



**TRIKNO**   
CHOCOLATE & SWEETS MACHINERY



## Trikno - The Swiss manufacturer of Knobel machines

We supply our machine to confectionery manufacturers around the world



Our mission:  
Together we make  
the most luxurious  
and creative dreams  
of confectionery  
designers come true.



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## About us

# Knobel by Trikno

In September 2022, the Swiss Trikno AG has taken over the Knobel Group. We re-started the production of the renowned Knobel machines, committed to reviving all of what makes Knobel machines unique and the first choice for confectionary manufacturers: From small moulding machines to support artisan production to complete production lines for the largest chocolate manufacturers worldwide.

Our extensive product portfolio includes innovative machines for decorating, nuts & fruit, one shot, free-dressing and sandwich applications, as well as our unique ColdPress® process. We also operate a unique Research and Development and Test laboratory and offer comprehensive retrofit solutions.

*“The world associates Switzerland in particular with high-quality chocolate and fine confectionery. That is not enough for us. We have the ambition that - on an international level - Trikno AG becomes a synonym for the most efficient and innovative way of producing fine confectionery products. We want our technologies, our process engineering and our machines to become the global gold standard in the industry.”*



Executive Board Trikno AG (from left to right): Bart Klinkenberg (CSO), Andreas Schällebaum (COO) and Marc Fuchs (CEO)



The Trikno global vision expresses our long term objective: **“Sweets – only with Trikno!”**



## Fields of expertise



Only with Trikno

### ColdPress®-Process

Our unique process for various chocolates, chocolate bars, hollow figures, semi-finished products in blisters, chocolates with wafers or biscuits.



For extremely detailed fine work

### Decoration

Detailed design of hollow figures, chocolates, chocolate bars or lollies. Highly accurate filling and shaping of cakes, sponge cakes and pastries.



For large ingredients

### Nuts & Fruits

Our technology for the reliable processing of masses with large-sized contents, such as whole nuts and almonds, dried fruit, rice crispies or marshmallows.



Efficiency from a single deposit

### One-Shot

The efficient and repeatable simultaneous moulding of shell and filling in one operation for chocolates, bars and tablets.



For small pieces of art

### Free Dressing

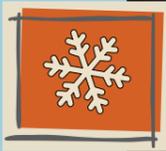
For direct casting without a mould on a cooling belt for products with an artistic, high-quality and creative look, limited only by your imagination.



For macarons and co.

### Sandwich

For precise and flexible production of sandwich products entirely according to your requirements and wishes.



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Only with Trikno

## ColdPress®-Process

ColdPress® refers to our unique process for producing perfect, thin and uniform shells with exact rims and tight lids. Complex products can easily be produced through a customised stamp design. The ColdPress® process ensures an even wall thickness of the shells (from 1.0mm) at every point, regardless of the product design.

### Possible applications include:

- Chocolates
- Chocolate bars
- Open shell chocolates
- Hollow figures
- Surprise eggs
- Semi-finished products in blisters
- Assorted chocolates
- Chocolates with wafers or biscuits
- Chocolates with whole nuts or cherries



ColdPress® enables you to process different fillings, such as aerated masses or liqueurs, as well as simultaneously filling shells with multiple fillings. Our Unique ColdPress system is suitable for retrofitting into your existing line.



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For extremely detailed work

## Decoration

Our decorating machines are perfect for carefully crafting detailed designs on hollow figures, individual chocolates, bars or lollipops. They can also be used for filling and decorating cakes, biscuits and pastries as an addition to a bakery production line. Thanks to RFID technology and mould recognition, you can decorate different products at the same time, because the machine automatically recognises the respective product and loads the appropriate decorating programme.

### Possible areas of application include:

- Hollow figures (3-D)
- Raised decorations on chocolates / bars
- Lollipops
- Pre-decorated products (2-D)



Also suitable for the smallest, most intricate decorative dots, such as the eyes of an Easter bunny.



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For large ingredients

## Nuts & Fruits

Confectionery with whole nuts, fruit pieces or other large ingredients is and remain popular. Feeding the desired mixing ratio via the hopper, our programmable agitator system guarantees reliable mixing and processing of masses with large ingredients.

