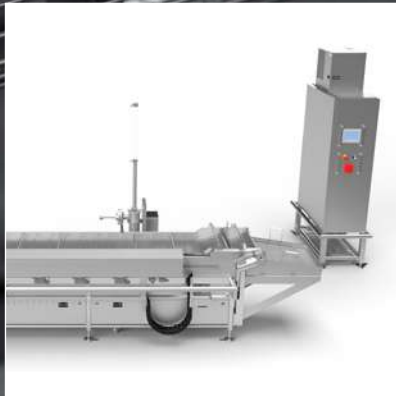
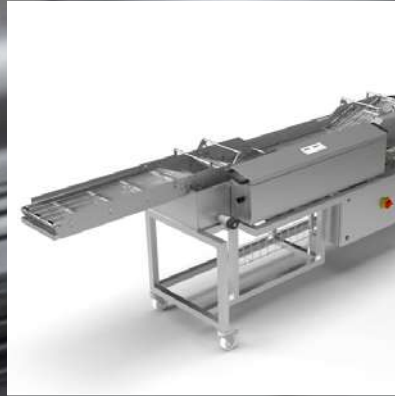




*Continuous
Frying
Freezing
Baking*

FOOD

Solutions for restaurants, catering providers, shops and food manufacturers

About us

- 1967 Founding of the mechanical engineering company RIEHLE.
- Medium-sized company with around 50 employees at the factory.
- Complete development, design and production takes place at our headquarter in Westhausen, Germany.
- Manufacture of machines for handcraft bakeries as well as for the baking and the food industry.
- Since 2013 member of the WP BAKERYGROUP since 2013.



58 
Years of experience

50 
Global partners

2030 
CO₂ neutrality as a goal

24 / 
Availability

 **50**
Employees



Our mechanical engineering company was founded around 60 years ago by Walter Riehle. It all began with the lye application of dough pieces, but our business soon expanded to include deep-frying. Since then, WP RIEHLE has received numerous awards for innovations in mechanical engineering for the baking industry.

Our first continuous deep-frying system (DLA) was developed in 2006. Thanks to the versatility of this system (various input systems, various sizes, various filling options), our business expanded very quickly into the **catering sector**.

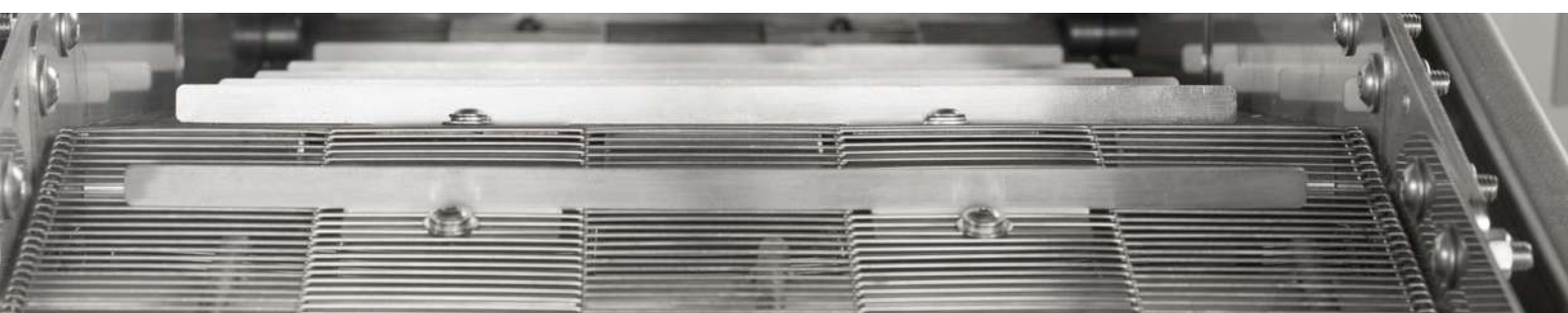
For example, in 2016, one of our **DLA SCs set a world record**: weighing 140 kg and measuring exactly 41.665 metres in length – the longest cordon bleu ever! 750 portions of cordon bleu of the highest quality in terms of taste and consistency even **made it into the Guinness Book of Records!**

Since 2013, we have been part of the WP BAKERYGROUP, the world's largest manufacturer of bakery machinery. However, many of our machines are also **suitable for use in the catering industry and food production**.

In 2015, for example, we received the "iba Trophy" for the **smallest continuous baking oven with patented heating technology for snacks and baked goods**. Infrared technology is suitable for a wide range of different products and shortens the baking process by up to 70%. Thanks to lower moisture loss, **the products stay fresh longer and look more appetising**. It is ideal for **convenience stores, snack shops, hotels, restaurants, bakeries and kiosks**.

