FlexiLine® 1.8 and 2.5

The FlexiLine System machine range is especially recommended for producing baguettes and part baguettes.
They can also easily be used to produce most types of breads.
Mechanising baguette production is undoubtedly a difficult bread-making operation.
The 300-350g dough pieces have to be stretched to a length of 65-70cm, while preserving dough quality.
The FlexiLine range can produce 1,000 to 2,500 baguettes or other types of breads per hour according to the model.
For over 25 years, MERAND has been manufacturing automatic baguettes and part baguette (1/2, 1/3, 1/4, 1/5, 1/6) production lines for bakers from the world over wanting to produce real French baguettes on a regular basis while minimizing labour costs.

- The FlexiLine 1.8 and FlexiLine 2.5 lines are part of the FlexiLine System range and are particularly designed for producing long baguettes (without spoiling the dough) and for cutting up rolls thanks to their exclusive proprietary systems, including:
- Pre-stretching after division with the MF2S® (Stressless Shaping)
- Static intermediate proofing system for optimum dough piece proofing
- Calibrated pre-moulding for increased regularity and trim-free cutting
- Moulding finishing in several stages

MERAND
Dough processing expert

The baguette has been a traditional French loaf since the 19th century. More than 30 million baguettes are sold every day in France!

We manufactured our first moulder back in 1954, so we could mechanise the moulding process while preserving the quality of the baker's dough. We have been making automatic baguette and roll production lines for over 40 years.

To produce long and regularly-shaped baguettes without destroying the alveolar structure of the bread, the process must include a number of key bread-making stages.

Similarly, to produce regularly-shaped rolls (or part baguettes) with no trimmings, it is important to let the dough stretch very gradually, in several stages.

- **Pre-stretching after division with the MF2S® (Stressless Shaping)**

Straight after the division phase, the dough has to be "strengthened" so the loaves will form properly when baked.
The dough pieces must also be shaped regularly, so they can be loaded more easily into the intermediate proofer.

This can be done in two ways:

Pre-rounding: makes it easier to center the dough pieces in the proofing pockets, thus improving intermediate proofer efficiency.
On the other hand, the gluten strand network is not properly aligned and will be over-stretched when the baguettes are formed in the moulder.

Pre-stretching: This is a more costly solution as a pre-stretched dough piece needs to be loaded into then unloaded from the intermediate proofer and it needs more monitoring than dough balls.
However, this replicates what the baker does when hand-moulding the dough.
It means the dough will stretch better without damaging the alveolar structure.

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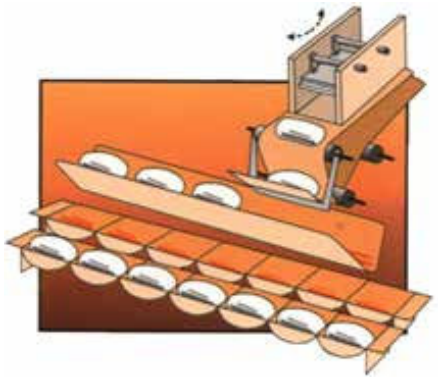
Dough processing expert

Some Key Points

- **Pre-stretching and division:**

Our FlexLine production lines use our exclusive proprietary MF2S® (Stressless Shaping) system to pre-stretch the dough pieces.
The gluten strand network can therefore be properly aligned when the baguettes are stretched.
This compresses the dough slightly to give it extra strength before it is pre-stretched.

The loader-distributor system shares out the dough pieces in the intermediate proofer and deposits them gently in the proofing pockets.



- **Static intermediate proofing** system for optimum dough piece proofing

Another key stage in producing long, regularly-shaped baguettes with the right alveolar structure consists in letting the dough rise properly after the dividing stage which «stresses» the dough.
This is why our Flexiline production lines are equipped with static rather than dynamic intermediate proofers.
In static intermediate proofers, the dough pieces always stay in the same pocket so they can rise properly.
In dynamic intermediate proofers, the dough pieces move from one pocket to another and are «stressed» every time they fall into a new pocket.
MERAND also manufactures dynamic (KraftLine) intermediate proofers but we recommend these for sandwich loaves, short loaves, etc. and not baguettes, that need to be stretched to full length.

