

LUXROTOR & ECOSTONE®

ROTARY RACK OVENS for one, two or four rotary racks
from 4,3 to 38,4 m²



THE HEIN LUXROTOR SERIES

Large baking surface on a small floor space - the right choice for all requirements.

The unrivalled amazing dimensions of HEIN-LUXROTOR rotary ovens (baking surface in relation to the floor surface) were made possible by a revolutionary concept: the integration of the burner in the upper part of the oven and a completely redesigned space-saving air duct.

The very best criteria of our "HEIN Quality" stand guarantee for consistently excellent baking results, a long lifetime, and reduced operating and maintenance costs while optimising products and production.



GENERAL ADVANTAGES:

- + Excellent steam distribution for optimal baking performance per deck.
- + **SOFTSTART** - The new oven rack driving system with frequency-controlled (soft) starting and stopping.
- + **SOFTAIR** - This option can be used to regulate the air speed with precision per baking stage.
- + Compatible with all other rack ovens.
- + Construction and finish using only the best materials available (e.g. exterior and interior walls made 2 mm thick high-grade stainless steel).
- + Completely steam-tight oven door with tested reliable lifting and lowering mechanism. (unique HEIN lifting mechanism).
- + Ergonomic operation and user-friendly **TOUCHMATIC** computer control.
- + Customer service (24/7) and spare parts at reasonable prices.

ADVANTAGES OF OVENS FOR TWO AND FOUR RACKS:

- + Minimum setup space/maximum baking surface with a robust construction that makes no compromises (as with all HEIN ovens)
- + Lower investment costs / less energy consumption.
- + Lower connecting costs (only one hood, one steam connection and one energy connection).
- + Maintenance costs for only one burner.
- + Exceptional production increase.



Unique HEIN lifting mechanism



ROTARY RACK OVENS FOR 1 RACK



4.3 m² to 16 m² usable baking surface on a floor surface of only 1.0 m² to 1.0 m²

LUXROTOR MODEL	Heat Exchanger	Number (max)/ size of steel sheets (cm)	Baking surface (max m ²)	External measurements (D x L x H) (cm)	Min. height under ceiling (cm)	Heat load (kW) LUXROTOR	Heat load (kW) ECOSTONE®	Electric power (kW)	Steam recovery (mm ø)	Exhaust gas (mm ø)
LR-64	above	18 (40x60)	4,3	100x100x230	250	30,5		3,0	80	-
LR-66	above	16 (60x60)	5,8	129x133x230	250	54	46	3,5	150	180
LR-66-H	above	20 (60x60)	7,2	129x133x260	280	65	54	3,5	150	180
LR-86	above	16 (80x60)	7,7	142x155x230	250	65	54	3,5	150	180
LR-86-H	above	20 (80x60)	9,6	142x155x260	280	80	68	3,5	150	180
LR-106-H	above	20 (100x60)	12	162x168x260	280	90	76	3,5	150	180
LR-108-H	above	20 (100x80)	16	162x184x260	280	98	82	3,5	150	180

ROTARY RACK OVENS FOR 2 RACKS



19.2 to 32 m² usable baking surface on a floor surface of only 4.2 m² to 5.3 m²

Comparisons of ovens standing next to each other have shown space savings of ± 1 m in width, a lower investment by ±25% and a reduced connecting value of ±20%.

LUXROTOR MODEL	Heat Exchanger	Number (max)/ size of steel sheets (cm)	Baking surface (max m ²)	External measurements (D x L x H) (cm)	Min. height under ceiling (cm)	Heat load (kW) LUXROTOR	Heat load (kW) ECOSTONE®	Electric power (kW)	Steam recovery (mm ø)	Exhaust gas (mm ø)
LR-812-H	above	2x20 (80x60)	19,2	197x215x273	300	140	120	5,0	180	180
LR-1012-H	above	2x20 (100x60)	24	213x227x273	300	150	130	5,0	180	180
LR-1016-H	above	2x20 (100x80)	32	221x243x273	300	160	140	5,0	150	180



ROTARY RACK OVENS FOR 4 RACKS

4



38.4 m² usable baking surface on a floor surface of only 6.6 m²

Comparisons of ovens standing next to each other have shown space savings of ca. 3.5 m in width, a lower investment by ±40% and a reduced connecting value of ±35%.

