

Hoval

solutions



Top performance on the mountain top with Hoval: Säntis Mountain Switzerland



Dear Readers,

In this issue, we're excited to share some of the innovative solutions Hoval has implemented. Our customers are saving energy, reducing their CO₂ footprint, and fighting climate change with these solutions. Curious about how we do it? Read on to find out. But first, Let's take a step back. Why are we able to achieve this? It all started back in the 1970s. Some of you might remember the oil crisis and its impact on daily life. For Hoval, it was clear even then that energy needed to be used responsibly. This was the beginning of our motto, "Responsibility for Energy and Environment," which continues to guide our actions today.

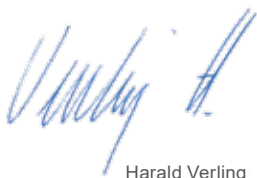
Over the years, Hoval has been a pioneer in the heating industry. We developed gas condensing boilers with the highest efficiency and lowest NO_x emissions, introducing the premix burner. Around the same time, we launched the first air-to-water and water-to-water heat pumps. We also ventured into climate technology with plate Heat exchangers for heat recovery, now leading the market in Europe. We innovated ways to heat and cool large halls using recirculation and fresh air units. Today, thousands of industrial, commercial, storage, and sports halls benefit from our technology, recovering significant amounts of warm or cold air. Hoval has evolved from a boiler manufacturer to a provider of innovative systems and sustainable solutions for our customers.

In this issue, we delve into the history of refrigeration technology and Hoval's introduction of the first heat pumps. We also outline Hoval's future roadmap, staying true to our brand by offering top-tier heat pump systems. These systems are developed, manufactured, and commissioned by us, with our service team ready for maintenance or emergencies. We demonstrate how our system solutions can replace oil heating with heat pumps without compromising comfort. For higher performance needs, our Belaria® fit heat pump, combined with our gas condensing boiler, offers a hybrid solution. Hoval provides solutions for single-family homes, multi-family homes, commercial

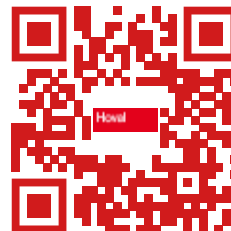
buildings, schools, and more. Our new TopVent® units heat and cool sports halls, storage halls, and industrial halls entirely from the roof. We also ensure perfect climate conditions in wine cellars and help hospitals save up to 50,000 euros annually by upgrading to our new condensing boilers.

Interested? Contact us anytime. Visit our new website by scanning the QR code below. You'll find more information and can leave us a message. We're happy to provide personal advice.

Enjoy reading!



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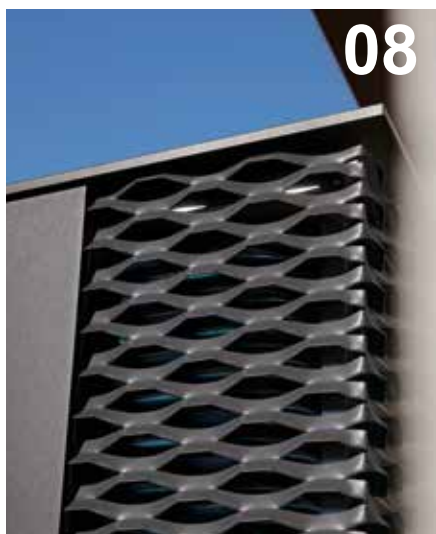
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The history of refrigeration

Chemists, engineers, physicists and even brewers



“To produce heat in the greatest cold is no difficulty at all, but to produce cold in great heat demands much skill”

Georg Christoph Lichtenberg
(1742–1799)

The history of refrigeration technology stretches back into antiquity, when people brought ice and snow back from the mountains and used it to cool their food. But it was not until the 19th century that refrigeration technology became an important branch of industry and a relevant part of daily life.

The first attempts to artificially generate cold temperatures were made in the 18th century. In 1748, William Cullen conducted an experiment whereby he placed mercury in a vacuum and achieved a reduction in temperature. In 1805, Michael Faraday designed a cooling unit based on the evaporation of ammonia, but due to the high costs involved and the difficulty of mass production it never became widespread.

German researcher Carl von Linde introduced ammonia as a cheaper and safer refrigerant in the 1870s. His invention of the refrigeration machine laid the foundations for modern refrigeration technology. However, one problem was the seal between the piston rod and cylinder housing.

Revolution in the brewing industry

In 1873, Gabriel Sedlmayr the Younger recognised the potential of Linde's technology and financed a new machine that achieved a breakthrough. Sedlmayr's brewery was now able to brew beer and produce natural ice all year round. Linde applied for a patent for his compressor in 1876, and by 1900 some 21 breweries in Munich were producing their own artificial ice using Linde units. Many more refrigerants were developed in the 20th

century, though chlorofluorocarbons (CFCs) were banned in the 1980s due to their harmful effect on the ozone layer. Today, more environmentally friendly refrigerants are used, such as hydrocarbons and hydrofluorocarbons (HFCs).