### Possible areas of application include:

- Chocolates with wafer or biscuits
- Chocolates with chopped nuts
- Rice crispies and puffed rice
- Cluster
- Dried fruit
- Mini marshmallows
- Whole hazelnuts, almonds or pistachios



Did you know that you can also combine a wide variety of ingredients?



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Efficiency from a single deposit

## One-Shot

Do you want to create filled products efficiently? Do you want to produce chocolates, bars or slabs with a particularly high filling content? Do you want to process liquid or highly viscous masses whilst being able to switch quickly between different products? If yes, you need the high pouring accuracy that our one-shot depositor can offer.

With our «Knobel by Trikno» machines, you pour shell and filling in one operation and they are the first choice when speed, maximum repeatability and flexibility are required.

### Possible areas of application include:

- Filled chocolates
- Filled chocolate tablets
- Filled chocolate bars
- Assorted filled chocolates



In our R & D laboratory you can test and try out our machines for your specific application.



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For small pieces of art

## Free Dressing

Free-dressing: this means that you cast a compound directly onto a base on the coating machine – an alternative to the moulding machine. There are almost no limits to your possibilities. With this process, you can create real pieces of art that look almost identical to handmade confectionery. The machine can be easily adjusted to different sizes and shapes and can also process highly viscous masses such as marzipan or pastry dough.

Possible areas of application include:

- “Non-moulded” chocolates
- One-shot filled chocolates
- Multi-layered products



Other uses: The production of chips or drops is also possible. Combined with the “Nuts & Fruits” option, the processing of large ingredients such as chopped nuts or dried fruit is also possible without any problems. Let your imagination run wild ...



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For macarons and co.

## Sandwich

Flexibility is a top priority here. Combined with your oven system, you can produce two-layer sandwich filled or decorated products. Our 3-D scanners record the type and position of the article, so the casting process is extremely efficient and precise.

Together with you oven system supplier, our engineering experts will design a complete production line for you, from dosing the pastry dough to filling and covering your sandwich product.

Possible areas of application include:

- Macarons
- Oven band biscuits



Use our linear robot and you will produce fully automatic macarons of impressive quality.