In 2024, we launched our Eco-Froster, which offers a large freezing area in a very small space. Its sophisticated design enables **(shock) freezing according to the first-in, first-out principle**. All products to be frozen are frozen for exactly the same amount of time. Whether dough pieces, meat, vegetables or fruit – the possibilities are endless!

Since 2024, several robots have been used to take over production processes in various areas of food production: **stacking, cutting, loading, unloading, product transport**. They vary in size and mobility depending on the task at hand. Our cobots, for example, require hardly any barrier space and are ideal for working alongside human staff. Simple automation is often sufficient to simplify production processes. WP RIEHLE launched its first automatic loader on the market back in the 1990s.



Our **Solutions:**

CONTINUOUS FRYERS (DLA SC)

P.6

They can be operated with oil/fat or water/broth and reduce frying time by up to 40%. They produce products with perfect colour, perfect crunch, juicy inside and low in fat.

CONTINUOUS SNACK OVENS

P.16

They reduce baking time by up to 70% and are specially designed to bake pre-baked, frozen baked goods. Ideal for pretzels, baguettes, pizza slices and other small snacks.

ROBOTICS & AUTOMATIONS

P.20

Simple automations and complex robots in various sizes, mobile or permanently installed, collaborative or with barriers. Depending on the area of application in your food production.

CONTINUOUS FREEZER

P.24

Large freezing area in a small space with first-in, first-out principle. Can be integrated into complex production lines. Suitable for blast freezing a variety of products.





Catering
All-rounder

DLA SC

- ✓ Consistently high product quality
- ✓ Less fat absorption
- ✓ Shorter frying time

Continuous Fryers

WP Riehle offers suitable deep-frying systems for a wide variety of products and production sizes. All systems pursue the same goal: great taste with little fat.

CRUNCHY, DELICIOUS, LOW FAT

Whether it's schnitzel, chips, falafel or other deep-fried products, the requirements for the deep-frying process are basically the same in most cases. The products should be crispy, tasty and as low in fat as possible. Our conveyor fryers make this possible.

TECHNOLOGY

Temperature is a decisive factor in fat absorption. The more constant the temperature can be kept, the lower the fat absorption by the product. All our deep fryers are equipped with at least a digital glass display control. We deliberately chose heating coils in the fat because the advantages outweigh the disadvantages. The temperature can be kept more constant and corrected more quickly. This keeps the fat absorption by the products to a necessary minimum.

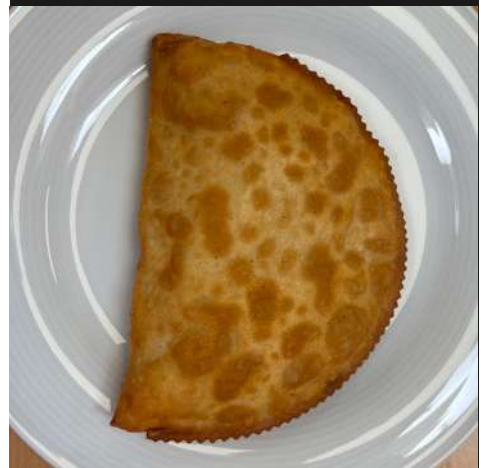
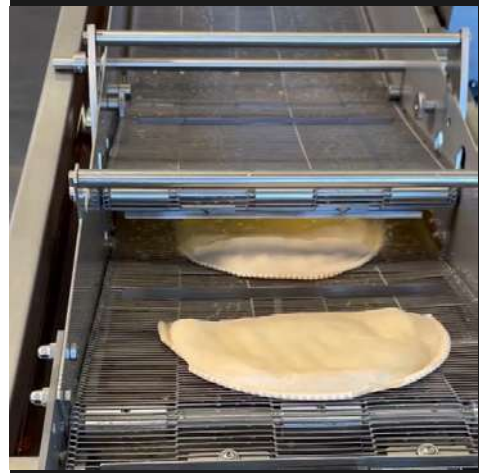
Sediments accumulate below the heating coils and burn significantly less than with surface heating. The cyclical heating prevents fat burns on the heating coils.

FLEXIBLE

The DLA SC series is available in various widths and lengths, which can be selected depending on the desired production volume or the available space. This enables us to offer solutions for any production size.

The deep fryers can be expanded with additional process steps, e.g. an automatic breading system or a falafel moulding device.

