

RONDO Burgdorf AG
Heimswilstrasse 42
3400 Burgdorf/Switzerland
Tel. +41 (0)34 420 81 11
Fax +41 (0)34 420 81 99
info@rondo-online.com

RONDO Schio s.r.l.
Via Lago di Albano, 86
36015 Schio (VI)/Italy
Tel. +39 0445 575 429
Fax +39 0445 575 317
schio@it.rondo-online.com

RONDO GmbH & Co. KG
Hoorwaldstrasse 44
57299 Burbach/Germany
Tel. +49 (0)2736 203-0
Fax +49 (0)2736 203130
info@de.rondo-online.com

RONDO S.à.r.l.
PAE «Les Pins»
67319 Wasselonne cedex/France
Tel. +33 (0)3 88 59 11 88
Fax +33 (0)3 88 59 11 77
info@fr.rondo-online.com

RONDO Ltd.
Unit 7, Chessington Park
Lion Park Avenue
Chessington, Surrey KT9 1ST/UK
Tel. +44 (0)20 8391 1377
Fax +44 (0)20 8391 5878
info@uk.rondo-online.com

000 RONDO Rus
Dmitrovskoe Chaussée 157, str. 4
127411 Moscow/Russia
Tel. +7 (495) 665 67 93
Fax +7 (495) 665 67 94
info@rondo-online.ru

RONDO Asia
Regional Office
A-2-21, Jalan Kuchai Maju 2
Kuchai Entrepreneurs Park
Jalan Kuchai Lama
58200 Kuala Lumpur/Malaysia
Tel. +60 3 7984 55 20
Fax +60 3 7984 55 95
info@my.rondo-online.com

RONDO Inc.
51 Joseph Street
Moonachie, N.J. 07074/USA
Tel. +1 201 229 97 00
Fax +1 201 229 00 18
info@us.rondo-online.com

RONDO Inc.
267 Canarctic Drive
Downsview, Ont. M3J 2N7/Canada
Tel. +1 416 650 0220
Fax +1 416 650 9540
info@ca.rondo-online.com

www.rondo-online.com



Stress-free, gentle and flexible:

Sheeting and feeding with Smartline



How do you overcome challenges? With experience and skill.

Sheeting and shaping dough is RONDO's great passion. We have been developing and building machines for dough processing for more than 65 years. Our experience, expertise and innovative solutions coupled with the high quality of our equipment form the solid foundation for our success. Dough-how & more.

The quality and taste of your pastries and therefore on your success are already influenced at the beginning, when a dough band is produced. Each type of dough possesses different properties. In the case of soft, highly-hydrated doughs, for example, the unique cell structure and flavours are important – whereas in the case of laminated doughs the layers of fat must be preserved.

Each type of dough thus has different requirements with regard to processing. RONDO has a solution that can handle them all without difficulty – the Smartline. The universal machine is equipped with a unique, pivoting satellite head which enables it to form any type of dough into a regular, relaxed dough band, allowing you to optimise the feeding of your make-up lines.

Hundreds of businesses worldwide have been convinced by the quality and flexibility of the Smartline and trust this innovative RONDO solution on a daily basis.

Smartline convinces, because you use it ...

- to produce variety.
- to enhance quality.
- to work efficiently.
- to profit from sophisticated details.
- to become more flexible.



gentle
stress-free
universal
rugged

What tackles every challenge? The versatile and flexible Smartline.

Do you want to feed your make-up line automatically? Are you looking for a multifunctional solution that reliably optimises the processing of a wide variety of dough types – including those that are difficult to handle? The RONDO Smartline meets your challenges.

Produce variety.

Thanks to the unique, adjustable satellite head, the Smartline will enable you to process all types of dough, even soft, highly-hydrated, pre-proofed and sticky dough, into a regular, stress-free dough band:

- Ciabatta, baguettes, focaccia, seeded rolls, crackers
- Yeasted pastries, donuts, pizza, scones, sweet rolls
- Naan bread, traditional Japanese bread
- Sheet cake
- Thin dough products
- Puff pastry, croissant and Danish dough products

You set the limits – not the Smartline.

Enhance your quality.

Stress-free, regular dough bands are the basis of high-quality and precisely weighted pastries. The Smartline delivers this basis. The

mature technology also processes difficult doughs gently into a perfect dough band.

Work efficiently.

The Smartline is equipped with the RONDO Control Concept, RCC. The progressive, consistent user interface is easy and intuitive to operate and you see all the important data on a single screen. You save time and work more efficiently.

Profit from sophisticated details.

Hygiene is extremely important at RONDO. Numerous sophisticated details make cleaning easier for you.

