HEUFT

THE THERMO-OEL PEOPLE

AUTOMATION OF BAKING PROCESS

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PREMIUM QUALITY FROM AN INDUSTRY LEADER

Thinking forward, exploring new grounds. At Heuft, we do not simply respond to trends but are at the vanguard of new developments. As a company that can look back over more than three hundred years in business, we are proud that Heuft has time and again revolutionized the industry with new oven concepts and designs. However, one thing never changed over all these years, namely the quality of our products. Designed to perfection in every detail, Heuft ovens and machines bear the „Made in Germany“ mark, of course.

At the moment, the biggest challenge faceing our industry is the design of ovens that allow for the production of artisan-quality bread on an industrial scale. Thanks to its good name and unrivalled experience, Heuft is generally the first port of call for bakers who wish to expand in this direction, as the Heuft concept of „100 % thermal oil“ has long become the new standard when it comes to reproducible quality in industrial bakeries – in Germany and abroad. Right now, automated large-scale oven systems from Heuft are in operation in more than 20 countries all over the world. Operators know that Heuft has no problem providing service and support over long distances. With baking areas from 3 to 600 m², our solutions are ideal for integration into existing production lines and enable our customers to grow their business in in the direction they want to go.

Our oven systems also stand out when it comes to energy efficiency. With our centralized heat integration systems and our range of heat recovery options, operators can reduce their energy costs while protecting the environment.

Meet us to discuss your needs and the available options for a heating concept that will serve you well into the future. You can trust us that we will be able to design and produce a system that is right for you.

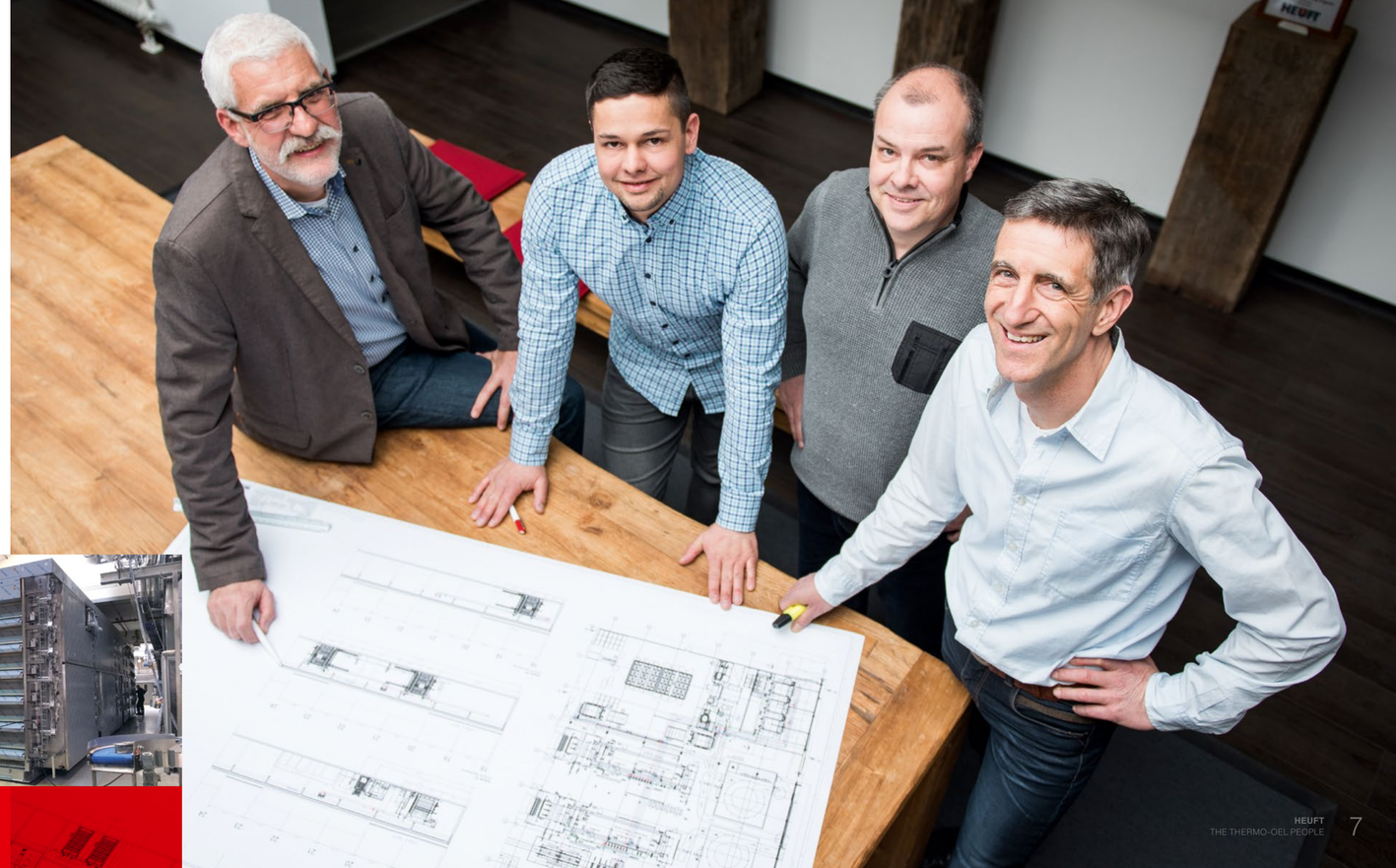
Thomas Heuft, managing director & shareholder of the Heuft Group

