

Industrial production lines:

Tailor-made performance.

RONDO Burgdorf AG

RONDO Industrial Solutions
3400 Burgdorf / Switzerland
Tel. +41 34 420 81 11
info@rondo-online.com

RONDO Schio s.r.l.

RONDO Industrial Solutions
36015 Schio (VI) / Italy
Tel. +39 0445 575 429
info.it@rondo-online.com

RONDO GmbH & Co. KG

57299 Burbach / Germany
Tel. +49 2736 203-0
info.de@rondo-online.com

RONDO S.à.r.l.

67319 Wasselonne Cédex / France
Tel. +33 3 88 59 11 88
info.fr@rondo-online.com

RONDO Ltd.

Chessington, Surrey KT9 1ST / UK
Tel. +44 20 8391 1377
info.uk@rondo-online.com

OOO RONDO Rus

127495 Moscow / Russia
Tel. +7 [495] 419 51 23
info.ru@rondo-online.com

RONDO Inc.

Moonachie, N.J. 07074 / USA
Tel. +1 201 229 97 00
info.us@rondo-online.com

RONDO Inc.

Downsview, Ont. M3J 2N7 / Canada
Tel. +1 416 650 0220
info.ca@rondo-online.com

RONDO Asia

58200 Kuala Lumpur / Malaysia
Tel. +60 3 7984 55 20
info.my@rondo-online.com

RONDO China

Regional Office
Guangzhou 510623 / China
Tel. +86 20 8388 2211
info.cn@rondo-online.com

RONDO México

Regional Office
C.P. 15530 México, D.F. / Mexico
Tel. +52 55 2580 7075
info.mx@rondo-online.com

www.rondo-online.com





What can you expect from RONDO? A lot more than you imagine.

RONDO has more than 60 years of experience in sheeting and shaping dough. This is why you can expect a unique combination of knowledge and experience in dough and technology from RONDO. We call it "Dough-how & more".

Our industrial ASTec lines (Advanced Sanitary Technology) are configured for demanding hygiene requirements that comply with the GMA standard (Grocery Manufacturers Association). With heavy-duty 24/7 deployment, they uniquely combine gentle dough processing with excellent hygiene properties. They meet your demanding requirements for hygiene, process and quality of the final product.

RONDO leads in technology as in well as consulting and service. In our opinion, these issues come together to form a unit, providing us with the only way to offer you Dough-how & more.

RONDO Industrial Solutions is a division of RONDO and as the name suggests is dedicated exclusively to taking care of customers with industrial scale production requirements. Whatever bakery products you wish to produce on an industrial level, RONDO Industrial Solutions has the knowledge and expertise to provide you with the right solution. And as a truly global concern, wherever you are, we support you locally.

Do you want to find out more? Please contact us!

Table of contents

The RONDO Group	4
Dough-how & more	6
Research and development	8
Range of products	12
Dough-band former	14
Laminating lines	16
Pastries	18
Diversity of the pastries	20
Croissants	22
Bread and rolls	24
Pizza	26
Donuts	28
Ethnic food	29
Cleaning and hygiene	30
Control systems	32
After-sales service	34
Quality awareness	35
Contacts	36

Hygienic
Robust
Powerful
Industrial

Where did it all begin? In Switzerland.