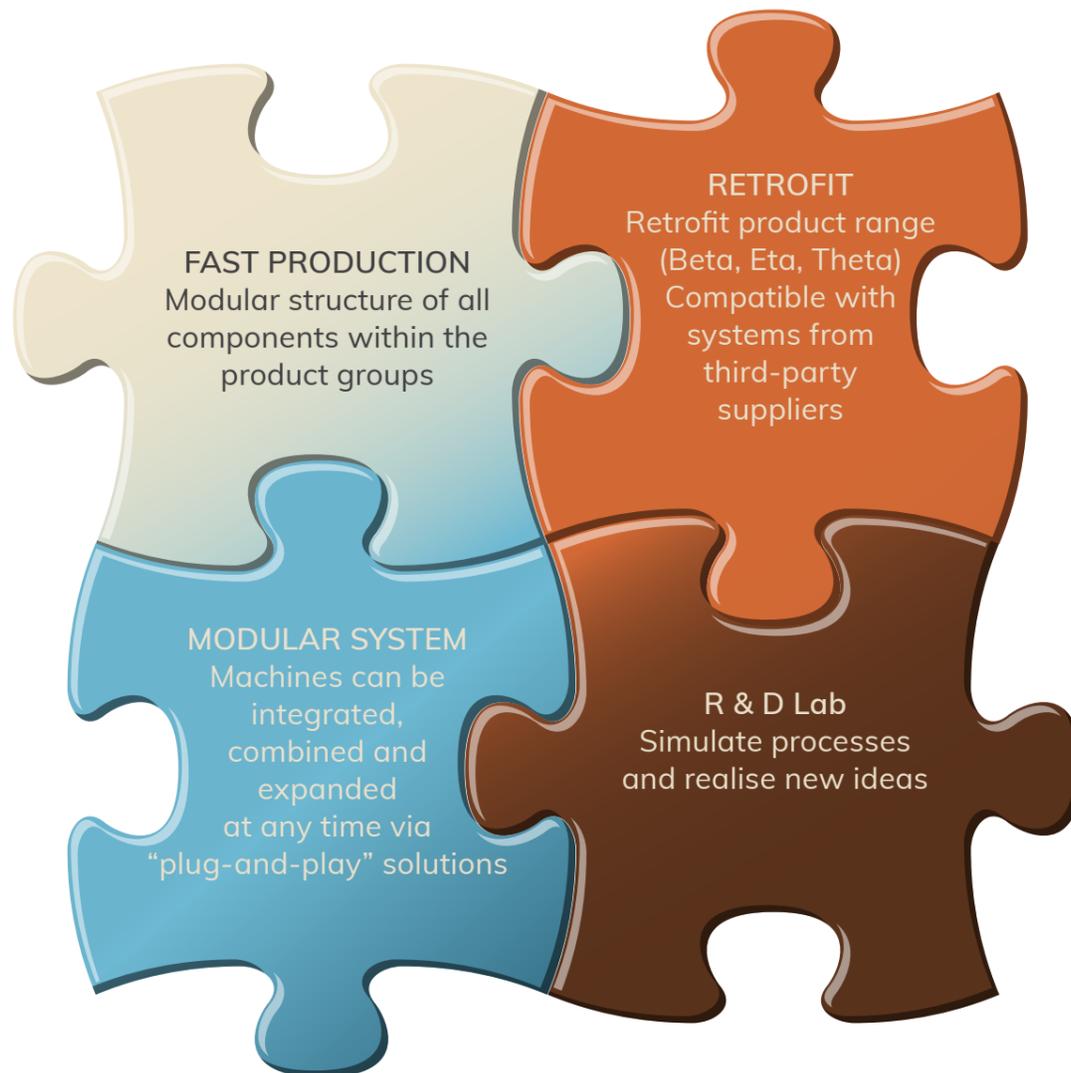


Modular principle

## Intelligent Modular System

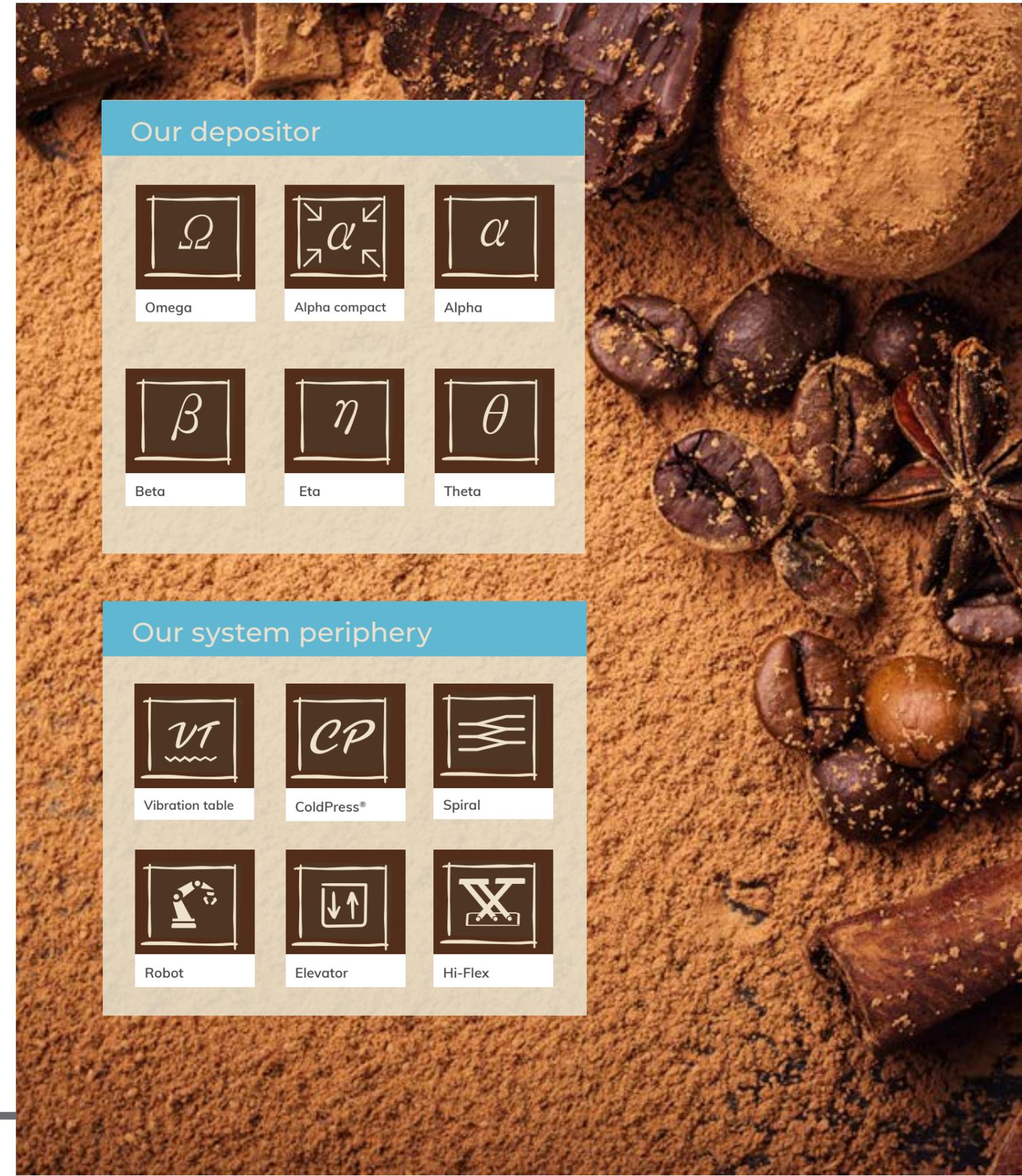
### On a large and small scale

To give you the greatest flexibility, both our machines and systems are modular in design. Our modular approach offers you many benefits including reduced lead times, end product flexibility, and quick and easy integration through plug-and-play. Our retrofit systems can cope with even the tightest of spaces, and should you want to realise new ideas, you are welcome to test them in our R & D laboratory.



Modular, powerful and expandable

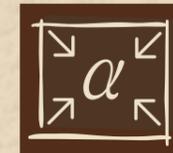
## Our product portfolio



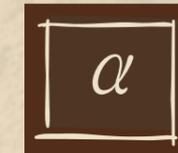
### Our depositor



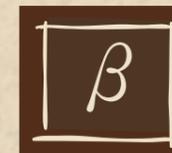
Omega



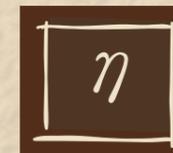
Alpha compact



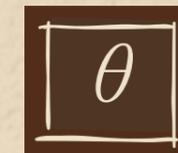
Alpha



Beta



Eta



Theta

### Our system periphery



Vibration table



ColdPress®



Spiral



Robot



Elevator



Hi-Flex



## Small, handy, mobile

# Omega



The Omega is the perfect tool for the confectioner. It is mobile thanks to its castors.



### Z model

Technical data

Machine type with Z model:	TCM 9. TCM 9/18 – 35