Made in Germany

HEUFT PROJECT MANAGEMENT

FROM THE FIRST IDEA TO COMMISSIONING

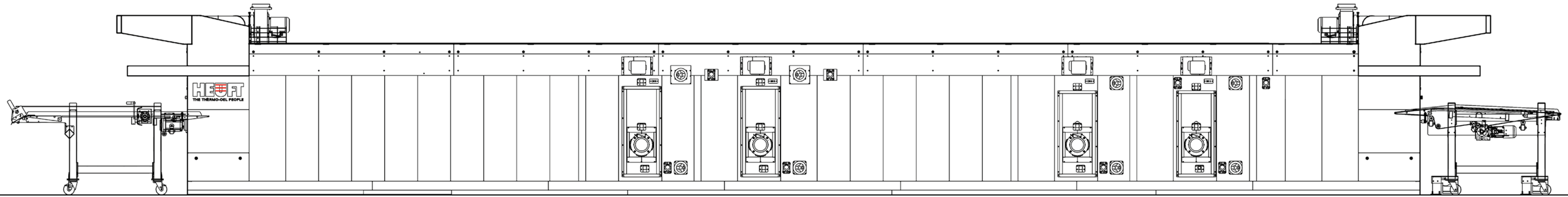
The biggest challenge in the design and manufacture of complex large-scale oven systems is the integration of the individual production steps into a streamlined process. Fortunately, our team is well equipped to master this. During the initial planning phase, our specialists in the various departments meet to coordinate the approach. Together with you, they examine the various technical options to choose a concept that best meets your requirements. As the project progresses, the Heuft management team makes sure that all parties involved in the project are fully up to date with what is happening at the various stages. As a result, no time is wasted between departments, and production progresses smoothly. Having invested so much passion in the design and manufacture of a system, we are loath to leave the shipping over to others. Thanks to our experience, creative approach and the right equipment, we are able to master every logistic challenge – for on-time delivery to any destination in Europe, America or Asia. When it comes to the installation and integration of our ovens on site, our technicians know what counts. Every task is performed with unrivalled precision and according to an agreed time schedule. Our specialists also manage the acceptance procedure and thus make sure that the project is completed on time and to the complete satisfaction of the customer. From the first contact to commissioning on site, you can always rely on the expertise and commitment of Heuft as your expert partner. For extra piece of mind.



VULKAN TUNNEL OVEN

THE VULKAN TUNNEL OVEN – IN A CLASS OF ITS OWN

When quantity and quality need to go hand in hand, look no further than the VULKAN tunnel oven from Heuft. This oven is particularly recommended for fast, continuous production in bakeries with a limited product range. As these huge models are fully configured by our programmers to meet the actual requirements of the bakery, they are not only extremely reliable, but also guarantee reproducible baking outcomes. These gentle giants can for instance bake 25,000 bread rolls in a single hour.



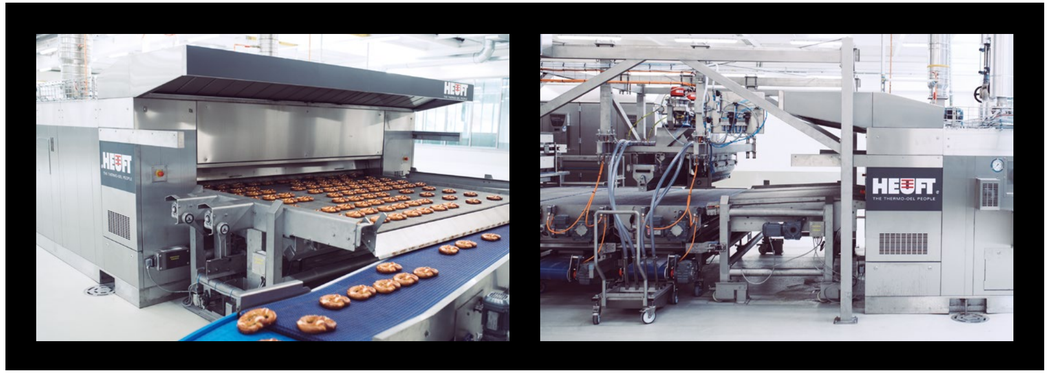
HIGH PERFORMANCE, LOW COSTS

Admittedly, our VULKAN tunnel ovens take up quite a bit of space. They are however always a good investment. VULKAN tunnel ovens are exceptionally energy-efficient and offer high throughputs – shift after shift and in the same high quality. No wonder our giant has won over many medium-sized and industrial bakeries running linear production systems. At the feed end, the proofed products are transferred by an automated system onto the oven conveyor. Customers can thereby choose the conveyor type that best suits their products. Our VULKAN tunnel ovens are available with mesh, chain, hinged belt or stone plate conveyors. The baking time determines the speed at which the products are transferred through the tunnel. Inside the oven chamber, the thermal oil heat transfer medium guarantees a fully controlled baking atmosphere from start to finish. Separately controlled temperature zones and top and bottom heat allow for optimized baking curves. Whether you produce loaves, bread rolls or your own specialties – your products will reach the oven exit baked to perfection, one looking and tasting as nice as the other.

