



SKADEC

*Company and
Product Overview*

**SUSTAINABILITY
QUALITY
PASSION**



THE GREEN COOLING

R290
NATURAL
REFRIGERANT



GREEN COOLING: EFFICIENCY MEETS ECOLOGY



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SUSTAINABLE REFRIGERATION TECHNOLOGY

The name SKADEC is derived from the name **SKADI** and the designation **ECO**. Skadi is known in Norse mythology as the goddess of winter; she is associated with strength, sharpness and courage to do new things. This is exactly what has characterised our approach since the first development steps in 2012/2013. Since then, we have specialised in sustainable refrigeration and air conditioning technology with natural refrigerants, especially in systems with environmentally friendly propane (R290).

With the spin-off of SKADEC from the Kratschmayer group of companies, we have been a strong partner for life cycle cost savings and demand-oriented cooling and heating for commerce and industry using energy-saving and environmentally friendly technologies since 2018.

Our corporate values are sustainability, quality and reliability. At our locations in Waldenburg and Kaunas, we live these values in a dynamic and motivated team. We want to set an example for the future through our work in reliably providing this sustainable technology for everyone to the highest quality standard.

YOUR PARTNER FOR SUSTAINABLE AIR CONDI- TIONING, COOLING AND HEATING TECHNOLOGY

**Founded in 2018 as a specialist
for natural refrigerants**

- » Developed in Germany in accordance with VDE and DIN
- » Very high quality standard
- » Competent advice during project planning
- » Risk management in Germany
- » Customized products and software solutions
- » Early fault detection and preventive maintenance
- » Competent service & maintenance



2000+
realised projects



**2 production plants with
12000 m²**



240+
employees

CE conformity and certifications

All devices offered are delivered with a CE
declaration of conformity.

Certifications

- » ISO 9001
- » ISO 14001

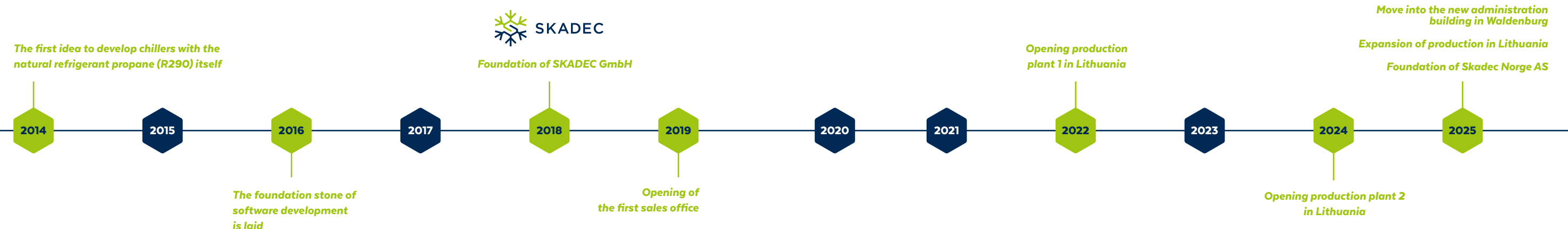


Standards and guidelines taken into account:

- » DIN EN 378
- » Pressure Equipment Directive
- » Low Voltage Directive
- » Machinery Directive
- » Electromagnetic Compatibility