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Dough processing expert

Some Key Points

- **Calibrated pre-moulding** for increased regularity and trim-free cutting

After proofing for approximately 15 minutes in the same pocket, the pre-stretched dough pieces are about 15-18cm long. At this stage, the dough is well rested and ready to be fully stretched.
The dough is subjected to an initial calibrated moulding which produces 40cm-long dough pieces. At this stage, it is essential for the dough pieces to be the same length so that the baguettes will have a standard length and to avoid trimmings when cutting rolls.

- **Moulding finishing in several stages**

Thanks to the successive gradual dough piece stretching stages, with strict calibration, the baguettes can be cut into 2/3/4 or 5 sections, without end trimming waste.
This makes things much easier for the operators.
Our patented RollsCoup' roll-cutting system also means that the rolls will not have ugly end cut marks after moving forwards on the conveyor.

- **Trim-free roll cutting**

Thanks to the successive gradual dough piece stretching stages, with strict calibration, the baguettes can be cut into 2/3/4 or 5 sections, without end trimming waste.
This makes things much easier for the operators.
Our patented RollsCoup' roll-cutting system also means that the rolls will not have ugly end cut marks after moving forwards on the conveyor.

- **Automatic loading on trays or plates**

After the dough is moulded and cut into rolls, the automatic loading system allows the dough pieces to be deposited quickly and regularly on the trays, thus avoiding manual handling finger marks.

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Some Key Points

The scalable, modular **FlexiLine 1.8** system can produce up to 1,800 baguettes per hour, with a daily production capacity of up to 15,000 baguettes.

The line can be used by a single operator with the automatic tray loading system

It includes all the key features of the FlexiLine range

- Pre-stretching after division with the MF2S® (Stressless Shaping)
- Static intermediate proofing system for optimum dough piece resting
- Calibrated pre-moulding for increased regularity and trim-free cutting
- Moulding finishing in several stages
- Trim-free roll cutting
- Belt-based roll separating conveyor
- L-shaped tray loading system

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FlexiLine® 1.8

The following options and supplementary units can be added later to the standard model:

- Air-pressure controlled hopper on the weighing machine for more regular weights (in particular with in-vat fermentation)
- Rotaball eccentric rounder (to produce dough balls as regular as hand-rounded balls)
- Storage capacity extension for the automatic tray loading system.

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Dough processing expert

FlexiLine® 1.8

The **FlexiLine 2.5** can produce up to 2,500 baguettes per hour, with a daily production capacity of up to 50,000 baguettes.

The line can be used by a single operator with the automatic tray loading system fitted with an elevator. (see following picture)

