

# Semi-automatic traysealers

## Food





MULTIVAC is a major manufacturer of semi-automatic and automatic traysealers. Each of these machines is individually designed to the customer's requirements as regards to the product and tray. Semi-automatic traysealers are suitable for packing small and medium-sized batches, and they can be integrated seamlessly as tabletop or free-standing units into new or existing production environments. Reliability, durability and comprehensive service make MULTIVAC traysealers a resilient link in your production chain.

# Machine classes

What are your requirements of a traysealer? Special tray shapes? Versatility? A small footprint? MULTIVAC offers a wide range of machines to meet all your requirements.

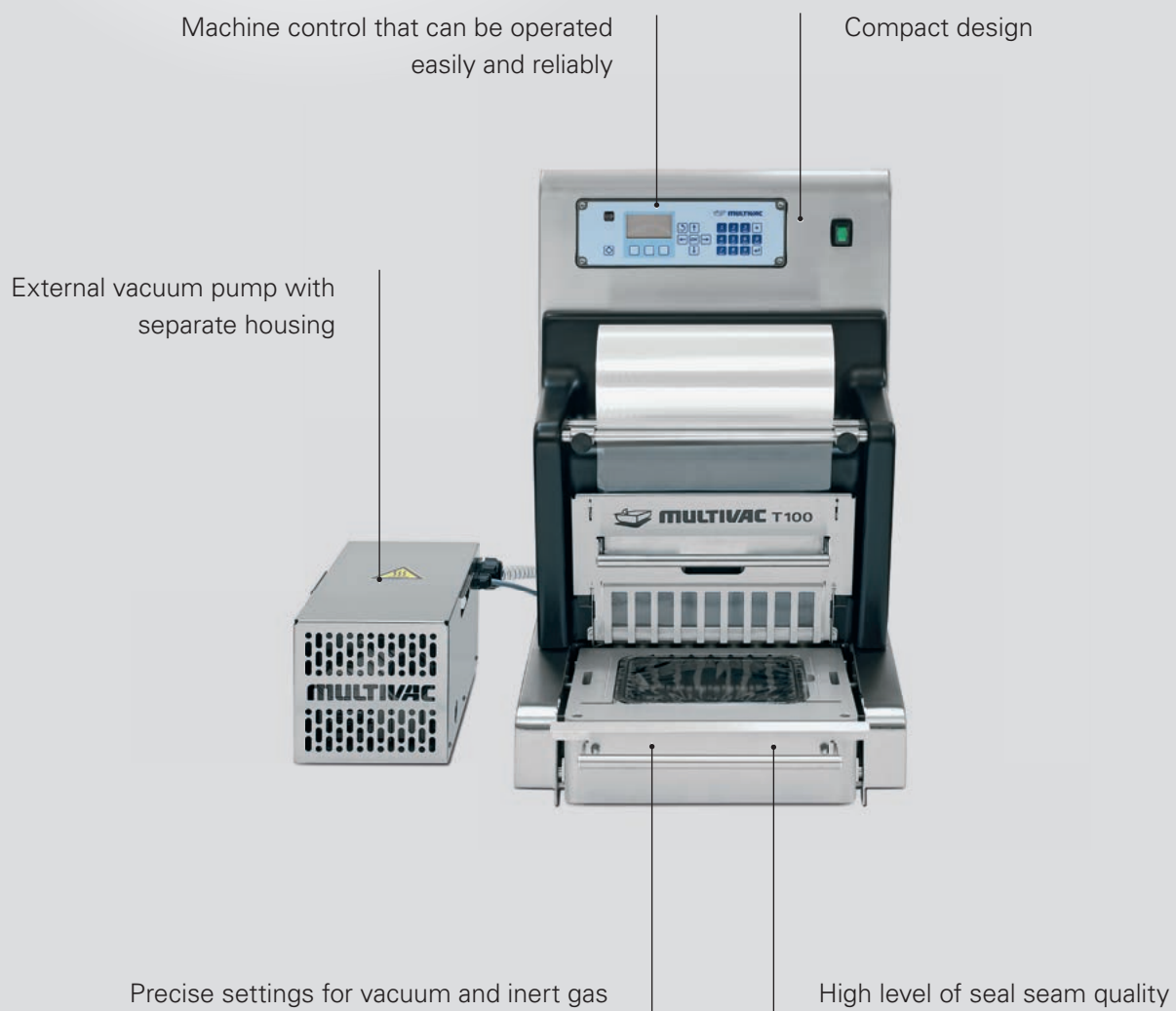


	T 100	T 200	T 250
	Tabletop unit	Free-standing unit	Free-standing unit
Output (cycles/min)	★★★★★	★★★★★	★★★★★
Equipment options	★★★★★	★★★★★	★★★★★
Die size	★★★★★	★★★★★	★★★★★
Number of packs	1	Can be freely configured	Can be freely configured
Forms of packaging	□ ○ ◌ ▭	□ ○ ◌ ▭	□ ○ ◌ ▭
Tray material	Rigid film, aluminium, carton, foam	Rigid film, aluminium, carton, foam	Rigid film, aluminium, carton, foam