Frying



Watch me

Video:
Frying Chebureki



Continuous Flow Systems

Our continuous flow systems can be filled not only with fat and oil, but also with water or broth. This allows you to cook a wide variety of products.

EXAMPLE: COOKING DUMPLINGS

With our continuous systems, you can cook hearty dumplings in the traditional way, for example. You place the uncooked dumplings on the conveyor belt (or, depending on the nature of your product, directly into the tub, e.g. using a dosing device), and they then pass through the bath at a programmed speed. This ensures that your dumplings are cooked to perfection at the specified cooking time and temperature and are automatically discharged at the end. Thanks to the automatic conveyor system, the dumplings can be cooked one after the other without interruption. The cooked dumplings can be removed at regular intervals and served fresh. This means there are no unnecessary waiting times and your cooked dumplings do not cool down in the meantime. The ideal solution for restaurants and catering providers.

EXAMPLE: COOKING BAGELS

Our DLAs are ideal for cooking bagels at set intervals. Our systems can be filled with water and equipped with different heating capacities depending on customer requirements. Cooking time and temperature can be individually regulated and adjusted. Depending on the cooking time and temperature, our DLAs are available with up to three heating coils, each of which can also be equipped with double heating power. The overall width and length of the system can also be adapted to your customer requirements and product specifications. The system is also perfectly suited for integration into complete production solutions.



- ➔ Consistently high quality: crispier and evenly fried products
- ➔ More digestible products thanks to reduced fat absorption
- ➔ Increased efficiency thanks to 40% shorter frying time
- ➔ Energy reduction thanks to shorter frying time, direct heating and efficient design

BENEFITS

- Different widths: 150, 300, 600
- Glass display control with 7 storable frying programmes
- Digital heating control leads to a constant temperature and thus reduces fat absorption
- 80 cm long infeed conveyor for gentle transport of the products into the submerge fryer
- Reduction of working and frying time of up to 40% by submerged, continuous frying
- Constant frying results
- Easy cleaning by removing the transport unit and heating unit without tools
- Ideal for schnitzel, french fries, hamburger, chicken nuggets, fish and much more.

OPTIONS

- Continuous oil filter
- Various transport belts available
- 40 cm long infeed conveyor instead of the standard 80 cm
- Increased heating power for extreme applications
- Also available as a fast runner (for pre-frying)
- Customised feeding and discharging solutions
- Customised solutions
- In different frying lengths available
- From 600 hydraulic lifting unit for transport insert and heating, for easy cleaning of the fat tray
- Extensive accessories available

The automatic continuous fryer for submerged frying.



Instead of fat or oil, the system can also be operated with water or broth.



- ➔ Usable width: 140 mm
- ➔ Heating power can be increased

TECHNICAL DATA

	DLA 150 SC-1	DLA 150 SC-2	DLA 150 SC-3
Length	2,264 mm	3,200 mm	3,950 mm
Width	530 mm		
Height (top edge of fat tray)	809 mm		
Empty weight	approx. 55 kg	approx. 100 kg	approx. 140 kg
max. connected load	5.5 kW	10.5 kW	15.5 kW
Voltage	230 V/400 V/N/PE 50 Hz		
Connection	CEE 400V 16A	CEE 400V 16A	CEE 400V 32A
Filling quantity	max. 40 litres	max. 80 litres	max. 96 litres
Usable width	140 mm		
Frying distance in the oil	650 mm	1,650 mm	2,460 mm
Frying time	24 sec. ... 6 min.	1:12 min. ... 12 min.	1:30 min ... 9 min.
max. product thickness	max. 55 mm		



- ➔ Usable width: 284 mm
- ➔ Heating power can be increased
- ➔ optional e.g. breaching unit

TECHNICAL DATA

	DLA 300 SC-1	DLA 300 SC-2	DLA 300 SC-3
Length	2,264 mm	3,200 mm	3,940 mm
Width	670 mm		
Height (top edge of fat tray)	877 mm		
Empty weight	approx. 64 kg	approx. 110 kg	approx. 145 kg
max. connected load	9.5 kW	18.5 kW	27.5 kW
Voltage	230 V/400 V/N/PE 50 Hz		
Connection	CEE 400V 16A	CEE 400V 32A	CEE 400V 63A
Filling quantity	max. 50 litres	max. 95 litres	max. 150 litres
Usable width	284 mm		
Frying distance in the oil	650 mm	1,650 mm	2,460 mm
Frying time	24 sec. ... 6 min.	1:12 min. ... 9 min.	1:30 min ... 12 min.
max. product thickness	max. 55 mm		

OPTIONAL EXTENSIONS

Our DLAs are perfect for integration into production lines. Various extensions are possible, e.g. an upstream breading unit for size 300.