Become more flexible.

The Smartline is an extremely flexible solution; it can be combined in many ways. Depending on your needs and requirements, it is equipped with a dough band former, the RONDO Dough Structure Optimiser, flour dusters and seeding units as well as one to three calibrators. In combination with the RONDO MLC, this creates a multifunctional line, L-shaped or U-shaped, enabling you to automate both the feeding and the laminating process.



Ciabatta dough



Bread dough



Pizza dough



Donut dough



Thin dough



Laminated dough

How does dough become a uniform dough band? By means of gentle sheeting on the Smartline.

In seven steps, the Smartline processes your doughs to create regular, stress-free dough bands and reliably feeds the downstream make-up lines. No matter what type of dough – the process remains the same.



1 Feeding variants

For smaller production volumes, pieces of dough are placed onto the infeed belt by hand. The Smart Feeder automates feeding the Smartline – an economical solution for larger production capacities which, if required, can also be supplemented with an elevating conveyor belt and a stocking hopper. For the final sheeting of laminated doughs, blocks of dough can be placed on the line.



1



2 Flour dusters and seeding units

Four flour dusters evenly dust flour onto the top and bottom of the dough band. For the production of bread rolls seeded on both sides, these can simply be replaced with seeding units.



3 Oscillating pressing paddles

The paddles gently adjust the dough to the desired width. This reduces side scrap and you save money.



4 Dancer roller

Uniform dough feeding is the basis for a regular dough band and precisely weighted final products. The dancer roller measures the height of the dough and automatically regulates the dough feed.



5 Satellite head

The unique satellite head gently sheets the dough. Thanks to the system patented by RONDO, there is an optimum setting for each of your types of dough.



6 Cross roller

The cross roller with its large driven roller and programmable speed gently sets the dough band to the exact width desired.



7 Calibrating unit

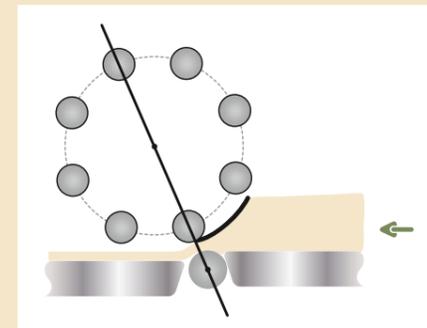
Depending on the desired final thickness, the Smartline is equipped with one to three calibrating units. Here, the dough band is once again lightly sheeted and set exactly to the desired final thickness. Subsequently, the Smartline feeds the downstream make-up line. With a belt width of 600 mm, it is the optimal match for the RONDO Polyline and Starline as well as all other common lines.

What makes the Smartline unique? The pivoting satellite head.

The optimal sheeting process for each type of dough and therefore high-quality dough bands and pastries – these needs are met by the universal Smartline. Its centrepiece, the adjustable satellite head, processes all of your types of dough, from soft, highly-

hydrated dough, through thin dough, all the way to firm dough, into a perfect, regular dough band. The cell structure, flavourings, layers – all of the dough properties that are important for pastry quality – are preserved. When you adjust the position of the satellite,

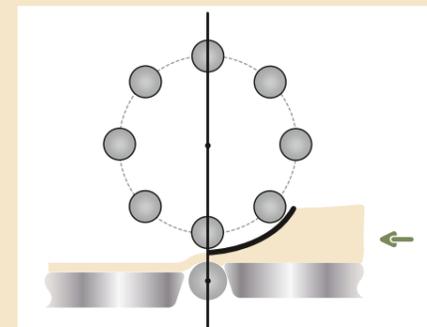
you influence the sheeting stretch and thus the intensity and duration of contact with the dough. You simply save the position of the satellite head in the program and call it up again at any time.



Optimal position of the satellite head for soft doughs

The satellite is located behind the lower roller.

You process soft doughs with high water content to make ciabatta and long-fermented traditional bread. These types of dough may only be processed briefly to preserve the special cell structure and flavourings that were created during the bulk fermentation. In this case, place the Smartline satellite behind the lower roller. This creates a steep and short sheeting stretch which is perfect for soft doughs.



Optimal position of the satellite head for firm doughs

The satellite is vertical above the lower roller.

Firm doughs such as non-fermented yeast dough as well as laminated puff pastry and croissant doughs must be sheeted gently and slowly. This preserves their structure and the layers. In this case, place the Smartline satellite vertically above the lower roller. This creates a flat, long and gentle sheeting stretch and, at the same time, good infeed – optimum conditions for firm doughs.



RONDO Smartline with Smart Feeder and Starline make-up line

What has to be quick and simple? Operation and cleaning.