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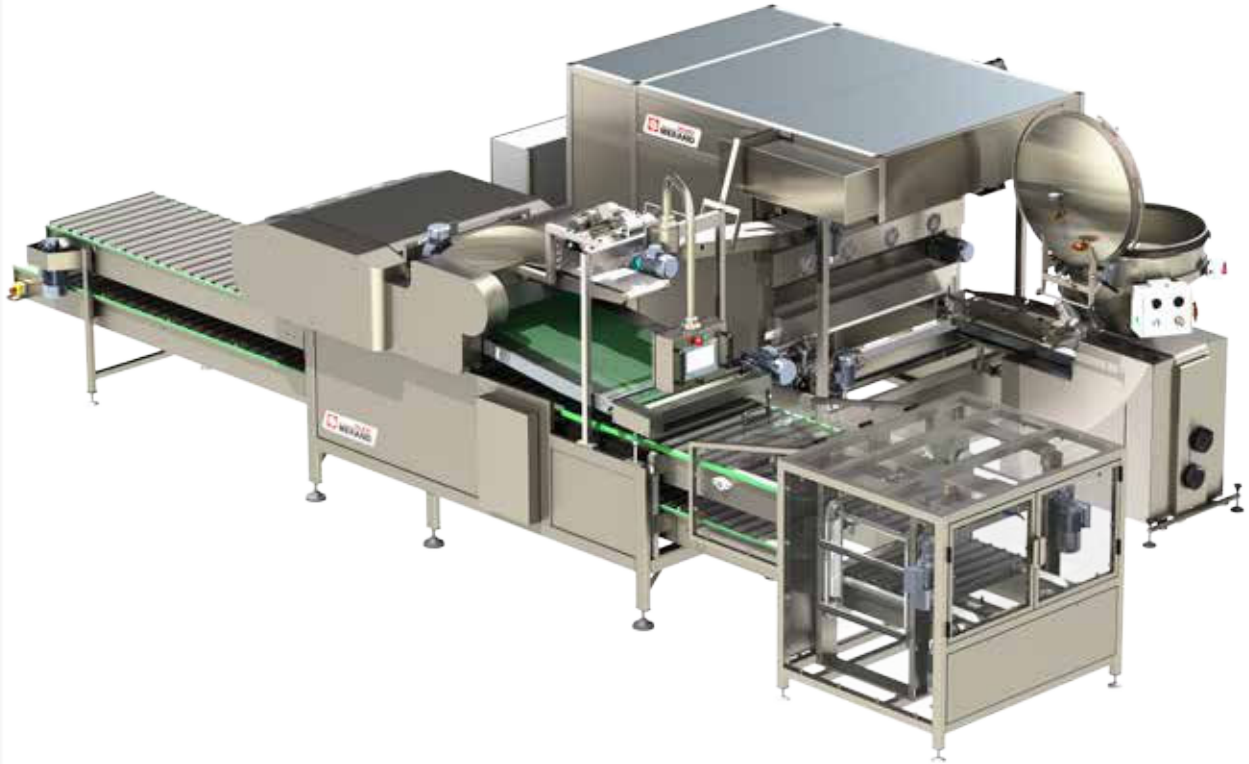
FlexiLine® 2.5

For controlled stretching and maximum regularity, the FlexiLine 2.5 line is fitted with the following systems:

- Pre-stretching after division with the MF2S® (Stressless Shaping)
- Static intermediate proofing system for optimum dough piece resting
- Dough piece intermediate proofer exiting frequency regulator and regular interval separator
- Pre-stretched dough piece centering system prior to moulding
- 5-roller dough sheeter for gradual dough sheeting
- Variable flow-rate dough-piece flouring system, with recipe memory storage
- Calibrated initial stretching for more regular length and diameter
- 2nd stretching with the C2A® (Controlled stretching) system
- Moulding belt rotation direction and speed control according to recipe (stored in memory using the touch screen control pad)
- Roll cutting with the RollsCoup' system (1/2 baguette, 1/3, 1/4, 1/5...) with no trimming waste
- Loading and frequency regulating V-belt re-alignment system
- Different types of automatic tray or conveyor loading systems
- Touch-screen control pad to save all recipe settings (with Operator and Production manager modes)



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Dough processing expert

FlexiLine® 2.5

The following options and supplementary units can be added later to the standard model:

- Air-pressure controlled hopper on the weighing machine for more regular weights (in particular with in-vat fermentation)
- Rotaball eccentric rounder (to produce dough balls as regular as hand-rounded balls)
- Storage capacity extension for the automatic tray loading system.

