



RADINI

by Rademaker

Where artisanal meets automation

BREAD PRODUCTION LINES

Processing between 250 and 1.200 kg of dough per hour

PROCESS VARIOUS DOUGH TYPES

Unlock a world of creativity and possibilities

Process various dough types for a wide range of products with Radini. Here are some examples to spark your imagination:

- Direct/green dough, which is immediately processed after kneading, resulting in a fine crumb structure.
- Pre-proofed dough, with a more open/airy crumb structure.
- Dough with a high-water percentage, such as ciabatta.
- Dough with incorporated fruits and/or nuts, to produce, for example, focaccia with olives or Christmas bread.
- Sourdough, multigrain and rye dough varieties.

Gentle dough handling

The dough batch is transformed into a continuous sheet while retaining the integrity of the dough structure. Thanks to the innovative Dynamic Pre sheeting System, the Radini production line is suitable for handling a variety of dough types.

To ensure a consistent and stress-free dough sheet all sheeting components are executed with enclosed rollers and dough outfeed conveyors to compensate for height difference between the roller and the transfer belt.



Ciabatta

A pre-proofed dough with a high water percentage



Christmas Bread

A firm dough with fruit and nuts incorporated



Focaccia

A pre-proofed dough incorporated with olives



Multigrain

Firm dough with bran and germ



Brioche

Sweet soft dough

Dough processing
Watch the video



Base configuration, consisting of a Dynamic Pre Sheeter, travelling guillotine and handwork station. Additional units are modular and can be added.

PRODUCTION WITHOUT REWORK DOUGH?

Rework is a choice!

Save valuable raw materials, time, and money by producing without the need of rework dough. By effectively utilising the dough sheet, the Radini bread line allows you to eliminate rework entirely.

- Cut products
Zero rework dough is achievable, depending on the appearance of the cutting edge.
- Moulded products
Standard without rework dough.

Simple and quick adjustment of sheet width

Exchangeable rollers allow you to quickly adjust the sheet width in just a few steps. The rollers are lightweight and can be changed by a single person. Quick changeovers & easy cleaning save time, allowing you to produce multiple product variations.

By enclosing the dough sheet and combining it with smart controls, we create a dough sheet with consistent volume. This allows you to use 100% of the dough sheet.



Zero rework dough
No waste, less labour



What is rework dough?



Once the dough is sheeted to its final thickness, it is ready to be formed into the desired product. For a uniform sharp or sealed cutting edge, a minimum of side trim is needed. As shown above, rework dough can be collected and re-used in the next dough batch.

SHAPING CUT PRODUCTS

Alternate between different product shapes and sizes!

Produce a variety of artisan style or traditional breads and buns in different volumes and shapes. You can cater to a range of demands - whether focusing on cost-effectiveness or creating premium, luxury items. Switch between these needs and optimize the use of your Radini bread line.

Use our traveling guillotine for producing items such as:

- A crispy, elongated ciabatta or pavé
- A square multigrain bun
- Omega or demi baguette...

With different guillotine cutters, you can create various baguette shapes, such as rounded or diagonal cut points or half-round edges for Turkish loaves.

Your creative touch

By incorporating a manual process step, you can simply expand your product range. Create twisted or braided breads or add decorations.

Process

Once a uniform dough sheet is created, it's ready to be shaped into any form. Dough lanes are spread, after which products can be cut with the use of our traveling guillotine.

Baguette production
Watch the video



Excess dough is automatically removed

When producing omega baguettes, some dough remains between the products. These dough parts are automatically rejected and collected by our rework conveyor.



Diamond shape



Ciabatta



Baguette (cut)



Turkish loaf

SHAPING ROUNDED PRODUCTS

Buns with a soft or crispy crust

Produce exquisite round products from various dough types with different structures. For buns with a soft bite, or a nice crunch. Vary in size, to create small buns or larger boules, and enhance the products by adding seeds.

