



Werner & Pfleiderer
Industrial Bakery Technologies

Industrial Lines
for the production
of fresh baked goods



WP BAKERYGROUP

WP BAKERYGROUP is the company for bakers. Our comprehensive range of high-quality machines and equipment is aimed at the requirements of bakeries worldwide. We provide baking technology for every step in the process – starting with kneading, dividing & moulding, through to proving & refrigerating and finally baking in both production and shop environments.

Our motto is **'think process!'**. Because only when all the separate processes are perfectly in tune with one another, is it possible to achieve consistently high quality and cost-effectiveness.

- Measurable energy savings
- Less waste
- Higher productivity
- Very simple machine operation
- Reproducible product quality

Day after day

think process!

 **Werner & Pfleiderer**
Bakery Technologies

 **Haton**

 **Werner & Pfleiderer**
Industrial Bakery Technologies

 **Kemper**

 **Werner & Pfleiderer**
Bakery Cooling

 **Winkler**

 **Werner & Pfleiderer**
Instore Baking

 **BackNet**
Bakery Software

 **Werner & Pfleiderer**
Bakery Service

WP CompetenceCenter

- _ Mixing.** Emil Kemper GmbH, Rietberg
- _ Dividing & moulding Rolls.** Emil Kemper GmbH, Rietberg
- _ Dividing & moulding Bread.** Werner & Pfleiderer Haton B.V., NL-Panningen
- _ Baking.** Werner & Pfleiderer Lebensmitteltechnik GmbH, Dinkelsbühl
- _ In-store baking.** Werner & Pfleiderer Lebensmitteltechnik GmbH, Dinkelsbühl
- _ Proofing & Cooling.** Werner & Pfleiderer Lebensmitteltechnik GmbH, Dinkelsbühl
- _ Laminating.** Werner & Pfleiderer Industrielle Backtechnik GmbH, Tamm
- _ Engineering.** Werner & Pfleiderer Industrielle Backtechnik GmbH, Tamm
- _ Bakery software.** BackNet E&S GmbH, Muggensturm

www.wpbakerygroup.com



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INDUSTRIAL LINES

*The professional planning and implementation of industrial lines for the production of baked goods requires in-depth knowledge and many years of experience. High performance multi-shift production, consistently high product quality, state-of-the-art control systems, challenging hygiene standards and short cleaning and maintenance times are key requirements for modern plant concepts. Requirements the individual companies of the **WP BAKERY GROUP** are definitely able to meet. Based on this background we supply individually equipped industrial lines that are acknowledged worldwide for their reliability.*



Werner & Pfleiderer Industrial Bakery Technologies – For more than 125 years we have developed, projected, manufactured, installed and maintained industrial machines and equipment for the production of baked goods. Today, we have become one of the leading suppliers of highly automated concepts for the continuous production of different types of products – from dough production to conveying of the baked goods and automated packaging. Our core activity within the **WP BAKERYGROUP** are “industrial solutions”. Our product portfolio includes industrial lines for the production of different types of bread including toast bread, wheat and rye breads as well as for the production of rolls, biscuits, soft pretzels, crispbread and many more.

We supply technical solutions that meet highest expectations. In close cooperation with our clients we develop concepts that comply with the market requirements or are setting future trends in industrial production.



EQUIPMENT AND MACHINES**MODULES**

_Pan bread lines	Mixer Dough make-up Proofing system Finishing Oven Transport logistics Cooling and freezing systems Conveying and packaging systems
_Rye/mixed rye bread lines	Mixer Dough make-up Proofing system Finishing Oven Cooling and freezing systems Conveying and packaging systems
_Wheat/mixed wheat bread lines	Mixer Dough make-up Proofing system Finishing Oven Cooling and freezing systems Conveying and packaging systems
_Roll lines	Mixer Dough make-up Proofing system Finishing Oven Transport logistics Cooling and freezing systems Conveying and packaging systems
_Baguette lines	Mixer Dough make-up Proofing system Finishing Oven Cooling and freezing systems Conveying and packaging systems



