



# Rademaker

*Specialists in food processing equipment*



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## *Pizza line*

When quality and quantity counts



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*Specialists in food processing equipment*





# Profitable pizza production

From pizza base to luscious topped pizzas, and from spicy finger foods to complete meals, we develop our pizza production lines to efficiently produce whatever pizza you need. Key aspects of our Pizza production lines are high precision, high capacity, flexibility and hygienic design. The line is suitable for producing pizzas in various shapes and sizes, pre-proofed or in line proofing, as well as alternative products and for varieties like pizza baguette and pizza sticks.

Two different pizza production solutions can be supplied; the Pizza Base Line and the Topping line. Both are designed for midsize to industrial bakeries with production capacity ranging from 500 kg to 6.500 kg dough per hour (special execution: over 9.000 kg per hour), consistently produced hour by hour, day by day, year by year.

With this set-up, Rademaker is unique in the market being a full solution provider as we are able to provide both a Pizza Base and Pizza Topping line. On top of that, we can also provide complete system integration solutions including mixing, proofing, cooling, baking and packaging equipment.

# Why sheeting technology?

Rademaker is a specialist in sheeting technology. We have chosen the sheeting technology above the traditional system because sheeting provides important benefits. Sheeting makes it possible to handle a broad variety of dough types, from 'green' to pre-fermented dough, all at high capacities. By using stress-free dough sheeters and laminating technology you can achieve basically any dough and pizza structure desired. Pizza sheeting is the most simple and cost-effective method for pizza production. There is no waste of dough because after product cutting the excess dough is transferred back into the dough feeder. Sheeting also enables a wide range of products and shapes to be produced on the same production system.



## Added values

- ✓ Perfect flexibility with a wide range of doughs and product that can be processed
- ✓ Consistent dough quality because of the sheeting technology
- ✓ Efficient production thanks to fast maintenance, cleaning and change-overs
- ✓ No waste of topping materials due to the full recycling
- ✓ Hygienic design lives up to the highest industry standards
- ✓ Rademaker is a full solution provider

All this results in a high-quality product and proven lowest cost of ownership.