# Tabletop units

Thanks to their compact dimensions, semi-automatic tabletop traysealers can be used anywhere. This means they are an ideal packaging solution for butcher shops, deli counters, caterers, direct marketing companies, etc.



# Free-standing units

Food of all types can be packed easily and attractively on free-standing semi-automatic traysealers. Thanks to a flexible die design, they can be matched perfectly to your requirements for versatility and output.



# Recipe for success in tray packaging

MULTIVAC built its first semi-automatic traysealers for food packaging as far back as the 1980's. Today traysealers have a higher production output, are particularly easy to clean thanks to a hygienic stainless steel design, and can be very quickly converted to different tray shapes and sizes.

Even trays that are not self-standing can be run precisely and reliably on our semi-automatic traysealers.

## **Selecting the program**

Select one of the defined or stored programs, or enter the desired process parameters.

## **Filling and loading the tray**

Pre-made trays are used for packing the product. The trays can be filled either before or after they are loaded into the traysealer. In both cases care must be taken to ensure that the tray flange remains clean. The trays are loaded manually into the tray carrier.

## **Starting the packaging procedure**

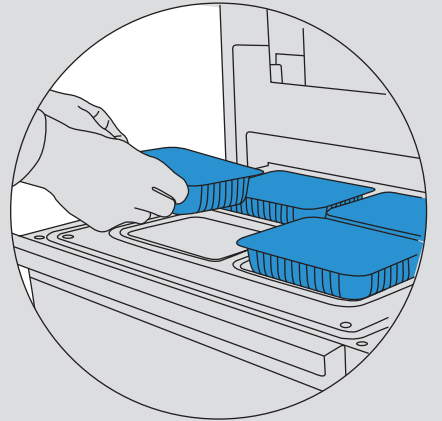
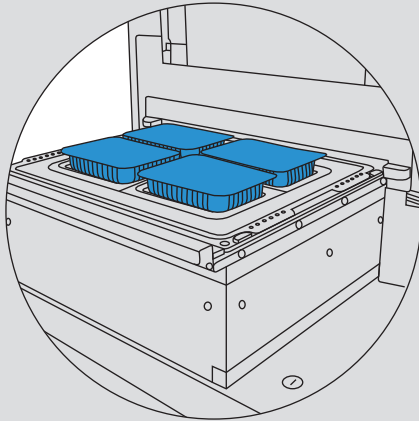
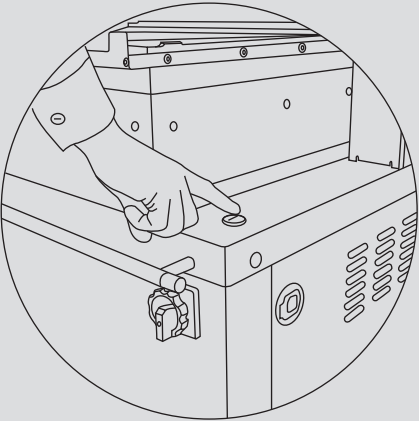
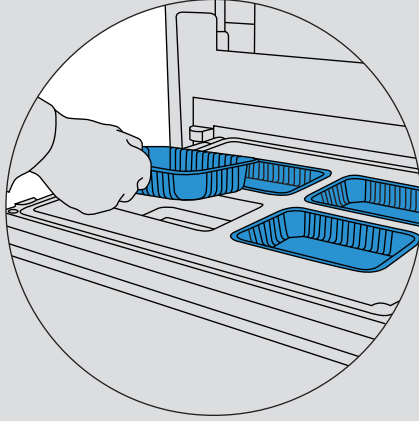
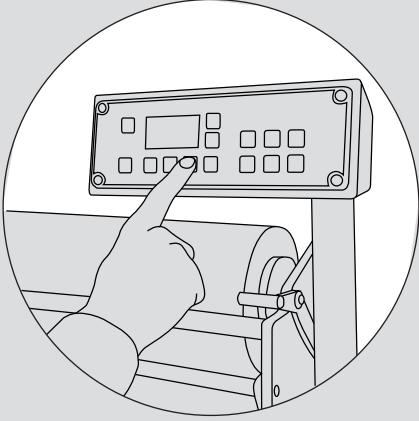
The packaging procedure is started by manually pushing the tray drawer into the traysealer or by pressing the start key\*. Evacuation, gas flushing, sealing of the trays to the upper web and then cutting take place automatically according to the process parameters that you have selected.