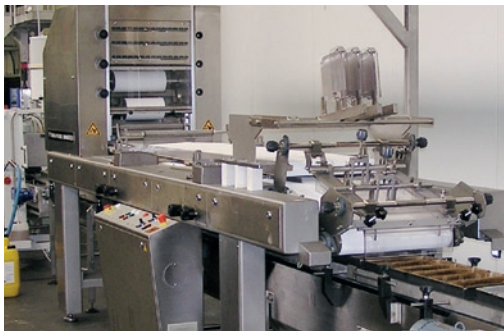
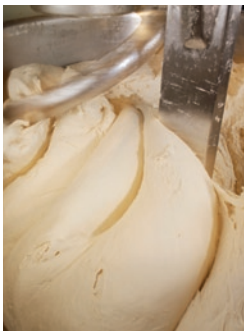
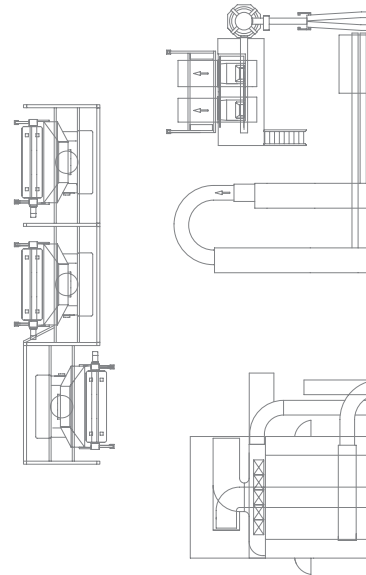
PAN BREAD LINES

Pan bread lines The production of pan bread and toast bread starts with dough production and dough make-up. Next, the strapped pans move through the proofing system for the final proof before they reach the THERMADOR tunnel oven. The strapped pans are cleaned, cooled down and returned to the dough make-up section.

The number of oven modules is depending on the necessary baking time in relation to the maximum traveling speed (performance).

Via cooling conveyors, the baked products are moved to the slicing and packaging equipment.

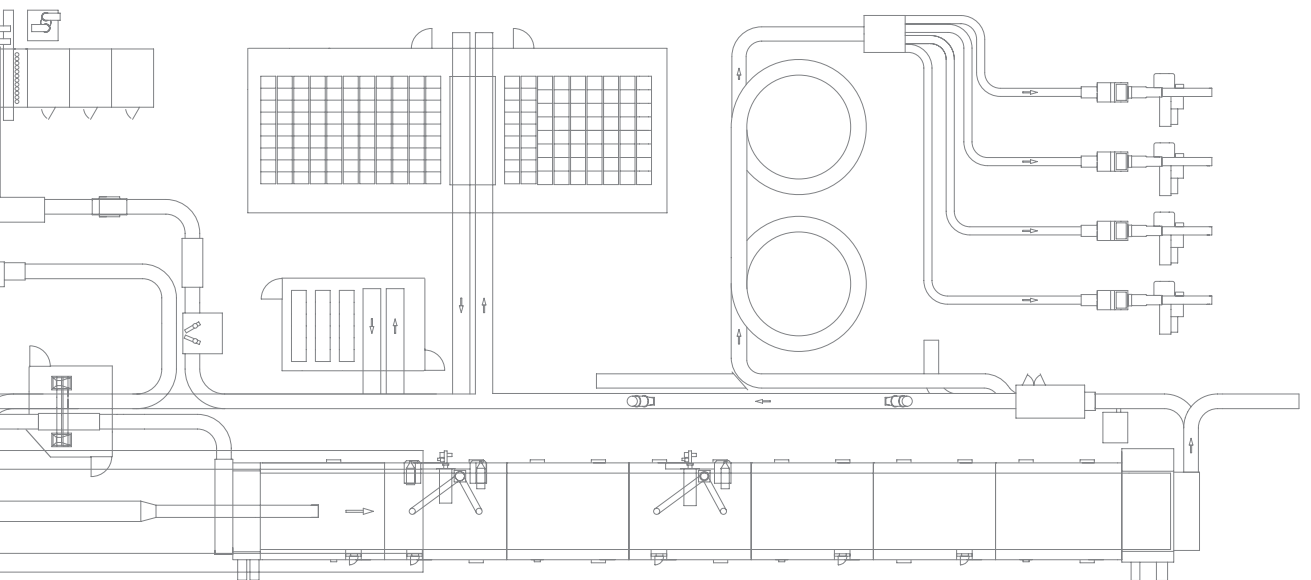
- 1 **Continuous or batch mixing** (with or without vacuum), sponge and dough process or direct process. Fully automatic mixing of homogeneous doughs with short processing time.
- 2 **Industrial dough make-up** including dough divider, rounder, intermediate proofer, moulder for high performance production of high quality dough pieces. The dough pieces are deposited into the strapped pans waiting underneath the moulder.
- 3 **Proofer** (swing tray or step proofer) with controlled humidity and temperature, individually adjustable for a defined final proof. Compact design with high production safety. Downstream dusters/seeders are optionally available.
- 4 **Finishing** with optional dusting/seeded and scoring unit
- 5 **THERMADOR tunnel oven** in modular design with different heating systems (with radiation and overlaying convection).
- 6 **Transport logistics** with lidder, delidder, depanner, cleaning, cooling conveyor, storage and pan oiler.
- 7 **Strapped pans and lids** coated and uncoated.
- 8 **Slicing and packing** with cooling and freezing for a defined core temperature for further processing.





