

# THERMO

Rack oven heated by thermal oil



The ideal oven for gentle baking.

**FLEXIBLE AND ECONOMICAL**



## Is the THERMO the ideal solution for your needs?

The THERMO oven, heated by thermal oil, combines the advantages of rack baking (e.g., HEIN ECOSTONE<sup>2</sup>) with the gentle radiant heat baking of an annular tube oven (e.g., HEIN UNIVERSAL).

Rack baking significantly simplifies the baker's workflow and provides high production versatility (small and large products, sandwich bread, pastries, etc.). The number of decks (7 to 10) is determined based on the specific needs of your production (standard or large-volume products).



- *Is your business expansion requiring increased baking capacity for your deck or rotary oven, but you lack the necessary space?*
- *Do you need to bake many moulded products and constantly struggle with an outdated and laborious workflow?*
- *Would you like to streamline and optimize these operations?*
- *Is your goal continuous production with reduced costs while increasing baking quality?*
- *Do you want an oven with flexible baking temperature control depending on the products loaded?*

If you answered "Yes" to one or more of these questions, now is the perfect time to invest in a HEIN THERMO rack oven.



Long-lasting freshness, a perfect crust, optimal rise and excellent crumb structure.



Gentle heat for excellent and highly uniform baking.

Double-glazed IR-treated thermal insulation glass (reduced heat radiation).

Fully constructed in stainless steel, inside and out!

Two racks 80 x 60 cm, 100 x 60 cm or 100 x 80 cm 7, 8, 9 or 10 decks.

Option to bake on stone sole racks with a belt loader.

Oversized hood with powerful exhaust system

Steam system heated by thermal oil for non-stop production.

Touchscreen control panel.

Additional **TURBO-CONVECTION** for "crisp" baking.

"Monoblock" version: Integrated economical boiler. Thermal oil never needs to be replaced.

Easy cleaning.

- Optimal baking quality
- Maximum baking surface relative to floor space.
- Flexibility and universal use.
- Maximum durability.
- Minimal maintenance.
- Energy efficiency.

## The system

The thermal oil heating system is comparable to a central heating system.

In a heating generator (1), special oil circulating in heating plates is heated using a burner or electric resistances (2) (primary circuit). This thermal oil is a highly fluid mineral oil that can be heated to over 320°C. Thanks to the high heat capacity of thermal oil, the oven temperature remains stable and is barely affected by door openings or product loading.

Due to the minimal difference between the actual baking temperature and the thermal oil temperature, products in the oven are not at risk of burning, even with partial or prolonged baking. This ensures a perfectly uniform bake.

The heating plates (4) provide particularly gentle and moderate radiant heat to the baking trays and grids. A constant baking atmosphere is maintained within the oven.

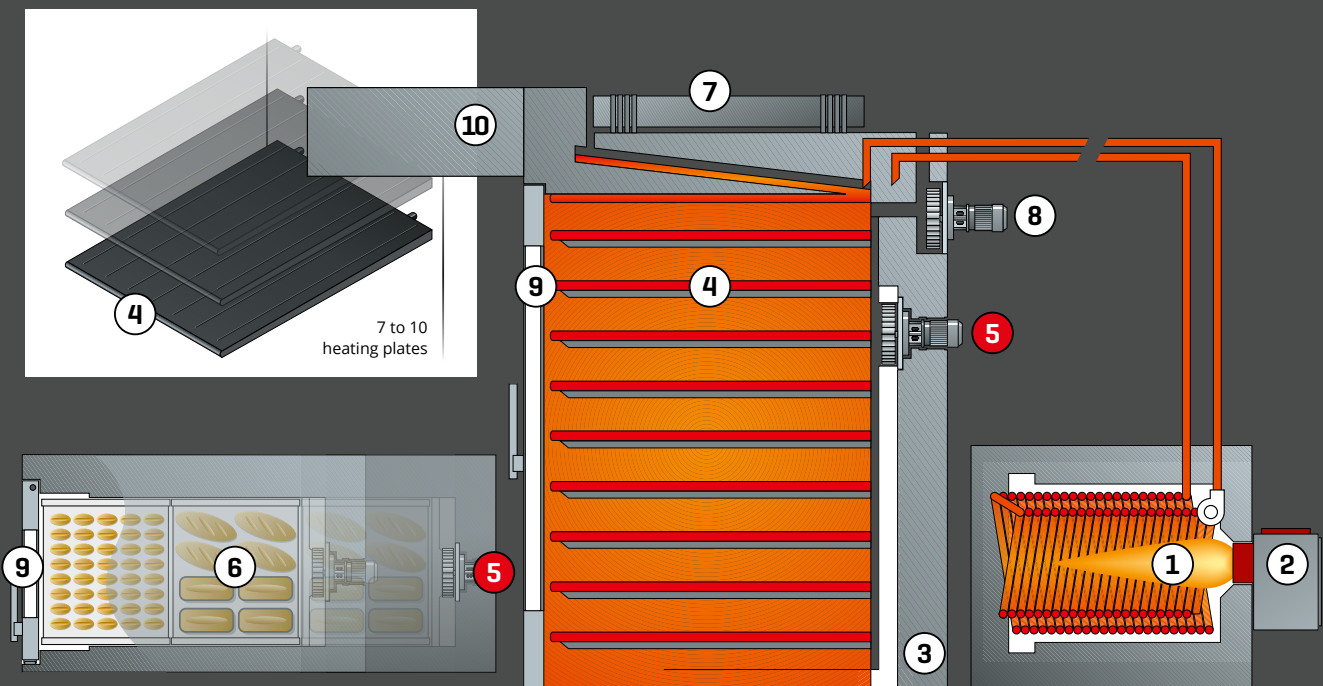
A forced air circulation system using an extraction and impulse turbine (5) enables additional programmable convection baking to promote the formation of a thicker crust. This **TURBO-CONVECTION** is also highly recommended for baking pre-baked bread and moulded bread. Your products will always benefit from optimal baking conditions.