In recent decades, refrigeration technology has developed in a range of sectors – from medicine to aviation. In the medical field, refrigerators are used to store vaccines and other drugs, while air-conditioning units and cooling systems are used in aviation to maintain a comfortable temperature during flights.

Refrigeration technology has undergone significant development over time, becoming an important industry and a major part of daily life. As the protection of the climate grows in importance, efforts are being made to push the development of more environmentally friendly refrigerants and more efficient cooling systems.



Hoval brine/water heat pump, around 1980.

generation technology

s were involved in its invention.

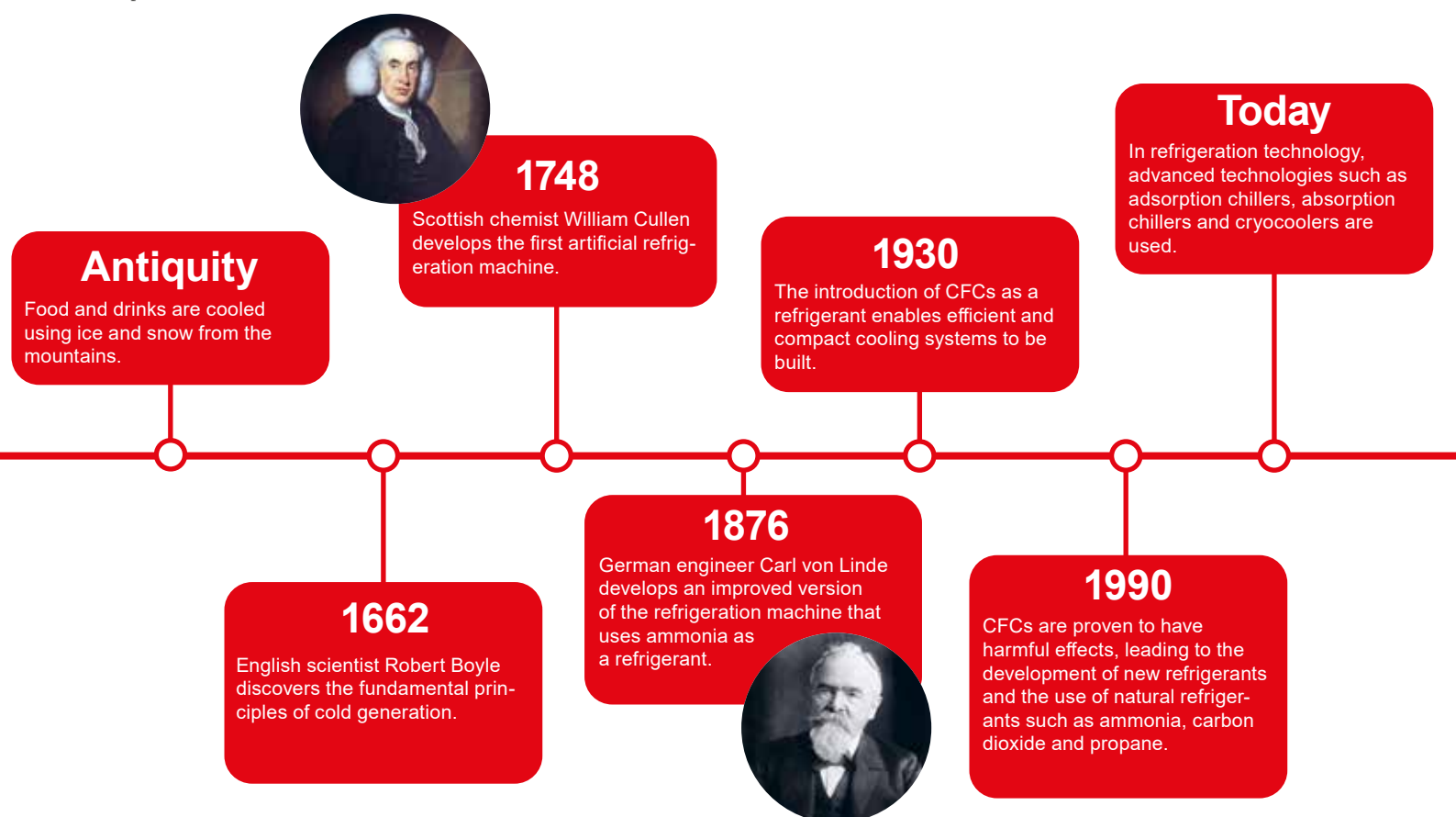
Gyula Szokody and the history of heat pump technology at Hoval

Gyula Szokody acquired a unique perspective in the Swiss heat pump industry. He was one of the pioneers who made a crucial contribution to the professional community of Swiss small heat pump manufacturers.