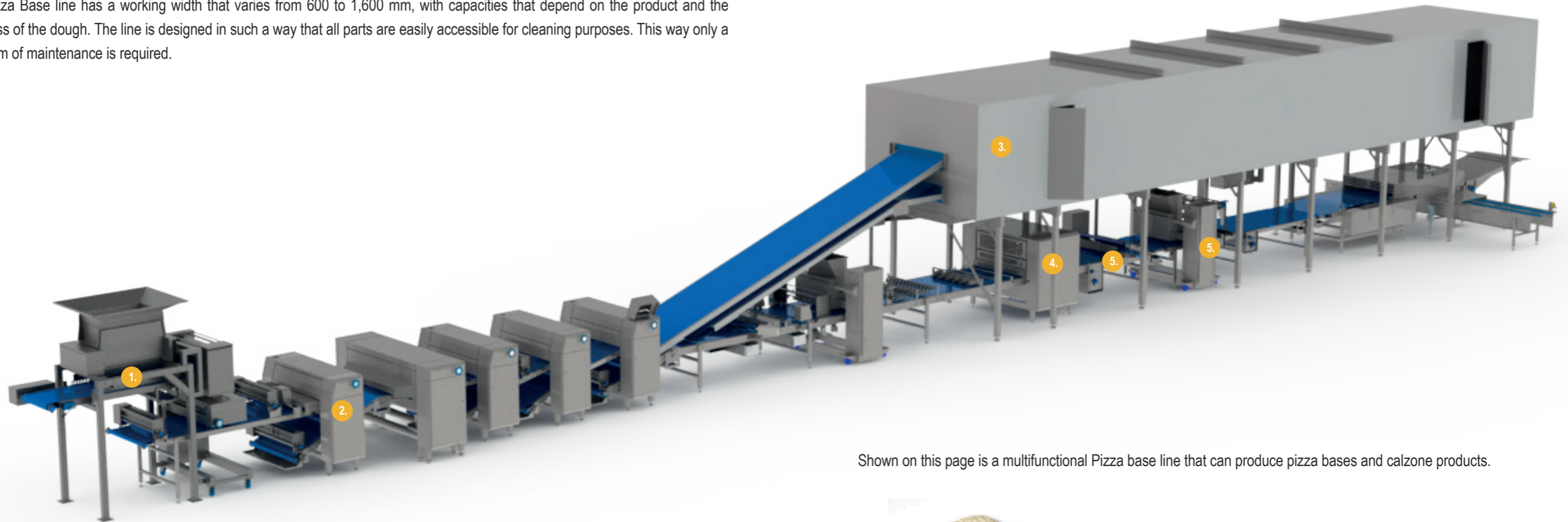
# Pizza Base line

Our Pizza base line sheets the dough to the required thickness while no oil or pans are required in the process. The line is dedicated for the production of exactly those types of pizza bases that you want to produce. In developing a solution, Rademaker will keep your specifications and requirements in mind. For both sheeted as well as pressed pizzas we have specific optimized solutions available. Either way, pizzas in any shape or form can be generated and 100% of trim dough can be reused.

The Pizza Base line has a working width that varies from 600 to 1,600 mm, with capacities that depend on the product and the thickness of the dough. The line is designed in such a way that all parts are easily accessible for cleaning purposes. This way only a minimum of maintenance is required.

## Proofing

Rademaker is able to produce and place a proofer into the Pizza Base line. It can be placed inline to proof continuous dough sheets prior to the product stamping and/or cutting and alternatively it can also proof individual dough products. Together with you we can determine which solution best suits you and your products.



Shown on this page is a multifunctional Pizza base line that can produce pizza bases and calzone products.



## Rademaker Sheeting components

The production process shown on this page is a fraction of the possibilities our Pizza Base line offers.



**1. Pre sheeters:** generate a homogeneous and stress-free dough sheets of any type with excellent weight control at the highest quality. The dough structure is untouched.



**2. Reduction stations:** reduces the dough sheets thickness to the final thickness.



**3. Proofing:** enables the dough to develop its structure and helps to develop taste.



**4. Product cutting:** cutting products out of the dough sheets. Multiple shapes and sizes are possible.



**5. Dough recycling:** the rework dough is transported back to the pre-sheeter. This brings our Pizza Base line to a highly effective and cost saving level.



**5. Sauce depositing:** Tomato sauce is deposited on the pizza base. Various methods are available, for instance showerhead depositing and stripe depositing.