OUR HISTORY



OUR SALES NETWORK

Headquarters

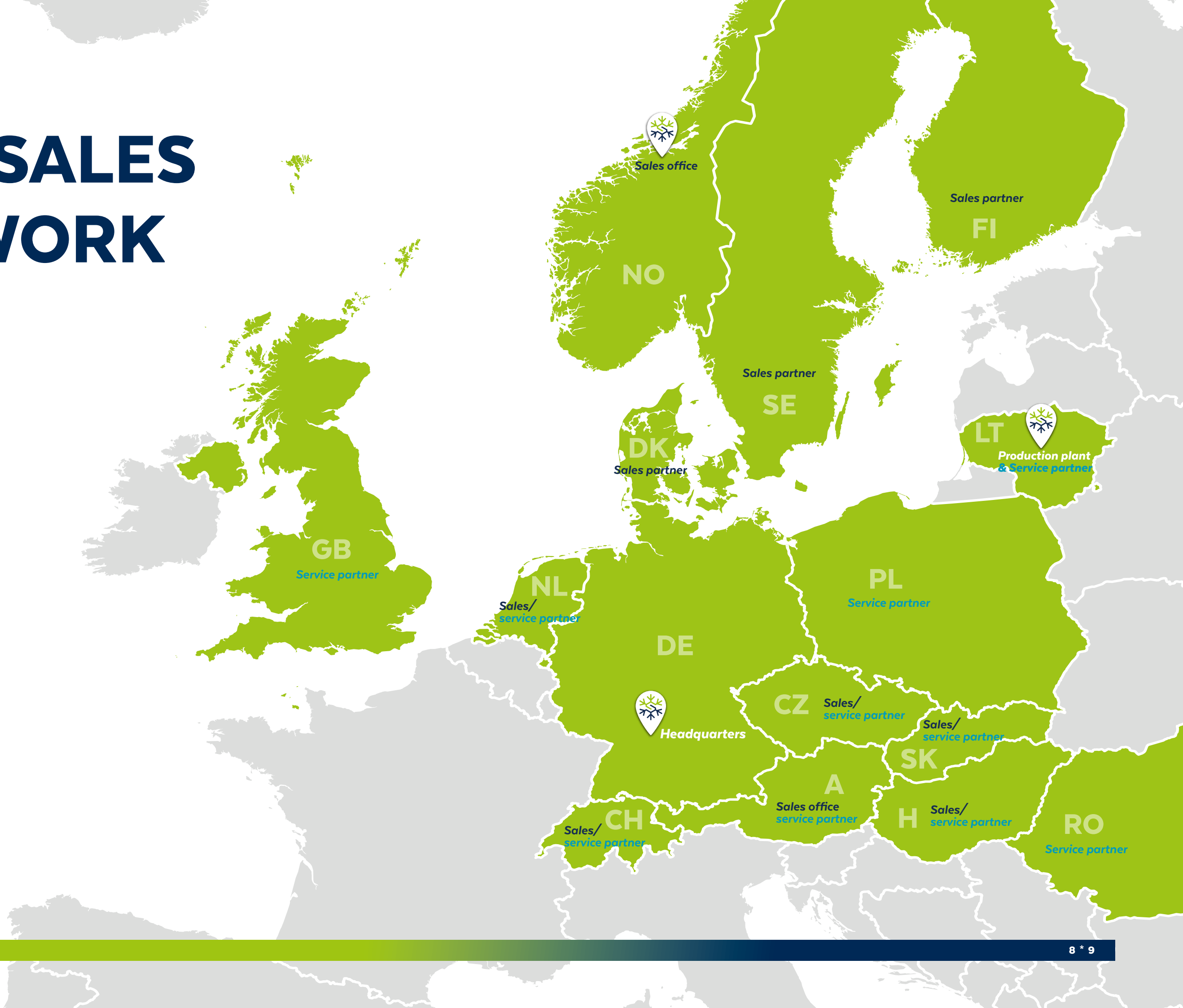
SKADEC GmbH
Parkallee 40
74638 Waldenburg
Germany

Production plant

Kaunas, Lithuania

SKADEC Norge AS

Trondheim, Norway



HEADQUARTERS WALDENBURG

The origins and future of the family-owned company SKADEC lie in Waldenburg. This is where the heart of the manufacturer of chillers and heat pumps with natural refrigerants beats.

Company headquarters in Waldenburg

Expertise, experience and innovative strength come together at our company headquarters in Waldenburg, in the south of Germany. Our engineers and technicians are working closely together on the machines of the future. This is where customer requirements are analysed and the end product is developed. SKADEC's comprehensive range of services is characterised by bundled and clearly structured expertise.





Our highly experienced and professional team assembles our chillers, heat pumps, hydraulic modules and other products for cooling and heating technology at our two production plants in Lithuania. We rely on state-of-the-art production technologies with high precision to create innovative and energy-efficient solutions for heating and air conditioning technology.

All components - from compressors and heat exchangers to hydraulic components and control systems - are carefully assembled and tested on a production area of over 12.000 m² to ensure the highest quality standards.

**QUALITY
MADE BY
SKADEC**

Employees from the engineering, production and quality assurance departments work closely together to achieve continuous improvements and constantly increase the efficiency of the heat pump systems. This close collaboration ensures that every chiller and heat pump is not only reliable and durable, but also fulfils the highest standards of energy efficiency and environmental friendliness.

PLANT 2 LITHUANIA



Thanks to our very high vertical range of manufacture, we have a close eye on every step of production and can therefore ensure maximum precision. Quality is checked at random after each step to ensure that our products meet the highest standards.

For us, this process begins with modern warehousing, the precise machining of sheet metal parts by punching and the exact bending of tubes.



Highly skilled workers



Professional CNC sheet metal processing



Pipe bending

PRODUCTION AND QUALITY

At SKADEC, we attach great importance to the quality of our products. Our heat pumps and chillers are characterised by their high quality workmanship and high reliability.

Another key component of our manufacturing process is our large in-house powder coating facility. By producing all parts ourselves, we not only guarantee the longevity of our products, but can also respond flexibly to special requests. We can therefore implement individual requirements for you quickly and easily. We pay particular attention to the wiring of our control cabinets,

which is carried out strictly in accordance with VDE standards. This enables us to guarantee maximum safety, reliability and conformity of our electrical systems. Our customers can rest assured that our solutions will work efficiently for years to come – an investment that pays off.