Use our cuprounder for producing items such as:

- Small buns
- Rounded loaves

All buns and loaves can be produced with or without inclusions. With interchangeable moulding cups, you can create a variety of product sizes. This automated process replicates the traditional manual rounding technique, saving valuable time while maintaining quality.

Your finishing touch

Incorporate a manual process step and effortlessly expand your product range. Add decorative patterns or finish your buns with seeds for an artisanal touch.

Process

The process starts with the creation of a uniform dough sheet, which is then cut into lanes and spread. Subsequently the dough lanes are cut into squares, which are shaped into round dough products using the cuprounder.

Bun production
Watch the video



Advantages of the cuprounder

The Cuprounder is designed for maximum flexibility, serving as an extension of the bread line and its capabilities. It can process a variety of doughs, including pre-proofed doughs, without compromising quality. Transitioning from manual to automated production ensures efficiency while maintaining artisanal standards.



Hamburger brioche bun



Small rounded buns



Round bun middle



Round loaf TA 170 pre-proofed

SHAPING ROLLED PRODUCTS

Rolling, rolling, rolling!

A wide variety of products and sizes are possible, including:

- Sweet brioche bread
 - Petit pain
 - Baguette
 - Batard
 - Toast bread with fine structure
- ...and much more!

Process

Adding a mobile moulding system allows for a wide range of products to be made by rolling.

After creating a uniform dough sheet, it is ready to be shaped in any form. Dough lanes are cut and spread, after which products are cut using a traveling guillotine. Following this, the dough parts are moulded into the desired dimensions.

Batard production
Watch the video



Compact and flexible system

The moulding system is designed for easy adjustment, ensuring no valuable time is lost during product changeovers. Whether producing different items or transitioning to production runs without the system, quick adjustments are seamless. The system features a compact, mobile frame, making it simple to disconnect and clean.

This flexibility allows you to produce a variety of products and adapt your product range according to customer demand and seasonal changes.



DECORATING STAMPS AND SEEDS

Decorate your buns with (custom) stamps!

Adding stamps to buns is an easy way to expand your product range with specialty items that will delight your customers. Stamping enhances the visual appeal of your products. Whether you are using seasonal motifs, festive designs, holiday themes such as Easter, or unique patterns. Stamped buns are sure to catch the eye!

An example is the 'windmill shape', a swirl or a football shape. We dare you to experiment with different design on various buns: from classic dinner rolls to brioche buns.

Process

After dough lanes are spread, they proceed to the guillotine. With a decoration stamp mounted in the guillotine, various shapes for decoration can be added.



*Eye-catching and
Mouth-watering*

Nutty or Sweet

Add poppy, sunflower, or pumpkin seeds; raisins and chocolate for the sweet tooth. These additions not only enhance the flavour of your bread products but also give them a luxurious appearance. With minor adjustments, you can create delicious and creative variations.

Process

The Radini bread line allows you to add strewing material:

- On the bottom of the dough sheet
- On top of the dough sheet/product

Our strewers ensure that your additions are applied consistently. The strewing units are adjustable to accommodate different decoration materials.

Square production
Watch the video



SHAPING AND DECORATING MANUAL

Unleash your creativity by combining automated and manual processes!

We value the creativity and craftsmanship of bakers. Radini equipment enables you to develop new products with a variety of shapes and decorations offering endless possibilities!

For smaller production needs, you can create small dough batches or make various products from a single batch - combining the best of both worlds.

Manual shaping and decorating

Manual actions can be integrated at various stages. Consider twisting, braiding, or adding decorations. We dare you to be creative! Additionally, we challenge you to make diverse decorations after proofing the dough products. In need of inspiration? Take a look at the video below.

Make your mark!

For some inspiration
Watch the video



A SOLUTION THAT SUITS YOUR NEEDS MODULARITY

A solution that suits your needs

Our portfolio offers units that can be combined in various ways to create a production line that seamlessly aligns with your specific production needs. On this page and the next, you will find just a few of the many possibilities.