RONDO Burgdorf AG, Switzerland



RONDO Schio s.r.l., Italy

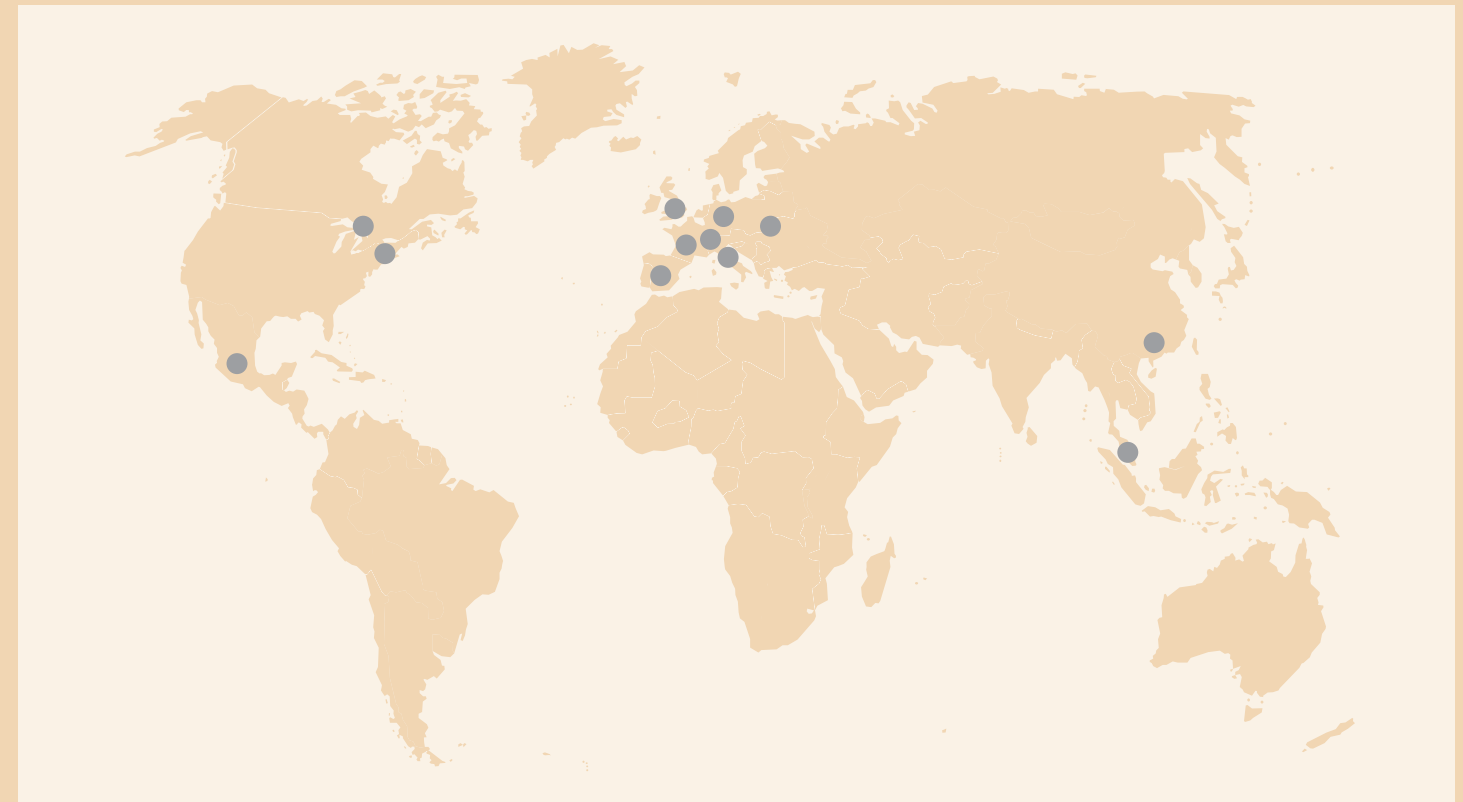


The history of RONDO began in a small workshop in Burgdorf (Switzerland). Here, at the gateway to the famous Emmental, Gustav A. Seewer invented the first dough-sheeting machine with belts in the 1950s.

With this idea, he laid the foundation for a company that now operates worldwide. Today, the RONDO Group has more than 420 employees worldwide in over 10 branches.



The origins of the company continue to set the tone at RONDO. We still view our employees as the most important potential for success today and tomorrow. They stand for Swiss quality, awareness and high innovative power. They stand for Dough-how & more.



The worldwide RONDO network

What does RONDO promise? Dough-how & more!

Dough-how & more stands for RONDO's passion for dough processing and more.

The slogan is derived directly from our strategic approach. It symbolises the unique combination of knowledge and experience in dough and technology that characterises RONDO. It demonstrates our clear awareness of your high expectations and demanding requirements.

With our ASTec lines, we offer you a unique extra: excellent hygiene properties. You can experience Dough-how & more even in the project design phase with RONDO. See Dough-how & more live in our test bakery. We accompany you during your tests and you are able to examine the results immediately, on site, in our laboratory equipped with the latest technology.



Dough-how & more: Top performance in research and development.



Top performance and innovations like those at RONDO only become possible through continuous research and development. Our extensive team of experts work continuously on new developments and customer-specific solutions.