Pan and toast bread

- Toast bread
- Pan bread
- Rye pan bread
- Whole grain pan bread
- Strip bread





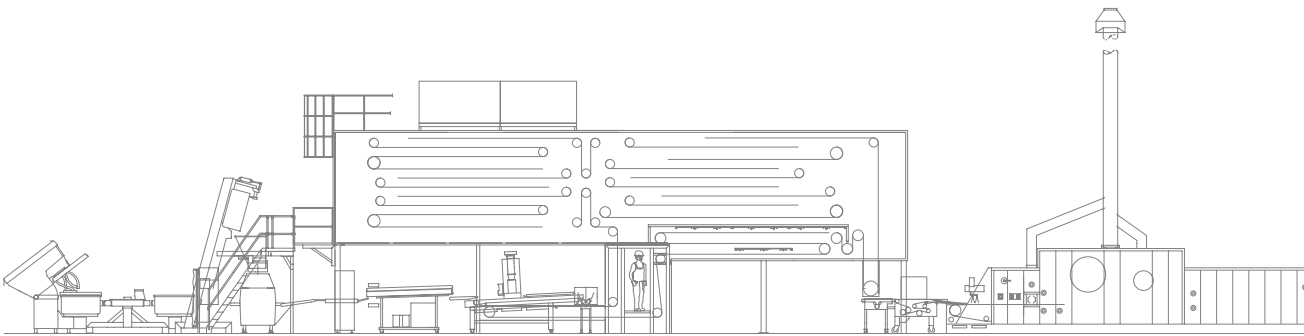
MIXED RYE BREAD LINES, *hearth bread*

Mixed rye bread lines The production of mixed rye bread starts with dough production and dough make-up. Next, the dough pieces are given their final proof before they reach the THERMADOR tunnel oven. Alternatively, the process can also be used with multi-level technology for traditional bread loaves.

The number of oven modules is depending on the necessary baking time in relation to the maximum traveling speed (performance).

Via cooling conveyors, the baked products are moved to the slicing and packaging equipment.

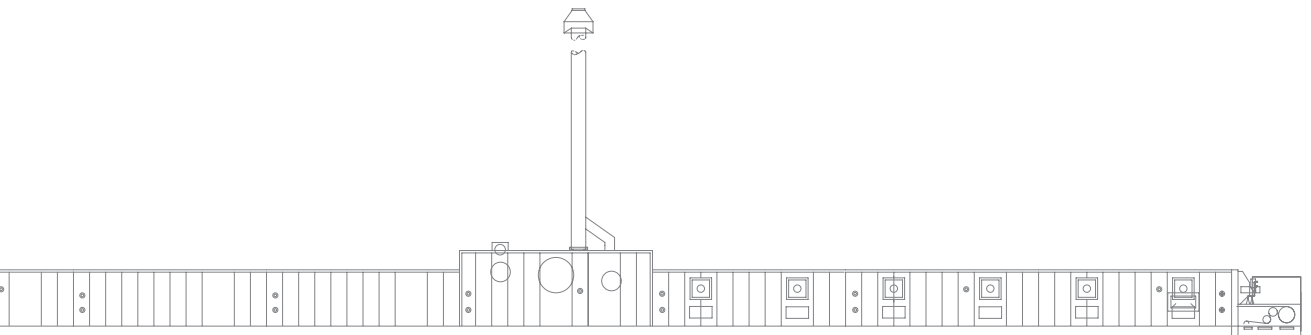
- 1 **Batch mixing** with manual or fully automatic bowl handling. Proven three-zone mixing with optional twin tool for a uniformly high dough quality and high performance.
- 2 **Industrial dough make-up** including dough divider, rounder and moulder for high performance production of high quality dough pieces. The depositing takes place underneath the moulder.
- 3 **Proofer** with controlled humidity and temperature, individually adjustable for a defined final proof. Compact design proofer for boards or baskets with high production safety. Downstream dusters/seeders are optionally available.
- 4 **THERMADOR tunnel oven** in modular design with different heating systems (convection, radiation, combination). Alternatively, the processing stages proofing and baking can also be implemented with multi-level technology.