From 1974 to 1995, he worked at Hoval, where he promoted modified chilled water systems as heat pumps for larger-scale heat demands. Under his leadership, a number of innovative heat pump projects were completed, including a system for 40 flats in Liechtenstein and a groundbreaking heat pump system at the Obermeilen sewage treatment plant on Lake Zurich.

Hoval also brought the “WW-Automat” fully automated heat pump system onto the market in around 1975.

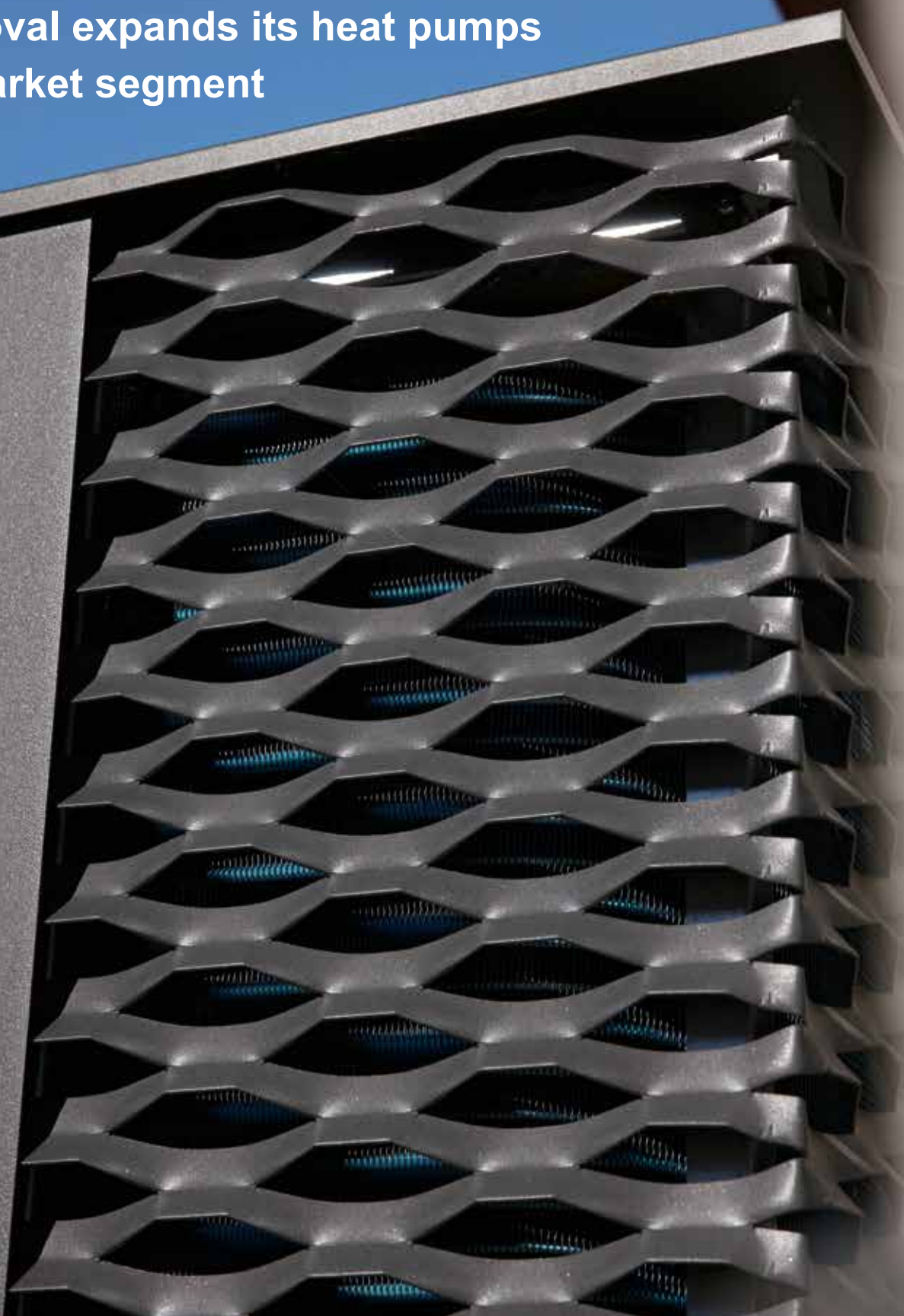
Szokody's work paved the way for highly efficient heat pump systems and continues to inspire the next generation of experts.



F-gases regulation: the trend towards natural refrigerants is being accelerated following a decision of the European Parliament on the amendment of the F-gases regulation. This goes hand in hand with a gradual reduction in the volume of synthetic refrigerants available on the market, with prohibitions on their use and sale also being enacted. This is why Hoval is already using the natural refrigerant propane in its Belaria® pro series.