Piston stroke:	32 mm
Z-axis:	100 mm
Cylinder liners:	35 mm
Pistons:	10 – 25 mm*



### CAD model

The Omega CAD is an industrial machine and is particularly suitable for decorating. By reducing the mass of the casting head, higher outputs can be achieved.

Technical data

Maschinentyp CAD model:	TCM 9 to TCM 12/24
Piston stroke:	32 mm
Z-axis / X-axis / Y-axis (optional)	100 mm / 150 mm / 150 mm (150 mm / 300 mm / 300 mm)
Cylinder liners:	35 – 42-2 mm*
Pistons:	6 – 25 mm*



## Space-saving

# Alpha compact



The compact moulding machine is the larger model to the Omega. It's the ideal confectioner's tool for the production of e.g. one-shot filled products. It is the space-saving version of the Alpha model and is ideally suited for confectioners and R & D laboratories.

### Z model

Technical data

Machine type with Z model:	TCM 9. TCM 24/48
Piston stroke:	52 mm / 60 mm
Z-axis:	100 mm
Cylinder liners:	35 – 45 mm*
Pistons:	6 – 30 mm*



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Good for decorating

# Alpha



The Alpha models are versatile. The moulding machines are used in confectionery businesses as well as in the industrial sector, depending on requirements.