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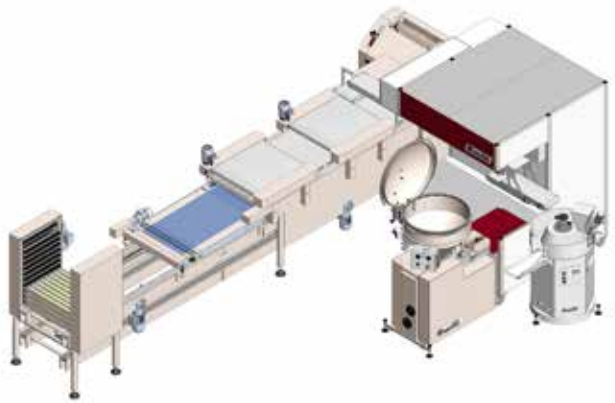
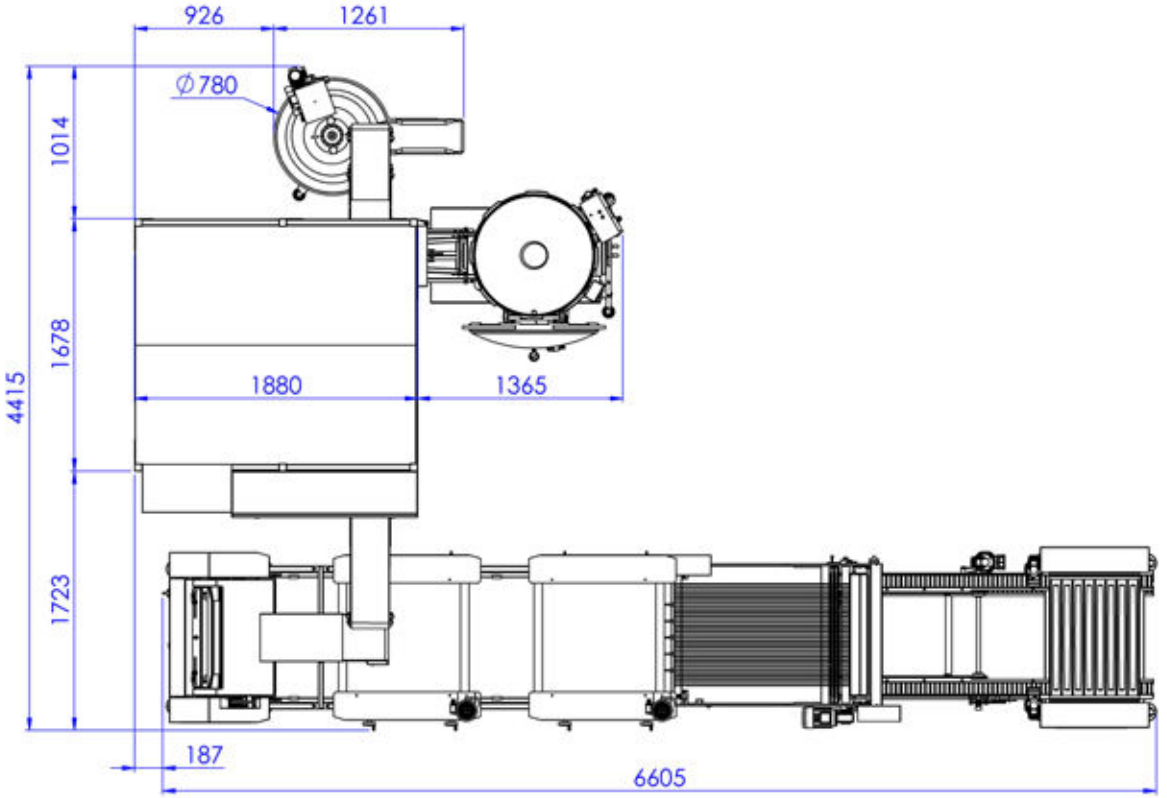
FlexiLine® 2.5

Some standard configurations (other needs, please consult us because we can study accessories to answer your requests)