Roadmap to the future

Hoval expands its heat pumps
market segment



Hoval has always kept a close eye on its market and on technologies, gearing its actions to these accordingly. When it comes to development, the company has often been ahead of its time – as was the case with the heat pump, which arrived on the scene at Hoval in the 1970s and was regarded as a niche solution alongside the company’s best-selling product, the oil-fired boiler.

Since then, the market has realigned itself; it is now dominated by heat pumps and the units available nowadays are also suitable for replacing oil-fired boilers.

In general, the heating, ventilation and air conditioning (HVAC) industry is currently undergoing changes like never before. Avoiding dependency on fossil fuels is a key focus, particularly in Europe, and promoting the use of heat pumps is a major lever for facilitating decarbonisation.

In the world of politics, heat pumps have now earned the same recognition as photovoltaic systems, wind power and battery banks. By the year 2030, 60 million heat pumps are expected to be in use across the EU. And achieving considerably higher growth within this market segment no longer seems to be just a political and ecological necessity but also a real possibility.

Kerstin Jorna, Director General of the EU Commission’s Directorate-General for Industry and Internal Market, is one of the current 17 million owners of a heat pump in Europe. At the 2022 Heat Pump Forum in Brussels, she said that the internal market of the EU is the key to achieving the ambitious political objectives.

To this end, many people need to combine their efforts and put some concrete measures in place. Ultimately, there are so many incoming orders for heat pumps that it is difficult to meet demand. In turn, this means long wait times for customers.

Blazing a new trail

As a pioneer in the area of heat pumps, Hoval is responding to the demands of the market by expanding capacity at its site in Vaduz (Liechtenstein) and at the one in Istebné (Slovakia).

As part of a joint venture in Austria, Hoval has already been developing and producing its own heat pumps for the past 15 years. With a view to ensuring the availability of the products, the two existing production facilities are now being extended. Meanwhile, a further factory is being built from scratch at the Istebné site.

The amount being invested for these purposes totals around EUR 60 million. In connection with this, the Group will be making further investments in logistics and in building up the workforce considerably in the areas of heat pump development and control technology.

“With the new heat pump production facilities in Vaduz and Istebné, we are increasing our production capacity and, in turn, will be better able to meet the high level of demand”, says Co-CEO Fabian Frick. “Particularly as a result of our clear commitment to building a heat pump factory in Istebné that is wholly owned by Hoval, we are well placed to set an important course for the future. By strengthening our resources in relation to heat pump development and the new production line in Vaduz, we are adding a further element to our package of measures and making ourselves fit and ready to cope with the booming demand.”



“The changes are opening up interesting opportunities for both Hoval as a company and for our employees. As a team, we are actively seizing these as part of the

Hoval family.”

Peter Gerner
Executive Board Hoval Group
Co-CEO



In September 2022, a new production line began series production at the headquarters in Vaduz.

Full steam ahead

The overall project is so large that it is, of course, being broken down into lots of different major projects and sub-projects. The project managers are responsible for coordinating all the processes and actions while ensuring that the work is synchronised where necessary. The whole undertaking is being managed by Group-wide Programme Management and a management team whose members are drawn from every area of the company.

“We are overseeing three major production projects that involve building up our R&D know-how and the strategic expansion of our procurement processes”, explains Fabian

Frick, Co-CEO. “The new heat pump production facilities in Vaduz and Istebné entered the official start-up phase in 2022 and the new factory is due to go fully operational in 2025. One thing’s for sure – a lot is going to happen over the next two years.”

In Vaduz, series production of our own heat pumps started up in autumn 2022 and further enhancements are due to follow in April 2023. After that, new heat pumps are going to start being produced at the existing building in Istebné as of the second quarter of 2023.

Installation of the refrigeration circuit



Fully installed and assembled



Pressure strength test



Leakage test | Evacuation





Hoval is building a new state-of-the-art heat pump factory directly adjacent to its existing factory in Istebné (Slovakia). It will commence operation in 2025.

Finally, large-scale production of the units will be able to commence in Istebné at the beginning of 2025 – the new heat pump factory in Istebné will be state of the art and, once fully completed, will employ more than 500 people.



“We are strengthening our position
in the area of renewable energies.”

Fabian Frick
Executive Board Hoval Group
Co-CEO

Filling the circuit with refrigerant



Electrical assembly |
Insulation measurement



Functional check



A system solution for every dimension of life

A heating professional replaces an old oil system with heat pump



The Kempers are a family of fitters based in North Rhine-Westphalia and a Hoval partner. When the time came for them to replace the old oil heating system in their combined home and office building, they opted for a heat pump system solution from Hoval. What they really appreciate about Hoval is being able to get all the future-proof technology they need from a single source.