In our demonstration bakeries in Burgdorf (CH) and Schio (IT), we experiment with ingredients and processes.

For many years now, RONDO has been collaborating with leading research establishments such as TTZ Bremerhaven (GER) and Campden BRI (UK), we are keenly involved in diverse research projects in the area of dough processing. You profit from this collaboration with regard to mechanical engineering, but also with regard to new processes and technology.





How do you avoid compromises? By not making any.



Millions of bakery products are produced every day worldwide using continuous dough bands created on industrial production lines from RONDO. Whether the production process is fully or partially automated, whether laminated or non-laminated dough is processed, whether fresh or frozen products are manufactured, our customers can rely on us across the board: on the high quality of our systems and the skilled support provided by RONDO. Precisely on Dough-how & more.

Wide range of applications.

The RONDO range of products covers a wide spectrum of high-quality and high-performance production lines. A large number of bakery products can be manufactured from a wide variety of dough types. It goes without saying that this includes gluten-free products, long-shelf-life pastries and R-T-B croissants. Our solutions are numerous as are the types of bakery products you can produce on RONDO lines:

- Puff pastries
- Danish pastries
- Croissants
- Yeast-dough pastries
- Bread and rolls
- Pizza
- Donuts
- Special pastries
- Ethnic food
- And a great deal more



Dough-band former



The RONDO range of products includes an appropriate dough-band former for every type of dough. Whether this involves very soft and pre-leavened bread dough or extremely thin dough – we have the right system to shape a continuous dough band to the quality and thickness you desire. The RONDO range of products also has proven solutions for processing gluten-free dough. RONDO dough-band formers offer high output, user friendliness, simple cleaning and low maintenance.

The MIDOS dough-band former (Multiple Industrial Dough System) in ASTec design has a specially designed roller system which works without process flour. It has been built in line with the latest hygiene criteria.



Three roll extruders are used for laminated doughs.



MIDOS processes soft doughs without process flour.

Laminating lines

RONDO has a very clear objective: to produce the best laminated dough band. Quality deficiencies in the dough band can no longer be corrected in subsequent process steps.

What is the key to the best dough band? Our dough-how shows that a minimal energy supply in the laminating process is the decisive factor. This is why our satellite head has a diameter of almost half a metre, enabling it to operate in a manner that is particularly gentle on the dough. Our satellites are available with two lower rollers, which means the rolling process runs in two steps. This maintains the layers of dough/fat perfectly.

We build laminating lines in a wide variety of configurations: in L, U or Z arrangements, inline with discharge conveyors or with a right-angled fan-folding station as well as with or without resting conveyors. Precisely the way you imagined.



The special engineering design means that the fat pump only has a marginal influence on the temperature of the fat.



A homogeneous dough band and a consistent layer of fat are the basis for the high quality of the dough band.



Large satellite heads with two lower rollers treat the dough band particularly gently.





Pastries

With widths from 700 to 1,500 mm, RONDO ASTec production lines meet the current requirements of the industry. Modular in structure, but executed individually, they will also meet your individual needs.

Accessories, all of course also in ASTec design, create limitless possibilities for the automatic production of pastry of all types.

Modern, flexible, reliable and easy-to-operate control systems simplify operation of the line.