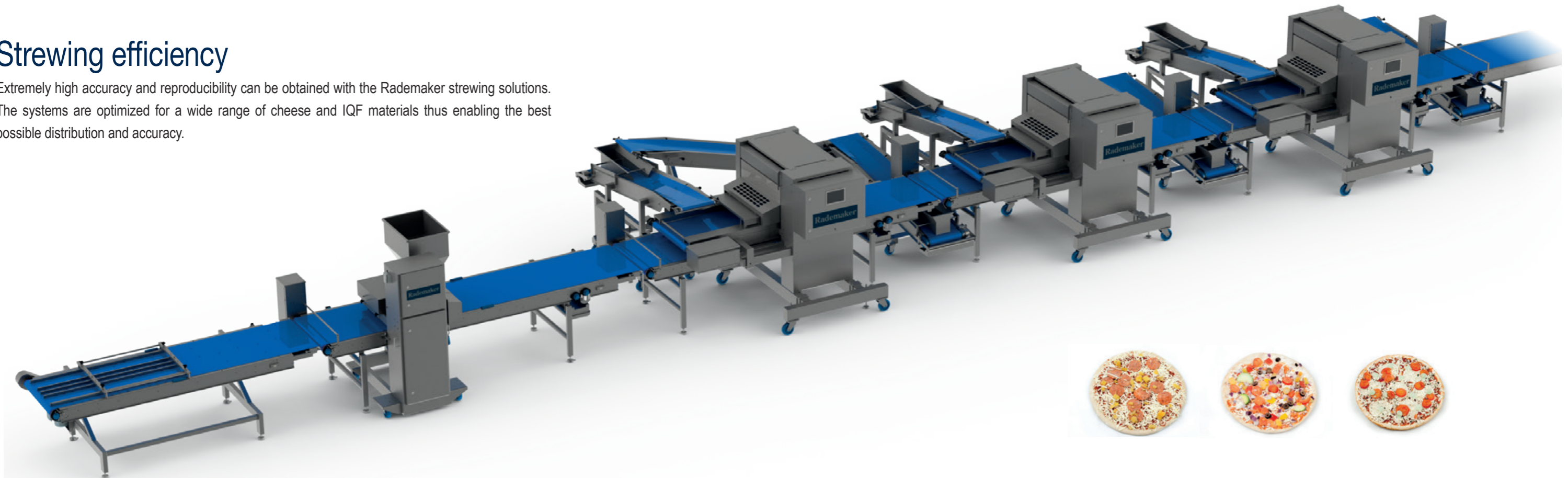
# Pizza Topping line

The Rademaker Pizza Topping solutions are automated systems that create topped pizza with tomato sauce, vegetables, grated cheese, ham and/or pepperoni cubes, etc. All type of toppings and Individual Quick Freezing (IQF) materials can be processed. The system is based on a modular design that ensures flexibility and fast product change-overs.

Rademaker developed two complimentary Pizza Topping systems to top your pizzas exactly the way you want. Both Topping systems feature a variety of depositors and applicators. The modular design of the lines ensures flexibility and fast product changeovers. With respect to cleaning, maintenance and operation, the Rademaker Pizza Topping systems are designed to meet the latest technical, hygienic and technological standards.

## Strewing efficiency

Extremely high accuracy and reproducibility can be obtained with the Rademaker strewing solutions. The systems are optimized for a wide range of cheese and IQF materials thus enabling the best possible distribution and accuracy.



### Strewing methods

#### Waterfall strewing



Product size flexibility is offered with this system, as several pizza shapes and sizes can be topped on the same system without change-over parts. This system offers the highest output and strewing accuracy. A recirculation system is integrated to recirculate the topping material.

#### Target strewing



Fixed shape travelling hoppers for 'indexed' pizza topping systems leaving pizza rim free of topping. This system doesn't need a recirculation system. Change-over parts are needed when different sizes or shapes need to be topped.

## Rademaker Topping components

Our Topping line consists out of the following production processes:

Sauce depositing



Cheese strewing



Recirculation system



Individual Quick Freezing (IQF) strewing



Recirculation system



Herb strewing





# Efficiency & Functionality

The overall set-up of the line is designed for high production efficiency. This is enabled by easy removable tools, reduced change parts, exchangeable scrapers and bins and various options to minimize required cleaning efforts.



*Efficient, error free operation and tool change-over is realized by applying Unique Fit Tooling. Because of the lightweight and more compact tooling, handling and detaching the tools is as easy as possible and can be done by one person.*

## Flexibility

A wide variety of different pizza products and shapes can be produced on the same production line. With a set of different cutting change-over tools, it is possible to produce round or square pizzas, pizzas with upstanding rim or pizza baguettes. It can all be produced on the same production line.



*Various product shapes can be cut by the same cutting module and cutting change-over tools.*

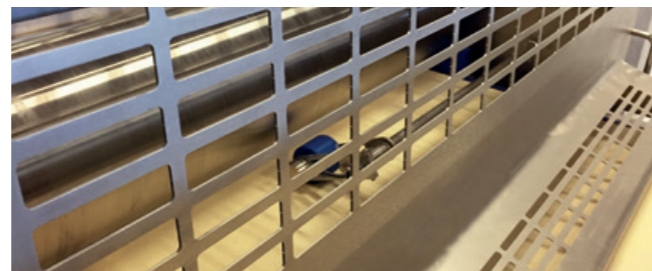
## Efficiency

For an even better strewing weight accuracy, Rademaker developed the Double strewing system. This system consists out of two strewing applicators. The first applicator feeds the second one. This way a more consistent and evenly spread topping is made possible. It is even possible to add a weighing conveyor to this system to create the highest possible strewing accuracy.