Beyond providing flexibility in terms of product range, the modular design is built to adapt to your evolving needs. You can modify the configuration and capabilities of your production line as your business grows. Expansion opportunities include adding automatic strewing, a weighing system, or tray loading capabilities. The line can be configured for semi- or fully automated setups.

Manual labour can complement automation for shaping products, such as twisting, braiding, or rounding. Hand-applied decorations, like adding almond paste for Christmas bread, or adding raisins on top of the product, further enhance flexibility and creativity in your product range.

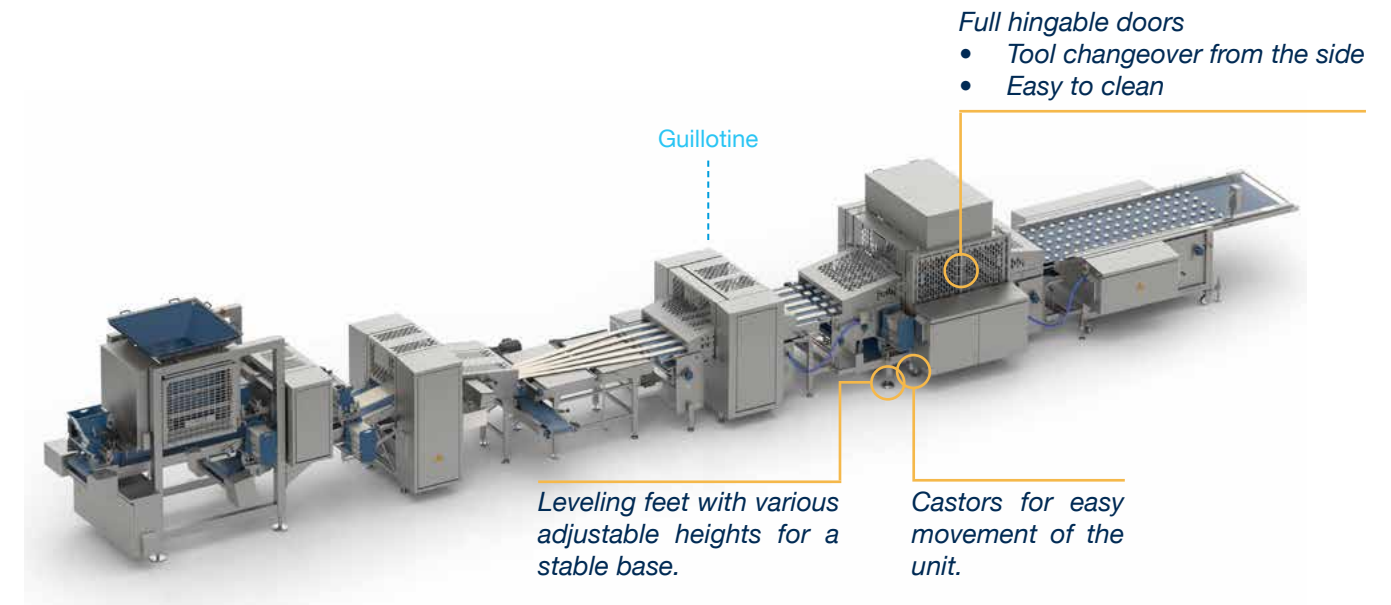
Plug-and-play units

All units following the guillotine are plug-and-play, meaning they can easily be added, as well as disconnected and removed from the production line. This flexibility is ideal for cleaning or a change in the setup of your production line to produce a different type of product. Additionally, the units are mobile, and the modular software ensures seamless recognition and integration into the system.

One example of a plug-and-play unit is the Cu-prounder, which shapes dough pieces into perfectly round bread products. You can see it illustrated and explained below.