LUXROTOR MODELL	Heat Exchanger	Number (max)/ size of steel sheets (cm)	Baking surface (max m ²)	External measurements (D x L x H) (cm)	Min. height under ceiling (cm)	Anschluß- wert (kW)	Electric power (kW)	Steam recovery (mm ø)	Exhaust gas (mm ø)
LR-1612-H	above	4x20 (80x60)	38,4	244x271x273	300	180	5,0	180	220

**For optimal results, set the highest requirements on the baking process.
Our job is to meet those requirements without compromise.**



Products of consistently high quality

The bread rolls look good and are baked to perfection: with a nice golden-brown colour on the outside, tender on the inside, with a fine crumb structure, even with a beautiful shine.



Good steam distribution for optimal baking performance per deck.



Completely Steam-tight door equipped with a unique closing system.



Universal use.



Impeccable construction (guaranteed "HEIN quality"), ultra-safe operation, simple to use and risk free, and easy access to the technical components.



SOFTSTART - The new oven rack driving system with frequency-controlled (soft) starting and stopping.



SOFTAIR - This option can be used to regulate the air speed with precision per baking stage.



Compatible with oven racks from other manufacturers.



Easy to assemble, reduced incidental expenses.



Customer service round the clock, year round (24/7).



Spare parts and customer service at reasonable prices.



Long-term, reliable cooperation.



MATERIALS

One of the essential conditions for making high quality equipment is using the best raw materials in combination with tried and tested production techniques and highly skilled workers. That goes without saying.

For the construction of the HEIN LUXROTOR, as for every HEIN oven, only stainless steel material is used (2 mm high-grade steel), plus electrical, mechanical and driving elements that meet the strictest quality standards. This can be gauged from instance from the oven weight which is determined in particular by the strength of the materials, etc. Our excellent production quality and the lifetime of the oven that is thereby attained are simply unrivalled in the sector.

CONSTRUCTION

The HEIN LUXROTOR bakes products using a rack that turns in a continuous flow of air. Hot air is injected through the adjustable opening and is distributed uniformly throughout the baking chamber. The dough pieces are therefore exposed to the same temperature on every deck, so that the products are uniformly baked.

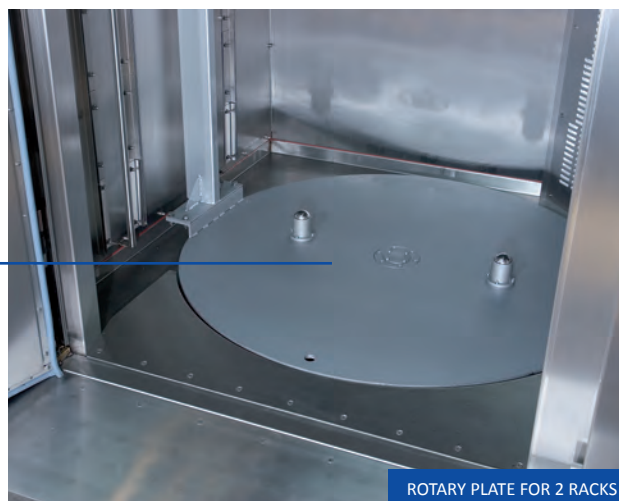
The unique, heavy door system (HEIN lifting mechanism) makes the baking chamber completely tight. The steam and the heat therefore remain inside the oven, where they belong, so that the baking products do not dry out.

The Steam-tight the door also prevents the formation of dark steam stains on the door front, which can thus remain clean for many years.



CONSTRUCTION FOR ONE SUSPENDED RACK

Our rotary ovens can be made with a special rotary plate to use racks of all brands.