Simple operation

The modern control concept RCC makes operation simple and work efficient. You find all the important data regarding the machine and the process on your screen.

- Colour touchscreen with high resolution
- Clearly arranged display with easy-to-understand symbols
- All settings can be saved in programs
- Integration of upstream and downstream machines
- Data protection by means of user management
- Data backup via USB connection
- Cross-machine program management with master function (optional)



Fast cleaning

A great many sophisticated details guarantee fast and simple cleaning, enabling hygienic production conditions.

- Smooth surfaces made of stainless steel
- Easily accessible components
- Interchangeable flour dusters
- White or blue belts

How do you work even more economically? When you automate more operations.



Smart Feeder

To ensure simple processing of non-laminated dough, you can feed the Smartline with the Smart Feeder dough band pre-former. It pre-forms the dough gently into a homogeneous band, which is subsequently sheeted to its final thickness by the Smartline. The Smart Feeder is available in three versions with different working widths and hopper capacities.



Elevating conveyor belt or stocking hopper

You can feed the Smart Feeder directly or in a more ergonomic and economical manner via elevating conveyor belt or stocking hopper.



Dough Structure Optimiser

As an option, the RONDO Dough Structure Optimiser can be placed between the Smartline satellite and cross roller. You can use it to exert an additional positive influence on the structure of your dough band and the weight accuracy of your pastries. The dough is processed gently, making the cells smaller and more regular.



Are you looking for a solution to everything? Combine the Smartline with the RONDO MLC.

Do you process both non-laminated and laminated doughs on your make-up line? Alongside sheeting and feeding, do you also want to automate laminating? Then combine the Smartline with an MLC (Modular Laminating Concept).

The two machines complement one another perfectly. RONDO MLC is a modular laminating system. It handles the folding in of fat and with one or two fan-folding stations it forms the desired number of layers. The Smartline then sheets the dough gently to the desired

final thickness and feeds the downstream make-up line. Your RONDO specialist consultant will be glad to explain this unique combination and its versatile possibilities in detail.

Process for non-laminated dough



Sheeting to final thickness and automatic feeding of the downstream line.

Smart Feeder for non-laminated dough.

Smartline

MLC

Sheeting to final thickness and automatic feeding of the downstream line.

Fan-folding station
The layers are formed by means of fan-folding. If required, the line is supplemented to include a third section with satellite and fan-folding station. The line therefore becomes U-shaped or Z-shaped, as the case may be.

Satellite
For subsequently fan-folding, the dough band thickness is reduced.

Fat pump
This is where the fat is folded in and subsequently wrapped with folding belts.

Dough band former for laminated dough.

Process for laminated dough



Technical data: Smartline and Smart Feeder

Technical data	
Smartline	PSS640 / ZKWE*640
Dimensions (L x W x H)	<ul style="list-style-type: none"> • 5520 x 1360 x 1410 mm • 6540 x 1360 x 1410 mm • 7840 x 1360 x 1410 mm
Width of table profile	715 mm
Roller gap satellite unit	0.5 – 32.5 mm
Roller gap cross roller and calibrating unit	<ul style="list-style-type: none"> • motorised adjustment • hand-wheel adjustment
Control voltage	24 V DC
Supply voltage	3 x 200 – 480 V AC, 50/60 Hz
Rated power	7.5 kW
Satellite	8 satellite rollers, pivoting head
Belt speed of calibrating unit, depending on application and dough	0.5 – 8 m/min
Production depending on dough thickness and working speed	150 – 1200 kg/h
Weight	<ul style="list-style-type: none"> • with one calibrating unit • with two calibrating units • with three calibrating units
	<ul style="list-style-type: none"> • approx. 1200 kg • approx. 1450 kg • approx. 1850 kg

Technical data	
Smart Feeder	PTV282, PTV352, PTV422
Dimensions (L x W x H)	<ul style="list-style-type: none"> • PTV282 / PTV352 • PTV422
Capacity of filling hopper	<ul style="list-style-type: none"> • PTV282 / PTV352 / PTV422
Roller gap of working roller	20 – 40 mm
Working width	<ul style="list-style-type: none"> • PTV282 / PTV352 / PTV422
Speed of working rollers	Max. 2.8 m/min.
Production at approx. 3 mm dough thickness	<ul style="list-style-type: none"> • PTV282 • PTV352 • PTV422
	<ul style="list-style-type: none"> • approx. 960 kg/h • approx. 1200 kg/h • approx. 1500 kg/h
Supply voltage	3 x 200 – 480 V AC, 50/60 Hz
Rated power	1.6 kW

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 instructions.