Other plug-and-play modules:

- Degassing and jump conveyor
- Moulding unit
- Jump conveyor
- Spray & strew conveyor
- Handwork station
- Tray loader



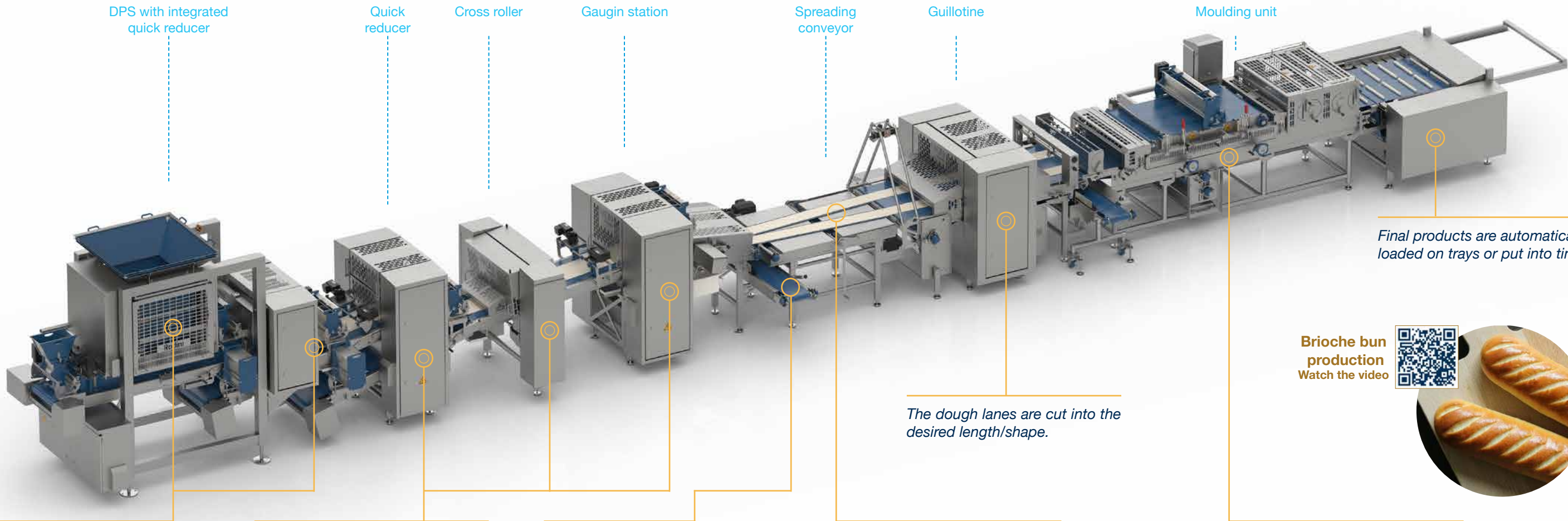
MACHINE CONFIGURATION

PLUG AND PLAY UNITS MOULDING

Explore the advantages of a modular set up!

Specifications
Working width sheeting section: 400 mm

Specifications
Working width make up section: 800 mm



The dough batch is processed into a continuous dough sheet while retaining its structure.

The dough sheet is gently formed to the required thickness and width with various units.

Rework dough, (if any), is collected.

Dough lanes are spread for an accurate tray loading pitch.

The dough lanes are cut into the desired length/shape.

Products are moulded, to shape for example a baguette.

Final products are automatically loaded on trays or put into tins.

