines achieve significantly higher output. With CustomCare after-sales solutions from MULTIVAC, you can increase the availability and lifespan of your equipment and dies on a planned basis.





BETTER PACKAGING

Our goal is for MULTIVAC packaging solutions to fulfil your requirements reliably and efficiently. That is why our MULTIVAC team of experts offers you a wide range of technical support and services, from the initial consultation to the supply of all spare parts for at least 10 years after your MULTIVAC packaging system was put into service.







MULTIVAC is part of the R-Cycle initiative across all its companies. The common objective is to drive the loop system for plastic packs forward, based on an open and globally applicable tracing standard.



MULTIVAC supports the BLUE COMPETENCE Initiative of the Association of German Machinery and Equipment Manufacturers (VDMA)