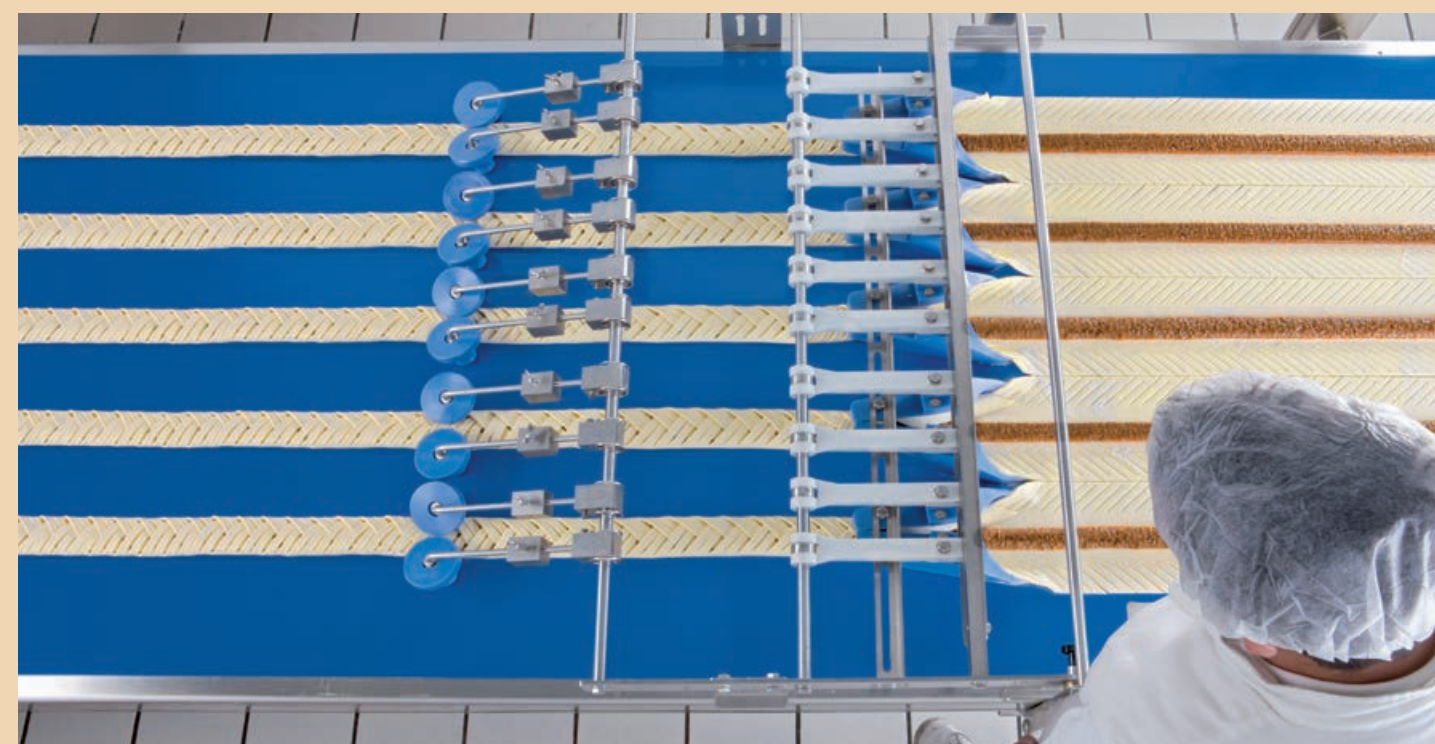
RONDO make-up lines process puff pastry, Danish pastry, yeast doughs, bread doughs, pizza doughs, thin dough and many other types of dough. Gluten-free pastries also have an important place here.



No matter whether cream, vegetable or meat fillings are involved, RONDO filling devices deposit them without difficulty.



Easy accessibility of the guillotine in ASTec design enables easy cleaning.



Numerous accessories enable the manufacture of a wide variety of products.

Diversity of the pastries

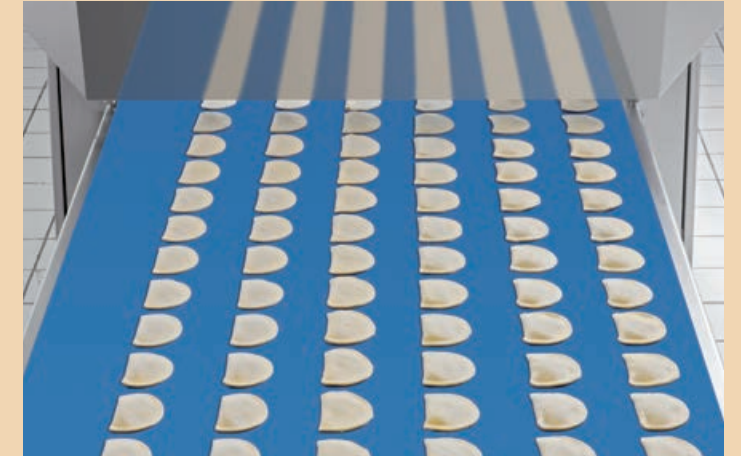


RONDO production lines set few limits on the products you can manufacture. Whether you want to fold, plait, roll, or sandwich the dough, all things are possible. Using numerous decoration tools you can make your pastries unmistakable.