Nicolas Kemper has always been a fan of heat pumps. As someone who works in the business himself, he was fully aware that a well planned heat pump system would be capable of heating a large, partially renovated building efficiently and supplying it with hot water. Spring 2021 was to spell the end for the oil heating system at the 300 m² building that houses the office, storage rooms and two flats belonging to the Kemper family. It had reached the point where the oil

tank needed to be renovated but that would have cost just as much as installing a subsidised heat pump. Other factors that nudged the decision in favour of an air/water heat pump were rising heating oil prices, government grants for renewable energies and, last but not least, the building's existing photovoltaic system.

With radiators and a heat pump, everything runs like clockwork!

"As part of the deep renovation work carried out on the property right back in 2004, we installed underfloor heating wherever it made sense and was feasible to do so. In this way, we managed to create the optimum conditions for a heat pump", explains Kemper. In the rooms where it was not possible to install underfloor heating, low-temperature radiators are being used instead. It is as if the Belaria® pro comfort from Hoval had been created specifically for



“Hoval uses a sensible refrigerant with a low GWP value. As a result, the Belaria® pro already meets tomorrow’s legal requirements today.”

Nicolas Kemper
Menden (North Rhine-Westphalia,
Germany)

renovation projects such as this. “The process of changing over the heating was quick and went without a hitch. We only had to manage without hot water for one day”, says Kemper enthusiastically. The heat pump technology was installed right where the oil tanks had previously stood. After that, the only thing left to do was swap over the connections. “The building no longer smells of heating oil”, say the Kempers in clear appreciation of the new clean heat source.



Minimal noise emissions were a key criterion for Nicolas Kemper.

A high-class appearance and cutting-edge technology

In addition to expert service, minimal noise emissions and a high-quality appearance were other factors of particular importance to Nicolas Kemper. “The system is located outside and must still look good in several years’ time without any signs of weathering. Many competitors use plastic but Hoval uses sheet metal”, says Kemper. For him, this is a clear indicator of quality.

Intelligent control for ultra-high efficiency

From the heating professional’s perspective, it was very important that all the units should come from a single manufacturer and be easy to interconnect. In this regard, Hoval definitely got top marks with its comprehensive range of coordinated products and its TopTronic® E universal system controller for controlling all components.

As a result, Mr Kemper can view the whole system on the display at a glance: both Belaria® air/water heat pump cascades, the two EnerVal 500 litre water tanks and the pair of TransTherm® modules for hygienic domestic water heating and for connection to the existing solar plant. Another fundamental requirement was having a good online connection – just like the one offered by HovalConnect – because Kemper’s parents also live in the building and are no longer able to take action themselves, e.g. if anything goes wrong. “This way I can access the units at any time via my smartphone while I’m out and about”, says the Hoval partner, highlighting the advantages of the solution.

Ecologically sound heating with an air-source heat pump

When selecting the heat pump, the technician once again paid careful attention to the details: “Hoval uses a sensible refrigerant with a low GWP value”, explains Kemper. Due to the natural refrigerant inside the Belaria® pro, the heat pump already meets tomorrow’s legal requirements today. The system is particularly sustainable in terms of its interaction with the family’s own photovoltaic system. Consequently, the Kempers are able to benefit from low operating costs and a climate-friendly heating system that is fit for the future, not only from a business perspective but also as a household.



Where oil tanks once stood, there is now a completely new system consisting of heat pump cascades, TransTherm® modules and water tanks.

Fit and hybrid at the same time

**Hoval Belaria® fit
heat pump: the right
solution for every
large-scale project**



Hoval is now offering the market an efficient heat pump for mid-range operation: the new Belaria® fit air/water heat pump is available with two performance levels. It can be operated at up to 1.4 megawatts either as a standalone unit or cascaded as part of a modular configuration – including in hybrid systems.

Warm in summer, cold in winter – the heating and cooling capacity required by a building changes with the seasonal temperature fluctuations.

The Belaria® fit air/water heat pump optimises its output to meet the prevailing heat demand. When it is used as a standalone unit, heat outputs of up to 85 kW can be achieved.

The inverter technology used enables this output to be modulated in the range from 40 to 100%. This means that both heating and cooling capacity are optimised to meet prevailing requirements and the power consumption of

compressors and fans is reduced in partial load operation. The unit switches on and off less frequently and also works more evenly.

Modular options

“The modular concept of the Belaria® fit facilitates efficient operation adapted to meet requirements in a wide operating range: this heat pump can be operated in cascades involving up to 16 machines”, says Product Manager Kevin Allenspach. For example, four Belaria® fit heat pumps in a cascade are capable of adapting heat output between 38 and 340 kW to meet the prevailing demand, corresponding to a modulation range of 1 : 9.

Multiple Belaria® fit units in a cascade also increase operational reliability through both redundancy of heat generators and the flexibility and scalability of the modular system.