Rye/mixed rye breads

- mixed rye bread
- mixed wheat bread





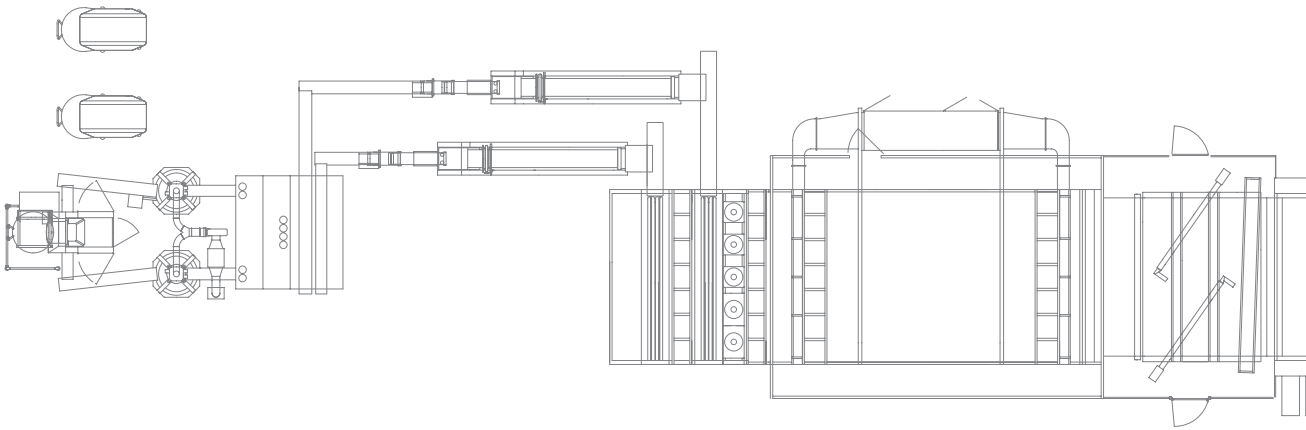
WHEAT BREAD LINES, *hearth bread*

Wheat/mixed wheat bread lines The production of traditional white bread starts with dough production and dough make-up. Next, the dough pieces are given their final proof before they reach the THERMADOR tunnel oven. Alternatively, the process can also be used with multi-level technology. Industrially produced breads can be either hearth bread or loaves baked on trays.

The number of oven modules is depending on the necessary baking time in relation to the maximum traveling speed (performance).

Via cooling conveyors, the baked products are moved to the slicing and packaging equipment.