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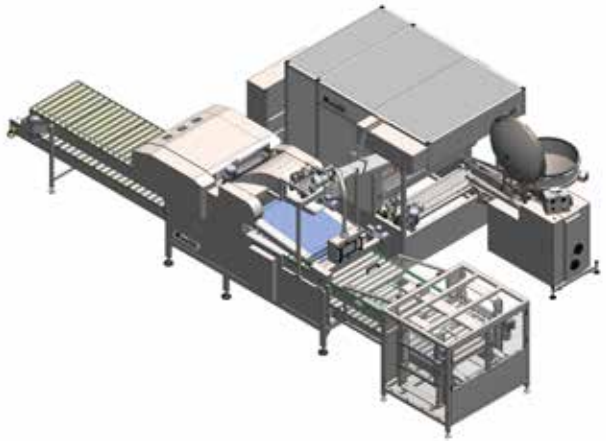
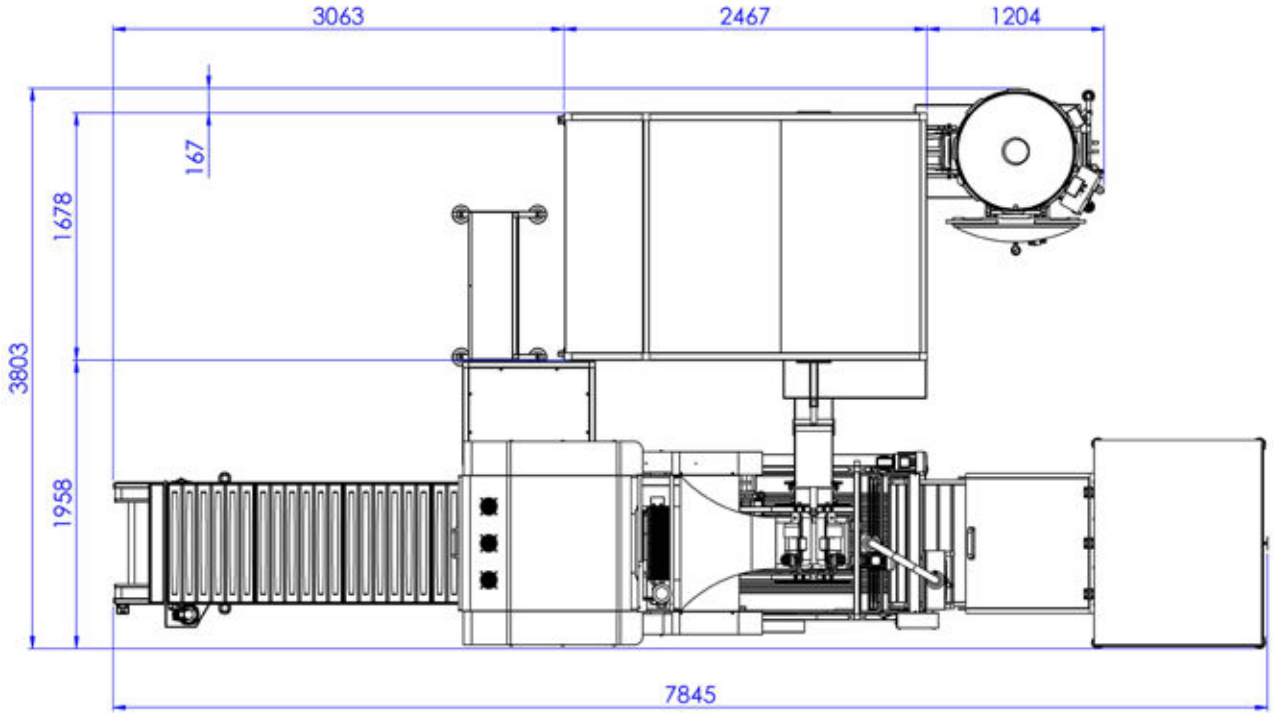
FlexiLine® 1.8

Some standard configurations (other needs, please consult us because we can study accessories to answer your requests)