The boiler does not need to be installed near the oven, allowing for more workspace and improving working conditions (reduced noise and heat emissions).

The boiler's power can be adjusted to allow multiple ovens to be connected simultaneously. In the event of future baking capacity expansion (additional oven purchase), the investment will be significantly reduced.

**CAPTION**

- 1 Heating boiler | 2 Burner or electrical or hybrid heater | 3 Isolation | 4 Heating plates
- 5 **TURBO-CONVECTION** - Hot air circulation fan | 6 Baking racks | 7 High-efficiency steam generator
- 8 Steam extraction system | 9 Solid stainless steel door | 10 High-power hood

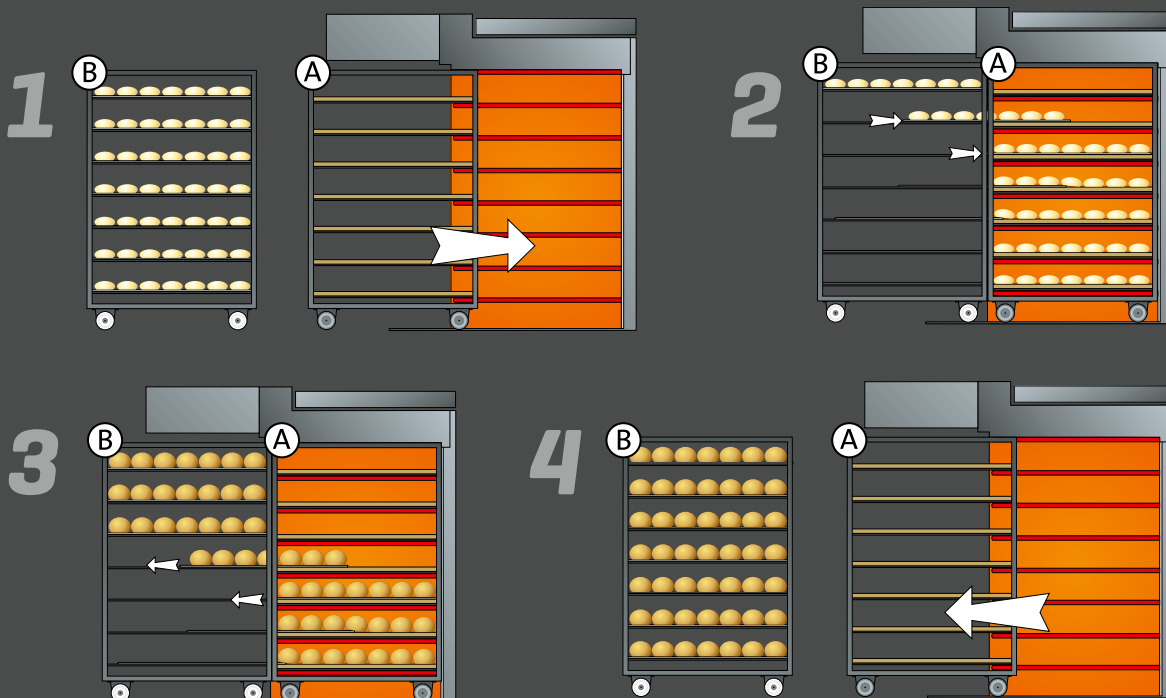


## Baking on stone soles with a belt loader and unloader

If your customers increasingly demand stone-baked bread and baguettes but you lack the space for an additional deck oven, we have the ideal solution!

The mobile stone baking system for the Thermo enables baking on stone with a capacity of 140 to 240 loaves. This means you have two ovens in one. Simple and efficient.

- 1** Preheat the rack equipped with stone soles (A) in the THERMO (approximately 30 minutes).
- 2** The dough pieces, placed on a combi-rack with belt loaders/unloaders (B), are deposited onto the stone soles.
- 3** After baking, the combi-rack with belt loaders/unloaders (B) allows for quick unloading of the baked products.
- 4** To switch to baking with flat plate racks, simply remove the stone sole rack (A). Production continues without downtime.

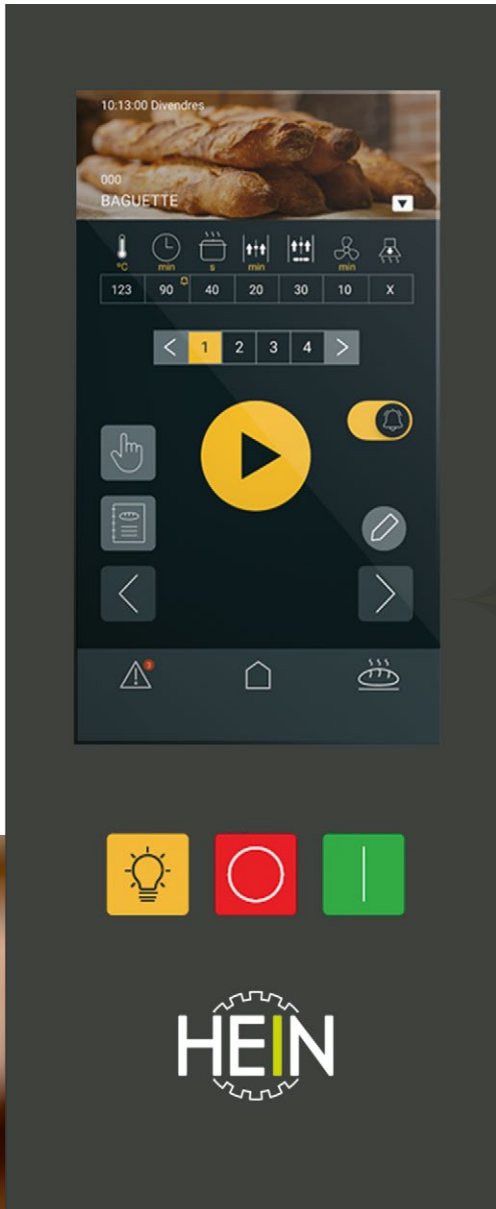


## Summary

- **Heating System:** The mineral thermal oil, heated inside the boiler or via electric resistances, circulates through the radiators on each deck, returning to the heat generator. The patented oil circulation system ensures absolute baking consistency. Thanks to the high calorific capacity of thermal oil, the oven temperature remains stable and does not fluctuate when the door is opened or when loading products.
- **Monoblock design** (oven and boiler). Maximum baking surface relative to floor space.
- **Steam Production:** Steam is generated in a steam generator located at the top of the oven, heated via the same circuit as the thermal oil. The amount of steam is automatically regulated via the control panel. Thanks to its unique design, a uniform distribution of a predefined quantity of saturated steam is always ensured. Dough pieces are perfectly enveloped in steam at the start of baking.
- **Baking Chamber:** Completely sealed and entirely made of stainless steel.
- **Radiators:** Made of high-strength steel. The exclusive design allows up to 10 baking decks while maintaining the same height as systems limited to a maximum of 10 levels. This significantly increases the baking surface.
- **Mineral Thermal Oil:** Never needs to be changed or filtered.
- **Door:**
  - **Large viewing window** for an excellent view of the products inside the oven.
  - **IR-treated double glazing** significantly reduces heat radiation.
  - **New Integrated Lighting System:** Located in the door for easy maintenance.
- **Oversized Hood with Powerful Extraction System:** Ensures perfect steam evacuation when the door is opened. It is directly connected to the oven's exhaust chimney.