Hybrid systems that use a Belaria® fit in combination with an additional heat generator for peak output offer particularly good value for money. This means that the unit is also suitable for hybrid renovation solutions.

Hybrid systems with renewable energy

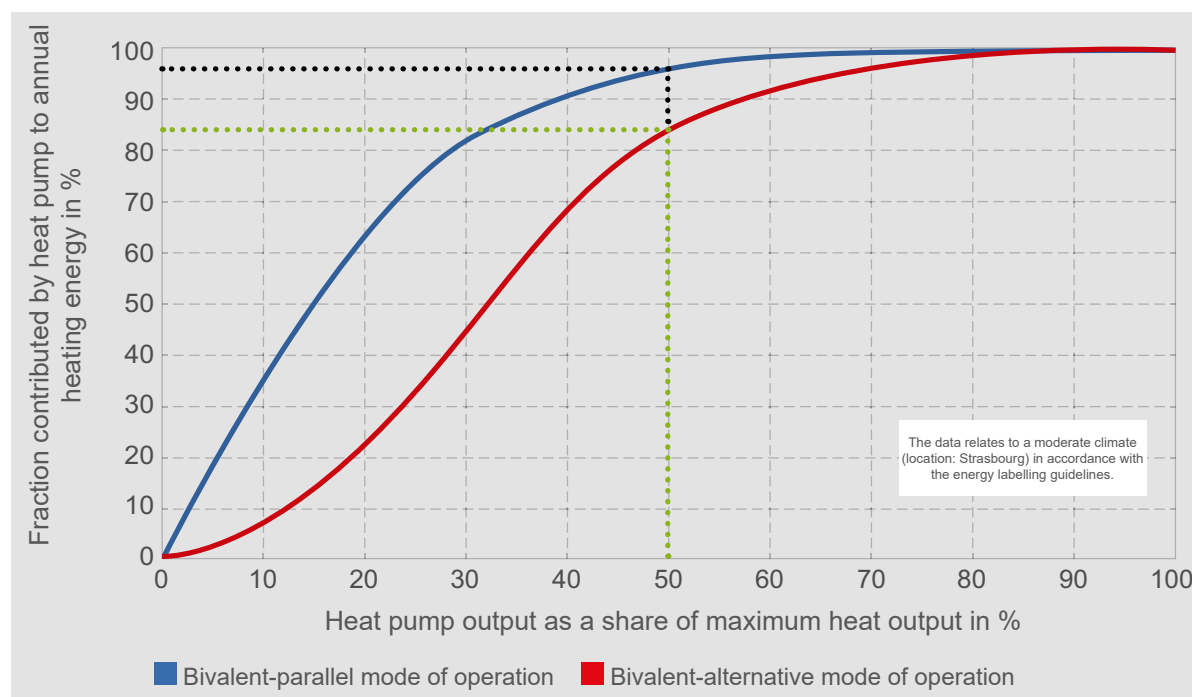
The Belaria® fit can be used to plan hybrid solutions that deliver ecological and economic benefits while also complying with regulations on renewable energy quotas. “The use of the Belaria® fit in a hybrid system – together with an UltraGas® boiler, for example – enables an annual energy consumption of approximately 80% to be achieved by the heat pump with just a 50% heating load”, Product

Manager Kevin Allenspach goes on to explain. In addition to the benefits of efficient operation, this makes eligibility for public funding a possibility.

Sustainable refrigerant

The Belaria® fit is operated using R32 refrigerant. The favourable greenhouse properties of this refrigerant make it a solution that is fit for the future.

Moreover, the volumetric refrigerating capacity of R32 is very high – approx. 1.6 times higher than that of R410A refrigerant, for example – enabling the unit to achieve high levels of performance in both cooling and heating operation.



The graph shows the relationship between heat pump output (as a percentage of the maximum heat output) and the resulting heat pump energy fraction (as a percentage of annual heating energy). With a heat pump output of 50%, a hybrid system is capable of achieving a fraction of 83% when operating in bivalent-alternative mode and a fraction of 97% when operating in bivalent-parallel mode.

Source: Hoval

All completed from the roof

The new TopVent® generation for decentralised indoor climate systems has arrived



The new series of roof ventilation units for supply air, recirculated air and mixed air offers maximum flexibility for the very best indoor climate conditioning and is a seamless addition to Hoval's range of decentralised indoor climate systems. Maintenance and installation are performed on the roof.

Hoval indoor climate systems are designed as energy-independent and freely scalable individual solutions. Quick and easy to plan, they can be perfectly integrated – in full and without compromise – into virtually any environment without the need for major structural measures. The modular systems are installed in carefully selected locations with a view to achieving the best possible climate conditions in the hall building.