## **Removing trays**

After the packaging procedure has been completed, the tray drawer is opened manually or automatically\*. The finished packs are lifted slightly in the tray carrier, allowing them to be removed particularly easily.

\* T 250 traysealer







## Large range of packs

The diversity of food and its forms of presentation are continually increasing. At the same time, the demands placed on trays in terms of tray shape and material are also growing. This wide range of packs can be produced reliably and efficiently on MULTIVAC traysealers. We design your machine individually to your requirements.



# Trays and film

All conventional trays made of plastic or other materials and in a variety of shapes can be sealed on MULTIVAC traysealers. The upper web is utilised to its optimum, so that only minimal film trim lattice remains.

## Tray materials

- Mono and composite plastic
- Board
- Foam
- Aluminium
- Renewable raw materials (e.g. those based on cellulose)

## Tray shape

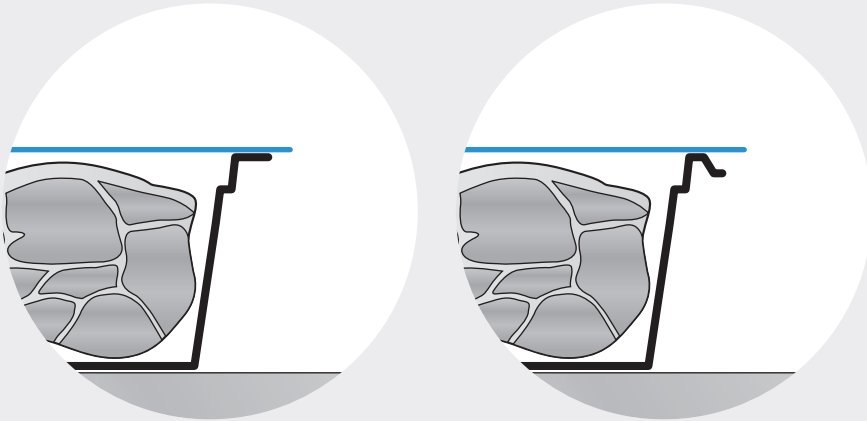
- Rectangular
- Multi-sided
- Round
- Oval
- Multiple pack cavities
- Slice pack
- Special shapes, e.g. trays that are not self-standing

## Film

- Unprinted film
- Printed film
- Lid film
- Temperature-resistant film
- Film from renewable resources (such as based on cellulose)

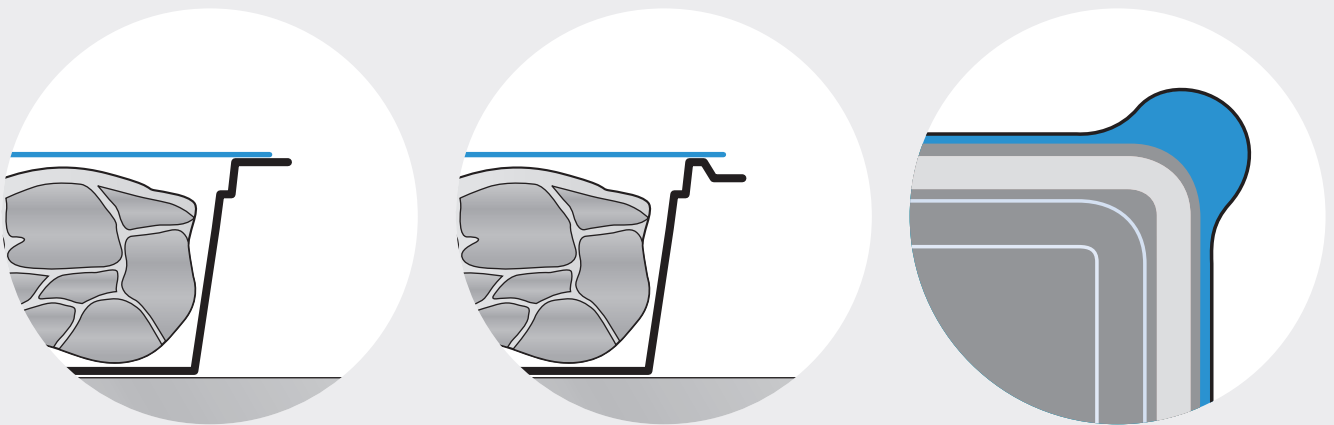


# Cutting systems



## Outside cut

With the outside cut, the upper web protrudes 1.5 to 2.5 mm beyond the edge of the tray ("cutting protrusion"). This type of cut is technically simpler than inside cut, and it functions with a wide range of upper webs.