- **TURBO-CONVECTION** (Dynamic Baking Atmosphere in Addition to Gentle Radiant Heat): Highly recommended for producing pre-baked bread and molded bread. This system ensures forced air circulation in the baking chamber via a suction and impulse turbine. The forced air enables additional convection baking, programmable during the final minutes of the baking cycle.
- **Controls:** Touchscreen for easy operation.
- **Minimal Maintenance:** The oven contains no moving parts inside.
- **Heating Options:** Gas, oil, electricity or hybrid (electricity combined with gas or oil).





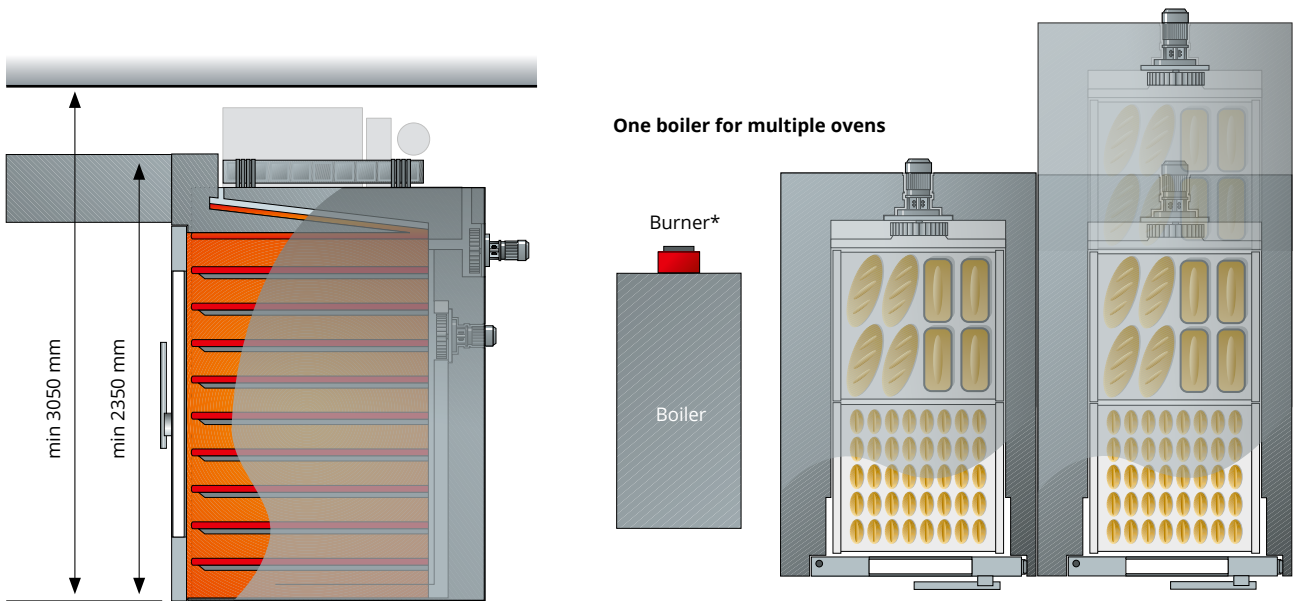
## Control System

The THERMO oven's touchscreen allows programming and controlling temperature, baking times, steam injection, TURBO-CONVECTION activation, etc.

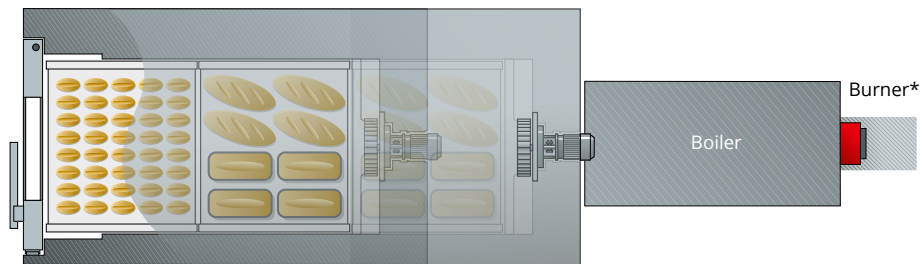
- Can store **up to 500 different programs**, with up to 7 steps or instructions per baking program.
- **Easy to use**, minimizing errors due to incorrect operation.