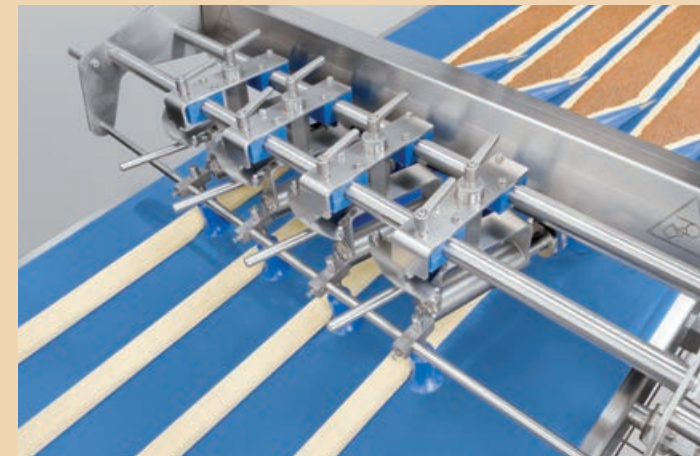
High-performance filling devices, dusters and sprayers give your pastry that certain extra touch.



With different decorative rollers, numerous product variants can be manufactured.



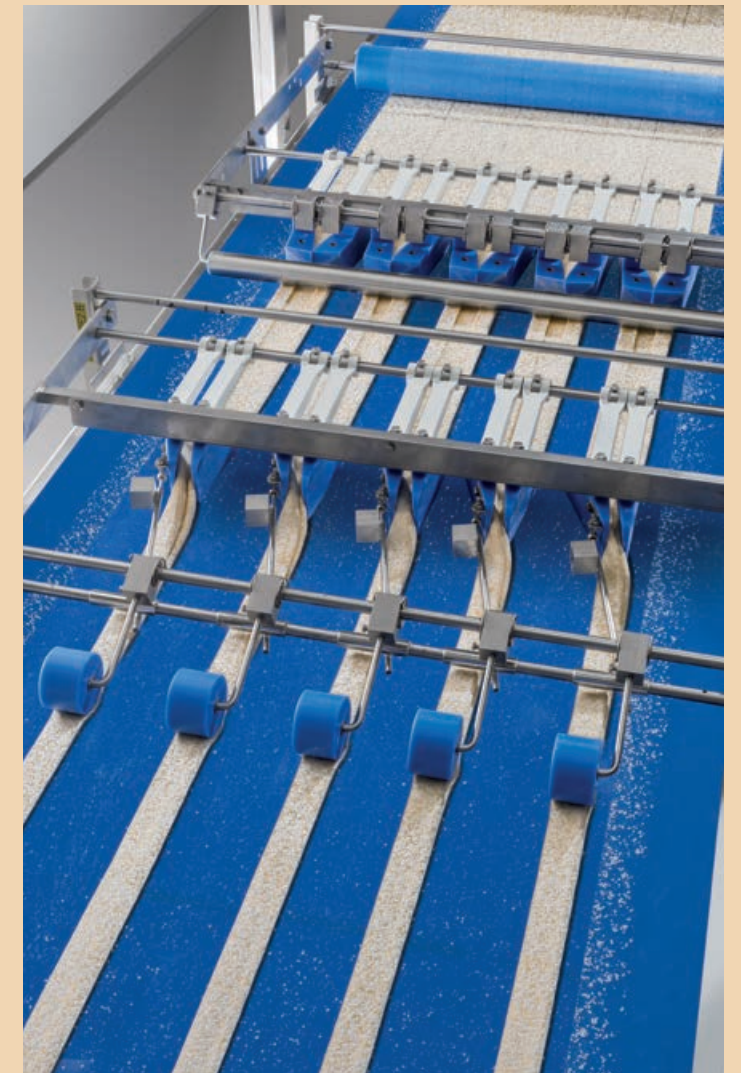
The diversity of stamped products is almost limitless.



Cinnamon (or raisin) rolls, mini cinnamon (or raisin) rolls and other rolled products can be produced at high throughput rates.



With sandwiching, you cover the filling with a second dough band and then stamp out the products.



ASTec accessories can be washed down.