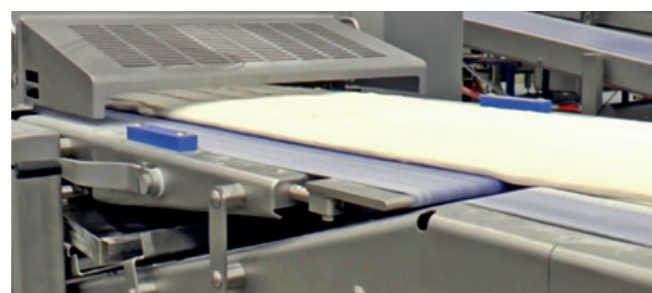


## Functionality

Rounded edges and fully open covers on both sides of each unit are applied throughout the system. The best possible accessibility of the process is achieved by optimizing the space between the working stations. Tools that are attached to the machine, are mounted with standoffs. With a minimal distance of 1 inch for cleaning purposes. Lightweight safety covers with extra handles enable ergonomic operation.



*An open design with high visibility of the process results in fast product set-up.*

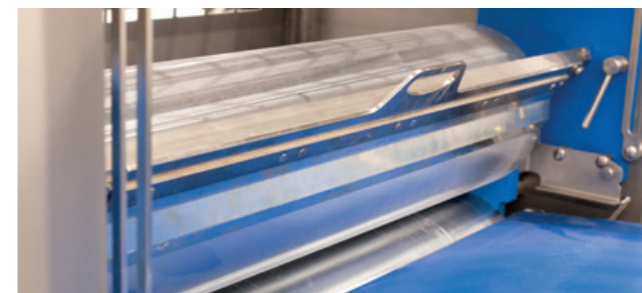


*Elimination of falling heights: by minimizing the transportation height throughout the production line, it results in a stable and relax dough sheet.*

# Hygienic Design

The Pizza line is designed according to the highest Rademaker hygienic design standards. These guidelines are directly derived from various high-end requirements for hygiene & cleanability such as the GMA standard and EHEDG recommendations. With excellent machine surface finishing, tilted surfaces, rounded frames, FDA approved materials, minimized hinges & bolts and numerous other items, the line is living up to the highest industrial requirements for hygiene. Elimination of recesses, cavities and dead corners is achieved. An open design enables easy cleaning without reducing the operator's safety. Belt lifters and retractable belt tensioners achieve accessibility for cleaning and inspection.

Apart from unmatched product quality and practically zero risk for contamination, the overall combination of the above improvements results in reduced cleaning time, increased production time and strongly reduced maintenance. Needless to say that this new Rademaker production line is fully designed and approved for wet cleaning, which was introduced in the industry by Rademaker over 25 years ago.



*Wear resistant roller scrapers are used to keep the rollers of the reduction stations as clean as possible.*



*Accumulation of dirt and dust is reduced due to the application of stand-offs.*



*Opening covers on both sides of the machine.*

## Sanitary operation

Sanitary operation is achieved by using lifetime- or non-lubricated bearings throughout the direct product zone. Direct-drive motors are positioned outside the product zone as much as possible. All motors contain food approved H1 lubricants, this results in zero risk for lubrication contamination. Outside the direct product zone sealed bearings are applied which can be lubricated during or after the production run.

To keep the rollers of the reduction stations as clean as possible they are fitted with wear resistant roller scrapers which were selected after extensive testing.

To achieve an easy to clean surface the machine is executed with round edges, tubes, ducts, angled surfaces and a smooth surface finishing (Ra <0.8) in the production zone.





