

Make-up line:

Starline – the high-performance line.



What convinces your customers? Your high-quality pastry products.



Dough-how & more from Switzerland

For more than 65 years now, RONDO has been developing and manufacturing dough-processing machines in Switzerland. And dough-how is the word we have coined for the unique combination of experience amassed over decades and our wealth of specialist knowledge. Our innovative solutions and the high quality of our machines and systems form the basis for your success. That's dough-how & more.

Robust, high-performance make-up line

The Starline is a user-friendly, robust make-up line boasting unparalleled performance combined with modern hygiene properties. The Starline adapts perfectly to your needs and preferences and to the space requirements and work processes on site in your bakery.

So the Starline is a superbly designed make-up line for the efficient production of all rolled, folded, filled, decorated or shaped pastries:

- You produce a very wide variety of pastries at consistently high quality
- You have rational processes in place for all types of dough: from soft dough through laminated dough to short dough and thin dough

swiss made powerful versatile rugged

How can "highest performance" be surpassed? By redefining "superb performance".

The all-rounder from RONDO

The Starline convinces with:

- Modern control systems for straightforward operation
- Flexible and adaptable configuration
- Wide range of product possibilities
- Fast changeover times
- Sturdy and robust construction
- Quick and easy cleaning
- Numerous options, accessories and tools
- Diverse automatic feeding options

High operating safety

Starline is consequently equipped with safety covers and safety devices, so it is compliant with all relevant safety guidelines.

Special nose roller

Small pastries are transferred readily and smoothly to downstream machines. The built-in quick-release belt makes cleaning easy.

Powerful guillotine

The guillotines stamp and cut pastries with high precision at high performance.



High flexibility

Wheeled accessories and quick-action connectors make for speedy product changes.

Numerous accessories

The accessories and tools make the line ideal for automatic production of a very wide range of pastries.

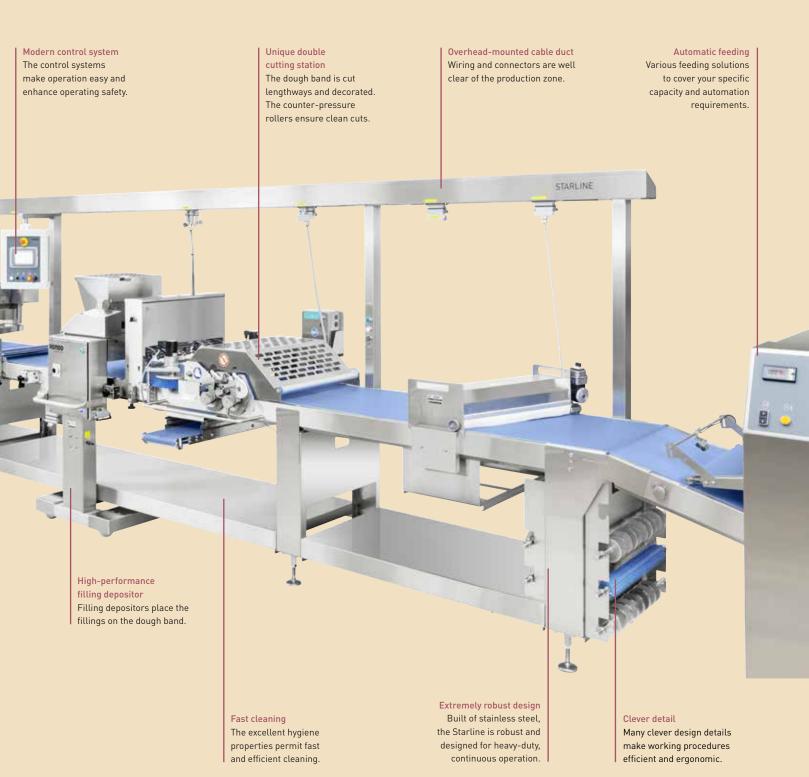
Technical data

Length (modular)	8.5, 10.0 and 11.5 m
Table width	715 mm
Table height	915 mm
Width of conveyor belt	640 mm
Speed of conveyor belt	0.5 – 10 m/min
Supply voltage	3 × 200 – 480 V, 50/60 Hz
Control voltage	24 V DC

The right to make changes of a technical nature is reserved. The technical safety and type-specific instructions in the operating manual must be complied with. Prohibition, information and warning signs on the machines are to be complied with in accordance with the operating manual.

Illustration shows the following options:

- Touch panel
- Wheeled rollwinder
- Pneumatic filling depositor
- Dough moistener
- Travelling guillotine
- Flour brush
- Dough scrap removal belt
- Blue conveyor belts
- Cutting and decorating rollers



How do you increase efficiency? With a proactive machine.



RCC - the innovative control concept

RCC, the advanced RONDO Control Concept, revolutionises operation. The unified interface for all RONDO machines with touchscreen makes operation simpler, faster and above all safer, even for non-skilled operators.

The visualization includes the entire production line, so operation is intuitive and streamlined. All important data are available at a glance, making work all the more efficient.