Hoval has developed its TopVent® units specifically to meet the demands of today's logistics, industrial and production

halls. They are the perfect addition to Hoval's proven decentralised indoor climate systems in any situation that requires undisturbed hall operation at a constant temperature.

Six versions of the new TopVent® roof ventilation units are now available – for recirculated air and supply air, heating and/or cooling – with two performance levels in each case. These are able to accommodate all conceivable requirements for establishing an ideal hall climate.

“With the new TopVent® C and S versions, we are able to offer a roof ventilation unit that meets the modern demands of our customers”, asserts Thomas Bacik, Climate Technology Product Manager at Hoval.

“During development, the main priority was to ensure that very little space would be required in the hall to accommodate the unit and maintenance areas. As a result, the full capacity of the hall can be utilised. This approach is particularly important in the warehousing and logistics industry.”



TopVent® roof units from Hoval have been developed specifically to meet the demands of modern logistics, industrial and production halls.



“With the new TopVent® C and S versions, we are able to offer a roof ventilation unit that meets the modern demands of our customers. Annual maintenance and any necessary repairs can be carried out without affecting the running of the hall.”

Thomas Bacik
Climate Technology Product Manager
at Hoval

Maintenance and installation from the roof

The TopVent® units are installed on prefabricated roof frames and roof ducts, and all of the installation work is carried out from the roof. All components that require maintenance can be accessed from the roof – so there is no need for access from inside the hall. This means that regular maintenance and service work can also be carried out without affecting the infrastructure and work processes in the hall. The only work that needs to be done inside is establishing

the hydraulic and electrical connections for the units. The zone-based control concept, featuring operating modes that can be combined as required in various units, also meets high expectations concerning operating times and temperatures. The decentralised system is made up of highly efficient units and can be optimally dimensioned, making it extremely economical.

What's more, the integrated Hoval Air-Injector ensures optimum air distribution and low temperature stratification.

A large industrial fermenting cellar with two massive stainless steel tanks. Three people are standing in the center of the room, looking at the tanks. The ceiling is high with a complex network of pipes and structural beams.

Refining wine

At Winzer Krems, an indoor climate solution maintains ideal storage conditions in the fermenting cellar

In the newly built complex at Winzer Krems, an indoor climate solution from Hoval creates the ideal production and storage conditions for the company's wine by maintaining constant temperatures and optimum air humidity.

Founded more than 80 years ago, Winzer Krems has become Austria's largest producer of quality wine. Over an area of around 4000 m² at its address at Sandgrube 13 in Krems, it has built a new fermenting cellar, as well as Europe's most advanced wine bottling plant and a new bottle warehouse. With a total investment of over 30 million euros, it is the largest project in the history of Winzer Krems. The goal is to guarantee the quality of the wine – as well as sustainable economic management – both now and in the future in view of the climatic changes that are already being felt. Following demolition of the old hall complex, the new wine cellar was completed in time for the 2020 grape harvest. The ultra-modern bottling plant was assembled in late 2021. Hoval is making a contribution to this pioneering technology: a total of 22 TopVent® units for heating, cooling and dehumidification are installed in the new hall with green roof. This hall has large windows in the western facade to provide plenty of daylight.

Perfect conditions for first-class wines: winemaker uses innovative indoor climate solutions from Hoval.

Sandgrube 13

Left to right: customer service technician Daniel Labenbacher, Managing Director of Winzer Krems Ludwig Holzer, Operation Manager at Winzer Krems Clemens Fuchs, Head of Product Market Management for Climate Technology at Hoval Christoph Steinhäusler.

Production hall: top standards for hygiene and working conditions

In addition to a comfortable indoor climate for employees, hygiene standards in the 2000 m² bottling plant were essential to this winemaking cooperative. “We fill 15000 bottles an hour with Grüner Veltliner and other quality wines. Clean air is particularly important in this regard,” says Clemens Fuchs, Operation Manager at Winzer Krems. The TopVent® units distributed over the ceiling maintain a comfortable temperature of 20°C and keep air humidity in the desired range. The major advantage is that only one system is needed to heat and cool the hall. The intelligent technology makes it possible to control the temperature over an area of 900 m² while also regulating air humidity with just a single unit. In addition, the high heating and cooling capacity of the TopVent® system makes it possible to reduce the number of units needed. Winzer Krems therefore benefits from maximum comfort at a low level of expense.

Recirculating air system for optimum wine storage at constant temperatures

The total capacity of the fermenting cellar at Sandgrube 13 is around 13 million litres of wine – 70% white wine and 30% red wine. To ensure perfect storage conditions, a



Winzer Krems is on course for success with record exports.



