Uniform, modular, efficient:
Laminating and Feeding with RONDO MLC.
What ensures sustained success?
Higher quality at lower costs.

Dough sheeting and shaping are RONDO’s great passion. For 65 years and more we have been developing and building machines for dough processing. Our experience and our wealth of specialist knowledge in shaping and sheeting dough, our innovative solutions and the high-end quality of our machines constitute the rock-solid basis of our success. Dough-how & more.

Day in, day out for years now, the RONDO MLC (Modular Laminating Concept) has been used to produce innumerable precision-laminated dough blocks and dough bands. Characteristic of all these products are the perfectly regular fat layers – an essential for croissants, puff and Danish pastries in superb quality. Our customers are delighted about the high-quality pastries and the low costs.

The powerful RONDO MLC is compact and modular, permitting step-by-step automation and investment. The system scores with high-grade components such as modern, dependable industrial-grade controllers and energy-efficient gear motors. It is built of stainless steel and designed for 24/7 operation.

Come and see the many advantages of the RONDO MLC for yourself – our Dough-how Center is at your disposal and our Dough-how specialists will be happy to run whichever tests are necessary.
How to improve quality and reduce costs? With a gentle and efficient solution.

“If you are using two, three or more dough sheeters for booking and sheeting, then a RONDO MLC is the better solution.”

“The RONDO MLC will improve the quality of your pastries whilst reducing your materials and labour costs.”

Enhance the quality of your pastries. A RONDO MLC will instantly enable you to improve the quality of your pastries in two ways:
- You eliminate irregularities and human error, because the line always operates uniformly and therefore much more regularly than a number of operators working with dough sheeters.
- Dough band former, satellite head, fan-folding station and calibrator ensure superbly uniform and gentle processing of the dough and produce consistently regular layers of fat and dough.

This is how you ensure uniformly high quality from the outset.

Reduce your costs for labour and materials. Investment in a RONDO MLC soon pays off:
- Weigh the dough, press dough blocks and fat plates, sheet, fold in butter or margarine, book... The RONDO MLC handles the complicated sheeting and booking process either partially or completely. And one or two operators can process up to 1300 kg of dough per hour
- Continuous production means considerably fewer dough offcuts, so there are no large quantities of dough to be re-introduced into the process.

You benefit from lower costs for labour and raw materials.

It’s time for you to benefit.

MLC dough band former
- Quality enhancement
The MLC dough band former processes your dough continuously, forming homogeneous dough bands of uniform thickness and width.
- Cost reduction
The dough band former dispenses with the labour-intensive step of weighing the dough. And it also helps cut down on the costs of raw materials. Because dough sheeters inevitably produce dough bands with irregular ends, which have to cut off and discarded. This doesn’t happen in continuous production, because the machine produces an endless dough band.

Fat pump and folding belts
- Quality enhancement
The RONDO fat pump provides the basis for regular dough/fat layers, because it dispenses a dough band regularly and continuously and “plasticises” the butter or margarine in the process. The folding belts then fold in the dough band precisely so that the fat is completely enclosed by dough.
- Cost reduction
The fat delivery rate is a precision setting – so you never use more fat than actually needed. And instead of pricey butter or margarine plates you can process the less costly blocks instead. Go ahead and add up the figures for yourself!

Satellite head
- Quality enhancement
The satellite head sheeted the dough band gently. So the layers of dough and fat are not destroyed in the process.
- Cost reduction
The RONDO satellite head sheets in a single process step, so it eliminates sheeting with dough sheeters.

Fan-folding station
- Quality enhancement
Fan-folding has no negative effect on the layers of fat. The process is gentle, producing homogeneous layers.
- Cost reduction
Efficient: The fan-folding station produces 2–10 layers of fat in a single pass. Dough quality is better, so by comparison with dough sheeters fewer layers are needed to achieve the same quality of pastry. And you have less edge wastage, because a fan-folding station enables you to set exactly the dough-band width you want.
What produces a uniform, laminated dough band?
The automatic, high-precision RONDO MLC.

RONDO MLC is a very flexible line. Depending on the configuration, you can produce dough blocks and endless dough bands. Use these dough bands to feed make-up lines and croissant machines continuously.

The control cabinets are integrated, so the whole line is very compact and modular. It can be built to meet your requirements, so it fits into any bakery.

Made entirely of stainless steel, the RONDO MLC is extremely sturdy and is built for 24/7 operation. RONDO uses high-quality components such as modern, dependable Siemens control systems and energy-efficient gear motors made by the Nord company. Like all RONDO machines, the MLC complies with the applicable international safety standards.

Production process

1. Shaping the dough band
The MLC dough band former gently produces a homogeneous dough band of uniform thickness and width – the basis for perfect quality in the finished product.

2. Applying the fat
You use the fat pump to automatically create a continuous fat band of regular width and thickness from blocks of margarine or butter. The folding belts fold the dough band in such a way that the fat is completely enclosed by dough. Manual application of fat plates is an alternative.

3. Sheeting
The multiple rollers of the satellite head gently reduce the thickness of the dough band. The layers of dough and fat are not destroyed in the process.

4. Fan-folding
The dough band is gently folded in on itself in the fan-folding station. This creates between two and ten uniform layers of fat. The fan-folded, thick dough band is then reduced in a second satellite head.

5. Producing blocks…
For block production, the dough band is automatically cut into pieces and then folded manually. At this point, your dough has between 2 and 40 fat layers. Depending on the type of dough and the process, the blocks can either be processed right away or left for a resting time, after which more dough/fat layers are produced.

… or final sheeting and feeding
Alternatively, you can sheet your regularly laminated dough band down to the desired final thickness with a cross roller and one or more calibrators and then feed directly to your make-up line or croissant machine.