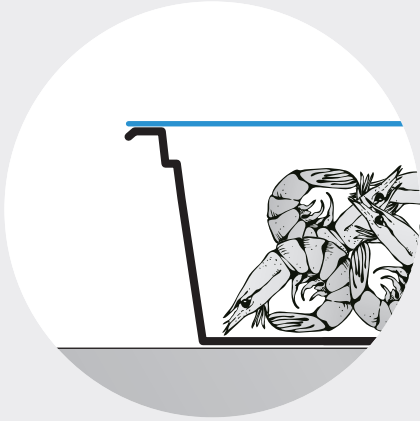
## Inside cut

With the inside cut, the cutting line on the upper web runs inside the outer contour of the tray. This enables an elegant visual appearance to be achieved. The technical effort of this cutting system is greater than with outside cut.

## Peel corner

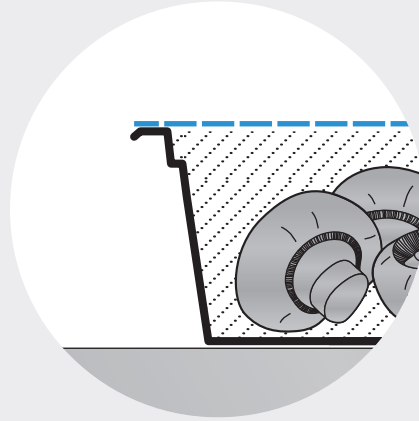
Peel corners can be used as an opening aid with both inside cut and outside cut. The unsealed tab can be placed inside the tray contour, or it can protrude beyond the tray contour to provide a better grip.

# Modified atmosphere packaging



## Natural atmosphere

The technically simplest solution is the sealing of trays without modified atmosphere. These packs protect the product from contact and mechanical influences but do not have any properties which extend shelf life.



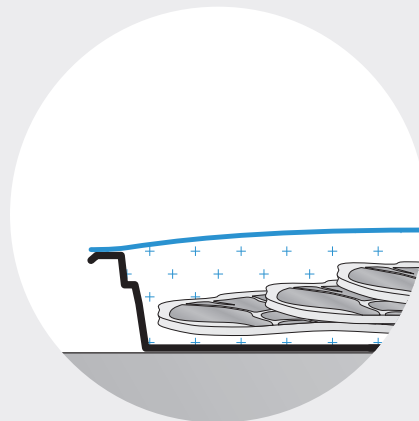
## Equilibrium atmosphere (EMAP)

The permeability of the upper web is matched to the respiration rate of the product by means of microperforation. This enables an equilibrium atmosphere to be established, which extends the shelf life of sensitive, respiring products such as fruit, vegetables, salads and herbs.



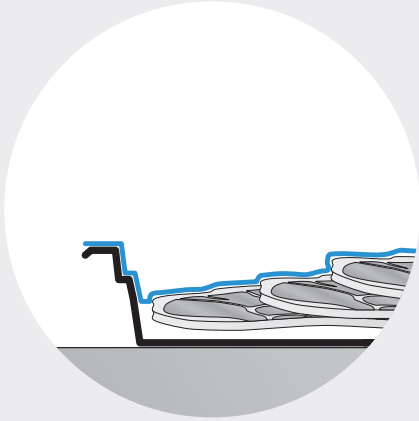
## Modified atmosphere (MAP)

In the case of packs with modified atmosphere, the atmosphere in the pack is replaced with a gas mixture matched to the product in order to maintain the form, colour and freshness of the product. This modified atmosphere usually consists of carbon dioxide, nitrogen and oxygen.



## Lid pack

Lid pack is a MAP pack for flat products. A special Lid film is used as the upper web, which shrinks slightly after sealing and therefore bulges above the tray. The small head space of the pack makes for reduced consumption of protective gas.



### **MultiFresh™ vacuum skin packs**

Packaging under vacuum extends the shelf life of products, since the biochemical degradation of the product is slowed down by the removal of the atmosphere. In the production of MultiFresh™ skin packs, trays and MultiFresh™ skin films are used, which enclose the product tightly and seal to the entire surface of the tray. Since flat products may be slightly compressed during packing, skin packs without product protrusion are particularly suitable for food that is not pressure-sensitive.