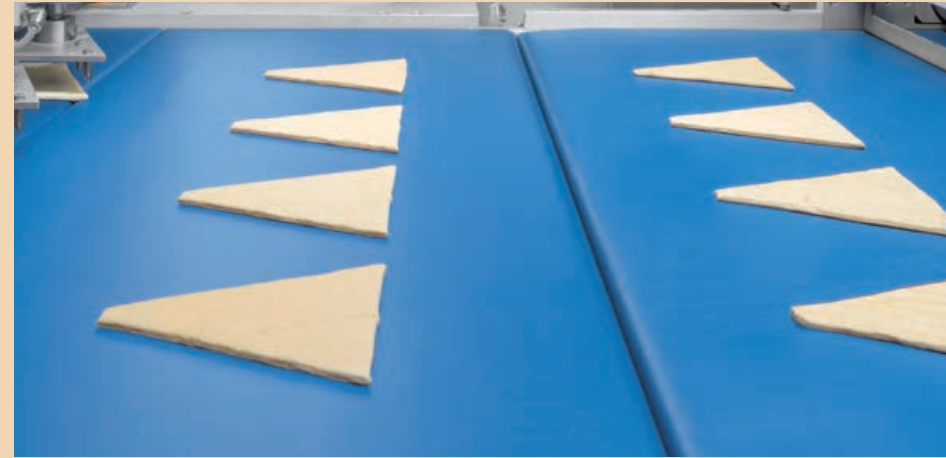
Filled and unfilled croissants



RONDO offers high-performance croissant machines for the manufacture of both filled and unfilled croissants. Our croissant machines feature high capacity and reliability. Size changes can be executed very quickly – thanks to the well-designed accessibility of the machine and the innovative design of the tools.



The triangles can be cut with a rotary cutting shaft or stamped with a guillotine from the dough band.



High-speed rotating devices controlled by servo motors turn the triangles into the exact position.



For filled croissants, you can apply the filling either in the middle or along the base.

Special bread and rolls

RONDO special bread lines are very suitable for the manufacture of bread and rolls from a soft, highly hydrogenated dough. The best way to make these baked products, e.g. focaccia, ciabatta and baguettes, is from an endless dough band.

The gentle dough-band forming, the dough guidance without drops in addition to the sophisticated accessories expose the dough to minimum stress, so that bubbles remain in the dough and no tension is created. If your ideas happen to be different, we have the right solution in our portfolio for you.



A feature of RONDO bread-production lines is the gentle processing of soft doughs.



We can apply grain or seed to bread and rolls on one side or two sides.



Folding the bread dough increases stability and volume of the rolls.



With the MIDOS dough-band former, you achieve the desired dough structure.



RONDObot is a rounding tool to mould high hydrated square dough pieces into round artisanal breads and buns.

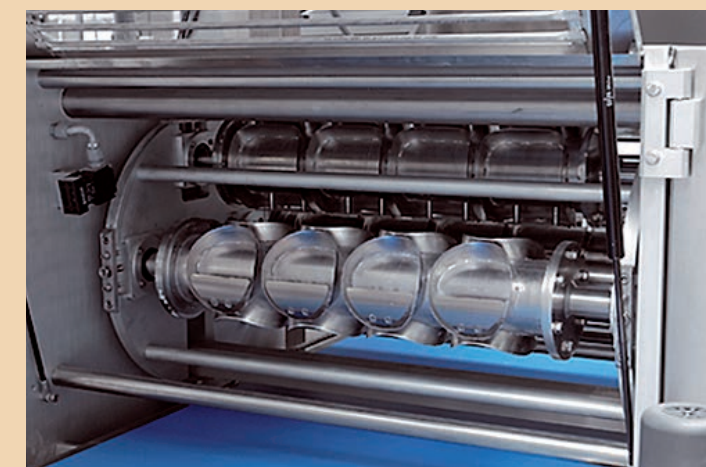


Pizza

Pizza lines from RONDO combine maximum performance with particularly gentle dough processing.

Our pizza lines enable you to manufacture Italian pizzas and thicker American pizzas, but also pizza snacks, pizza baguettes, calzone pizzas and more.

With a wide range of accessories, you can give your pizza an unmistakable appearance or structure. The range includes, for example, components for the manufacture of cold-pressed and hot-pressed pizzas as well as systems for topping with and without crust.



Product changes are very simple, using a revolving cutting station, for example.