BAKING AREA OF 10 m² TO 160 m²

SPECIAL FEATURES

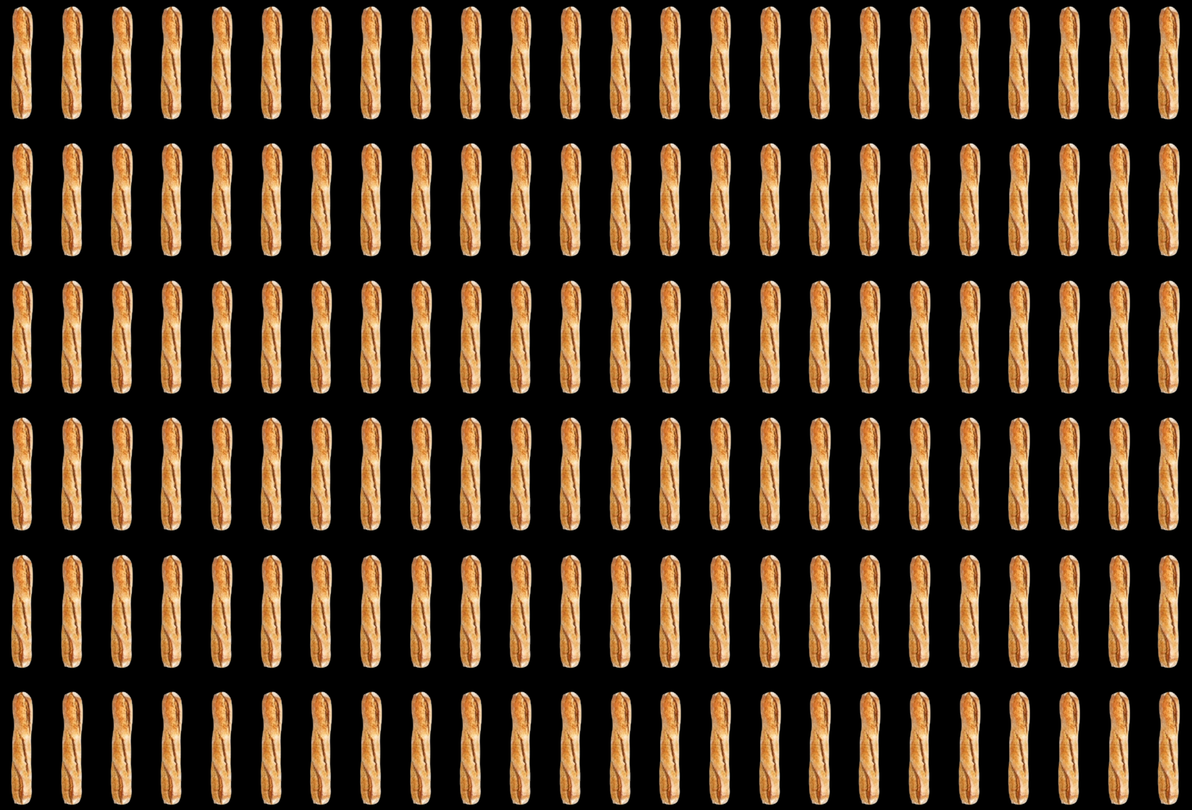
- **Useable baking width: 1,000 to 3,500 mm**
- **Useable baking length: 9,600 to 46,000 mm**
- **Baking area of 10 to 160 m²**
- **Baking conveyors with mesh, hinged or stone plate belts**
- **Configurable temperature, steam and turbulence zones to suit product**



The large-scale oven which is normally fitted with a single deck and a baking area of up to 160 m² is known for its reliability and long service life, even when operated continuously at full load. To change from a high throughput rate to a broader product range, simply switch the tunnel oven to manual or batch mode. This and many other advanced features make this multi-function oven the perfect piece of equipment for operators with a long-term outlook. In addition, the oven is easy to clean, requires only minimum maintenance and can be incorporated into a heat integration system. The VULKAN tunnel oven therefore deserves a place in every bakery.

BAKING WITH THERMAL OIL

FOR REPRODUCIBLE PERFECTION!



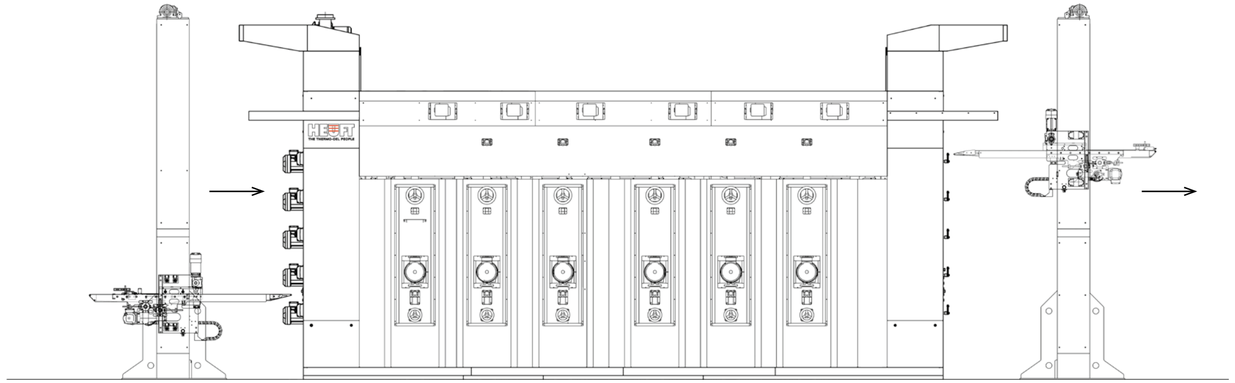
VULKAN EUROBACK®

AN INVESTMENT IN QUALITY AND VERSATILITY

In modern bakeries, large-scale ovens are integrated into complete processing lines. That is why our VULKAN EUROBACK is optimized for integration into any automated processing chain that starts with proofing and ends with cooling. To avail the full capacity of this thermal oil oven, it can be combined with a charging system tailor-made to suit your production line. Such a system ensures fully automated precision loading and unloading at programmable intervals and speeds. The VULKAN EUROBACK is an extraordinarily versatile oven, featuring up to twelve decks so that different products can be baked at the same time. And there is more: with separately controlled temperature and steam zones in the decks and an option to change between continuous baking and step-by-step batch baking mode, the VULKAN EUROBACK offers everything you need for the production of quality goods based on your very own recipes. The VULKAN EUROBACK is where customizability meets productivity.