Thanks to the unique rotary piston system, the greatest possible moulding accuracy can be achieved. This forms the basis for decorating chocolate figures.

## Z/X model

The Alpha is suitable for the finest chocolates. It is characterised by high speed and high output.

The casting machine can also be designed as a nut hybrid plant.



Technical data

Machine type with Z/X model:	TCM 9. TCM 36/72 (72/144 opt.)
Piston stroke:	52 mm / 60 mm / 70 mm
Z-Achse / X-Achse:	150 mm / 300 mm
Cylinder liners:	35 – 90 mm*
Pistons:	10 – 30 mm*

**i** New design!



## CAD model

All Alpha models can be equipped with 3 axes (CAD). This allows the casting head to move in all directions.

Technical data

Machine type with CAD model:	TCM 9 to TCM 36/72
Piston stroke:	52 mm / 60 mm
Z-axis / X-axis / Y-axis:	150 mm / 300 mm / 150 mm (300 mm opt.)
Cylinder liners:	30-2 mm – 90 mm*
Pistons:	6 – 30 mm*



For retrofit projects in the tightest of spaces

# Beta

The Beta single-row model is the ideal replacement for old casting machines in the industrial sector for solid casting and decorations thanks to the free-arm system. It is designed to be placed on existing conveyor belts or third-party equipment. This way, outdated machines can be replaced without much effort. The advantage over double-row models such as Eta / Theta is the more compact design. The Beta moulding machine can thus also be used in confined spaces.

Technical data

Machine type:	TCM 9. TCM 36
Piston stroke:	52 mm / 60 mm
Z-axis / X-axis / Y-axis:	150 mm / 150 mm / 150 mm
Cylinder liners:	30-2 mm – 45 mm*
Pistons:	6 – 30 mm*



Designed for systems from third party suppliers

# Eta / Theta

The double-row Eta can as a replacement for old casting machines in the industrial sector and can be used for solid casting, decorations and one-shot products. It is designed to be placed on existing conveyor belts or third-party equipment. This allows obsolete models to be replaced without much effort. Eta / Theta can be equipped with 3 axes (CAD), thus allowing the casting head to move in all directions.

The Theta series is designed for fast running lines and oven belts up to 1500 mm wide and has a special feature of an optional 500 mm X-axis.

Both types of plant can also be designed as nut hybrids plant.

Technical data

Machine type with Z-/X-/CAD model:	TCM 9. TCM 36/72 (72/144 opt.)
Piston stroke:	52 mm / 60 mm / 70 mm
Z-axis / Y-axis:	150 mm / 150/300(opt.) mm
X-axis:	Eta: 300 mm (400 mm opt.) Theta: 300 mm (500 mm opt.)
Cylinder liners:	30-2 – 90 mm*
Pistons:	6 – 30 mm*



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\* For detailed technical specifications, please contact your Trikno partner directly.



## Quiet and effective Vibration table

The high-efficiency vibration table (VT) is equipped with a special vibration plate developed by us. The vibration result is better than the conventional way, but the noise level is below 85 dB. This makes it possible for the first time in our industry to operate a VT with only a Makrolon cover instead of a noise protection cover.

The vibration table can also be controlled via the touch panel of the casting machine. This allows the vibration settings to be stored for each product. There is a bevel under the belt which ensures easy cleaning from the front.

### Technical data

Magnetic vertical vibration	for solid and filled products, frequency adjustable
Magnetic vibration	for decorations, frequency and amplitude adjustable
Pneumatic lateral vibration	optional – for even distribution in the cavity
High-frequency top vibration	optional – for large ingredients/nuts etc.



## The ideal transport system Spiral

The moulds are transported without fastening (loose mould system), which guarantees trouble-free and jam-free operation. In a spiral all moulds travel the same path, thus receiving uniform cooling or heating. The spiral is custom-built from standard components – in any conceivable length. It is suitable for industrial applications as well as for the confectionery shop. The insulated housing is available in different versions (plastic, aluminium and stainless steel).