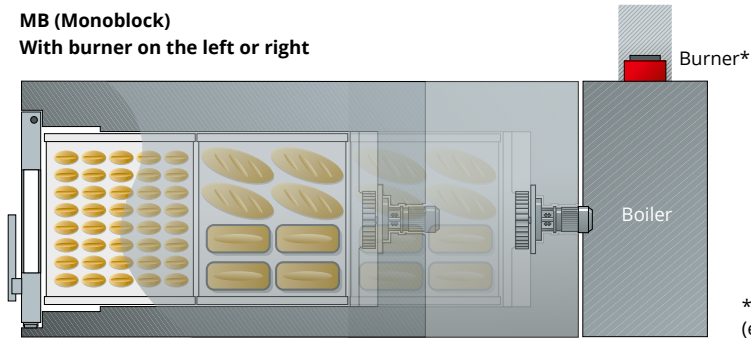
Different construction options



With rear burner



MB (Monoblock)  
With burner on the left or right



\*) Gas, oil, electricity or hybrid (electric combined with gas or oil)

- TH 86: For 2 or 3 racks of 80 x 60 cm
- TH 106: For 2 or 3 racks of 100 x 60 cm
- TH 108: For 2 or 3 racks of 100 x 80 cm

External Dimensions Thermo for 2 racks	TH-86	TH-106	TH-108
	Depth x Width (cm)		
Mono Bloc	350 x 146	350 x 162	390 x 172
without boiler	268 x 146	268 x 162	294 x 162

Maximum height between floors (cm) TH-86, TH-106 & TH-108				
racks	7 floors	8 floors	9 floors	10 floors
standard	204	172	148	129
with stone plates	197	165	141	122
with loader	147	115	91	72

height	depends on the project. (min. 320 cm)
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**HEIN TOPLUX**