<b>Atmosphere exchange technology</b>	<b>Description</b>	<b>Application</b>
Evacuation and gas flushing	The air is evacuated from the pack, and the desired gas mixture is supplied. Then the pack is sealed.	Standard application

In the case of food with special requirements, such as hot products or products with air pockets, we have special processes that are gentle on the product and enable the required atmosphere to be achieved, allowing the maximum shelf life to be assured.





# Flexibility and operating reliability

MULTIVAC traysealers are designed for particularly simple operation and reliable packaging procedures. Their easy-to-clean MULTIVAC Hygienic Design™ supports the high demands of food production. The die parts and film can be changed quickly when packing with different tray sizes. A gas flushing system enables trays to be packed with modified atmosphere.

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# Simple operation

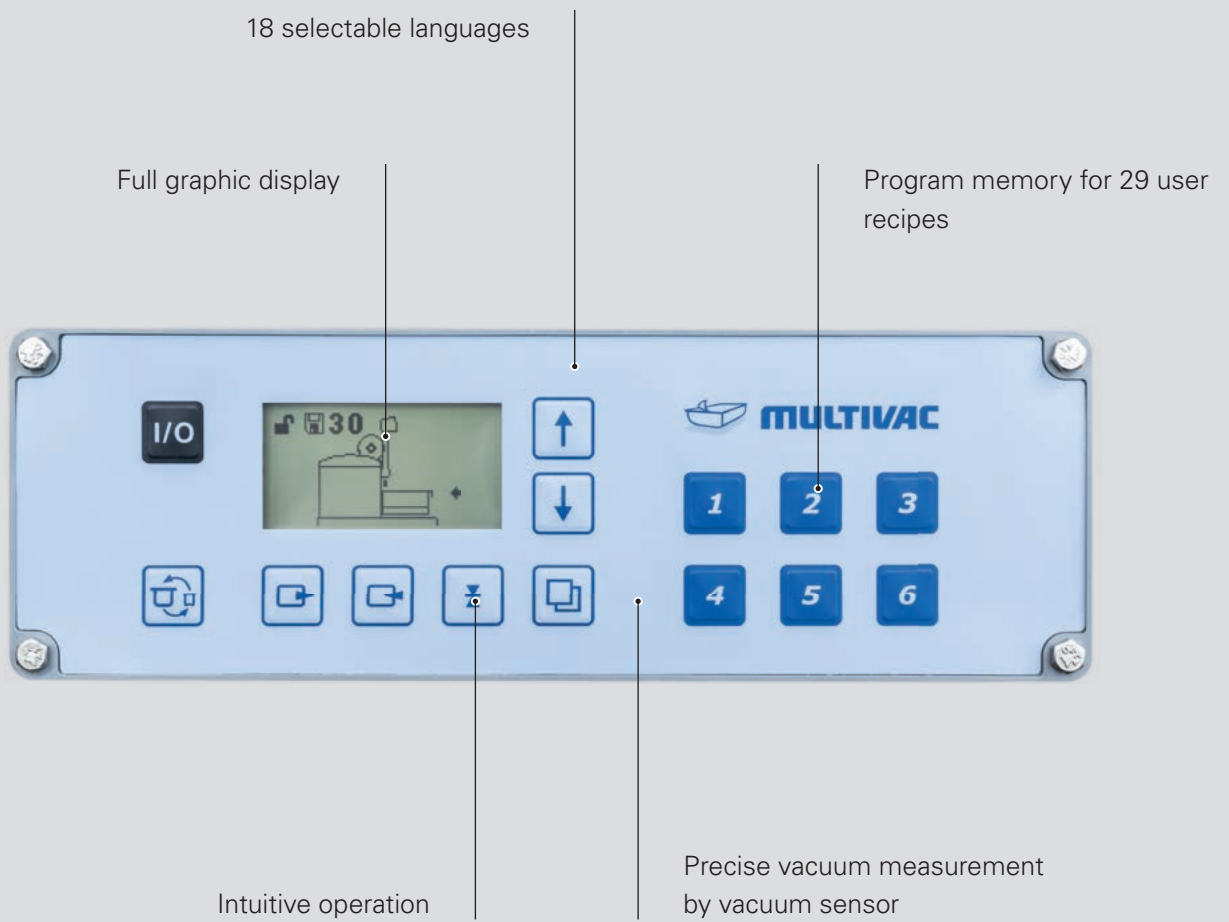
## Machine control of the MC series

The digital MC electronic control is used in all semi-automatic traysealers. It can be operated simply and intuitively. A membrane keyboard, which is easy to clean, is used together with a LCD display. All the process stages are clearly shown on the easy-to-read display. Thanks to the 18 operating languages that can be set, MULTIVAC traysealers can be operated reliably worldwide.