Powder coating



Assembly





Our production processes at SKADEC are at the heart of our quality strategy. From design to the selection of materials and high-quality components through to final assembly, we retain control over all relevant processes. Our production facilities are equipped with state-of-the-art technology that enables us to focus on precision, efficiency and sustainability. We place particular emphasis on energy efficiency and resource conservation in all areas of production. Thanks to our flexible production processes, we are able to offer customised solutions for different requirements without compromising on quality. Our machines are manufactured with the aim of operating reliably and efficiently for many years.



SKADEC CLOUD

Your advantages with the SKADEC Cloud

Thanks to our intelligent control system, you can keep your refrigeration machines and heat pumps under control at all times – efficiently, flexibly, and with future-proof technology. Our innovative software enables remote maintenance, real-time monitoring, and precise analyses to optimize your operations. We rely on freely programmable controllers to regulate and control our systems. These form the ideal basis for incorporating our many years of experience in refrigeration, air conditioning, and heating technology into our specially developed control algorithms. When developing the control programs, our in-house programming department focuses particularly on user-friendliness, high availability, and efficiency of the systems.

Remote service and maintenance



Access the machine from anywhere via our router and perform updates and optimizations remotely. Adjust setpoints, perform quick checks, or analyze detailed operating data—all with just one click. Individual access to each unit down to the actuator level allows you to analyze, isolate, or even remedy the causes of errors remotely.

Condition monitoring



Track the current performance of the machine and check whether the machine reliably meets the required heating or cooling capacities and achieves efficiency values.

Alarm management



Receive push notifications or emails in the event of malfunctions or critical conditions. The alarm manager provides a detailed overview of identified problems. If an on-site appointment is necessary, spare parts can be organized and the technician can be informed about the malfunction and possible causes of the error before the initial visit. This saves time, money, and stress!

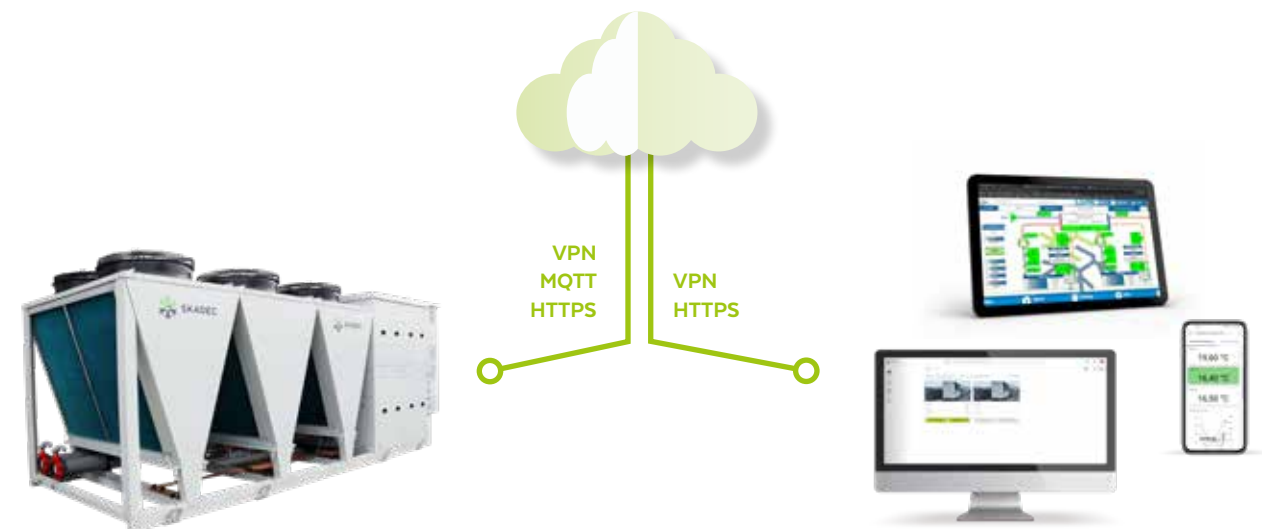
Predictive maintenance



Plan upcoming maintenance in good time. Save up to 80% of the time spent on the machine, reduce response times, and increase the efficiency of your technicians. Our solution creates added value for you and your customers.

Access anywhere anytime

Whether from the office or on the go, with a desktop PC, tablet or smartphone, the SKADEC Cloud gives you full control over your machine. Whether you want to adjust setpoints, perform a quick check or carry out a detailed analysis, your machine is just a click away. With the SKADEC cloud solution, you have full access to all relevant data and functions.



App Download for free!



Apple Store



Google Play



Fleet Manager



With Fleet Manager, you can centrally manage and monitor all SKADEC systems under your care. This provides a detailed overview of all machines, the ability to analyze and plan upcoming maintenance and malfunctions.

Safety



The SKADEC Cloud uses powerful, IP-enabled programmable logic controllers (PLCs) with their own web server for process and data visualization. Secure connections via VPN routers (ISO27002, IEC62443-2-4) ensure data protection.

