

Crusto bread line

When quality and quantity count



Rademaker

*Specialists in food
processing equipment*

Our daily bread

Bread comes in many shapes and sizes. This staple food is on the daily menu of people in virtually all corners of the world. We, at Rademaker, have managed to transform the traditions of the past into robust, state-of-the-art industrial bakery production lines. Today, the ever changing need for new types of bread reflects even faster changing consumer attitudes. Rademaker is familiar with types of bread from all over the world. We have incorporated all of this know-how into the flexible Crusto bread line that will allow you to anticipate the future requirements of your customers. It is designed to produce a wide range of breads from

soft dough, strongly hydrated dough, pre-fermented dough, bio dough and firm dough. The unique modular design of the production line allows for fast product changeovers and for expansion with customized additions with which you can easily adapt your product range. Designed to meet the highest hygienic and safety standards, the Rademaker Crusto bread line will yield maximal results in terms of product quality and return on investment, with a focus on ingredient and waste reduction. Capacities range from 500 kg - 9.000 kg per hour, consistently produced hour by hour, day by day, and year by year.

Founded in 1977, Rademaker was one of the first companies to specialize in the development of innovative solutions for the bakery industry. Our bread lines reflect a wealth of know-how of dough, production technology and high quality final products. As a front runner in our field, we offer solutions that have your specific requirements as a starting point, and 24/7 after-sales and service support.

Rademaker offers modules for the following processes:

Sheeting



Bread dough pre-sheeters to generate stress-free dough and consistent sheets



Optional: Folding & laminating to obtain a finer and more regular cell-structure and stronger dough



Reducing steps for a calibrated sheet (width and thickness)

Make-up process

Various modules are available to shape the final product.



Width cutting and spreading



Guillotine for product cutting



Optional: Bottom seeding

Why sheeting technology?

Rademaker are specialists in sheeting technology. We have chosen the sheeting technology above the traditional system because sheeting provides some important benefits. Sheeting makes it possible to handle a great 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 bread structure desired. Our Crusto breadline concept allows you to combine traditional bread types with artisan bread types, all produced on one sheeting system.



Handling



Optional:
Multi-lane weighing
and cutting



Optional:
Degassing & moulding



Optional:
Rounding



Optional:
Top strowing of a
variety of materials



Optional:
4- and 6-Pieces
system (for an extra
fine crumb structure).