We use a high-quality and very precise sensor for determining the vacuum and inert gas values.

In the recipe memory, 29 different programs can be stored for a variety of products and called up at the press of a button. Six practical standard programs are preset in the factory. These can be changed as required.





# MULTIVAC Hygienic Design™

Traysealers in the MULTIVAC Hygiene Design™ are designed for the hygiene requirements of the food industry. Hygienic design and high-quality materials ensure cleaning is fast and reliable.

## MULTIVAC Traysealers

- are certified in accordance with DIN EN 1672-2-2005,
- are certified in accordance with DIN EN 14159.2008,
- and can be equipped, as an option, in accordance with the USDA hygiene standard.

## **Benefits**

- Shorter cleaning and servicing times, therefore less downtime
- Easy access to all important components
- Economical use of water and cleansers
- Longer lifespan of the packaging machines
- GS certification mark of the German Social Accident Insurance (DGUV)





**MULTIVAC T25**



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# Format change

The greater the number of different pack formats produced on a machine, the more critical quick format changes become. It is for this reason, MULTIVAC traysealers are equipped with dies, designed to ensure quick and easy conversion of the machine.

## Die bottom section

The die bottom section is integrated in the tray drawer. The format-dependent parts are a tray carrier, designed for the outer contour of the tray and the number of trays, and filling plates in various heights, with which the die is matched to the tray height.

## Die top section

The die top section, which can be changed if required, is positioned in the traysealer housing above the tray drawer. The only format-dependent part is a sealing plate, which also includes the cutting unit.

Practical examples	Required format change	
	Die bottom section	Die top section
Same number and size of trays		
- Change of tray depth	Filling plates	-
Change in the number or size of trays	Tray carrier, filling plates	Sealing plate

# Film handling

## **Film material from the roll**

Semi-automatic traysealers from MULTIVAC are equipped with a film unwind without holding mandrel, which takes web rolls with different core diameters.

Film unwinds with holding mandrels are available as an option for running very heavy or particularly thin materials, or for trays with register printed upper webs.

## **Pre-cut film**

In addition to packaging materials from the roll, our semi-automatic traysealers can also run pre-cut film reliably and efficiently.

## **Removal of film trim**

Film trim is removed manually or by means of a film trim winder.

This ensures precise tensioning of the film trim lattice and winds it up in a compacted form.

# Register mark control

The register mark control enables register printed film to be run. It detects the register marks reliably and ensures the print image on the upper web is located in the correct position on the tray.