ROTARY PLATE FOR 2 RACKS

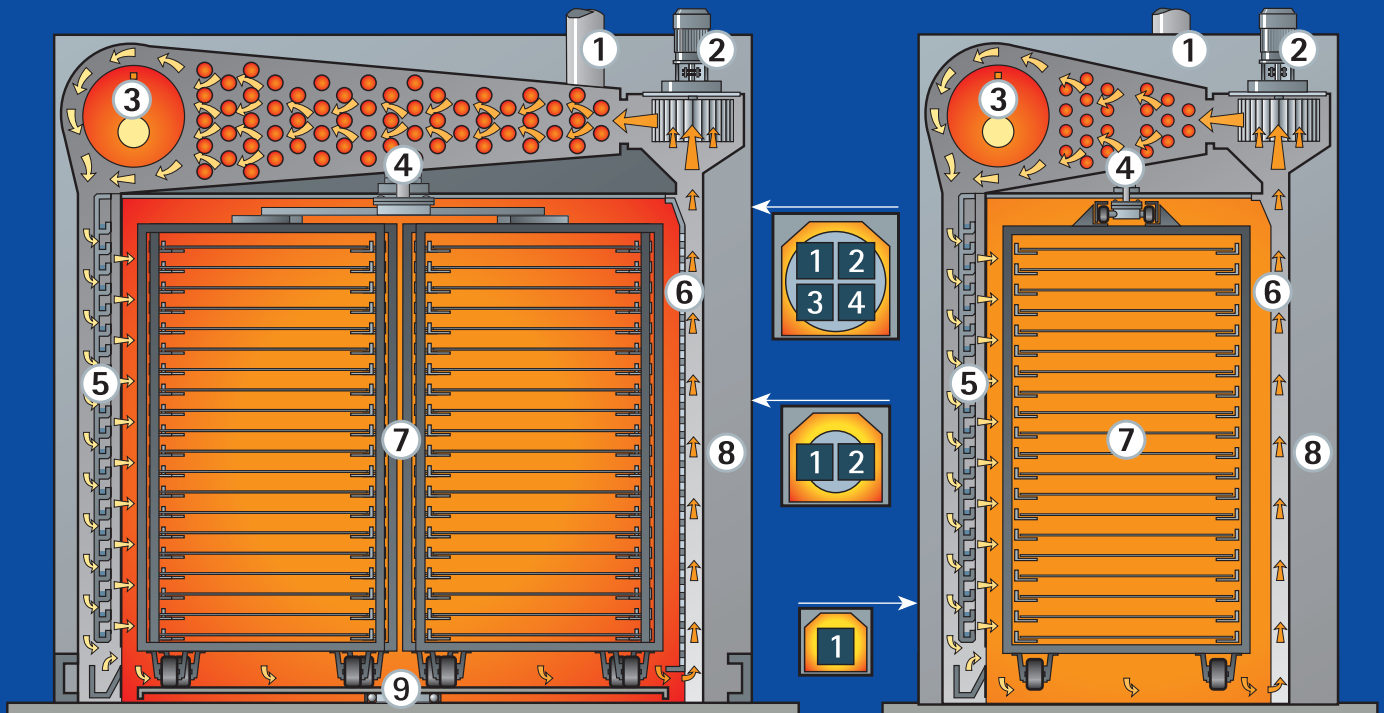
THE "TURBO" HOOD

The largest serially manufactured hood with vapour capture for germs and an extra powerful extractor fan ensure efficient suction of the outgoing heat and steam and prevent condensation water from dripping.

The HEIN LUXROTOR can be equipped (as an option) with a large remote indicator of the baking temperature and remaining baking time, making it possible to monitor the baking process from distance.



OPERATING PRINCIPLE OF THE HEIN LUXROTOR



- | | | |
|--------------------|-------------------------------|------------------|
| ① Gas exhaust pipe | ④ Rotation mechanism | ⑦ 4 rotary racks |
| ② Heat exchanger | ⑤ Ultra-powerful steam unit | ⑧ Insulation |
| ③ Burner | ⑥ Wall with extraction system | ⑨ Rotary plate |

THE HEAT EXCHANGER SYSTEM

A short heating-up time, high flexibility and an increased lifetime were the objectives set when designing the heat exchangers. These objectives have been fully achieved.