A program memory for more than 100 products ensures reproducible product quality every time. Access to the various user levels is password-protected, contributing once again to process dependability.

Cleaning programs step the user through the applicable cleaning process. Every cleaning step has to be acknowledged, so you also have a record of all your cleaning processes ready for the next audit.

You also have the option of integrating upstream and downstream machines into the RCC.

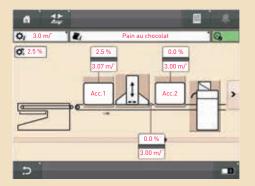


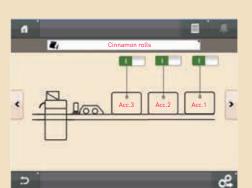


Simple, safe operability

The Starline's control system streamlines daily work routines and ensures smooth operation.

There are two versions, so you can choose the ideal system:





RCC touchscreen

The RCC touchscreen makes operating the line safe and intuitive.

The operator sees the entire line and all important data at a glance, so is able to work all the more efficiently.

- Large 7" touchscreen for safe, intuitive operation
- RONDO Control Concept with visualization of the entire make-up line complete with all accessories
- Modern Profinet bus system
- Up to 6 motor-driven accessories directly controllable
- More than 100 programs can be stored by name
- Data easily saved to USB memory stick for backup
- Protected user levels for operator, line supervisor, production manager and service specialist
- Integrated machine control for upstream and downstream machines (optional)
- Interface for remote maintenance and service support (optional)



Touch panel

Easy to use, the touch panel covers the basic requirements:

- Large, self-explanatory symbols for the settings for the line and the accessories
- Up to 4 motor-driven accessories controllable
- Up to 99 different products can be saved in memory
- Integral RS232 interface for data backup
- Start/stop logic for upstream and downstream machines (optional)

What makes the Starline perfect? Many clever solutions.

Powerful guillotines

RONDO offers two different guillotines for the Starline so as to cover different requirements.

These powerful guillotines with their high cutting force ensure perfectly stamped and clean-cut pastries.

Changing knives and stamping dies is a quick and easy, no-tools job.



Electric guillotine

The powerful guillotine with servo-drive cuts and stamps your pastries. Depending on the application, you can cut at rates as high as 120 strokes per minute and stamp at up to 60 strokes per minute.



Electromechanical guillotine

The powerful electromechanical guillotine has a travelling stamping/cutting unit. The line runs without pausing the dough band, significantly increasing line output.

Robust design

Robust and durable, powerful and absolutely reliable:

- Solidly built in non-rusting stainless steel
- 45° double-fold profile for high rigidity
- Steady, height-adjustable feet

Always the right length

The Starline is available in a range of lengths, perfectly matching your specific set of requirements: modular from 8.5 m to 11.5 m overall, custom adaptations are possible. One of these is bound to be the ideal Starline for you.



High-performance filling depositors

Whether sweet or savoury, creamy or chunky – you use various fillings for your baked goods every day.

Fillings make a decisive contribution to the unique taste of your pastries, and to their success. RONDO filling depositors place fillings regularly and accurately in weights – and that holds true for soft or hard fillings, fillings containing fibres and creamy fillings, fillings with or without chunks. A split hopper means that a single filling depositor can work two different fillings at the same time, so you can automatically produce pastries with two fillings.



The pneumatic filling depositor is suitable for fillings ranging from soft to hard. The hopper has a hinged safety guard, so it is very easy to clean.



The Rondofiller deposits fillings of all kinds gently and accurately in weight. It can be fitted with feed screws, pistons or Mohno pumps, so it is extremely versatile. In the Profinet version it can be integrated into remote maintenance for the Starline.

Quick and easy cleaning

In the foodstuffs industry, virtually nothing is more important than hygiene. Cleaning a Starline is literally a clean-cut affair. Many clever details make for speedy and efficient cleaning and help ensure hygienic production conditions:

- Smooth surfaces made of stainless steel
- Overhead-mounted cable duct
- Concealed motors
- Plugs are outside the production zone
- Nose roller with quick-release belt
- Large flour catch pans



How do you thrill your customers? With attractive pastries.

Clever accessories

The range of pastries is many and varied, and you can produce them all with the Starline. Numerous tools and accessories ensure high-volume production of high-quality pastries.



Various accessories for rollwinding



Special stamping for imaginative pastry shapes



Folding stations for single and multiple folding



Special accessories, i.e. for products with scissor decoration



 $\label{lem:constraints} \mbox{Accessories and tools for double-decker products}$



Seed depositors and round and long moulding units for bread and bread rolls























Increased efficiency

You can boost the profitability of your Starline by automating additional production steps. You have a choice of various systems for continuous feeding, for decorating, for moulding and for panning the dough pieces.





Add a Smartline and turn your Starline into a versatile production line for pastry and bread rolls, pizza, donuts and much more.





Use a RONDO MLC modular laminating line to automate the production of puff-pastry and Danish dough products with continuous feed of the Starline.



Compact and universal panning solutions boost the efficiency of your production.



Have our dough-how experts develop your new products and recipes.



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