The range of pizza lines includes line widths between 700 and 1,500 mm.



A dough band without stress is the requirement in order that pizzas stay round.



Accessories and special machines such as this press give your pizza an unmistakable appearance or structure.

Donuts

RONDO donut lines with an hourly output rate of between 6,000 and 30,000 units are not only high-performance, but also versatile.

Whether you make donuts using the direct method or the laminating method, we have the right system for you in our range.



Ethnic food

RONDO is at home worldwide, which means we know not only Central European bakery products but are also familiar with special bakery products and special doughs on all continents.

Whether you wish to make, for example, thin dough, samosas, filo, pita, papadum, lavash or other regional specialties, you can rely on RONDO and our dough-how.

We have developed special accessories and machines for processing these doughs and combine them with our standard components to create an individual, optimised solution.



The thinnest dough bands can be produced with special calibrating devices.

What is ASTec? Your main advantage.

Hygiene is increasingly becoming a focal point in the production of baked goods. That is why a high standard of hygiene is required for production systems.

The Grocery Manufacturers Association, the largest association in the food industry worldwide, has developed ten principles to define machines and systems that comply with a high standard of hygiene. We have designed our industrial ASTec lines according to these principles, the GMA checklist.

RONDO ASTec (Advanced Sanitary Technology) lines are configured for demanding hygiene requirements. The engineering design is in line with the needs of hygiene, high-quality materials have been used to ensure rapid and reliable cleaning. Niches and horizontal surfaces have been avoided. Micro-organisms, dough and product scraps can therefore no longer accumulate. The ASTec line is cleaned according to a computer-based program defined individually for your production. The cleaning steps are logged for your audit.



There are two versions of ASTec lines: one for wet cleaning and one for dry cleaning.



Only materials that can be easily cleaned are used. The conveyor belt also has sealed edges.



The wide-opening protective covers, the belt management system and the free spaces between the individual line components ensure good accessibility to all points where cleaning is required.



All parts of the ASTec line have been constructed in such a way that no dirt can accumulate.

The advantages of ASTec lines are obvious

- 30% shorter cleaning times, thus reducing costs and increasing production time.
- Easier and faster access to all the important components for cleaning, maintenance and service.
- No accumulation of product scraps or materials in niches and cavities.
- Individual, computer-based cleaning programs for maximum hygiene.
- Documentation of the individual cleaning steps and reproducibility at any time.



The 10 ASTec principles

Cleaning

- Cleaning is carried out in line with GMP standards or other quality standards that can be verified by means of active monitoring programmes.

Compatible materials

- The materials used are compatible with the products, the environment and chemical cleaning agents.

Access

- All system sections are easily accessible for cleaning and hygiene, maintenance and inspection.

No material deposits

- The system is free of niches in which products or liquids can accumulate. Self-draining prevents the accumulation of waste or liquids.

Sealed cavities

- Cavities are avoided or must be permanently sealed.

No niches

- The system has no indentations, slits, corrosion, gaps, recesses or open seams. All welding seams should be smooth.

Hygiene function

- Under normal operating conditions, the machine does not contribute to the propagation of bacteria.
- Man-machine interfaces such as buttons, valve levers etc. are designed in such a way that neither products nor liquids can penetrate.
- The machine design is compatible with the bakery equipment and other systems such as power, steam, air and water systems.

Cleaning methods

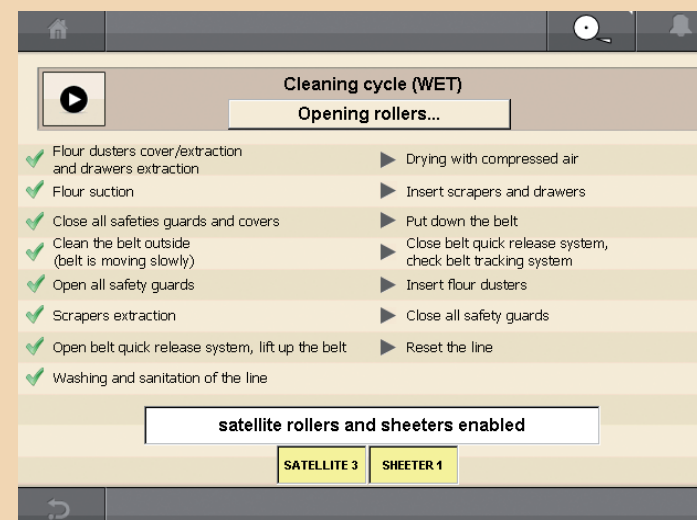
- The cleaning methods are effective and efficient and are recorded. The chemicals used are compatible.