### Technical data

System type	Spiral
Cooling section	9 to 500 m
Mould width	up to 650 mm
Optional	Double tower / two-part spiral (access facility)



Two-piece spiral



## The unique system ColdPress®

The ColdPress®-system enables the production of perfectly even and thin shells; the basis for any quality product. One of the most important advantages of the tools is the maintenance-free and uninterrupted use. Regardless of the shape of the item, we avoid moving parts on our stamps and can guarantee flawless shells with a perfect volume.

### Technical data

Type of plant	TCM CP
Mould width	275 – 650 mm
Line speed	up to 24 moulds per minute
Shell thickness	from 1.0 mm upwards



## Versatile in use Robot

We are increasingly using Yaskawa robots in chocolate processing. Thanks to their flexibility, they can be used quickly for different jobs. So far, they have mainly been used as a replacement solution for the cooling spirals or as handling devices for the moulds or blisters in various applications and are an excellent complement to the Hi-Flex system.

### Technical data

Robot type:	Yaskawa
Working ranges:	from 300 – 2400 mm
Payloads:	for tools from 3 - 100 kg
Speeds:	up to 24 cycles/min (2 x 12)
Design:	Food grade approved
Applications:	Cooling and heating cells, mould handling, changing station, bottom and edge stripper

With and without cooling



## Elevator

The elevator is mainly used as a buffer or as a lift for overhead moulding. The fully servo-controlled unit has a gearless linear servo drive on the pusher thus allowing for a gentle mould transport, e.g. for liqueur-filled trays.

Technical data

Plant	Elevator
Mould width	275 – 650 mm
Total height	max. 6 m
Moulds per tier	1 – 6



Handling system with 3-D motion



## Hi-Flex

Gearless linear servo robot system for all handling operations in a single sheet line with a precision better than 0.1 mm. Edge trimming, base stripping and demoulding of products; insertion of products in a final pack. Hi-Flex – the ultimate low-maintenance “pick-and-place” robot for limitless flexibility.

Technical data

Machine type	Hi-Flex
Housing lengths	2100/2450/2960/3960 mm
Enclosure type	single / double
Tool weight	max. 100 kg



Upgrading with Trikno

## Retrofit

Realise new products. Optimise existing product processes. Increase quality.

You can upgrade, expand or modernise your existing third-party equipment with various Kobel by Trikno machines. This concept allows you to combine your existing and still well-functioning peripherals with the latest production technologies. Thanks to the lower investment costs, many customers have been able to significantly upgrade their existing plant and considerably expand their production possibilities.

Depending on your needs, your existing system can be expanded to include the following applications:

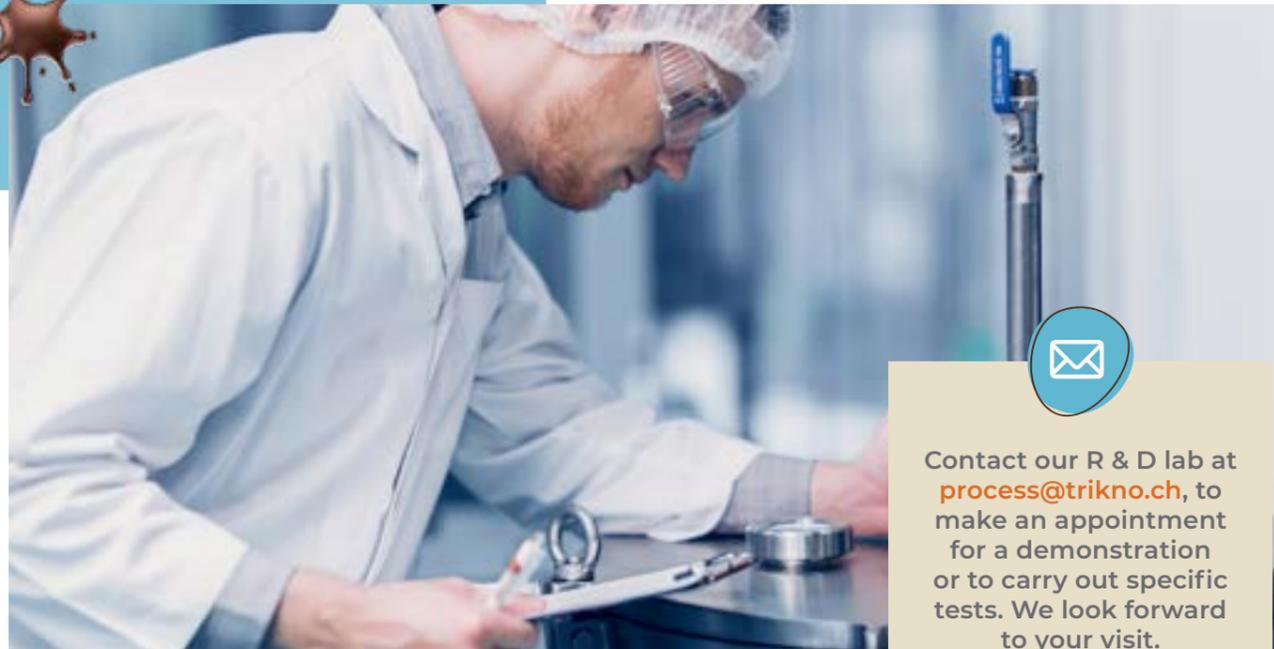
- More precise and powerful casting machines for One-Shot
- Moulding machines for nuts & fruits, i.e. for large ingredients
- Moulding machines for efficient and artistic free-dressing
- Moulding machines for the filling of existing shells onto continuously cooling channel belts
- Moulding machines for small-volume drops as mass-produced articles
- Decorative moulding machines and magnet-driven vibration units for precisely decorated articles
- ColdPress® unit with subsequent edge cutter for perfectly shaped chocolate shells
- Gearless linear servo Hi-Flex robots to automate various handling operations



Our machines can be integrated into existing third-party lines, on a oven band or in a coating line, regardless of the age of the existing line.



Alpha was successfully integrated into an old plant.



Contact our R & D lab at [process@trikno.ch](mailto:process@trikno.ch), to make an appointment for a demonstration or to carry out specific tests. We look forward to your visit.

## Innovative and practical think tank

# R & D Lab

Do you have exciting ideas and you want to develop new products?

Do you want to realise a brand new product? Are you looking for a solution for a specific task? No problem. At Trikno, we do everything to make your dreams and ideas come true - with the highest quality and efficiency.

Visit our research and development laboratory. Together we will carry out tests to realise your desired products and show you the unique possibilities of our machines.

And if your ideas cannot be fully implemented with existing process technology, our experienced engineering experts will develop a solution for your application.

**Sweets? Only with Trikno!**

Our laboratory offers the possibility to simulate all processes. The following equipment is available at all times:

- 3-D moulding machine for decorations
- One-shot moulding machine
- Nut moulding machine especially for masses with large ingredients
- ColdPress® for the production of chocolate shells
- Automatic Hi-Flex edge to cutter
- Tempering machines with tempermeter and process mixer

From engineering to production and assembly, we offer you all services from a single source.

Expert, fast and customer-friendly

# Service and spare parts

Your partner for first-class service in the confectionery industry

Our wide range of services includes everything you need to ensure that your machines and plants run smoothly and your business remains successful. We guarantee high machine availability with our extensive spare parts inventory and upgrade solutions, including retrofit options.

Our services at a glance:

- Trainings
- Commissioning
- Product developments
- Maintenance and repairs
- Retrofit
- Maintenance contracts
- Spare parts delivery

In use worldwide

Our service department is available to you worldwide. Our experienced service technicians offer comprehensive maintenance services for casting machines and their peripherals, both on-site and via remote access.

Transparent billing

Transparency is of outmost importance to us. Our billing is based on time and effort or on previously agreed fixed prices, so that you always have control over your service costs.

Our maintenance contracts: expert, fast and customer-friendly

Maximum availability is important to you? Then we recommend our customized maintenance contracts. With them you can guarantee that your machines are always in top condition.