FOR A BETTER FUTURE



R290 – also known as propane

R290 is a natural refrigerant. It is used very efficiently in chillers and heat pumps and convinces everyone through its environmentally friendly properties. Wherever possible, we have been using the natural refrigerant R290 for years. It helps protect the ozone layer and reduce greenhouse gas emissions to a minimum. As it is abundantly available in nature, we will continue to drive research and development into R290 in the future, in order to provide you with a cost-effective alternative to the very highest standards of efficiency and quality.

- » Natural future-proof refrigerant
- » GWP* of 0,02, ODP** of 0.
- » High energy efficiency and high annual performance factor
- » Cost-effective: Funded by the national climate protection initiative (up to EUR 200,000 in funding)
- » Cost-effective in service and operating costs
- » Very good thermodynamic properties

The advantages of R290 in our machines

Sustainability, energy efficiency, redundancy, plant safety and life cycle costs are considered criteria in our newly developed future-proof chillers and heat pumps. They are designed in such a way that the refrigerant charge is low and high system availability is ensured. A comprehensive safety concept ensures safe operation of the systems.

- » Not subject to the F-gas Regulation, even if this is tightened in the future
- » Reduced operating costs
- » Low pressure position, below 28 bar
- » Safe operation even at high outside temperatures
- » Efficient operation in summer and winter

*GWP (Global Warming Potential) according to AR6: The value of the relative global warming potential indicates the contribution of a refrigerant to global warming. The reference value is CO₂ with a GWP of 1.
**ODP (Ozone Depletion Potential): The ozone depletion potential indicates the relative effect on ozone layer depletion. All natural refrigerants have the value 0.

CORNERSTONE OF OUR SUCCESS

SKADEC machines offer flexible and efficient solutions for a wide range of industries and applications. Our chillers and heat pumps are designed to fulfil different requirements and offer maximum performance in different environments:



Office and administration buildings:

Ensure a pleasant indoor climate and energy-efficient cooling in your office and administration rooms – for a productive working environment.



Industry:

Our systems offer high-performance cooling and heating solutions for industrial processes that depend on reliability and efficiency.



Retail:

Create the ideal temperature for your sales areas and storage rooms to protect goods and customers alike.



Public buildings:

Our technology helps public buildings to reduce their energy costs while ensuring a comfortable climate for visitors and employees.



Hotels:

Offer your guests maximum comfort with reliable and quiet cooling and heating solutions for all areas of the hotel.



Refrigerated storage:

For the storage of temperature-sensitive goods, we offer precise and efficient refrigeration technologies that guarantee the highest quality and safety.

Thanks to our customised solutions, our machines are able to meet a wide range of requirements - from retail outlets to large industrial plants.

THE SKADEC TRAINING PROGRAMME

Our training programme covers all important aspects to prepare you optimally for the use of our machines:

Security concept:

Understand our proven safety concept and learn how to apply it effectively to ensure safe operation.

Control:

Learn all about how our machines work and how to operate them to ensure smooth and efficient day-to-day operations.

Commissioning:

We will guide you through the commissioning of our machines and train you in all the necessary steps.

Practical work on the refrigeration circuit:

Through practical training on the refrigeration circuit, we provide you with the knowledge you need to carry out maintenance work independently.

Remote maintenance:

Our machines offer advanced remote maintenance options. In our training courses, we show you how to use these effectively to minimise downtimes.



At SKADEC, we attach great importance not only to offering our customers high-quality products, but also to providing them with comprehensive training in their use and maintenance. With our training courses, we ensure that you can work safely and efficiently with our machines - for maximum reliability and productivity in your business.

AIR COOLED HEAT PUMPS

Air-cooled heat pump SH.B



- Technical details:**
- » Heating capacity 60 kW – 230 kW (A7 W45)
 - » Cooling capacity 50 kW – 180 kW (A35 W7)
 - » Max. outlet temperature 65°C
 - » Min. ambient temperature -20°C
 - » Reciprocating compressor
 - » Power control via frequency inverter
 - » EC fans
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated hydraulics optional
 - » Integrated heat recovery optional



Natural refrigerant
» R290

Heating capacity **60 kW – 230 kW**
Cooling capacity **50 kW – 180 kW**

Air-cooled heat pump SH.D



- Technical details:**
- » Heating capacity 230 kW – 820 kW (A7 W45)
 - » Cooling capacity 180 kW – 720 kW (A35 W7)
 - » Max. outlet temperature 65°C
 - » Min. ambient temperature -20°C
 - » Reciprocating compressor
 - » Power control via frequency inverter
 - » EC fans
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated hydraulics optional
 - » Integrated heat recovery optional