Picture: DLA 300 SC with upstream breading unit

CALCULATED HOURLY OUTPUT* FOR OUR BESTSELLER DLA 300SC-2

		Size	Weight	Frying time	Output per hour
Samosas		L 70 mm	0.040 kg	6 min.	25 kg
		W 70 mm			
		H 20 mm			
French Fries		L 40 mm	0.010 kg	3 min.	230 kg
		W 10 mm			
		H 10 mm			
Cutlet		L 100 mm	0.150 kg	4 min.	67 kg
		W 100 mm			
		H 20 mm			
Bread Sticks		L 25 mm	0.025 kg	1.5 min.	50 kg
		W 9 mm			
		H 9 mm			
Nuggets		L 45 mm	0.020 kg	3 min.	70 kg
		W 35 mm			
		H 20 mm			
Fish Filet		L 100 mm	0.150 kg	3 min.	180 kg
		W 50 mm			
		H 20 mm			

* Approximate data. Can vary according to the local recipe, operator speed, etc.



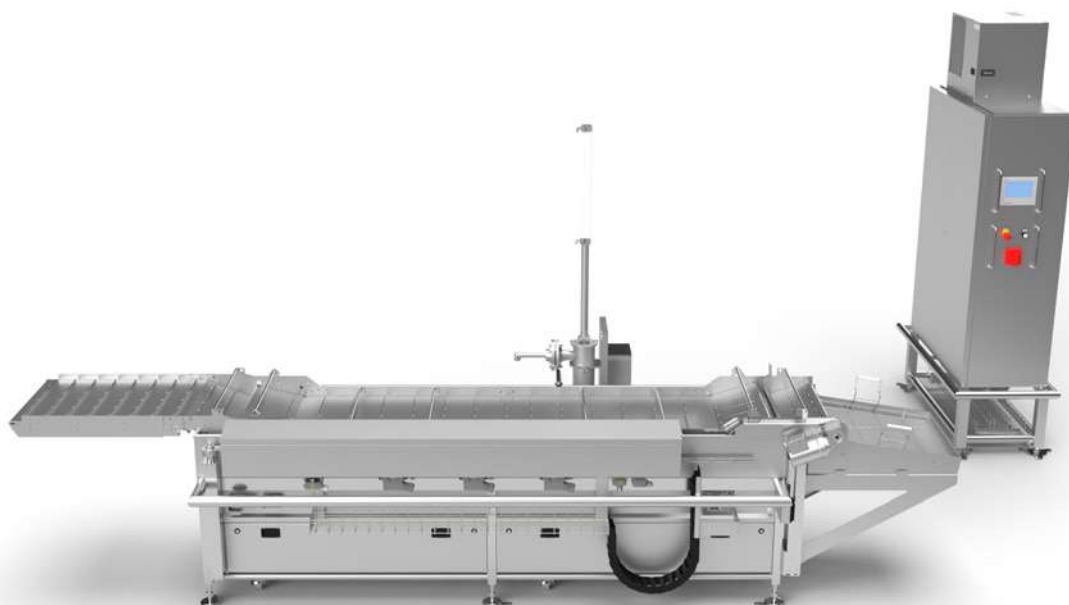
- ➔ Usable width: 585 mm
- ➔ Heating power can be increased
- ➔ optional e.g. breaching unit

ADDITIONAL OPTIONS 600

- Integrated drain filter tank under the fat tray, with automatic level control and washable stainless steel permanent filter and flap for splash-free feeding of fat blocks
- Hydraulic lifting unit for transport insert and heating, for easy cleaning of the fat tray. This is required from DLA 600 SC-3 upwards.

TECHNICAL DATA

	DLA 600 SC-2	DLA 600 SC-3
Length	3,200 mm	4,000 mm
Width	1,100 mm	
Height (top edge of fat tray)	870 mm	
Empty weight	approx. 393 kg	approx. 620 kg
max. connected load	37 kW	54 kW
Voltage	230/400 V-50Hz	
Connection	CEE 400V 63A	CEE 400V 125A
Filling quantity	max. 185 litres	max. 250 litres
Usable width	585 mm	
Frying distance in the oil	1,600 mm	2,350 mm
Frying time	55 sec. ... 11 min	1 min. ... 13 min
max. product thickness	max. 55 mm	



- ➔ Usable width: 585 mm
- ➔ Separate control cabinet with touch panel control, remote maintenance possible
- ➔ Heating power can be increased
- ➔ optional e.g. breaching unit

ADDITIONAL BENEFITS

- Separate control cabinet with touch panel control
 - Touch panel is insensitive to water, dirt and oil/fat
 - All components of the production line are controlled and operated via the touch panel
 - Control system is internet and remote maintenance capable

ADDITIONAL OPTIONS 600 IT

- Automatic level control with fat melting tank ensures a constant amount of fat in the submerge fryer
- Hydraulic lifting unit for transport insert and heating, for easy cleaning of the fat tray.
This is required from DLA 600 SC-3 IT upwards.