Our promise

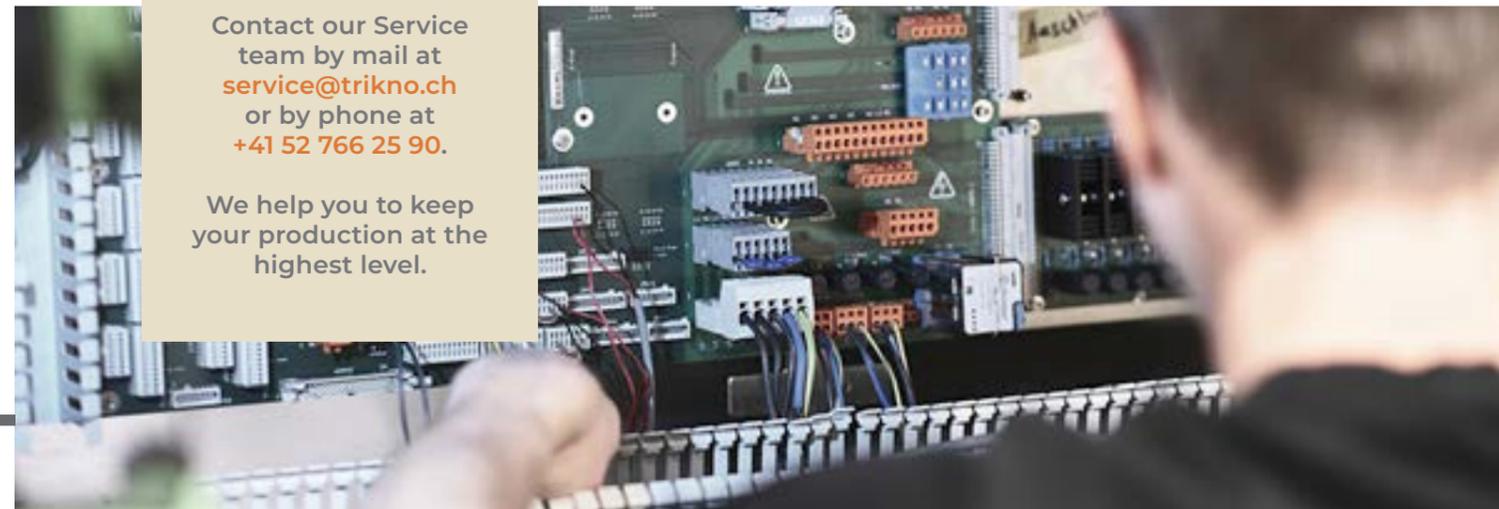
Our goal is not only to supply the best machines, but also to be the best service provider in the industry. We set the highest standards for quality, efficiency and customer satisfaction. Contact our dedicated service team today to find out how we can help you keep your equipment in top shape. Service is our business because your satisfaction is our top priority.

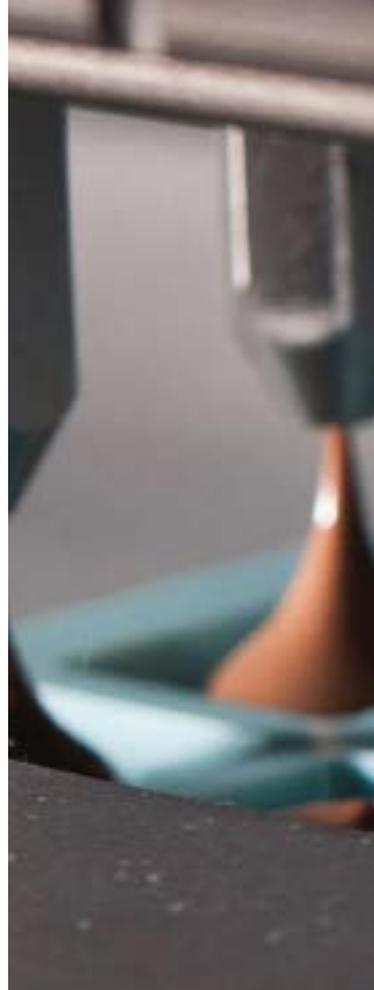
**Rely on us to meet your requirements and keep your production at the highest level.**



Contact our Service team by mail at [service@trikno.ch](mailto:service@trikno.ch) or by phone at +41 52 766 25 90.

We help you to keep your production at the highest level.





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