Natural refrigerant
» R290

Heating capacity **230 kW – 820 kW**
Cooling capacity **180 kW – 720 kW**



4-pipe energy centre



- Technical details:**
- » Heating capacity 145 kW – 650 kW (W45 A7)
 - » Cooling capacity 130 kW – 575 kW (W7 A35)
 - » Max. outlet temperature 65°C
 - » Parallel heating and cooling
 - » Reciprocating compressor
 - » Power control via frequency inverter
 - » EC fans
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated hydraulics optional

Natural refrigerant
» R290

Heating capacity **145 kW – 650 kW**
Cooling capacity **130 kW – 575 kW**

AIR-COOLED CHILLERS

Air-cooled chiller SC.A



- Technical details:**
- » Cooling capacity 50 kW – 1,500 kW (A35 W7)
 - » Max. ambient temperature +42°C
 - » Reciprocating compressors, screw compressors
 - » Power control via frequency inverter
 - » EC fans
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated free cooling optional
 - » Integrated hydraulics optional
 - » Integrated heat recovery optional

Natural refrigerants
» R290
» R1270

Cooling capacity **50 kW – 1500 kW**



WATER COOLED HEAT PUMPS AND CHILLERS



Water cooled heat pumps & chillers SH.C / SC.C



- Technical details:**
 - » Heating capacity 60 kW – 620 kW (W7 W45)
 - » Cooling capacity 50 kW – 480 kW (W7 W45)
 - » Max. outlet temperature 65°C
 - » Reciprocating compressor
 - » Power control via frequency inverter
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated hydraulics optional
 - » For indoor and outdoor installation
- Natural refrigerant**
 - » R290
- Versions:**
 - » Hydraulically reversible



Water cooled heat pumps & chillers SH.T / SC.T



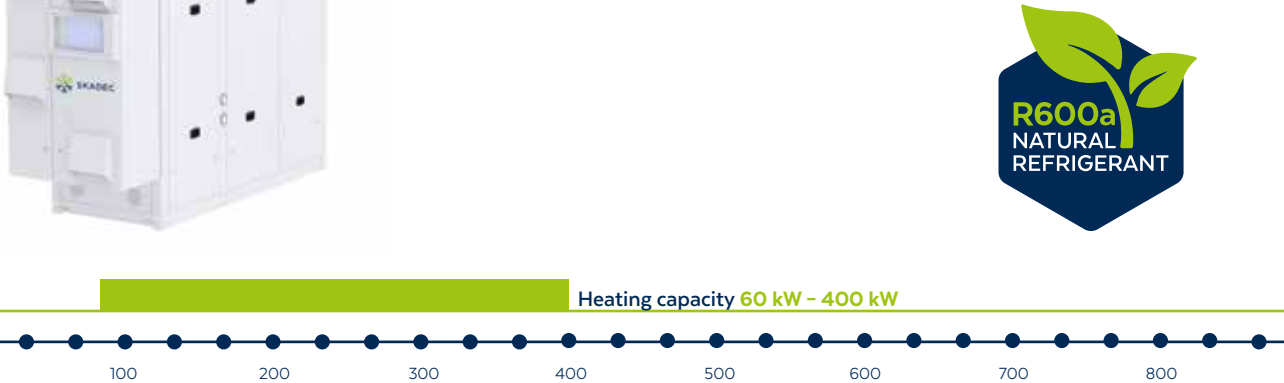
- Technical details:**
 - » Heating capacity 400 kW – 850 kW (W7 W45)
 - » Cooling capacity 300 kW – 670 kW (W7 W45)
 - » Max. outlet temperature 65°C
 - » Screw compressor
 - » Power control via frequency converter
 - » Noise-reduced design
 - » Powerful PLC control
 - » Compact dimensions (approx. 3.05 x 1.20 x 2.05 m)
 - » For indoor and outdoor installation
 - » Modular expandability
- Natural refrigerant**
 - » R290
- Versions:**
 - » Open housing
 - » Hydraulically reversible



Water-cooled high-temperature heat pump SH.C



- Technical details:**
 - » Heating capacity 60 kW – 400 kW (W35 W70)
 - » Max. outlet temperature 90°C
 - » Reciprocating compressor
 - » Power control via frequency inverter
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated hydraulics optional
 - » For indoor and outdoor installation
- Natural refrigerant**
 - » R600a
- Versions:**
 - » Hydraulically reversible



Water-cooled high-temperature heat pump SH.T



- Technical details:**
 - » Heating capacity 420 kW – 930 kW (W35 W70)
 - » Max. outlet temperature 90°C
 - » Screw compressor
 - » Power control via frequency inverter
 - » Noise-reduced design
 - » Powerful PLC control
 - » Compact dimensions (approx. 3.05 x 1.20 x 2.05 m)
 - » For indoor and outdoor installation
 - » Modular expandable
- Natural refrigerant**
 - » R600a
- Versions:**
 - » Open housing
 - » Hydraulically reversible