Cooling Technology from A to Z

**HEIN FLEX-UV**

Long-term preservation of pre-baked bread

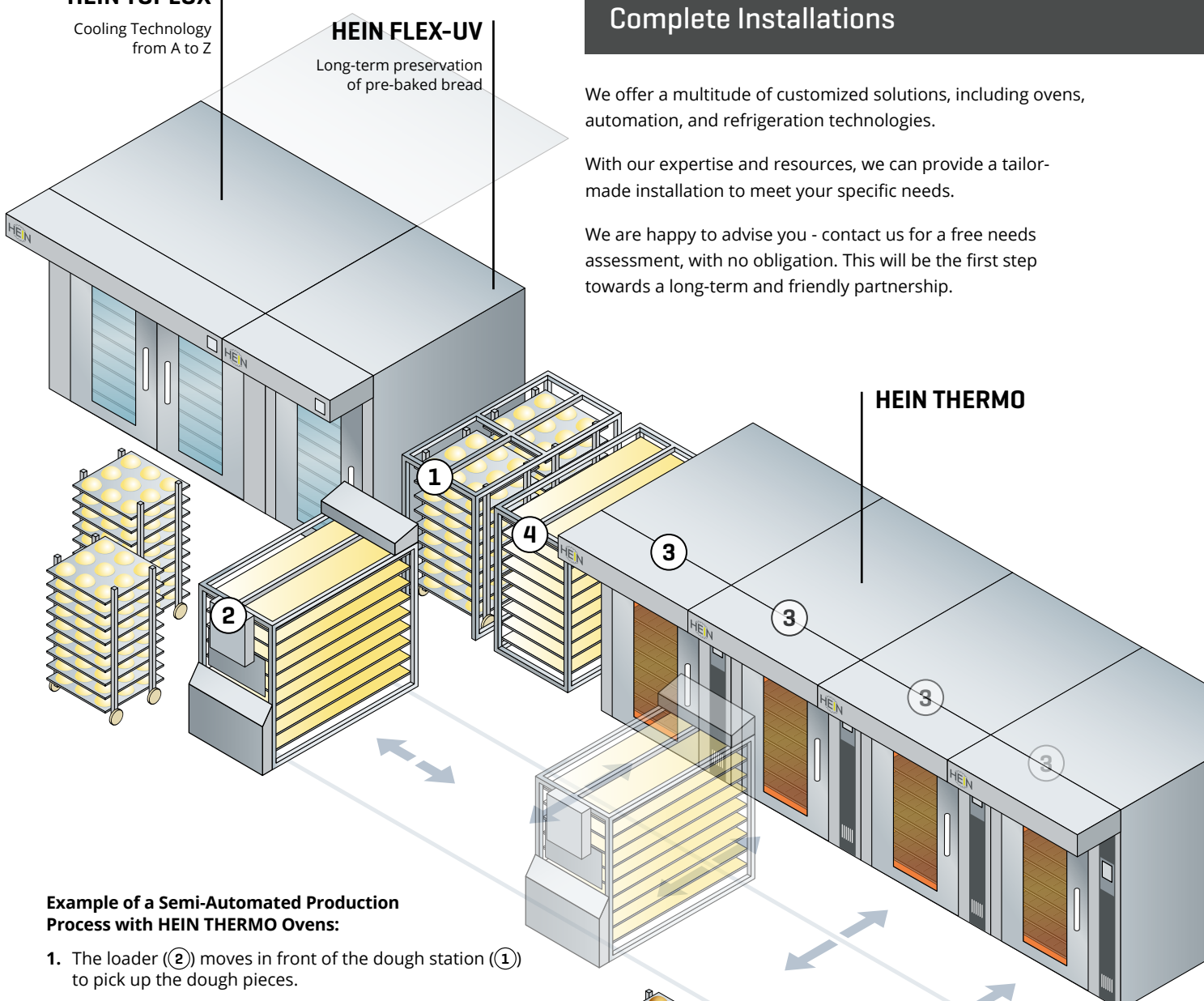
**Complete Installations**

We offer a multitude of customized solutions, including ovens, automation, and refrigeration technologies.

With our expertise and resources, we can provide a tailor-made installation to meet your specific needs.