# Customer satisfaction is key

Based on 40 years of Rademaker expertise, our production lines are considered as a sublimation of technological excellence gathered over time resulting with high product quality at the lowest possible cost of ownership!

## Unmatched 24/7 Service

Rademaker supports your production process every way we can, 24 hours a day, 365 days a year. Our service doesn't stop after the delivery and installation of your equipment. We can provide a full range of services to cover all system and process related issues through the operational lifetime of the machinery.

- ✔ 24/7 Service Helpdesk
- ✔ Customer Training
- ✔ Preventive and corrective maintenance
- ✔ Spare parts
- ✔ Upgrades, refurbishing & optimising

## Technological support

To be your partner for new product development and consultancy, we have, since 2006, opened the Rademaker Technology Centre (RTC). Here, the development process of a Rademaker production line starts. It features several pilot lines for any bakery product. The testing rooms are climate controlled, so the customer's production situation can be created. Rademaker technologists develop the products that the customers demand. Eventually, these products are translated into a Rademaker production line.



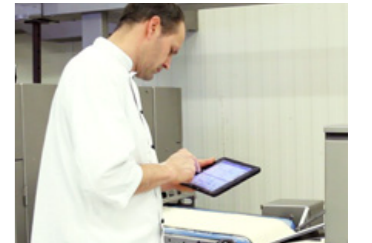
## Rademaker Academy: training & sharing know-how

Technology know-how is one of the key items that is required when a production line is installed, and the production process starts. More specifically the detailed know-how on sheeting processes, production line operation and dough processing are often lacking. This lack of know-how can result in problems affecting the overall cost and time to market. But also, raw material suppliers who see the traditional bakery industry shift more and more towards sheeting technology require more knowledge. This is why the Rademaker Academy started; to preserve and share bakery knowledge through education and training.



## Controls

Great care is given to the new user interface, the central interface size has increased to 22". The touch panel position can be easily adjusted to the desired working height. An iPad control is optionally available to enable remote operation at any position in the line. Our control platform enables OMAC based data exchange with neighbouring (third party) equipment. Advanced data processing enables on-line monitoring and optimization of equipment efficiency. Fast start-up and reduction of flour usage are achieved due to the smart combination of process and recipe information. The existing cascade system & automatic belt speed adaptation (DDIC / Dough loop) is adapted to fit the increased hygiene demands but remains part of the machine design. The advanced control system features fully automatic speed adjustment and enables the different sections to operate independently. While the last dough part of the production run is processed towards the end of the line, the beginning of the line is ready for cleaning or for the production of another product.



## Continuous innovation and innovation

10 Years after the formal start of the Rademaker Research & Development (R&D) Department, it moved to its own building; the Rademaker R&D Centre. It contains a dedicated working space for R&D, where modules, lines and processes are tested. The R&D Centre underlines the leading position that Rademaker occupies in the market in the field of innovation. Besides the fact that it expresses our dedication to development and innovation, it is also a promise. A promise to keep working on improving the machine performance and finding innovative, effective production solutions. To prepare ourselves for the future, setting up our independent R&D department is an important resource. This way we can keep pro-actively approaching the market and give a founded advice towards our customers.



## Inhouse production

The complete production process of our equipment takes place in two state-of-the-art production facilities, covering a total of 20.000 m2. The quality of our production lines are derived because the production team consists of our highly qualified craftsman and no concessions are made regarding materials used in our production lines.

## Turn-key solutions

Rademaker is experienced as system integrator. Our Systems Integration Division is the result of our client's desire to have Rademaker take control and responsibility for a part or the complete bakery system. The benefit being our clients can leverage Rademaker's decades of international bakery experience while focusing on their day to day operations and core business. Additional advantages being one point of responsibility, innovation of system design using tier one equipment suppliers, and efficiency of communication. Our System Integration Division is located in two locations; The Netherlands and the USA. They work closely together and guarantee a worldwide coverage of System Integration services for Rademaker's worldwide customer base.