The oversized, robust heat exchanger protects you against costly damage. One type of energy can be rapidly substituted for another without any problems.

INSULATION

The HEIN LUXROTOR oven series boasts excellent insulation, as only top quality insulating materials are used.

The large new door window is equipped with heat-resistant double glazing.

THE STEAM UNIT

The oversized steam unit is located directly behind the burner. Hot air from the burner thus flows through the steam unit so that products that require large amounts of steam can be baked to perfection. A special system inside the baking chamber provides saturated and constant steam - which is reflected in the unique appearance of your products.

This high performance steam system bakes also frozen pieces of dough to perfection.



TOUCH SCREEN CONTROLS

 touchmatic

This technology boasts several innovating features above the usual oven controls, such as **SOFTSTART**, the new system for driving baking racks with frequency-controlled starting and stopping, or **SOFTAIR**, where the air speed can be adjusted per baking phase.

HEIN was awarded the much-coveted DBZ-TROPHY prize for innovation at the SÜDBACK 2005 trade fair for this new and pioneering development.

Several ovens can interchange information in a network or be controlled and monitored remotely (e.g. via PC or an oven configured as the master). If there is no network, the preset cooking programmes can be transferred from one oven to another by using a simple USB stick.

The extremely easy use and synopsis are made possible by a Windows-based control panel, as well as the advantages of a very large touch-screen (5"; 8.4" available as an option).

The baking programmes (299) and temperature curves are stored and displayed in the form of bar charts and line diagrams. All data of the baking processes are stored.

A remarkably faster and more efficient service is made possible by protocolling any baking errors, deviations from the programme or errors in the hardware. The regular servicing periods are indicated automatically.



5 x LR-106

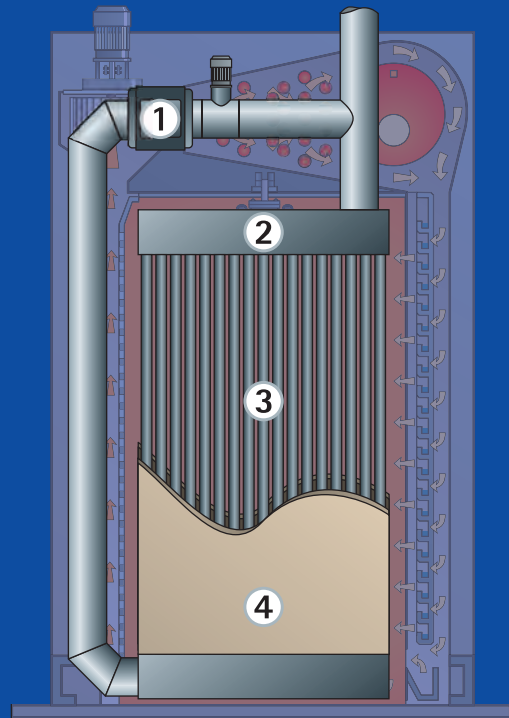
THE NEW HEIN LUXROTOR ECOSTONE®

Is a rotary oven with built-in heat recovery and heat release inwards via insulated stone walls.

Some two years ago, we made the first steps towards “stones in a rotary oven” with “Stonewall.” Nowadays, scarcely any LUXROTOR oven leaves our factory without stone walls. Success tells its own story: more stored heat and positive effect on the baking process, the baking chamber loses less heat during filling and well-done programmes, thereby leading to shorter warm-up times.

We have now gone a step further: To reduce the exhaust temperatures of the rack oven, we have built a stone wall with energy recovery into the rear wall of the LUXROTOR. The new LUXROTOR ECOSTONE® rack oven was thus introduced in 2010.