SPECIAL FEATURES

- **Efficient baking of large quantities thanks to full automation**
- **Perfect for 24-hour operation**
- **Customized units for integration into existing processing lines**
- **One oven with multiple temperature zones and separately controlled top and bottom heat**
- **Available with mesh, chain, hinged or stone plate conveyor**

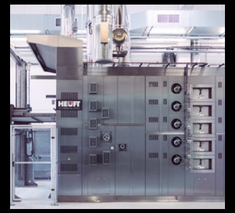


VERSATILE LOADING AND BAKING

The VULKAN EUROBACK is particularly popular with Industrial plant bakeries and similar large-scale operators. This efficient giant combines an oven and a loading system in a single unit, setting new standards in baking automation. Apart from the actual oven, we have the CONCORD loading system, a fully automated system that loads and unloads the products and can be integrated into any production line. Its speed makes it a highly efficient option even where there are frequent product changes. The loader can be adjusted to suit any deck height. The products to be baked are transferred automatically or at manually controlled speeds and intervals into the baking chamber. In the VULKAN EUROBACK, up to twelve decks, insulated from each other can be controlled separately to bake a variety of products to perfection. Thanks to thermal oil technology, you can achieve optimum heat distribution inside the oven chamber, leaving nothing to chance. The thermal oil acts as the heat transfer medium for hot gas, air or steam and offers many advantages, especially in large ovens, such as the VULKAN EUROBACK with a baking area of up to 600 m².

If your business involves a large range of bakery products and you need a versatile yet efficient oven, look no further than the VULKAN EUROBACK. It caters for a high throughput rate, guarantees excellent results and is extremely reliable.

BAKING AREA UP TO 600 m²



PERFECTION AT YOUR FINGERTIPS

In many ways, the VULKAN EUROBACK is similar to a piano played by a virtuoso. In music, we have key changes and tempos to express different moods – with the VULKAN EUROBACK, we have a wealth of control parameters that control the baking result. This means that you will initially need some assistance until you achieve optimized results. That is why our process technicians will work with you to perform a first series of trial runs at your premises. You will act as the director, as you know exactly how your products need to taste and look, while our experts will adjust the parameters accordingly, fine-tuning the settings until you are completely happy. This process does not take very long, as the oven is equipped with state-of-the art measuring and control technology. By pooling your expertise as a baker with our process know-how, we make sure that the VULKAN EUROBACK will produce the perfect quality you expect – day after day.

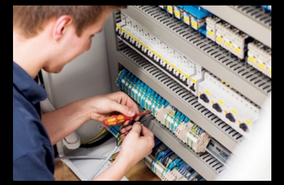
#heuftthermooelbakers

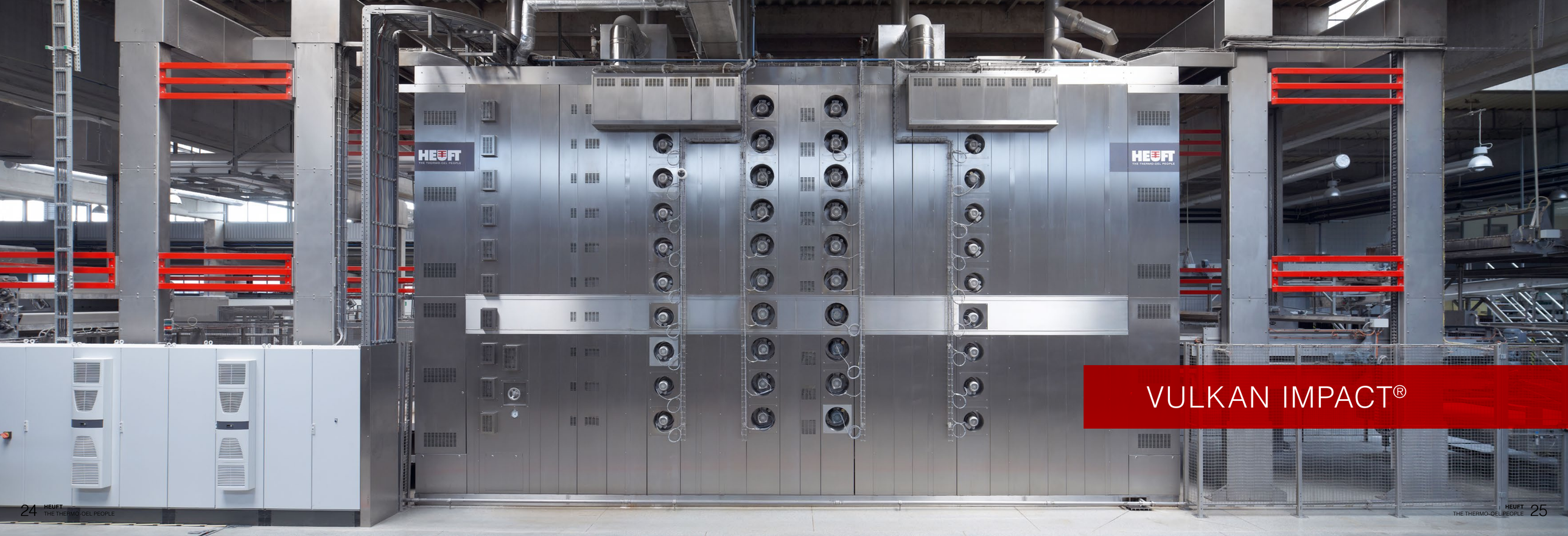
HEUFT CONTROL TECHNOLOGY

SAFETY FIRST

FOR YOUR PRODUCTION

Bakeries must be able to analyze and correct their baking processes at any time. For optimum quality, all parameters must be perfectly fine-tuned. As an expert in the design of automated oven systems, Heuft uses the latest available measuring and control technology for its units. Also, our electrical technicians and IT specialists do not simply think in binaries and digital code, as they are familiar with the processes involved in baking and therefore know what you need for your specific product range. If they are not sure, they will always ask the baking expert, which is of course yourself. You decide on the functions and interfaces that you wish to incorporate into your control system, and to which extent the oven is to be networked with your production line. It is also up to you to determine the data you need for operational safety and transparency. Based on your requirements, our technicians devise the control program and verify its functionalities in virtual production runs. You can rest assured that everything the oven does is based on what you actually need. We then design and manufacture the turn-key control cabinets and user-friendly touch panel interfaces and make sure that everything is installed properly on site, keeping in mind the applicable safety standards. However complex the control system behind the oven, your operators will be presented with intuitive panels that make operation extremely easy, as all relevant machine features and processes are visualized. This ensures that everything runs smoothly and that your products are always of the highest quality.