We are happy to advise you - contact us for a free needs assessment, with no obligation. This will be the first step towards a long-term and friendly partnership.

**HEIN THERMO**



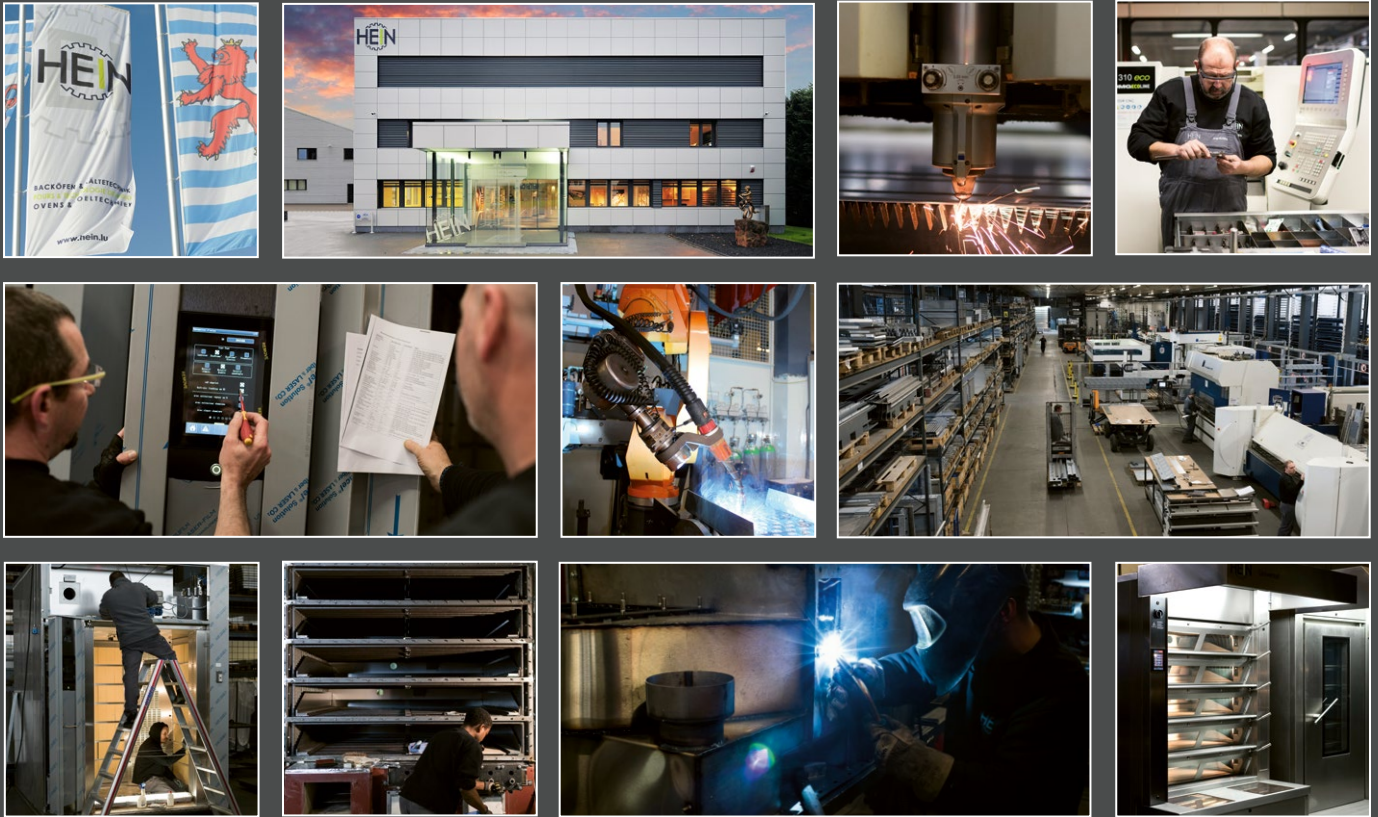
**Example of a Semi-Automated Production Process with HEIN THERMO Ovens:**