TECHNICAL DATA*

*without control cabinet

	DLA 600 SC-3 IT
Length	4,000 mm
Width	1,100 mm
Height (top edge of fat tray)	870 mm
Empty weight	approx. 620 kg
max. connected load	54 kW
Voltage	230/400 V-50Hz
Connection	CEE 400V 125A
Filling quantity	max. 250 litres
Usable width	585 mm
Frying distance in the oil	2,350 mm
Frying time	1 min. ... 13 min
max. product thickness	max. 55 mm





Snack Baking

ITES

- ✓ Up to 70% reduction in baking time
- ✓ Less moisture loss
- ✓ Minimal space required

Infrared oven

The oven is specially designed to bake pre-baked, frozen baked goods. Ideal for pretzels, baguettes, pizza slices and many other small snacks.

HIGH-SPEED BAKING

Patented infrared technology: Depending on the product, infrared baking can reduce baking time by up to 70%. The products are baked from the inside out, meaning the end product contains more moisture and stays fresh for longer.

The continuous oven offers a huge reduction in reaction times. Defrosting and thawing are also possible in the oven. Different sizes allow for different areas of application.

OPERATION

Operation is intuitive via a touch panel. The control system offers the option of storing 50 individual baking programmes.

EXPANDABLE

Optionally, the infrared tunnel oven can be supplemented with a **salt dispenser**. Lye products can be thawed and automatically sprinkled with salt before baking. To do this, the products are removed from the oven and returned to it after salting. This process is stored in the baking programme and runs fully automatically.

Optional shop solution: The ITES can be connected to a **self-service system**. It is used as a tunnel oven and the products are transferred to a dispensing shelf after baking.

With the **shop glazing system**, it is possible to bake and glaze frozen doughnuts in less than a minute.

Baking



The ITES is ideal for convenience stores, snack shops, hotels, restaurants, bakeries and kiosks.



EQUIPMENT

- Conventional oven and patented infrared technology in one
- Touch screen control
- 50 individual baking programmes
- Fully stainless steel construction
- Developed and manufactured in Germany
- Complies with NSF hygiene standards

BENEFITS

- Infrared technology reduces process time by up to 70%
- In addition to the external heat exposure, the infrared waves bake from the inside out.
- Less moisture loss – higher selling weight and longer freshness
- Can be thawed/defrosted in the oven
- Significant reduction in response times to customers

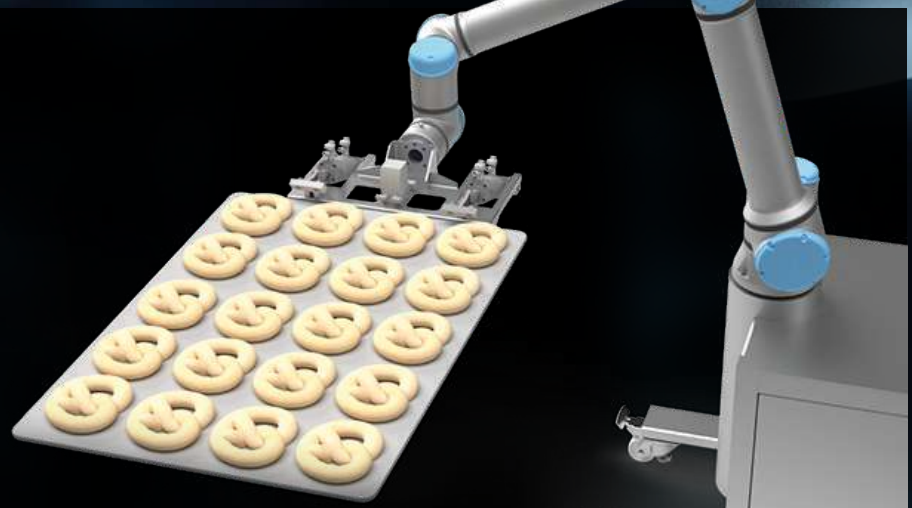
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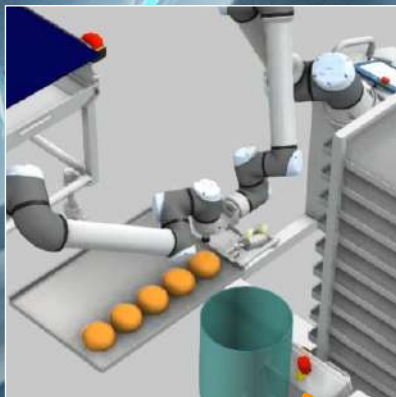
- Der Salzer integriert sich perfekt in den automatisierten Produktionsprozess – aus der Tiefkühltruhe bis zum verkaufsfähigen Produkt.