Working with dough resting time
After allowing the resting time, you can put your dough blocks back on the MLC. This enables you to double the number of fat layers: you can place one block on top of another with an offset and get as many as 80 fat layers. The satellite head joins the blocks to form an endless dough band.

If you want to further increase the number of fat layers for puff pastry, say, the blocks can be put on the belt in front of the fan-folding station. If you already have the number of layers you need for croissant or Danish pastry dough, for example, the blocks can be put on the belt after the fan-folding station, ready for final sheeting and feeding to a downstream line.
How do you grow and invest step by step?
With a well-designed, modular solution.

RONDO MLC is modular so it can grow in sync with your business. The MLC has integrated control cabinets, so additional modules are easily added. You can get started with your first module and already you’ll be benefitting from reduced costs and enhanced quality. Later on you can go ahead and add one or two more modules and automate more steps in the production process. Proceeding step by step, you expand your MLC into a fully automatic laminating line or a multi-functional feeding solution.

Basic module A
The basic module has everything you need to automate your block production (Block Line) or feeding (Feeding Line) of your make-up line or croissant line and benefit from the quality enhancements and cost savings. The optional RONDO fat pump takes rationalisation of your block production yet another step further.

Basic module A with add-on module B
If you couple your basic module A to an automatic fan-folding station (add-on module B), you have an L-shaped laminating line. Now you can fan-fold your dough band automatically, increasing the number of fat layers by a factor of 10. This solution is ideal if you want to allow your dough blocks a resting time in the process.

Basic module A with add-on modules B and C
A second fan-folding station (add-on module C) upgrades your MLC to a fully automatic line that enables you to produce a dough band with up to 100 fat layers. You can give this line a U- or Z-shaped configuration, to suit the space at your disposal. This fully automatic solution is ideal if you want to make laminated doughs immediately, in other words, with no resting time.

RONDO MLC and Smartline
If you intend processing laminated doughs along with other, non-laminated doughs or even highly hydrogenated ciabatta dough, we recommend combining the MLC with the RONDO Smartline. In a configuration like this the Smartline takes the place of the last section of the MLC. This gives you a multi-functional laminating and feeding line, capable of gently processing virtually all types of dough from laminated doughs through sweet yeast doughs, pizza and donut doughs to soft, highly hydrogenated bread dough. It can also feed automatically to your downstream make-up line.

State-of-the-art controller = totally easy operation
The modern RCC control concept facilitates operation and day-to-day work. Because all the important data about the line and the process are always available on your screen.

- 7“ colour touchscreen with high resolution
- Clear presentation with readily understandable symbols
- Settings can be saved in programs
- Integration of the upstream and downstream machines
- Data protection by user management
- Data backup via USB
- Cross-machine program management with master function (optional)
- RONDOnet – the step forward into Industry 4.0 (optional)

End-to-end hygiene concept = speedy cleaning
Thanks to the well-designed details, cleaning a RONDO MLC is quick and easy.

- Surfaces are smooth and the material is stainless steel, so without corners and edges there are no accumulations of dough scraps
- Easily accessible components
- Quick-release belt for good accessibility
- Concealed motors and plug connectors
- Removable flour dusters for easy emptying and cleaning

MLC dough band former = regular dough bands
The dough band former can be used for many different types of dough. Compact, it is mounted on castors so it is easily movable, and it takes very little time to clean. You can automate feeding with an upfeed conveyor belt or a portioning hopper. You increase your productivity and reduce labour.

Basic module A
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Basic module A with add-on module B
If you couple your basic module A to an automatic fan-folding station (add-on module B), you have an L-shaped laminating line. Now you can fan-fold your dough band automatically, increasing the number of fat layers by a factor of 10. This solution is ideal if you want to allow your dough blocks a resting time in the process.

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What solution convinces you?
One that meets your needs.

Technical data

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**MLC concept**
- Laminating line for production of dough blocks with 1 to 6 layers
- Laminating line with one fan-folding station for production of dough blocks with 2 to 40 layers
- Laminating line with two fan-folding stations for production of dough blocks with 2 to 60 layers

**Area of application**
- Laminating line for production of dough blocks

**Components**
- Dough band former
- Fat pump (optional)
- Folding belts
- Satellite head
- Rotary cutter

**Capacity**
- From 200 kg and up to 1300 kg of laminated dough blocks per hour

**Required floor space (L x W)**
- Approx. 8000 x 6000 mm

**Control system**
- Microprocessor control
- 7" colour touchscreen
- 100 program memory slots

**Width of conveyor belt**
- 640 mm

**Speed at line end**
- 3 – 8 m/min

**Rated power**
- Without fat pump: 7.5 kW / 6 kW
  - With fat pump: 10 kW / 8 kW

**Supply voltage**
- 3 x 200 – 480 V, 50/60 Hz

**Air (only necessary with fat pump)**
- 600 Nl/min

**Weight**
- Without fat pump: approx. 1300 kg
  - With fat pump: approx. 1900 kg

Looking for an industrial-grade laminating and feeding solution?

Ask your RONDO specialist consultant.

Need a laminating and feeding line with more capacity? The RONDO range includes the high-end EVO Line and the ASTec lines for extra-high-capacity solutions.

The EVO Line is an industrial-grade production line with a working width of 700 or 900 mm for processing dough at a rate of between 1000 and 2000 kg per hour. It is characterised by its high process reliability and gentle dough processing.

The industrial-grade RONDO ASTec Lines have a working width of up to 1500 mm offer even higher capacity and are custom-designed specifically to your requirements. Built in-ground-breaking ASTec design (Advanced Sanitary Technology), they are compliant with the latest hygiene directives.