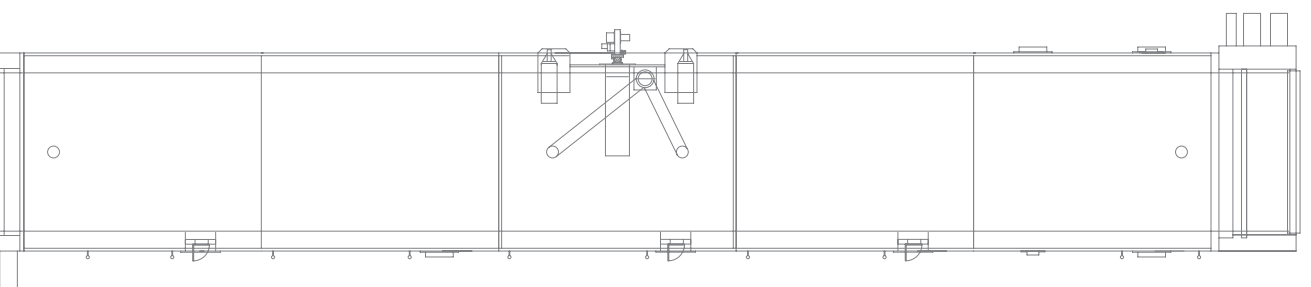
- 1 Batch mixing** with manual or fully automatic bowl handling. Proven three-zone mixing with optional twin tool for a uniformly high dough quality and high performance.
- 2 Industrial dough make-up** including dough divider, rounder and moulder for high performance production of high quality dough pieces. The depositing takes place underneath the moulder.
- 3 Proofer** with controlled humidity and temperature, individually adjustable for a defined final proof. Compact design proofer for boards or swing trays with high production safety. Downstream dusters/seeders are optionally available.
- 4 THERMADOR tunnel oven** in modular design with different heating systems (convection, radiation, combination). Alternatively, the processing stages proofing and baking can also be implemented with multi-level technology.





Wheat/mixed wheat breads

- Bread loaves
- Baton
- French bread





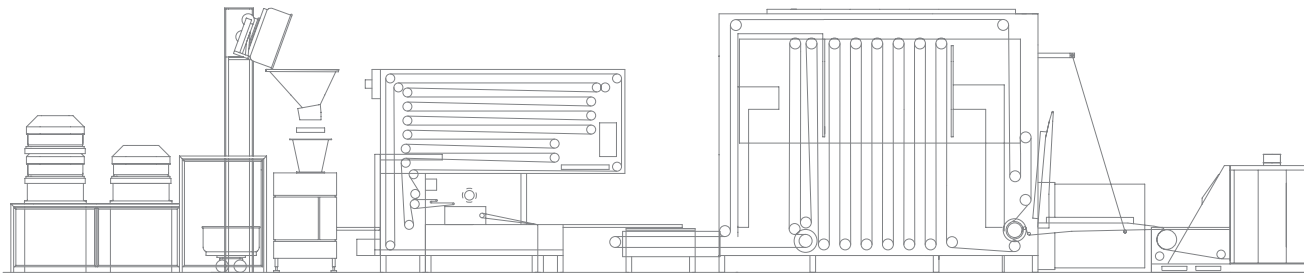
ROLL LINES

Roll lines The production of rolls starts with dough production and dough make-up. Next, the dough pieces are given their final proof before they reach the THERMADOR tunnel oven. Alternatively, the process can also be used with multi-level technology. Industrially produced rolls can be either baked directly on the hearth or on trays.

The number of oven modules is depending on the necessary baking time in relation to the maximum traveling speed (performance).

Via cooling conveyors, the baked products are moved to the packaging equipment.

- 1 **Batch mixing** with manual or fully automatic bowl handling. Proven three-zone mixing with optional twin tool for a uniformly high dough quality and high performance.
- 2 **Industrial dough make-up** including dough divider, stamping station, cutter and moulder for high performance production of high quality dough pieces. The dough pieces are then handled by a high performance depositor.
- 3 **Proofer** with controlled humidity and temperature, individually adjustable for a defined final proof. Compact design proofer for swing trays with high production safety. Downstream dusters/seeders are optionally available.
- 4 **THERMADOR tunnel oven** in modular design with different heating systems (convection, radiation, combination). Alternatively, the processing stages proofing and baking can also be implemented with multi-level technology.