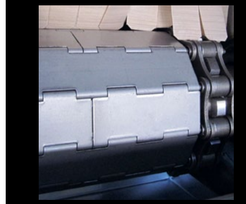
VULKAN IMPACT®

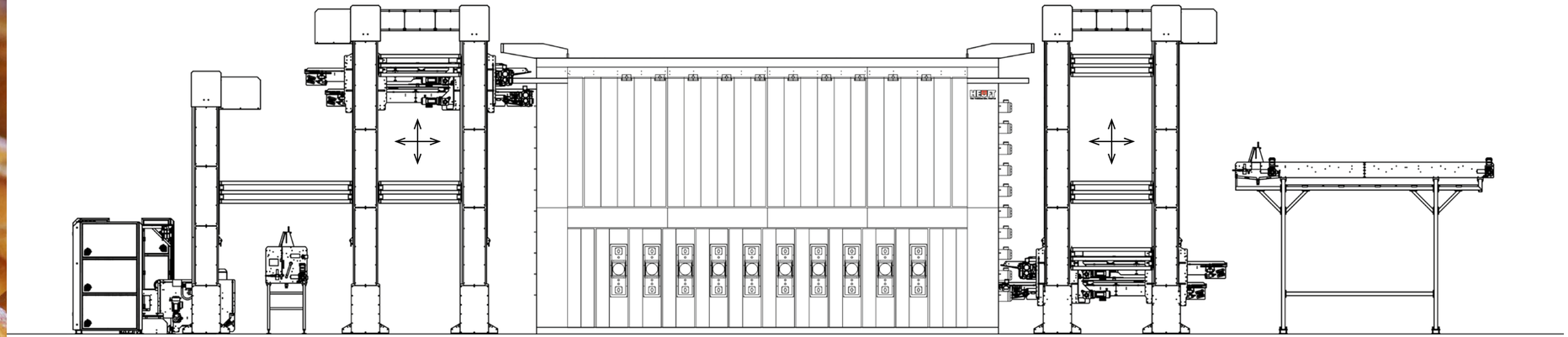
SPECIAL FEATURES

- **Available with 6 to 12 decks of variable width and depth**
- **Traditional baking like in a Heuft deck oven**
- **Speedy loading thanks to high level of automation**
- **Flexible oven catering for various batch sizes, frequent product changes and fluctuating quantities**
- **Precision temperature control, separate for top and bottom heat**
- **Configurable steaming and turbulence times**

THE VULKAN IMPACT – THE EFFICIENT OVEN FOR ANY BATCH SIZE

Our VULKAN IMPACT enables bakers to avail themselves of all the quality advantages of batch baking in a high-performance oven. With up to twelve decks as standard and a baking area of up to 350 m^2, it has the production capacity of a large-scale oven. Apart from quantity, the VULKAN IMPACT is known for its excellent baking quality, especially in connection with fast and frequent product changes. Run together with our automated CONCORD-RAPID loading system, the individual decks can be loaded and unloaded within seconds without any heavy lifting. Last but not least, the VULKAN IMPACT can be configured as a conventional continuous or as a reversing oven. That is what we call flexibility!