Toasting a successful project.

constant temperature of 17 to 18°C must be maintained. “That’s easy in winter, but in summer we need sophisticated technology,” says Clemens Fuchs. In the 16-metre-deep cellar, the right climate is also crucial to the production processes for the wine varieties. And the system has to maintain the right air humidity so that mould is given no chance to grow. Installation company Getec had overall responsibility for the building technology in this new-build project and relied on the solutions expertise of Hoval. The TopVent® recirculation units distribute the air fully automatically using the integrated Air-Injector. The indoor climate units were positioned at specific points under the ceiling and divided into six control zones. This creates a flexible, custom system solution that maintains the right conditions in every area.

Heating, cooling and ventilation with central control

The engineers involved appreciate the benefits in the new building: “Everything was planned and implemented perfectly,” confirms Clemens Fuchs. The central controller for the six control zones for the bottling plant, cellar and warehouse is located in the middle of the building. This ensures the pipework is kept short while making operation and maintenance of the system easier. The control solution is undergoing continuous optimisation based on initial practical experience. “Hoval takes a very solution-orientated approach and quickly finds a way to achieve a goal, even for individual requirements,” says the Operation Manager of the prestigious winemaker, who is very satisfied with the collaboration. “The communication channels are short and there is always someone available to advise when needed,” he says, summing up the project following completion.



Winzer Krems has put Europe's most advanced bottling plant into operation.





TopVent® THC-9

- Application in high-ceilinged halls
- Heating (with connection to a hot water supply, 4-pipe system)
- Cooling (with connection to a water chiller, 4-pipe system)
- Recirculation operation
- Air distribution with adjustable Air-Injector
- Air filtration (optional)
- Decentralised system: high plant reliability
- Simple engineering



Savings of EUR 50 000 per year



By using two UltraGas® double boilers, a Belgian hospital has managed to achieve enormous efficiencies in terms of its operating costs.

Every organisation wants to reduce its costs as much as possible while at the same time ensuring smooth operations. Mouscron hospital, which has been recognised as a centre of excellence in various fields, has conquered this challenge by adopting an exceptional heating solution.

The origins of today's Centre Hospitalier de Mouscron (CHM) in north-west Belgium can be traced back to 1995 when it was created through the merger of two hospitals. It has 400 or so beds, twelve operating theatres, an MRI scanner, three radiotherapy rooms, a robot-assisted operating theatre and the new particle accelerators that it acquired a year ago. The hospital's greatest strength is its Oncology department, which is recognised as a national centre of excellence in Belgium. It is also renowned for its dialysis and diabetes

centres. CHM recently expanded its radiotherapy and A&E areas to a total size of 5000 m².

Hoval UltraGas® with a total output of four megawatts

Just like other healthcare facilities, this hospital also has very high heating and hot water requirements. "It was only ten years ago that we decided to install condensing boilers but then they began to leak", relates Paul Ardenois, Head of Logistics at the hospital. "The model that we have recently selected to replace them – a Hoval UltraGas® boiler with an output of four megawatts – is a decision to future-proof ourselves. The heat exchanger, which is 100% stainless steel on the water side, should keep the boiler in an operable condition for 20 to 30 years. Indeed, with its exceptional levels of efficiency, this UltraGas® boiler represents the very best the market has to offer. By installing two UltraGas® boilers (2000D), we have recorded a 14 per cent saving within the first three years compared to the previously installed condensing



The UltraGas® boilers have impressed the hospital management team in every respect.



boilers. To put that in figures, it equates to savings of more than EUR 50 000 per year.” Jérémie Leleu, the hospital’s Technical Director, has the following to add: “As far as energy consumption is concerned, we can claim to be eight to nine per cent better off in the winter and 35 to 45 per cent better off in the summer.”

exceptionally good due to the boilers’ accessibility and design”, says Paul Ardenois. “Over recent years, we have noticed a general decrease in quality that has been getting worse and worse, probably as a result of planned obsolescence. In the Hoval brand, we have rediscovered the genuine quality of former times, but with an additional touch of the avant-garde. Hoval does not just offer you a boiler with an extremely long service life but also outstanding technical performance. We are convinced that we have put our trust in the very best that the market has to offer.”

Managed by Hoval partner Edergen

The advantages delivered also include those of a technical nature: “Being able to run the system with a very large flow/return temperature difference (Delta T) allows a colder return temperature for the water. This is conducive to saving gas”, says Jérémie Leleu. “The boiler cascade management is also very impressive from a speed and output perspective.”

Jérémie Leleu is also keen to stress how quickly the technical aspects of the project were implemented. These aspects – along with the sale of the products – were managed by Edergen, a Hoval partner company based in Belgium. Edergen sells HVAC solutions for the medium-sized business segment and also offers associated services. Looking back on the project, the hospital management team is not just highly satisfied with the products but also with their operation and with the customer service received. “The boilers have never broken down once since they were put into operation. Ease of maintenance is also

Mouscron hospital has been recognised as a centre of excellence in various fields.



Responsibility for energy and environment