Separate processes

- Wherever possible, different work processes are separated to prevent cross contamination or to prevent products from being tampered with.

Equipment and personnel

- The cleanliness requirements for the equipment and the hygiene requirements for the personnel are in compliance.



You can define individual cleaning programs and store them in the control system.

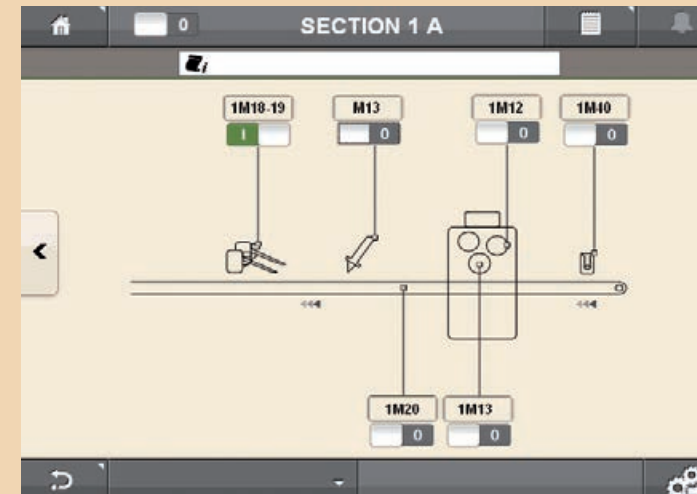
How do you increase efficiency? With an intelligent line that also thinks.



Complex and networked production lines are frequently deployed in modern industrial bakeries. Flexible, reliable and easy-to-operate control systems therefore make a decisive contribution to process stability as well as to maximising efficiency. When changes are made to the settings on RONDO lines, all downstream motors are regulated and synchronised by means of cascade control.

The control systems of our ASTec lines also support you in ensuring that cleaning of the lines is documented.

We use exclusively PLC control systems from leading providers such as Siemens, Allen Bradley or Mitsubishi. Our control systems enable any desired degree of automation. The logical structure and large symbols also mean that they are particularly easy to operate. They provide quick access to the electronic version of the manual, so that the team of operators can easily look up information quickly. Our control systems provide the possibility for access via internet as well as to back up programs on a USB stick.



Everything at a glance

The screens show graphics of the line sections and provide details regarding each individual motor. The motors are synchronised by means of cascade control.



Access from everywhere

The mobile control panel simplifies monitoring, especially in the case of very long lines. Irrespective of the position of the main panel, corrections can be entered and checked directly at the corresponding device.



Safely monitored

Laser-light barriers monitor and control production. Accessories, flour dusters, guillotines and other system components are automatically started up and stopped at the end of production. This simplifies your processes, reduces malfunctions and also saves energy and raw materials.



Cleaning documented

On RONDO ASTec lines, you can store individual cleaning programs in the control system.

A menu guides you through the required cleaning steps and confirms they have been performed. You are automatically provided with documentation of the cleaning that you can use for your next audit.

Skilled after-sales service.



The after-sales service of RONDO accompanies you during the entire life cycle of the production line. It offers not only a fast spare-parts service and skilled advice, but also supports you in the maintenance, servicing and modernisation of your system.

Preventive maintenance is an important factor for success nowadays, ensuring maximum availability of the line. We offer you tailored individual solutions that are optimised to meet your needs.

Our decentralised spare-parts logistics ensure rapid spare-part deliveries worldwide. Experienced employees of RONDO train your operating personnel in theory and in practice, also on site if desired.

Swiss quality awareness.



You are our measure of quality. It is only when you are completely satisfied that we have achieved our objective. With "completely", we mean the technical solution as well as the reliability, efficiency, safety, ease of cleaning and maintenance of a production line.

Communication with you is also part of quality in general. By listening attentively, we recognise the challenges you are facing and the problems for which you expect solutions. If the results of this listening are then implemented in the corresponding solutions, quality comes about more or less on its own.