# Packing with modified atmosphere

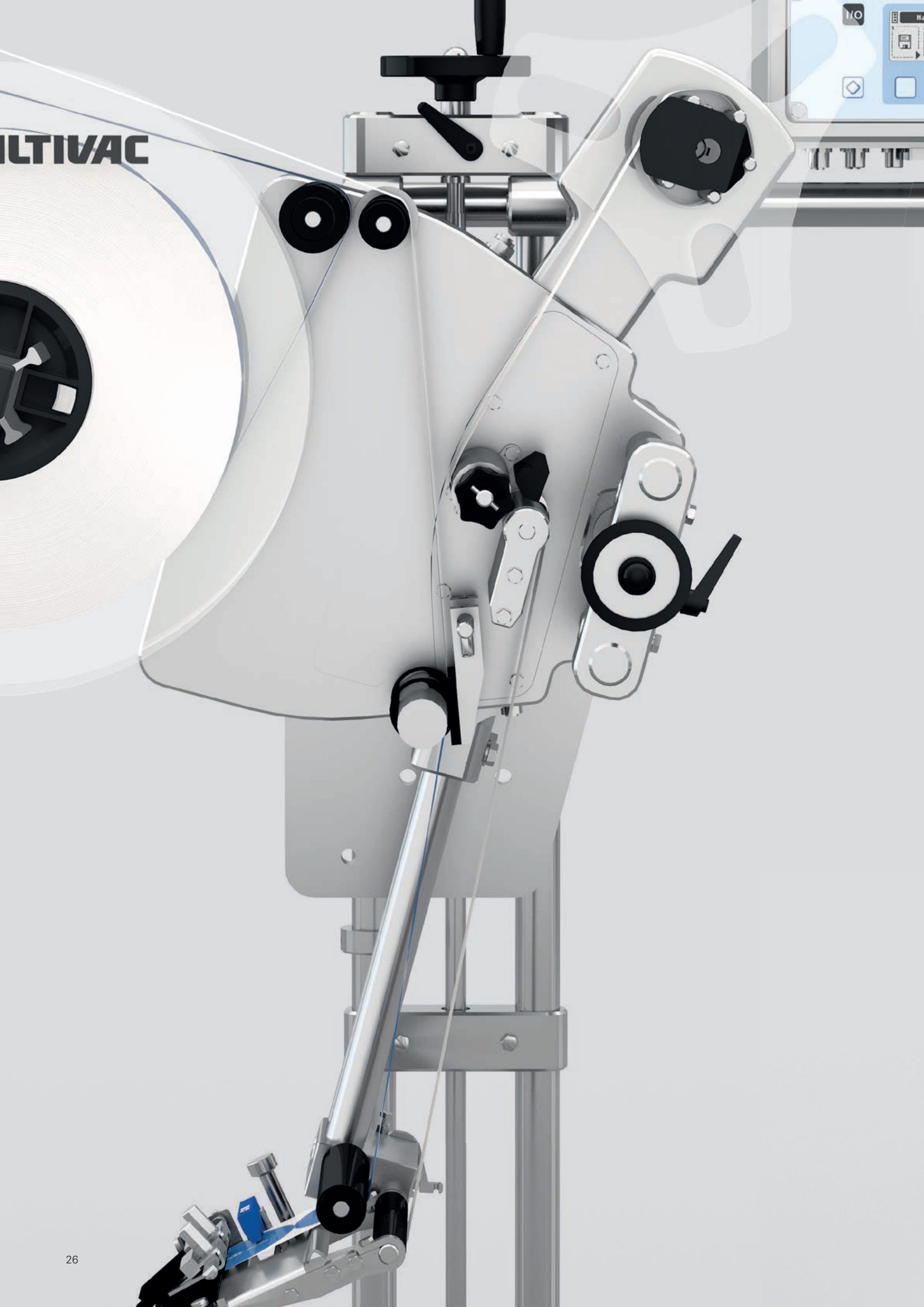
When packing with modified atmosphere (MAP), the atmosphere in the pack is replaced after evacuation with an inert gas, which is matched to the product. This is usually carbon dioxide, nitrogen, oxygen or a gas mixture.

Semi-automatic traysealers from MULTIVAC can be equipped as an option with a gas flushing system, allowing pre-mixed inert gases to be used.

Pre-mixed inert gases for different applications can be obtained from gas manufacturers. This is really only sensible however, if only a few different mixtures are required.

MULTIVAC traysealers can be equipped as an option with gas mixers. The inert gas mixture is produced directly at the traysealer. The individual gases are stored separately in tanks or gas bottles. This procedure offers an unlimited variety of gas mixtures and simplifies stockholding.

MULTIVAC



# Upgrades and options

Labelling and marking systems, as well as inspection systems and the majority of the accessories for your packaging machine, are developed and manufactured by MULTIVAC itself. In this way we can guarantee first-class quality for each system and also ensure these modules fit seamlessly into the overall system.

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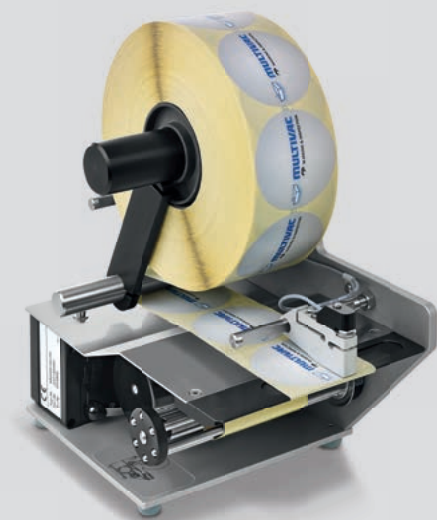
# Marking systems

MULTIVAC Marking & Inspection, our Center of Excellence for labelling, marking and inspection, offers a large selection of labelling and printing systems for in-line and stand-alone applications.

Our specialists work together with you to develop the ideal solution for your requirements.

- Manual label dispensers
- Semi-automatic labellers
- Conveyor belt labellers
- Link chain labellers

▼ Label dispensers



▼ Conveyor belt labellers



# Inspection systems

MULTIVAC Marking & Inspection also offers a comprehensive range of systems for the quality inspection of products and packs. These ensure your products meet the highest quality and safety standards.

- Checkweighers
- Metal detectors
- X-ray inspection systems
- Visual inspection systems

▼ Checkweigher with metal detector





# Better Packaging with MULTIVAC

If you decide in favour of MULTIVAC, you will receive individually tailored packaging solutions, reliability in the packaging process and excellent service.