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FlexiLine® 2.5

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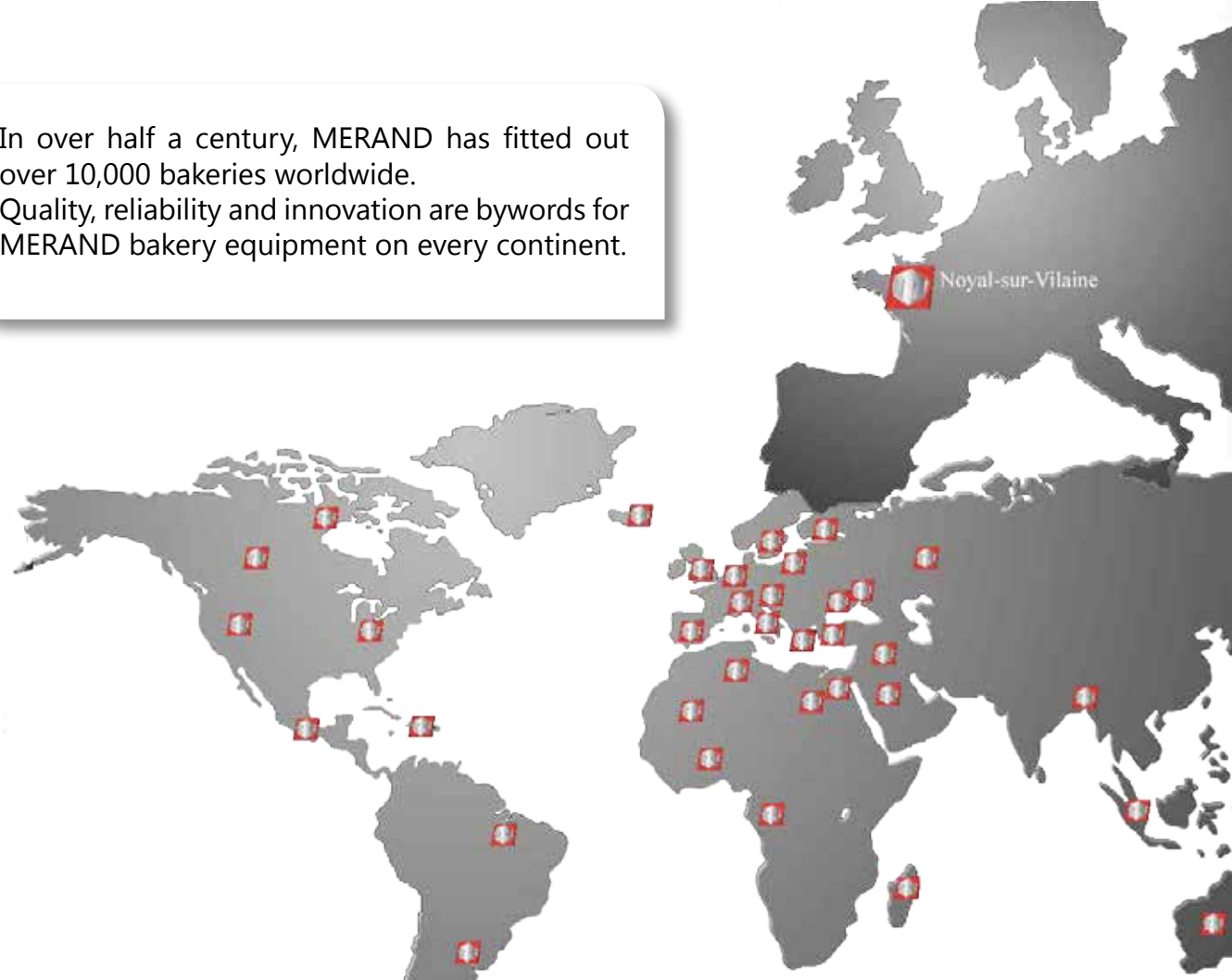
In over half a century, MERAND has fitted out over 10,000 bakeries worldwide.
Quality, reliability and innovation are bywords for MERAND bakery equipment on every continent.



Represente by:

MERAND
Le maître d'oeuvre de la pâte

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