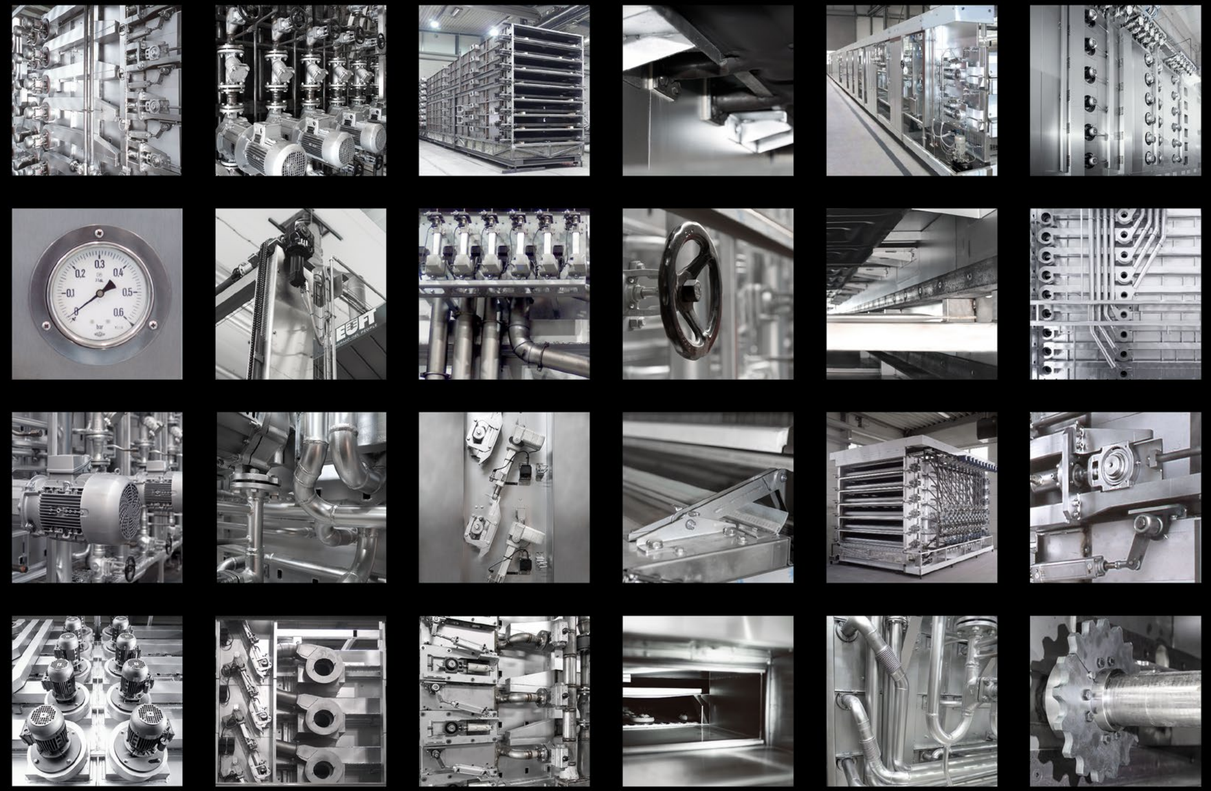




HEARTH BAKING IN LARGE-SCALE OVEN

You offer a broad range of products and you produce at an industrial scale. Then you need a VULKAN IMPACT. This compact all-rounder has been specifically designed for bakeries with frequent product changes. Run together with an automated CONCORD-RAPID loading system, breaks between batches are minimized as every hearth is loaded and unloaded in two separate steps. Whether pan products or individual loaves – the transfer takes only a few seconds. The products are transported on heavy-duty fabric or stainless steel loading conveyors. Inside the oven, they are processed with all the advantages of deck baking, whereby continuous gentle heat guarantees consistent product quality – for small as well as for large batches. To produce a lovely crumb and crust, the oven comes with fine-controlled turbulence and steam technology. When it comes to throughput rate, the VULKAN IMPACT knows virtually no limits. Our standard model is available with up to twelve decks and a total baking area of up to 350 m². When choosing the capacity you need, you should consider whether you wish to run the VULKAN IMPACT as a continuous or as a reversing oven. Units with a baking area of 200 m² or less are generally configured as reversing ovens. Combined with a CONCORD-RAPID loader, a reversing oven is not only extremely cost-efficient but also takes up little space. Thanks to their energy efficiency, all our VULKAN IMPACT models pay for themselves within a short time.

BAKING AREA UP TO 350 m²



100%

MADE IN GERMANY

AUTOMATION FOR ARTISAN BAKERIES

Baking is one of the oldest crafts in the world. Bakers are proud of their products, know the best ingredients and stick to their own recipes – and luckily, this is not about to change. What has changed however is the technology they use. Many artisan bakeries are now equipped with deck and trolley ovens from Heuft. Fully automated production lines do away with back-breaking physical work, leaving bakers to explore new ingredients, recipes and baking techniques. Modern bakers use touch panels and computer based controls to achieve optimum production results, marrying their professional trade skills and automation where it makes sense. The result: premium artisan quality produced with the efficiency of modern technolog

AUTOMATIC DECK OVEN

THE VATO OVEN – TAILOR-MADE TO SUIT YOUR PRODUCTION REQUIREMENTS

Our VATO deck ovens are as equally efficient as large-scale oven systems. Equipped with up to twelve decks – also available as pull-out or, drawplates decks – and a baking area of up to 108 m², this model has a very small footprint given its large baking space. As it can be fitted with decks of various size and deck group control, the VATO is one of Heuft's most versatile ovens. In the VATO, both small and large batches can be produced with unrivalled efficiency. The options available in the baking programs make sure that your products are of the artisan stone oven quality your customers demand. Day after day, shift after shift. Loaves, bread rolls and cakes – everything is baked to perfection, as the VATO is known for its even heat distribution. Operated with thermal oil, the models of the VATO deck oven range are available in many different configurations. They can be controlled and loaded from both sides, for instance with a CONCORD fabric conveyor loader or an industrial robot. The VATO ovens can be easily integrated into any production line as they are designed according to the key principle behind Heuft technology: expansion of production without compromising product quality.

BESONDERHEITEN

- **Available with 6 to 12 decks of variable width and depth**
- **Flexible oven system catering for various batch sizes, frequent product changes and fluctuating quantities**
- **Precision temperature control with 2 to 7 separate temperature circuits**
- **Hearth width: 1,250 to 2,500 mm**
- **Hearth length: 1,600 to 3,600 mm**
- **Baking area from 12 to 108 m²**
- **Speedy loading and high level of automation**

ADVANCED TECHNOLOGY FOR AUTOMATED LOADING

High-speed processing even in continuous operating mode – by combining a VATO oven with a loading robot. The robot packs the trays and pans in the most efficient way onto the extended deck plates of the deck oven, working with great precision and at a high speed. The decks are then automatically retracted into the oven with minimum temperature loss. In the oven, the goods are baked to perfection – batch after batch. Robot technology from Heuft does away with heavy physical work and makes baking process control as easy as possible.

VULKAN THERMO-ROLL®

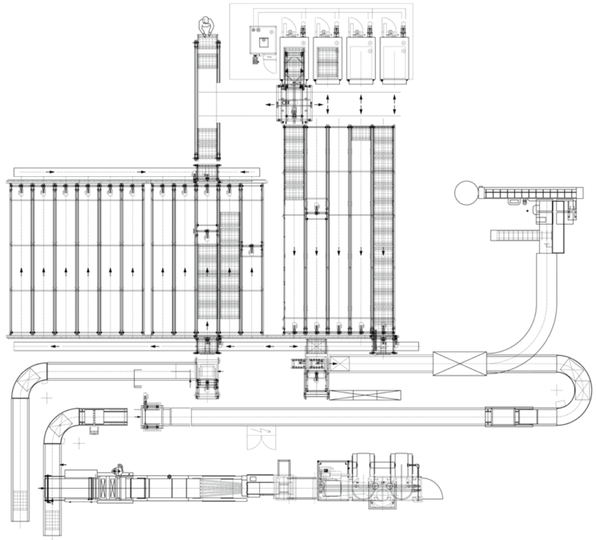
SPECIAL FEATURES

- **Thermo-Roll ovens are available in combinations of 2 to 20 units, offering baking areas from 7 to more than 400 m²**
- **Automated handling of stone plate products with VTR CONCORD; automated handling of tray/pan products with VTR box system**
- **Huge capacity and throughput rate in continuous batch mode**
- **Excellent ratio between baking area and footprint**
- **Modular system, extendable at any time**