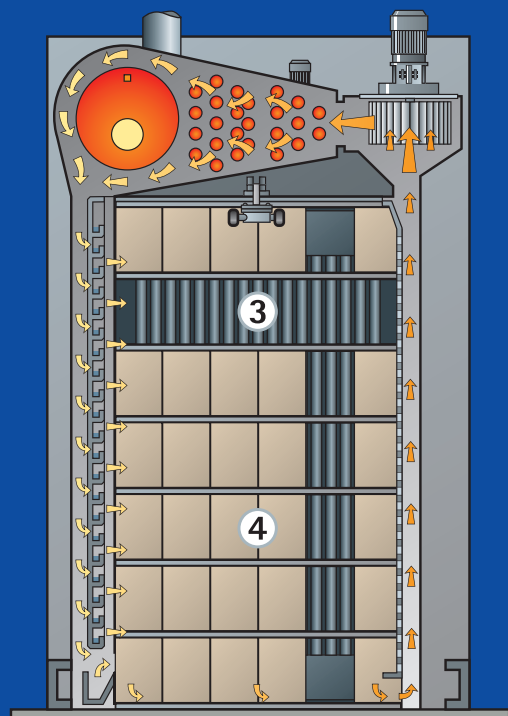
It may just look like an ordinary stone wall in the baking chamber, but in reality it is a rational installation for recovering maximal energy via the exhaust. The exhaust temperature is reduced by 150° on average (during continuous baking), which brings it close to the baking temperature.



- ① Distribution unit
- ② Heat recovery system
- ③ Massive ring pipes
- ④ Thermal stones (heat buffer)



Heat recovery and heat release inwards via insulated stone walls



HOW THE SYSTEM WORKS

The energy recovered is stored in the special thermal stone rear wall and the energy recovery system, and has several positive effects on the oven's baking behaviour.

- Escaped heat is captured faster during the pre- and out-baking phases, whereby the temperature drops more slowly. The temperature in the oven drops by 20°C slower on average, and this has a positive effect on the baking quality. A powerful heat buffer with an energy recovery system (250 - 350 kg) is used to this end.

- A shorter burner running time of about 10% as well as a 20% lower connection time by comparison with a normal rack oven make for up to 25% lower energy consumption.

- An exceptional crust, a soundly developed underside and products that stay fresh longer.

- When the baking process is interrupted, the rack oven cools off less rapidly.

New systems are inevitably accompanied by complicated control technology, electronic components and other modules that can and will in any event break down.

Not the new HEIN ECOSTONE® system: it runs exclusively with an additional mechanical heat recovery system combined with a 200 kg active stone thermal buffer, which has at least the same lifetime as the tried and tested heat exchanger in the burner compartment.

The simple but refined construction with a minimum of components can be built in every HEIN rotary oven model.

AWARDS AND PRIZES

HEIN ECOSTONE® obtained various citations already when it was unveiled:



For you, the ECOSTONE® Concept means energy savings of 13.7 to 25%* depending on the prevailing conditions.

TÜV tested! (German Technical Inspectorate)

*) compared with a rack oven of similar size without ECOSTONE®.



Overview of our ovens, cooling and fermentation chambers and automated production technology

- HEIN UNIVERSAL :** Annular tube deck ovens,
with an all-masonry thermal stone hearth and 22 mm thick oven plates
- HEIN LUXROTOR
& ECOSTONE® :** Rotary rack ovens, for 1, 2 or 4 rotary baking racks
(ECOSTONE® - with built-in heat recovery and heat release inwards via insulated stone walls)
- HEIN STONEROLL :** Annular tube rack oven with massive "single block baking chamber" cast with thermal stone
- HEIN EUROLUX :** Cyclothermic deck ovens
- HEIN ELECTRO :** Electric deck ovens
- HEIN BAKELUX
& CONDILUX :** The visible baking system: Convection and/or deck ovens for shops
- HEIN TOPLUX :** Cooling technology from A to Z (cooling and fermentation chambers)
- HEIN SPIDER :** Automatic loading and unloading system
- HEIN HUBILUX :** Semi-automatic loading and unloading system



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