Rolls

- Kaiser rolls
- Hard rolls
- Baguette rolls
- Hamburger buns
- Hot Dog buns





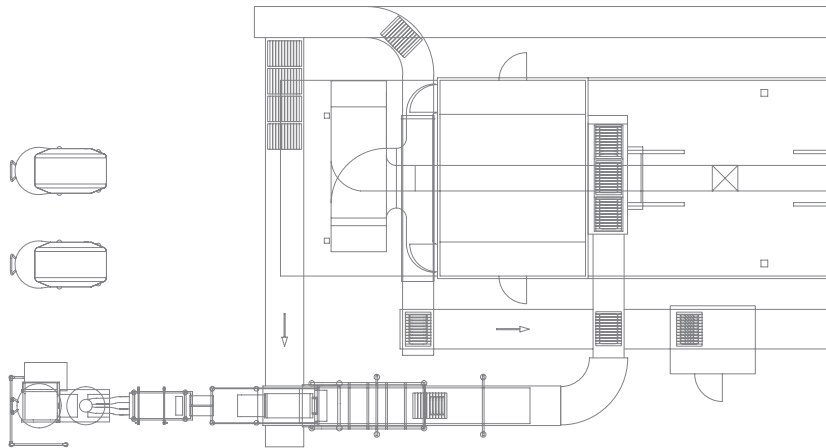
BAGUETTE LINES

Baguette lines The production of baguettes starts with dough production and dough make-up. Next, the dough pieces are given their final proof before they reach the THERMADOR tunnel oven. Alternatively, the process can also be used with multi-level technology. Industrially produced baguettes can either be baked directly on the hearth or on trays.

The number of oven modules is depending on the necessary baking time in relation to the maximum traveling speed (performance).

Via cooling conveyors, the baked products are moved to the packaging equipment.

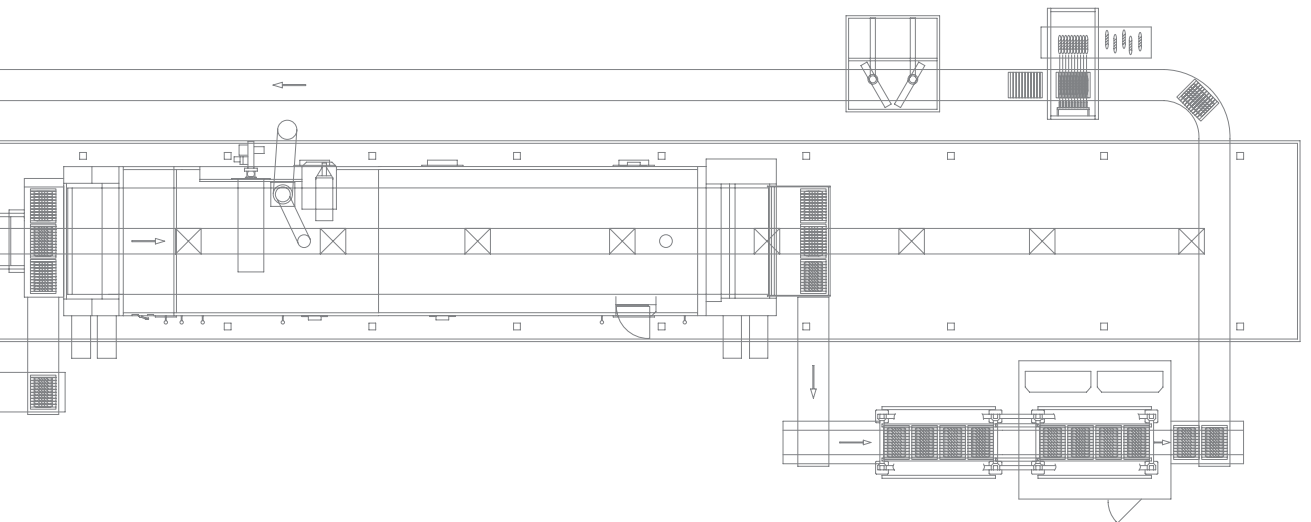
- 1 **Batch mixing** with manual or fully automatic bowl handling. Proven three-zone mixing with optional twin tool for constantly high dough quality and high performance.
- 2 **Industrial dough make-up** including dough divider, cutter and moulder for high performance production of high quality dough pieces. The dough pieces are then handled by a high performance depositor.
- 3 **Proofer** with controlled humidity and temperature, individually adjustable for a defined final proof. Compact design proofer for boards or swing trays with high production safety. Downstream dusters/seeders are optionally available.
- 4 **THERMADOR tunnel oven** in modular design with different heating systems (convection, radiation, combination). Alternatively, the processing stages proofing and baking can also be implemented with multi-level technology.