Our wide and flexible product range enables us to supply a machine to you with the output, functionality and flexibility, which meet your requirements.

Take advantage of our consulting services and benefit from our many years of experience in developing solutions for packaging food.

Simply ask us!

# More service

Service from MULTIVAC covers the entire life cycle of a packaging solution. More than 900 specialists worldwide support you with consultancy, training and technical service.

## **Professional consultancy and machine installation**

The packaging specialists from MULTIVAC analyse existing packaging concepts and highlight potential for improvement. They develop new types of packaging and suitable machine concepts with you. They also ensure that your new packaging machine is put into service without a hitch and that it is integrated in your production process.

## **Tests of packaging solutions in the MULTIVAC Innovation Centers**

We provide capacity in our Innovation Centers for you to perform packaging tests. Here you have the opportunity to test packaging concepts as well as produce small quantities for conducting market acceptance studies. Shelf life tests and technical food analysis can also be performed.

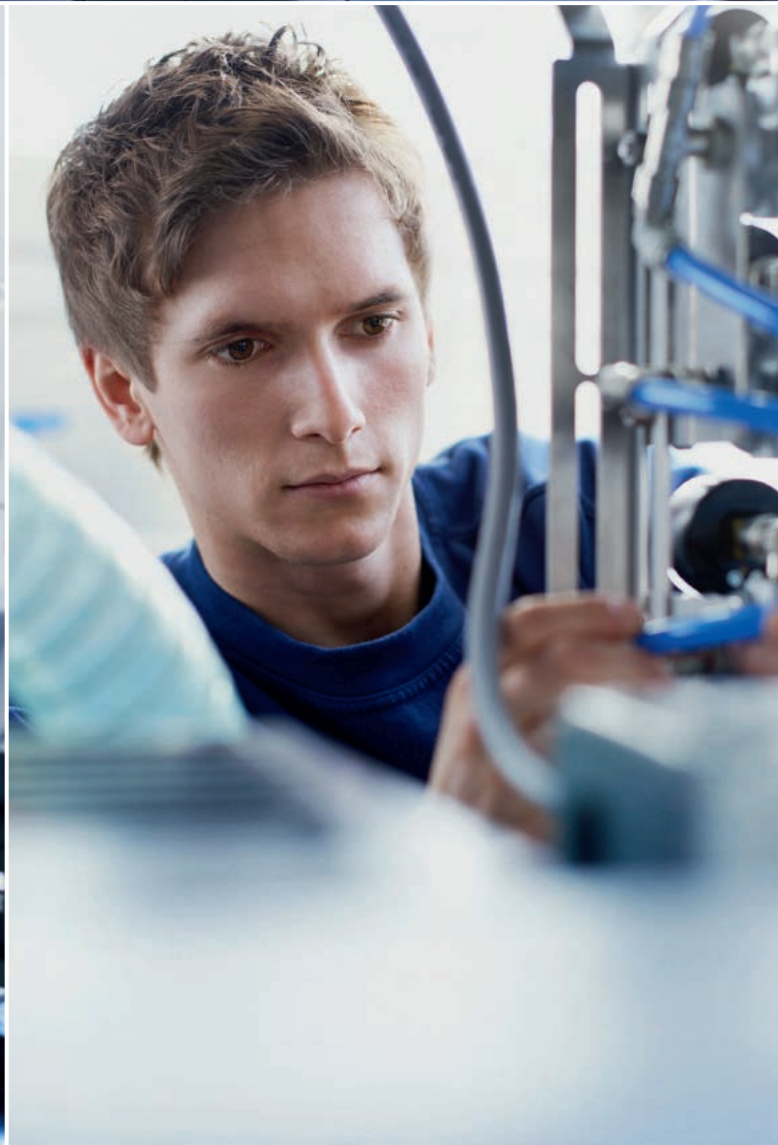
## **Needs-based training courses**

We offer user training courses worldwide for our customers' operators and service personnel. On site at customer locations, at the premises of our subsidiaries or at the MULTIVAC Training & Innovation Center. We are flexible in matching the content of our training courses to your requirements.

## **Machine maintenance**

Thanks to the benefits of reliable machine technology, our technical service always ensures the maximum availability of your equipment is maintained. The easy and rapid supply of spare parts contributes significantly to this. The expertise of our specialists makes our service perfect.







## BETTER PACKAGING

MULTIVAC offers integrated solutions for packaging. We serve customers worldwide with our large portfolio of machines and services. Our decentralized organisation is the basis for our individual customer care.