THE THERMO-ROLL OVEN GROWS WITH YOUR BUSINESS

Thanks to the modular design, our VULKAN THERMO-ROLL ovens are a viable alternative to a large-scale oven. As your business grows, you can simply add another oven to your existing system. This approach gives you maximum flexibility while keeping capital expenditure manageable. At the moment, we offer 2,000 different THERMO-ROLL models, catering for virtually any bakery. By combining 2 to 20 THERMO-ROLL ovens into an oven system, you can increase the baking area step by step to over 400 m². You will quickly see that industrial-scale production rates and stone plate baking can go hand in hand.

The THERMO-ROLL is easy to operate and can be combined with an automatic VTR CONCORD loading system that protects the health of your workers and is extremely fast and precise. It takes the CONCORD VTR less than 30 seconds to load an oven. The transport system even caters for easy integration of peel boards. To sum up: the THERMO-ROLL featuring the latest in automated loading, baking and unloading technology is in a league of its own, and nearly as efficient as a large-scale baking unit.



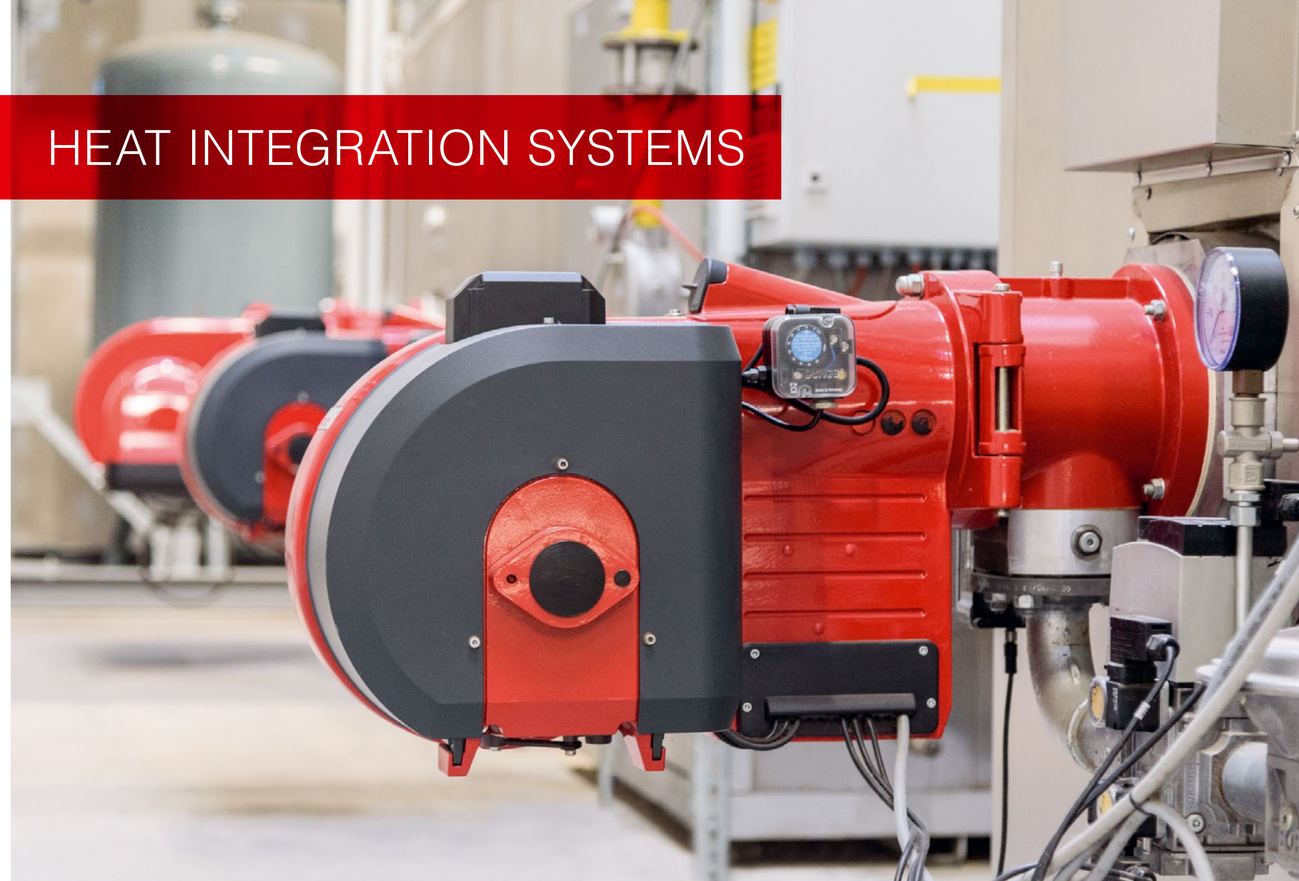
ARTISAN BAKING AND ROBOT TECHNOLOGY GO HAND IN HAND

For efficient baking, ovens and loading systems must be perfectly matched and fine-tuned to each other. Our combinations of modern robot technology and VULKAN THERMO-ROLL ovens show how this can be done. In a process controlled by a centralized computer, the products run through a fully automated production line. The rail box system thereby acts as a shuttle, moving seamlessly between the various production stations from dough kneading to baking, cooling and packaging. At the transfer points, industrial robots pick up the trays and place them in the next station. The products are thereby handled with the greatest care. Such high-tech production lines can even be installed in bakeries where space is limited. Each unit is custom-designed to suit the actual premises, and the boxes as well as the trolley ovens are made to measure. Avail of our advanced technology to secure the future of your business. Our experts would be delighted to discuss your wishes and plans.