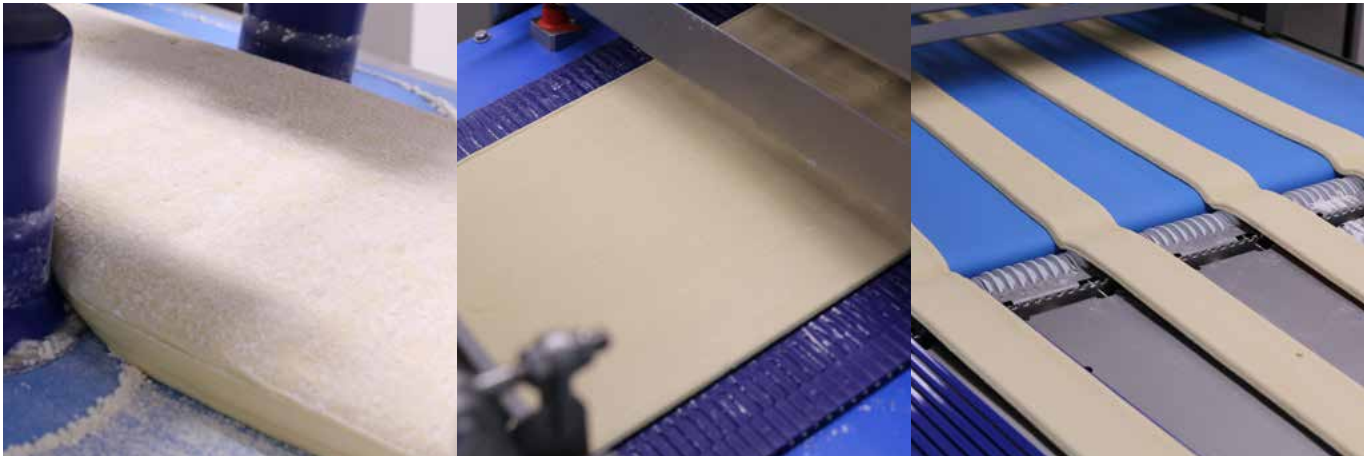
Brioche bun production
Watch the video



Sheeting section

Make up section

Tray loading



INCREASE AND BROADEN EXAMPLES OF CAPACITIES



*Increase your capacity,
broaden your product range*



The Radini bread line processes up to 1200 kg of dough per hour. The number of dough products produced per hour depends on your chosen configuration, the type of dough, the weight, and the dimensions of the dough product. Below are some examples by product group.

Cut products

Ciabatta **standard zero rework dough**

- Weight dough product: 150 gram
- Maximum product capacity: 7,200 pieces/hr

Triangle

- Weight dough product: 40 grams
- Maximum product capacity: 20,800 pieces/hr

Rounded products

Small bun

- Weight dough product: 68 grams
- Maximum product capacity: 12,000 pieces/hr

Rounded loaf **standard zero rework dough**

- Weight dough product: 1000 grams
- Maximum product capacity: 960 pieces/hr

Moulded products

Baguette **standard zero rework dough**

- Weight dough product: 450 grams
- Maximum product capacity: 2,500 pieces/hr

Artisan half baguette **standard zero rework dough**

Shown in photos 3 and 4

- Weight dough product: 225 gram
- Maximum product capacity: 4,700 pieces/hr

The specified capacities are the maximum achievable capacities. When adding manual steps such as twisting, the line speed can be reduced to ensure an operator friendly product flow.

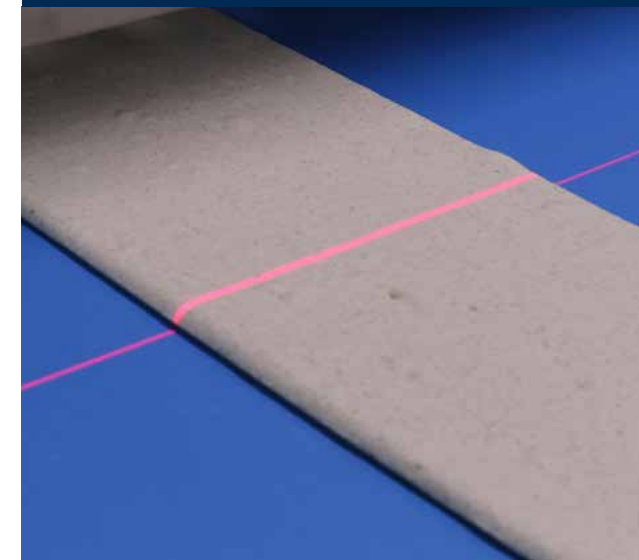
Would you like to learn more about the possibilities?

Then contact your regional sales representative or the Rademaker headquarters. We are happy to provide more information. We also regularly attend trade fairs, visit www.rademaker.com for more details.