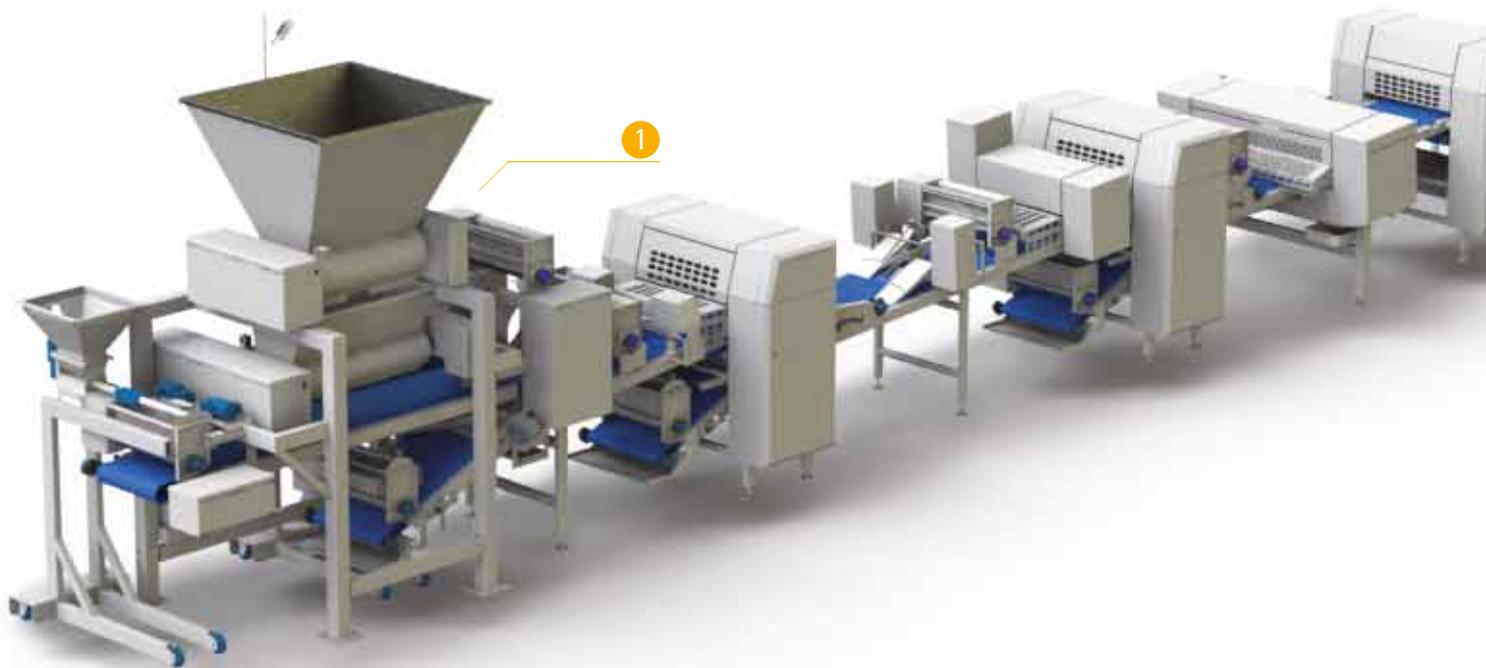


Tray loading

System integration. In addition to the Crusto bread line Rademaker also provides complete system integration solutions that may include mixing, proofing, cooling and baking equipment.

Wide product assortment at significant capacities

The Crusto bread line is developed to produce a wide assortment of breads for mid-sized to industrial bakeries. Whatever bread product you need, the Crusto bread line can make it. The line consists of a number of innovative and versatile modules on wheels that can easily be positioned in any required line order. This flexibility is key when it comes to configuring your application and managing production efficiency. When you choose for the Crusto bread line, we will provide you with the best solution for your situation, even if this means developing a customer-specific module.