HEAT EXCHANGERS AND HEAT INTEGRATION SYSTEMS

MANAGE YOUR ENERGY EFFICIENTLY – WITH EQUIPMENT FROM HEUFT

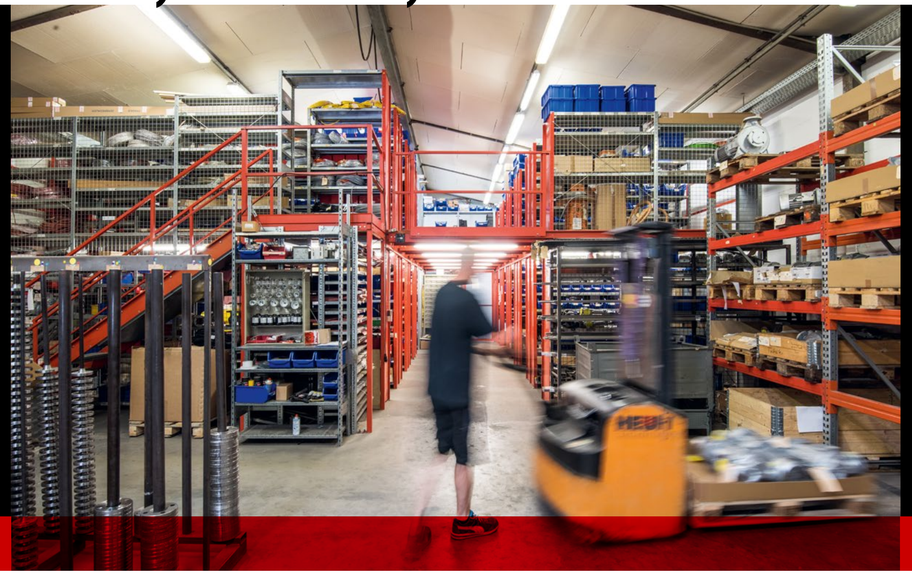
Is it really possible to make energy management easy? We believe so, and prove it by offering user-friendly control systems with visualization interfaces. Everything depends of course on the efficiency of the heating system. That is why we provide you with a solution that best suits your thermal oil oven system. All our heat exchangers are custom-designed and built in-house. This means that there are no interface-related problems, and that all units and processes run smoothly from the very start. Depending on your preferences, our heating systems can be run with gas, electricity, heating oil or energy recovered from biomass. Burners with outputs of up to 2000 kW meet peak demands. If required, our heat exchangers can be installed in a separate room away from the ovens and are available as stand-alone units or combined systems with multiple exchangers. Thus you can rely on always having enough heat for continuous production. Heuft also offers a comprehensive range of modular heat recovery solutions that extract energy from flue gas or steam. For optimum efficiency, our combined heat exchanger systems come with intelligent energy management as standard. All the data and information you need is thus available to you at the push of a button and in real time, so that you can analyze your energy consumption for further optimization and proper documentation. Contact us to discuss your energy-efficient future and the savings you can make with our technology!



WE ARE THERE FOR YOU, WHENEVER YOU NEED US

Bakeries who invest in large-scale oven systems must be able to depend on the support of an experienced service team that is there for them – around the clock and wherever it is needed. When it comes to customer service and short response times, Heuft is proud of its track record. To minimize downtimes, we offer a scheduled routine maintenance service. Should you still encounter a problem, simply call the Heuft 24/7 helpline to speak to an expert technician. Our service staff can log on to your system to examine and resolve problems or to optimize the parameter settings. If you need spare parts, we will get them to you in no time. As all components conform to industry standards, they can be sourced worldwide, and our logistics team will ship them to you within the shortest of time. At our warehouse in Bell, Germany, we keep around two million parts in stock, catering for new as well as older models. Thanks to our global network of dealers, we are never far away from you – wherever you are in the world. Heuft – the family company with the personal touch.

1,903,548 SPARE PARTS AVAILABLE IN STOCK



HEUFT FACTS & FIGURES

300

The largest VULKAN EUROBACK thermal oil oven ever built by Heuft has a baking area of 300 m². It is in operation at an XXL bakery in the United States.

40

Our longest tunnel oven measures 40 meters. This is however not the limit, as our technology is suitable for ovens up to 50 meters in length where the proofed pieces enter the oven on a stone plate, hinged or mesh conveyor to exit it at the other end as perfectly baked products.

1700

We have been building ovens since the year 1700. There are very few engineering companies in this world that can look back over more than 300 years in business! Rooted in this great tradition, Heuft is time and again setting new standards when it comes to baking oven technology.

8

At Heuft, we take a long view. By now, eight generations of the same family have managed the steady growth of our company. Steeped in tradition, we succeed through innovation.

100

Thermal oil technology has gained global recognition, and Heuft has established itself as the market leader. Hundreds of automated Heuft ovens and systems all over the world produce top-quality products – day after day. Thanks to quality German engineering.

24

Our service team is available to you 24/7, 365 days a year. Heuft experts can be reached around the clock through our 24/7 helpline or by remote service. For peace of mind and extra operational safety.

22

From Bell in the beautiful Eifel Mountains to destinations all over the world: thermal oil ovens from Heuft can be found in hundreds of bakeries in more than 22 countries. Our service team assists all our customers with the same efficiency – wherever they are based in the world.

1

Heuft stands for advanced technology, namely baking with thermal oil. We specialize in thermal oil technology, which has made our company a technology leader around the globe.

IMPRESSUM

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