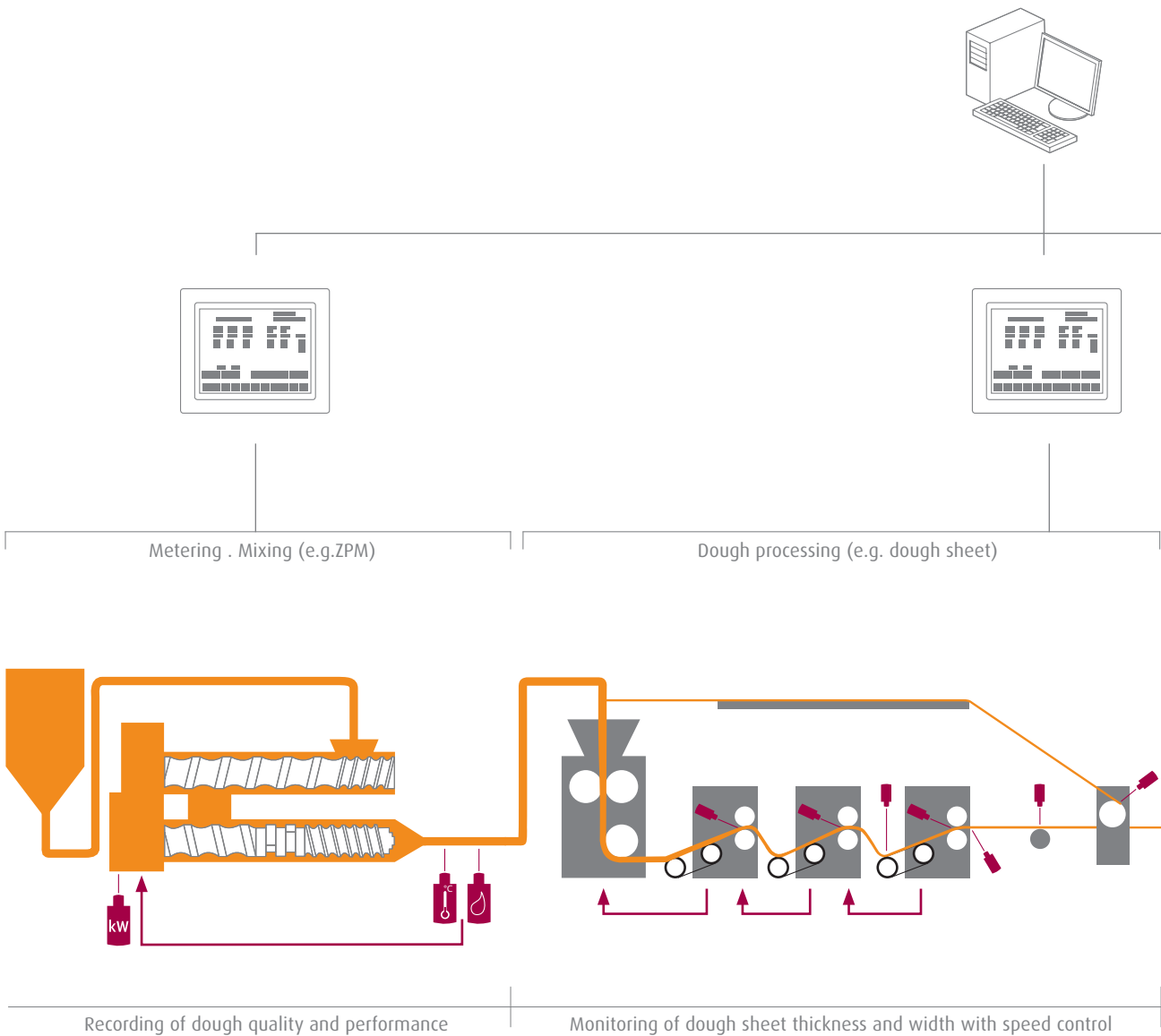
Baguette

- Baguette
- Half Baguette
- Petit Pain



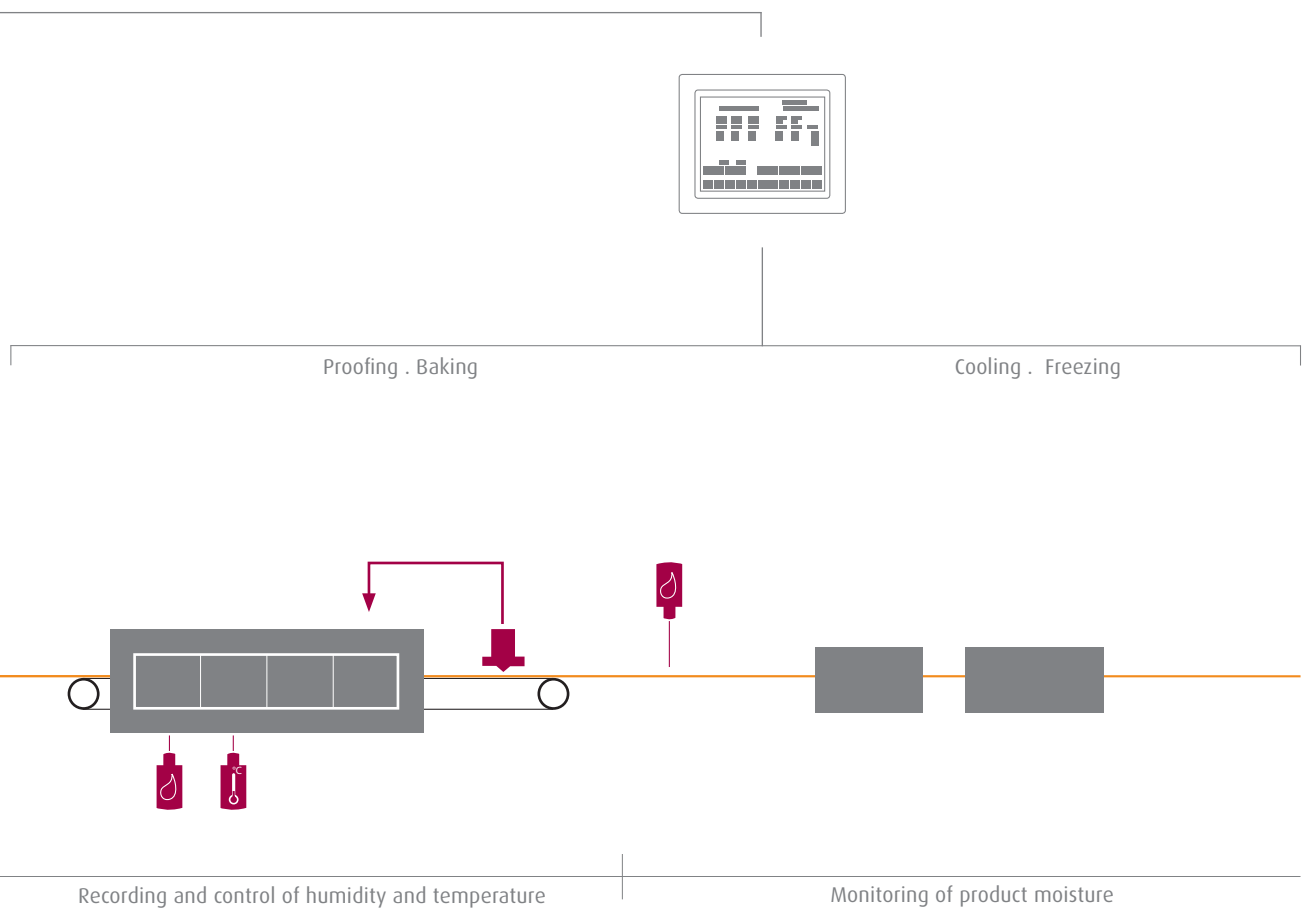
AUTOMATION

Convenient operation, complete reproducibility of product qualities and excellent availability characterize the industrial equipment provided by **Werner & Pfleiderer**. These features are also directly related to the lines' high degree of automation. Controlling, measuring, adjusting - all parameters can be monitored and corrected automatically by the control system or manually by the line operator. A wealth of different sensors permanently monitors the quality relevant parameters of the production process including dough quality and performance, thickness, width and speed of the dough sheet, humidity and temperature inside the oven, moisture and temperature of the product. The lines' modules react immediately to the obtained results and modify their settings - a completely self-regulating system.



The entire production process is documented in detail. It can be monitored by the authorized line operator and his supervisor and manually corrected, if needed. Via internet the entire automation system can be remote controlled and maintained.

Werner & Pfleiderer Industrial Bakery Technologies turns special customer requirements into different productions lines with the desired degree of automation.



WP BAKERYGROUP

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*The **WP BAKERYGROUP** has subsidiaries in France, Italy, Belgium, Russia and the USA.*

You will also find dealerships with service stations all over the world.

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