WATER-COOLED HEAT PUMPS & CHILLERS



Water-cooled heat pumps & chillers SH.F / SC.F



- Technical details:**
 - » Heating capacity 400 kW – 3,200 kW (W7 W45)
 - » Cooling capacity 300 kW – 2,500 kW (W7 W45)
 - » Max. outlet temperature 65°C
 - » Screw compressor
 - » Power control via frequency inverter
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated hydraulics optional
 - » For indoor and outdoor installation
- Natural refrigerant**
 - » R290
- Versions:**
 - » Hydraulically reversible



Water-cooled high-temperature heat pump SH.F



- Technical details:**
 - » Heating capacity 400 kW – 2,200 kW
 - » Max. outlet temperature 90°C
 - » Screw compressor
 - » Power control via frequency inverter
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated hydraulics optional
 - » For indoor and outdoor installation
- Natural refrigerant**
 - » R600a
- Versions:**
 - » Hydraulically reversible



WATER-COOLED COMPACT MACHINES



Water-cooled heat pumps & chillers SH.I / SC.I



- Technical details:**
 - » Heating capacity 17 kW – 83 kW (W7 W45)
 - » Cooling capacity 13 kW – 65 kW (W7 W45)
 - » Max. outlet temperature 55°C
 - » Reciprocating compressor
 - » Power control via frequency inverter
 - » Powerful PLC control
 - » Separate hydraulic modules optional
 - » Indoor installation
 - » Modular expandable
- Natural refrigerant**
 - » R290
- Versions:**
 - » Hydraulically reversible

Refrigerant charge <2.5 kg



Water-cooled heat pumps & chillers SH.S / SC.S



- Technical details:**
 - » Heating capacity 15 kW – 87 kW (W7 W45)
 - » Cooling capacity 12 kW – 67 kW (W7 W45)
 - » Max. outlet temperature 75°C
 - » Scroll compressor
 - » Power control via frequency inverter
 - » Powerful PLC control
 - » Indoor installation
 - » Modular expandable
- Natural refrigerant**
 - » R290
- Versions:**
 - » Reversible in terms of refrigeration technology

Refrigerant charge <3 kg



MACHINES IN OPEN HOUSINGS AND SPECIAL SYSTEMS



Water-cooled chiller/heat pump with open housing



- Technical details:**
- » Cooling capacity 30 kW – 2,500 kW (A35 W7)
 - » Reciprocating, screw and scroll compressors
 - » Power control via frequency inverter
 - » Powerful PLC control
 - » Integrated hydraulics optional

- Natural refrigerants**
- » R290
 - » R1270
 - » R600a
- Conventional**
- » R1234ze
 - » R515B
 - » R513A
 - » R454B
 - » R32

Cooling capacity 30 kW – 2.500 kW

Special system in customer-specific design



- Technical details:**
- » Reciprocating, screw and scroll compressors
 - » Power control via frequency inverter
 - » EC fans
 - » Noise-reduced design
 - » Powerful PLC control
 - » Integrated free cooling optional
 - » Integrated heat recovery optional
 - » Integrated hydraulics optional

- Natural refrigerants**
- » R290
 - » R1270
 - » R600a
- Conventional**
- » R1234ze
 - » R515B
 - » R513A
 - » R454B
 - » R32



SUSTAINABLE SOLUTIONS FOR STRONG RESULTS



DRYCOOLER

Table version

- Technical details:**
 - » Up to 350 kW cooling capacity at 40°C/45°C, 34% MEG and ambient temperature +35°C
 - » EC fan
- Optional:**
 - » Foldable fans
 - » Self-draining design
 - » Repair switch
 - » Control cabinet
 - » Rubber vibration damper
 - » Spring vibration damper
 - » Powerful PLC control



V-shape version

- Technical details:**
 - » Up to 1,200 kW cooling capacity at 40°C/45°C, 34% MEG and ambient temperature +35°C
 - » EC fan
 - » Single row design
 - » Double row design
- Optional:**
 - » Foldable fans
 - » Repair switch
 - » Control cabinet
 - » Rubber vibration damper
 - » Spring vibration damper
 - » Powerful PLC control



HYDRAULIC MODULES



Custom built hydraulic modules

Hydraulic modules are planned and manufactured for specific projects according to the customer's specifications. They are available either with steel frames, transport frames or fully assembled in containers. The modules available include pump groups, buffer tanks, heating and cooling circuit manifolds as well as turnkey technology centers in containers. In the choice of components, there are no restrictions.



All hydraulic modules are visualised as a 3D model before assembling and made available to the customer for approval. In the detailed representation, the arrangement of the components, space conditions and walkways can be evaluated. This saves you time, personnel and costs on the construction site.

Software solutions for hydraulic modules



You need a suitable automation solution for your hydraulic station? SKADEC can supply you with the control cabinet including the PLC-based controller, optionally pre-installed and wired to the frame or the technology container. Our customised solutions offer maximum flexibility with a consistently high quality. The user-friendly control system can be operated intuitively via 7", 10" or 15" touch panel. In addition, the load management of the cooling and heating system can be regulated via the central PLC controller.