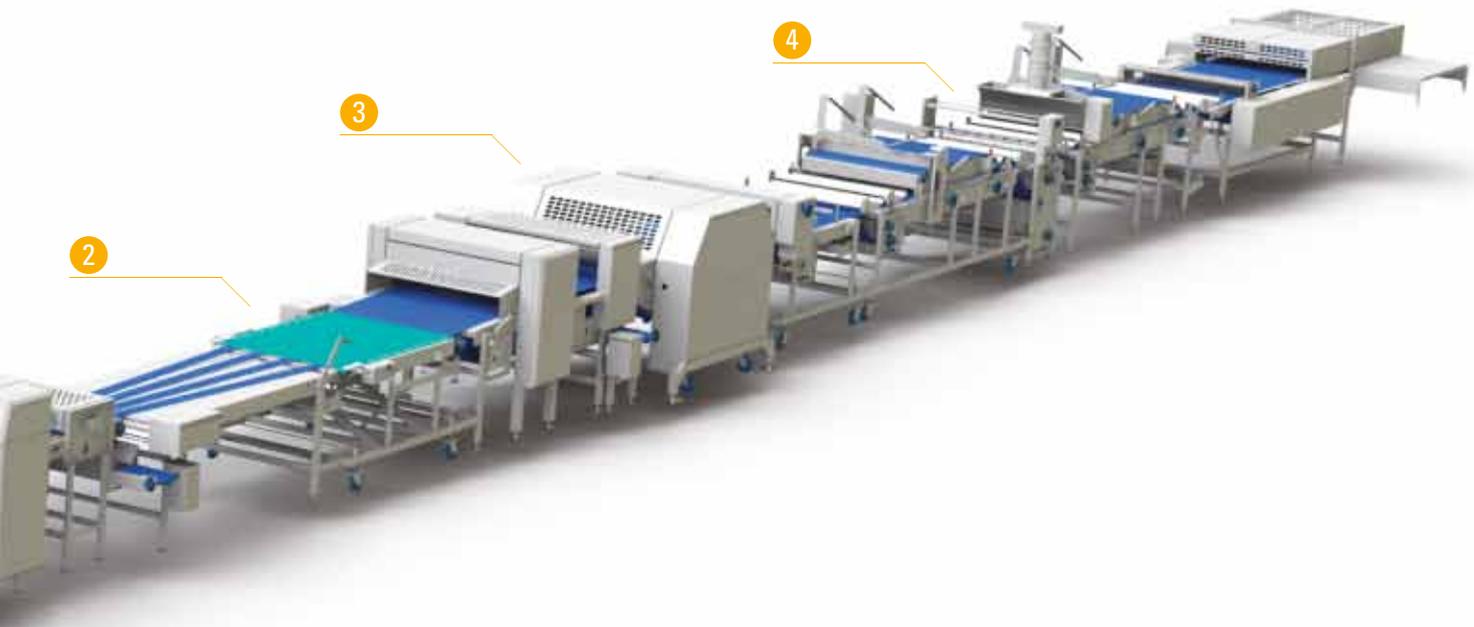


The line configuration shown on this page is only an example of the many possibilities the Rademaker Crusto bread line offers. Our specialists will be happy to apply their knowledge and experience in helping you determine the solution that best suits you and your products.

Line control



The Crusto bread line is equipped with a PLC controller for a user friendly line operation and recipe management. 60 Different recipes and line settings can be stored. Featuring a 10 inch color touch screen, automatic speed and height adjustments are automatically re-calculated and changed (cascade). Maintenance assistance per section and manuals are available on screen. Individual section control for short recipe changeover and higher production efficiency, for example cleaning can start at section one while production is still running in section two. The integrated control board comes standard with the bread line, but it can also be supplied as a mobile unit. This allows the operator to walk along the line and follow the dough production process, making it a time-saving and user-friendly operation tool.



- 1 Bread dough pre sheeters:** Rademaker bread dough pre sheeters generate stress-free dough sheets of any type with excellent weight control at the highest quality. Capacities ranging from 500 to 9.000 kg/h. The dough structure is untouched because of the dough friendly handling.
- 2 Weighing:** The patented Rademaker weighing conveyor achieves very high product weight accuracy resulting in efficient production of your bread products.
- 3 Rounder:** The Rademaker bread rounder transforms square dough pieces into rounded buns, varying from 40 to 800 gram a piece, capacities ranging between 920 to 1850 kg/h.
- 4 Moulding:** a combination of different moulding belts where the dough is being rolled to perfectly shaped rolled bread products and baguettes.

Unlimited variety for the best quality

Versatility is key in the Rademaker Crusto bread line. Thanks to the modular set-up, this flexible production line allows you to produce a wide range of breads by simply exchanging one or more modules.

A good recipe is the very basis of your bread quality. As it is our quest to produce a wide variety of high quality breads, the Crusto bread line is capable of handling a large variety of recipes, including those for breads with a high water % (strongly hydrated) or low salt content, with bio ingredients, or gluten free, pre-fermented, Levain, mother dough, biga and sponge dough. All these recipes result in a very wide range of bread products. If you want to produce tin breads we focus on achieving a fine and consistent crumb structure, as with the high-water absorption artisan breads we focus on obtaining a light, authentic and open bread structure. Whatever bread product you desire to produce, dough processing holds no secrets to us.

While the Crusto bread line is developed to produce an extensive and international assortment of breads, we can take the extra step and apply one of the major strengths of Rademaker, namely developing customized modules tailored to your specific needs.





Overview of the most important bread shaping methods:

Cut breads



After sheeting, the dough is shaped in rows by rotating knives or guillotine. The result is a wide variety of breads that include ciabatta, triangles, square buns, hexagonal, cut baguettes, cut petit pain and bara rustika, flatbreads, pita and pizza.

Rolled breads



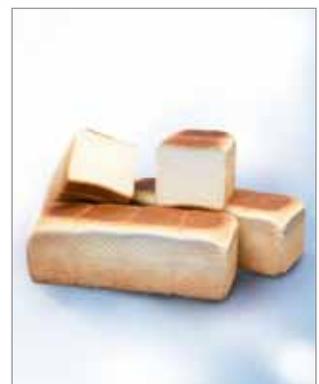
After sheeting, the dough is cut using the guillotine. Next, Rademaker's moulding technology is applied to roll and shape the dough. Rolled baguettes, rolled petit pain and bara rustika, free standing bread, tin bread, toast bread (open & closed top, 4 pieces), brioche and rolls are the result of this method.

Rounded breads



After sheeting, the dough is cut and rounded using the Rademaker rounding unit, resulting in traditional breads such as boulé, rolls, sandwich rolls and hamburger buns.

Tin breads



Cut and rolled dough pieces can be placed into baking tins. The final products of this process include tin bread and toast bread (open top, closed top, 4 pieces and multi-pieces) and typical English sandwich bread.