1. The loader (2) moves in front of the dough station (1) to pick up the dough pieces.
2. The loader (2) moves laterally, positions itself in front of the selected oven (3), and loads the dough pieces inside the oven. Baking begins.
3. Baking ends. The loader (2) moves in front of the oven (3) and unloads the baked products.
4. The loader (2) moves to the unloader (4) and unloads the baked products.

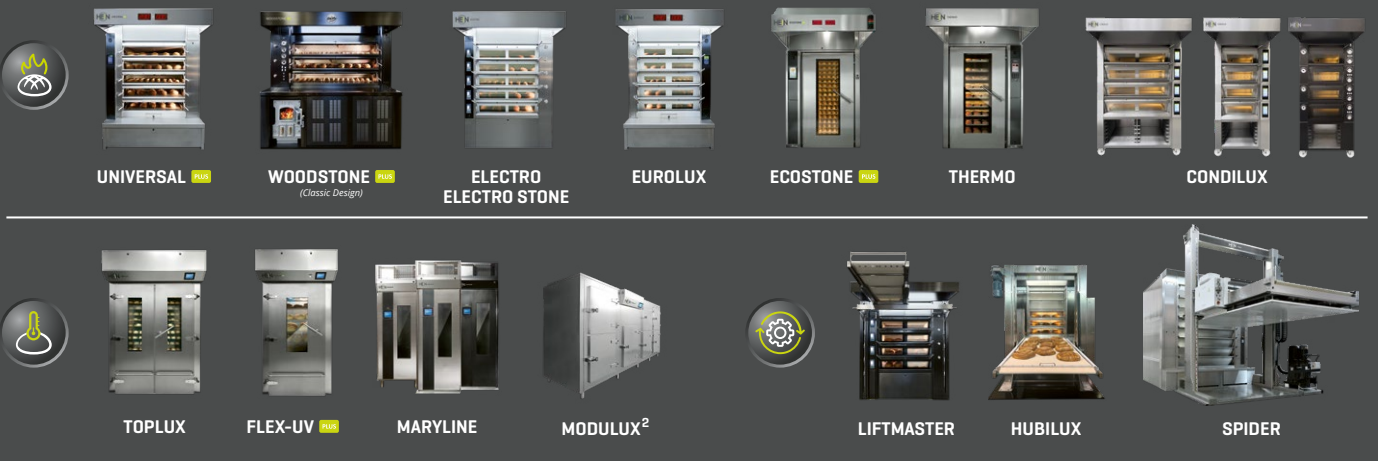


# Oven construction and cooling technologies

The HEIN company is an innovative family-owned company from Luxembourg, which has been developing high-quality baking and cooling technology for demanding bakers and manufacturing it in its own production facilities since 1882. Every product that leaves the factory is the result of over 140 years of experience, the highest level of engineering, the best materials and components, the most modern production techniques down to the last detail and the skills of highly motivated and committed employees.



## Overview of our product range



*Redefining excellence. Since 1882.*



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