BUFFER TANKS

Customised buffer tank configuration

Possible design:

- » Volume 200 – 10,000 litres
- » S235JR steel, V2A V4A stainless steel
- » Insulation diffusion thickness 20mm, 40mm, 60mm
- » Polyester fibre fleece thermal insulation
- » Galvanised steel or stainless steel protective jacket
- » Inlet bends
- » Separating plate
- » Nozzle tube



Latent storage systems/PCM storage

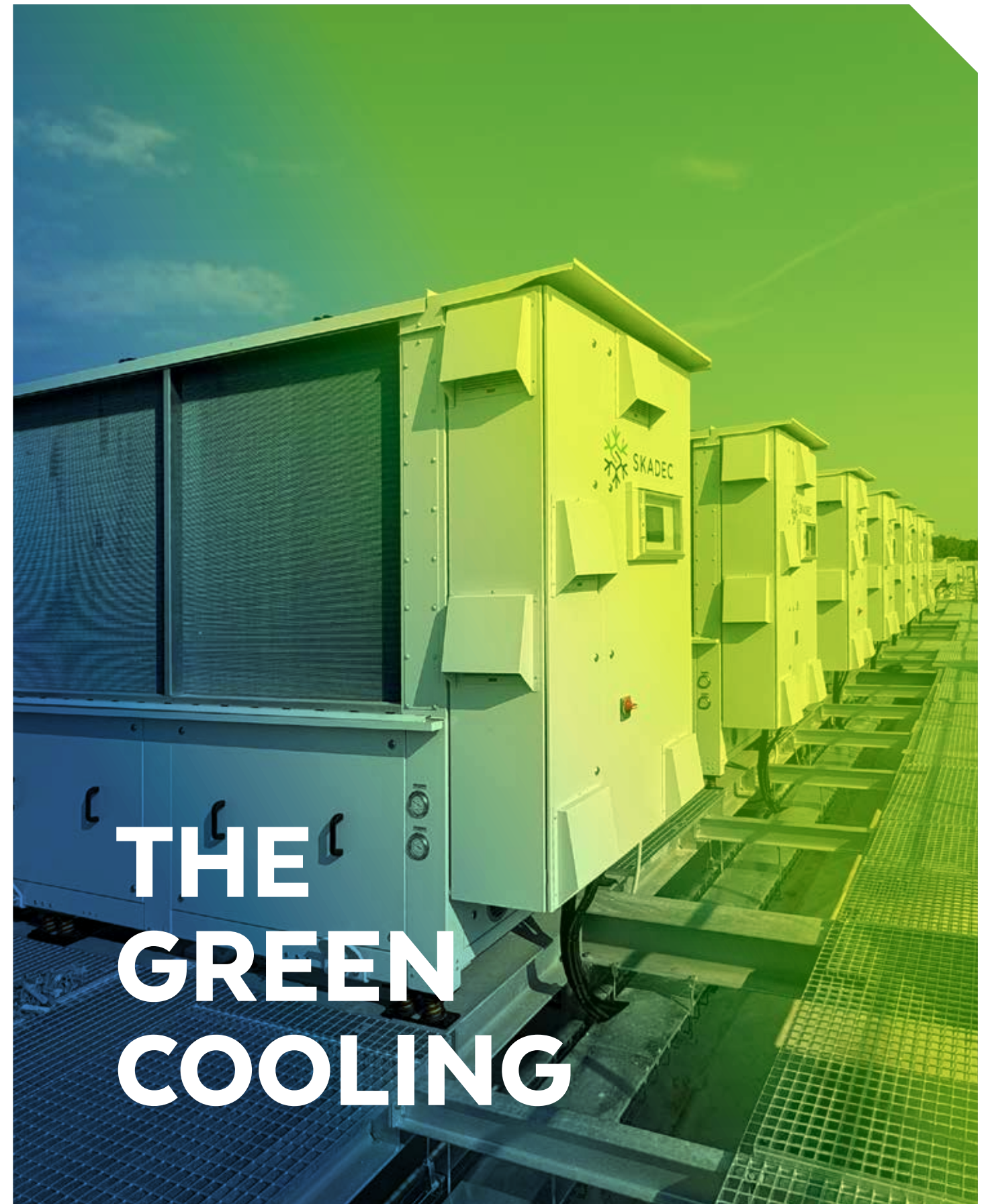
Cold storage for the economic operation of brine plants

The latent storage system can store thermal energy and release it when required. The storage is based on the latent heat of fusion principle (phase change of the medium) with the advantage of storing large amounts of energy in a very small space. The PCM (phase change material) is located in airtight welded spheres made of plastic (HDPE) in a buffer storage and is frozen in charging mode or melted in discharging mode with the help of a liquid carrier medium (e.g. glycol).