Continuous improvement and innovation

When you choose Rademaker as your partner in bread lines, you choose the very best. We listen to customers, keep close track of market developments and treasure the feedback of our service engineers. This enables our Research & Development department to develop innovations you can face the future with. Our robust and durable production lines are built from first-class materials by our qualified professionals. Special components are sourced from selected third party suppliers

with a proven track record. Rademaker equipment meets international food processing standards and is designed for wet cleaning. Hygiene and safety are top priorities. The quality that results from all of this and of which we are so proud, is reflected in every single component of every production line we make and in every service we provide. A continuous improvement program ensures that this high quality is maintained at all times.





Rademaker laminating and folding technology

Folding and laminating can give you several benefits. Layering of the bread dough can help you to influence the structure of your final product, for example a better oven spring and a fine crumb structure. The dough is laminated by a laminating retracting belt and is placed in between the sheeting components of the bread line. Rademaker designed a special in-line laminating system that gives the opportunity to keep the configuration in a straight line. The laminating and folding technology also provides operational advantages like flexibility of the dough sheet's width.

This Rademaker technology is optimized to gain fine structured tin breads and toast breads (open or closed top, 4 pieces or multi pieces). Also free standing breads can be produced using this technology. We kindly invite you to our Technology Centre to see the impact of laminating for yourself.



Rademaker Technology Centre (RTC)

We do more than producing dough processing machines alone. The development process of your production line starts in our Rademaker Technology Centre (RTC). Our Technology Centre features several pilot lines for any bakery product, whether bread, puff pastries, croissants, pizzas and flatbread or specials such as gluten-free or reduced salt products. If you want to further improve your existing products or develop an entirely new product, the specialists of the RTC are at your service. In an optimal testing environment with temperature conditioned rooms for dough make-up, ovens, proofers, mixers and anything else you might need, we test products and processes.

Whatever recipe your product desires, dough processing holds no secrets to us. After having translated your wishes and requirements into a fully operating production line, it is important to transfer knowledge to your staff for a good performance. The RTC employees will enjoy starting up your production and train your staff to operate the line. We gladly share our technical and technological know-how and experience. The Rademaker Technology Centre is our recipe for the production lines solutions designed for you: a unique combination of proven and new technology plus attention for detail, all based on your own requirements.

Rademaker

Customer satisfaction is key

Rademaker's technology and product-driven research has resulted in a bread production line that is unmatched. To sum up some of the benefits, the Crusto bread line offers:

- **High bread quality at significant capacities**
Easy handling of pre-fermented doughs, securing optimal gas retention. Increased water percentage results in softer bread with an artisan look, feel and taste. Also a very fine dough structure can be obtained for non-artisan bread types. Capacities ranging from 500 to 9.000 kg/h.
- **Flexibility & line efficiency**
Modular design for a wide variety of products, enabling quick and easy change-overs. Low downtime, high efficiency and product yields, therefore a good return on investment (ROI).
- **Dough-friendly processing & well controlled processing**
Controlled stress-free dough treatment from the very beginning to the end of the process. This leads to a consistent output for any type of bread. Laser sensors that constantly control and scan the production process lead to a consistent product quality. Easy operation due to random speed changes that are automatically re-calculated and changed (cascade) and a recipe management system.
- **Safety & hygiene**
Rademaker production lines are designed using all relevant norms and regulations for safety. The Rademaker Crusto bread line is suitable for wet cleaning and build according to CE-regulations. It meets IFS, BRC, and GFSI standards. Our goal is to meet and exceed the latest hygiene and safety standards and provide also on these topics full customer satisfaction.
- **Customer requirements are met**
Customized solutions meet your specific demands. The Rademaker team will help you meet your needs by offering technological and technical support. Test facilities are available and custom-built solutions will be developed when necessary.



Rademaker service 24/7

Rademaker supports your production process 24 hours a day, 365 days a year. Our service doesn't stop after the delivery and installation of your Crusto bread line. The production line is designed to be up and running non-stop. To ensure this, and to further increase the line's life cycle, we offer a cost effective (preventive) maintenance program.



Turn-key solutions

While the Rademaker Crusto bread line is a perfect stand-alone machine, we do, however, also provide turn-key solutions. The emphasis on solid and long-standing partnerships with third party suppliers exploits our joint expertise to the fullest. This enables us to integrate your Crusto bread line with equipment of third party suppliers who are experts in their field, into an overall solution that works for you.

Rademaker

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