A SOLUTION THAT SUITS YOUR NEEDS HIGHLIGHTS



*A smooth workflow with
ultimate precision*



Your creativity is limitless!

...as far as we are concerned.

Are you producing seasonal products? Or do you like to offer your customers something new? No problem! You can save an unlimited number of recipes via the HMI.

Consistent and repeatable products

The Radini bread line provides an efficient and consistent process with ease of operation. It's intuitive operating panel makes the line easy to control and adjust. Some recipe-driven adjustments are made automatically, to ensure consistent product quality. For adjustments that are not made automatically, tooling settings can be accessed and changed easily.

Tray loader

Ensure a seamless transition from production line to proofing with our tray loader. It automatically deposits dough products onto indent-, convoluted trays, peel-boards, pans etcetera, ensuring a smooth workflow.

Tray loading
Watch the video



Weighing possibilities for ultimate precision

Pricewise, it is increasingly beneficial to sell products that match or only minimally deviate from the communicated target weight. Products that are too light should be avoided and heavier products result in lost profit.

To ensure precise weight control, we offer weighing solutions: volumetric weighing with smart sensor or weighing conveyor based on load cell technology.

Volumetric weighing

A smart scanner measures the dimensions of the dough sheet. Based scanned data, the cutting length of the guillotine is adjusted accordingly.

Weighing conveyor

This conveyor measures the actual weight of the dough strips. . By forward controlled speed variation a precise cutting length of each product is achieved.

BAKERY TECHNOLOGY COLLABORATE AND SUPPORT



*Combined expertise of
bakery technology and
automation*



The Radini Experience Centres in the Netherlands and the USA provide a dedicated, professional bakery environment equipped with our Radini production lines. These facilities enable us to process customer requests efficiently and effectively.

To closely replicate our customers production environments, the rooms are temperature-controlled. The facilities also include additional equipment like a proofing cabinet, refrigerator, blast freezer, rack oven, deck oven, mixing equipment, a cleaning area, and a storage room.

Through these centres, we offer comprehensive support and expert guidance to customers looking to automate or further streamline their production processes. Whether the goal is increasing capacity or diversifying product offerings, we provide knowledge and support.

Our experienced dough technologists play a key role in this process, offering hands-on expertise to refine recipes, optimise processes, and ensure the highest product quality. Through product tests, we demonstrate how a customer's product is produced on the Radini line, providing positive insights and ideas about automated production possibilities; cooperation is key.

Additionally, interactive demonstrations give an overall impression of the production process and are most of the time scheduled for small groups of interested professionals. Beyond testing and demonstrations, our team actively supports product development, helping customers achieve consistent quality, efficiency, and innovation in their baked goods.



Our dough technologists have various backgrounds, with expertise in artisan bakeries, advanced technology, and quality control. They work together with each other and with you to achieve the best results.

SERVICE AND SUPPORT THERE FOR YOU



*Our experts are
happy to assist*



We are a total solution provider that takes the burden off our customers and believe that long-term partnerships deliver the best results.

Service and support

We understand that transitioning from manual to automated production has an impact on your processes and organisation. We are here to support you and address any questions you may have.

Our team of professionals, ranging from sales to dough technologist and design engineer to commissioning engineer, are ready to assist you.

24/7 service

When you face hiccups during production, it is critical to get through these moments as quickly as possible. We offer 24/7 service to ensure you receive the support you need. Our commitment extends well beyond the point of purchase and delivery.



Maximise the potential of your Radini line

Our Academy enhances the skills of your employees, bringing significant financial benefits. Your bakery benefits as productivity goes up and performance improves. Reduction in ingredient waste, weight inaccuracies, downtime, or rejected products can lead to substantial savings.

To help you get the most out of your equipment, we are happy to share our knowledge and expertise. Contact us to learn more about the possibilities.

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by Rademaker



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SOLUTIONS FOR (SEMI-) AUTOMATED PRODUCTION OF



BREAD



DONUTS



LAMINATED DOUGH



PASTRY



CROISSANTS