More information and video about the product



TECHNICAL DETAILS		ITES 30/30	ITES 60/40	ITES 60/40 incl. salter
Length		1,197 mm	1,497 mm	1,497 mm
Width		540 mm	840 mm	840 mm
Height with salter		-	-	645 mm
Height without salter		543 mm	543 mm	-
Weight		approx. 95 kg	approx. 170 kg	approx. 175 kg
Voltage	1-ph	1x230 V/N/PE/50 Hz	3x230 V/400 V/N/PE/50 Hz	3x230 V/400 V/N/PE/50 Hz
	3-ph			
max. connected load	1-ph	3.4 kW/15 A	9.2 kW/14 A	9.3 kW/14 A
	3-ph			
Standard belt		wire mesh, non-stick	wire mesh, non-stick	wire mesh, non-stick
Automatic salter		-	-	5 litre
Max. product height		80 mm	80 mm	80 mm





*Automate
Workflows*

WP ROBOT

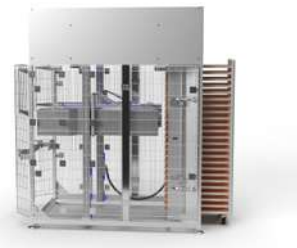
- ✓ Automatic loading of products
- ✓ Product & tray handling
- ✓ Taking over simple tasks

Automation and robotics

The WP ROBOT division covers all products and is therefore not dependent on the end products to be manufactured. We use different automation and robot solutions depending on the production volume and activity.

NEW TECHNOLOGIES. NEW OPPORTUNITIES.

The robotics and automation segment, including its technology and potential applications, is growing steadily. The food industry is also benefiting from this in many areas. Simple automation, such as automated product loading, and complex robotics are both used here.



AUTOMATIC LOADER

The automatic loader is a typical example of simple automation. Here, a fermentation trolley is docked to the system and the loader begins to systematically process all trays/peel boards one after the other and remove the products. The products are then transferred to another system via a conveyor belt.



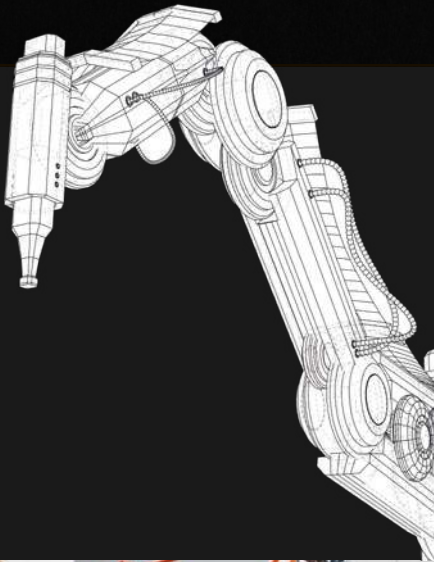
WP AUTOMATIC LOADER:

Automatic loading of dough pieces from proofing trolleys for transfer to a machine.



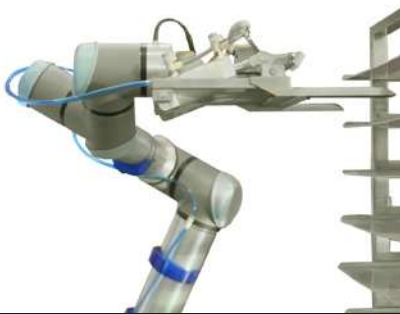
WP SCORING ROBOT ABB:

Automated scoring of dough pieces with different cutting patterns (here using water jet scoring technology).



WP STACKING ROBOT ABB:

Stacking of trays, peel boards and packaging in large production lines.



WP FIXED/MOBILE COBOT:

Loading and unloading of machines, product and tray handling possible with various attachments and programmes.