Advantages:

- » Reduction of peak loads
- » Storage of renewable energy in the form of thermal energy (e.g. electricity from the photovoltaic system)
- » No maintenance costs
- » High storage density on a small footprint
- » PCM material available for 0 to -38°C supply temperature



THE GREEN COOLING

REFERENCES

Our products are used in numerous industries and for a multitude of applications

SKADEC water chillers and heat pumps stand for highest quality, reliability, sustainability and energy efficiency. Wherever possible, we rely exclusively on natural refrigerants such as R290, R1270, R600a or CO₂.

Our customers include globally renowned industrial and commercial groups. Our broad product portfolio offers solutions for all applications in the small and large capacity range. Our flexible and efficient production enables us to deliver systems tailored to customers' needs and application areas with short delivery times.

We are proud of

- » Over 2000 implemented projects
- » 250 MW installed refrigeration capacity
- » The equivalent of 60,000 tonnes of CO₂ saved



Chemical industry

For a long time, the German chemical industry has been a driving force in the international market. No company can afford plant failures with resulting downtimes. For the required process cooling in production, SKADEC has therefore focused on maximum plant availability and high machine redundancy.

Performance data

- » 1274 kW cooling capacity (2x R290 water chiller)

Data processing centers

Server cooling in data centers has become increasingly important in recent years. SKADEC R290 water chillers with free cooling are ideal for energy-efficient and sustainable IT cooling. The intelligent control system installed as standard guarantees maximum system availability. SKADEC was able to supply four chillers with free cooling for the cooling of air-conditioning cabinets and a heat pump for building heating and cooling.

Performance data

- » 2412 kW cooling capacity (4x R290 chiller)
- » 2408 kW free cooling capacity
- » 360 kW heating capacity (1x R290 heat pump)



Office building

The world's largest automotive supplier decided to rely on heating and cooling solutions with the natural refrigerant R290 for its new campus. For the end customer, the climate neutrality of its sites is paramount, so the focus of this project was on sustainability and energy efficiency. There are now two air-water chillers and two water-water heat pumps on the roof of the building, which ensure an optimal climate for 2,000 employees.

Performance data

- » 1032 kW cooling capacity (2 x R290 chiller)
- » 3464 kW heating capacity (2 x R290 heat pump)



Office building

Innovative sustainable building technology thanks to 24 geothermally operated compact heat pumps. The systems supply nine buildings with highly efficient heating, cooling and process cooling and, thanks to their modular design, ensure maximum operational reliability and fail-safety. In the event of servicing, components can be replaced quickly and easily, which simplifies maintenance and increases efficiency. Due to the low refrigerant charge of less than 2.5 kg per system, simple installation as a ventilated enclosure indoors is possible.

Performance data

- » 1603 kW cooling capacity
- » 1370 kW heating capacity

Logistics centres

Reliable heat pumps are a decisive advantage for the efficient temperature control of warehouse and office areas. The reversible heat pumps can be used for both heating and cooling, which fulfils the requirements of storing temperature-sensitive goods. By using the heat pumps, energy consumption can be optimised and operating costs reduced. The solution also helps to reduce CO2 emissions and ensures a sustainable energy supply in logistics centres.

Performance data

- » 1603 kW cooling capacity
- » 1058 kW heating capacity (4x R290 heat pump)



Production

Production facilities have a wide range of heating and cooling requirements, be it heating or cooling the hall and neighbouring office buildings, process cooling or domestic hot water heating. In this project, all requirements are met by our reversible R290 heat pumps. The use of natural refrigerants was very important to the client, and we were able to present an optimal solution thanks to our experience.

Performance data

- » 1011 kW cooling capacity
- » 1410 kW heating capacity (7x R290 heat pump)

Retail trade

For food retailers, system failures cause inconvenience to customers. The heat pump, specially designed for high operational reliability, has two completely separate refrigeration circuits and three frequency-controlled reciprocating compressors. The fine-tuned power supply enables the required cooling capacity to be delivered extremely precisely and energy-efficiently.

Performance data

- » 140 kW cooling capacity
- » 196 kW heating capacity (1x R290 heat pump)



Hotel

Operational safety, maximum availability and energy efficiency take centre stage in the planning and design of our heat pumps. Hotel guests in particular are very sensitive and always want reliable hot water for showers, air-conditioned rooms in summer and cosy warmth in winter. Low-noise solutions are also an important factor nowadays. Sound-insulating bonnets with high noise reduction (up to 20 db(A)) are used in this project.

Performance data

- » 520 kW cooling capacity
- » 560 kW heating capacity (4x R290 heat pump)



Automotive industry

Simulated environmental conditions play an important part in the automotive industry. SKADEC supplied water-cooled R290 chillers for process cooling. The units were manufactured according to the factory's specifications and each equipped with a Siemens S7-1500 PLC.

Performance data

- » 1200 kW cooling capacity (-5°C outlet temperature) (4x R290 water chiller)

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