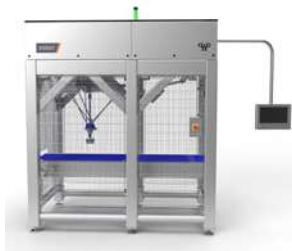
ABB ROBOTS

An ABB robot is usually used for integration into large, complex production lines. It is a permanently installed articulated arm robot and, depending on the attachments and programming, can perform various tasks, from stacking, loading and unloading machines, product handling to scoring dough pieces.



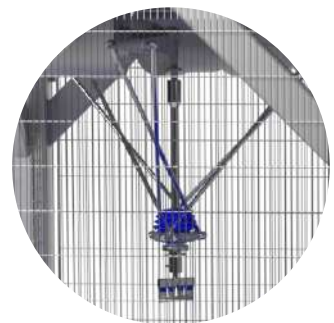
COBOTS

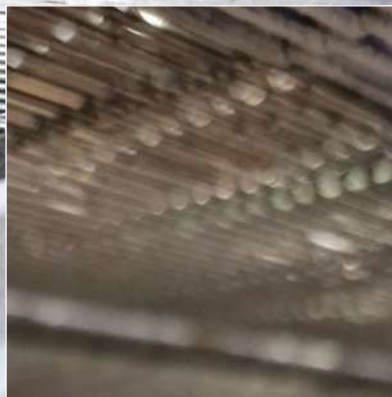
Cobot solutions are particularly useful in areas where humans and machines interact, as they work collaboratively, so without large barrier areas. They can be either permanently attached to a machine or freely movable on a mobile unit. This articulated arm robot can also be equipped with different attachments that can be exchanged without tools and used in different areas thanks to various programmes.

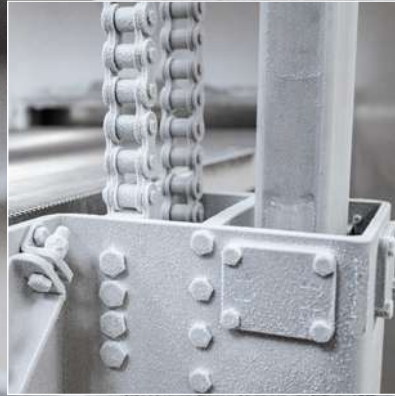


DELTA ROBOTS

The Delta robot stands out thanks to its incredible speed. It is mainly used for scoring dough pieces. It can be equipped with different cutting techniques and cutting patterns. Like all robot solutions, it always delivers precise and consistent results.







Shock
Freezing

EcoFroster

- ✓ Integration into production line
- ✓ Large freezer area in a small space
- ✓ First-in, first-out principle

Continuous Eco-Froster

With the Eco-Froster, only the products to be frozen are loaded into the freezer and, once frozen, are automatically discharged for further processing according to the first-in, first-out principle.

ENERGY AND SPACE SAVING

The WP Riehle Eco-Froster combines a large freezing area with a small footprint. Its design offers, for example, 54 m² of freezing area on a floor space of only approx. 12 m². The products to be frozen are transferred to the wire mesh belts in the freezer using optional feed systems. The entire mechanism is located inside the Eco-Froster during each step of the process, so that only the products need to be cooled, not the mechanism. **This results in significant energy savings compared to a rack freezer.** The immersion of the freezer mechanism in a cold bath ensures very short freezing times with very low energy consumption.

The various freezing times can be stored via the Beckhoff touch panel control with remote maintenance option. Thanks to its modular design, the freezer can be easily adjusted in width and length. The corresponding feed systems transfer the products from upstream production facilities to the Eco-Froster. Once freezing is complete, the frozen products are automatically discharged and can be transferred to a packaging system.

BEST RESULTS

The storable freezing times and automatic output of the products after freezing, which can then be transferred directly to a packaging system, ensure consistent product quality.

Freezing



TOUCH PANEL CONTROL

- Beckhoff touch panel control
- with multi-level operator menu Operator Master Service
- Internet-enabled for remote maintenance
- Can also be controlled via upstream WP Riehle ComJet with central control, for example
- Supply and discharge systems can be integrated

POSSIBLE USES

Depending on product characteristics, for:

- Dough pieces
- Fish & meat
- Vegetables and fruits

When loading and transporting products directly onto wire mesh belts, the products to be frozen must meet specific requirements to prevent damage during transport through the freezer, such as dimensional stability.

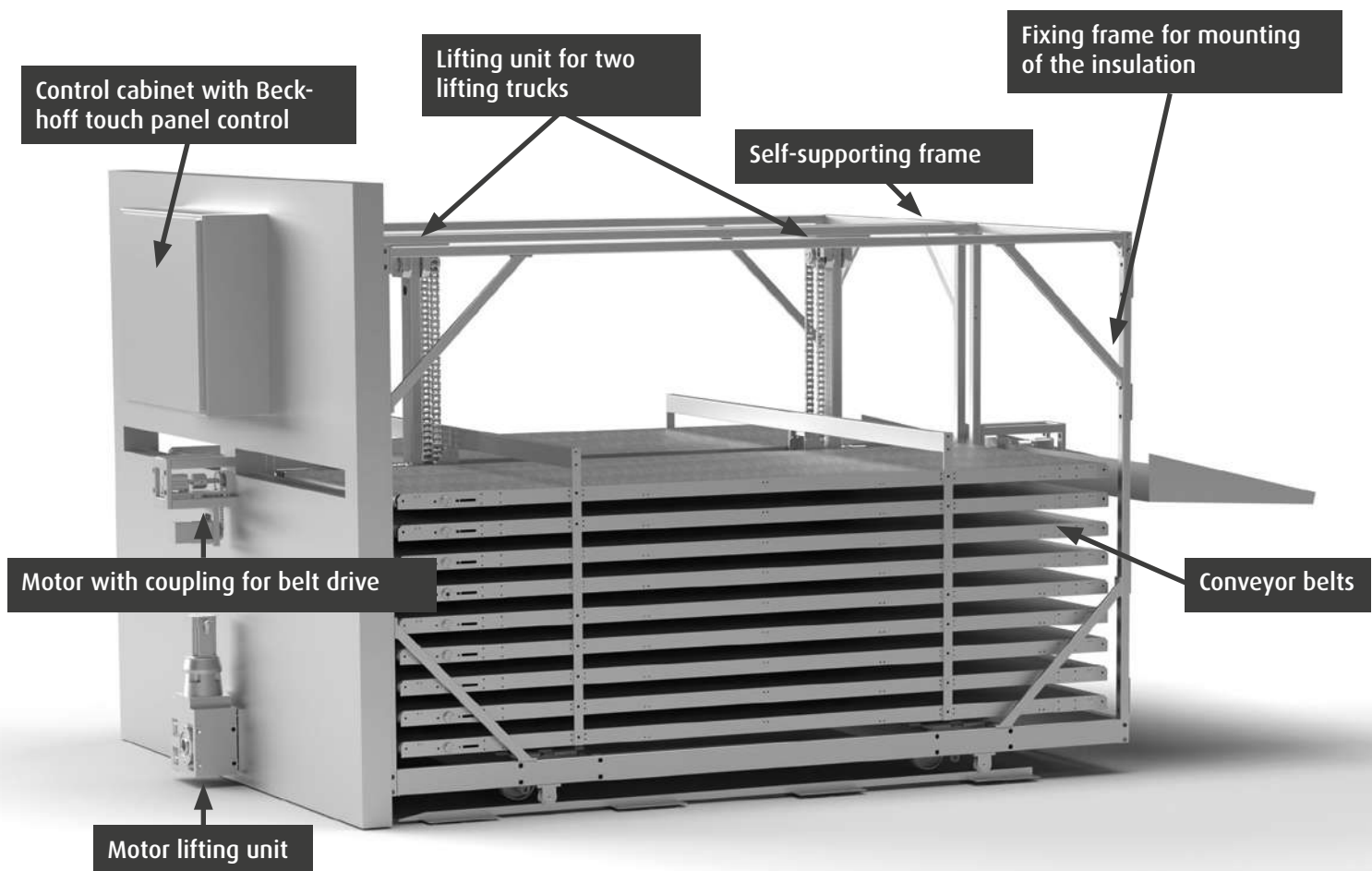
Please consult our sales operators.

TECHNICAL DETAILS

Useful freezing area	21-69 m ² or larger
Dimensions of the frozen products	height max. 60 mm, Diameter min. 10 mm
Freezing time	Adjustable settings for processing time
Temperature range	-40°C to +40°C
Connections (without cooling)	16 A/400 V, 6 bar compressed air, W-LAN/network connection for remote maintenance



You can find more information and videos about the Eco-Froster on our website: www.wp-riehle.de



**DEEP FRYING
(PASTRY)**

**DEEP FRYING
(SAVOURY)
& COOKING**

**IN-STORE /
SNACK
BAKING**

**LYE
APPLICATION**

**TRAY
CLEANING**

**ROBOTICS /
AUTOMATION**

**BAKERY
FREEZING
SYSTEMS**

**CUSTOMISED
SOLUTIONS**

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