

– weishaupt –

new.11

The new Weishaupt products



The future with a system

Condensing | Solar | Heat pumps | Burners

Stay flexible – with a system

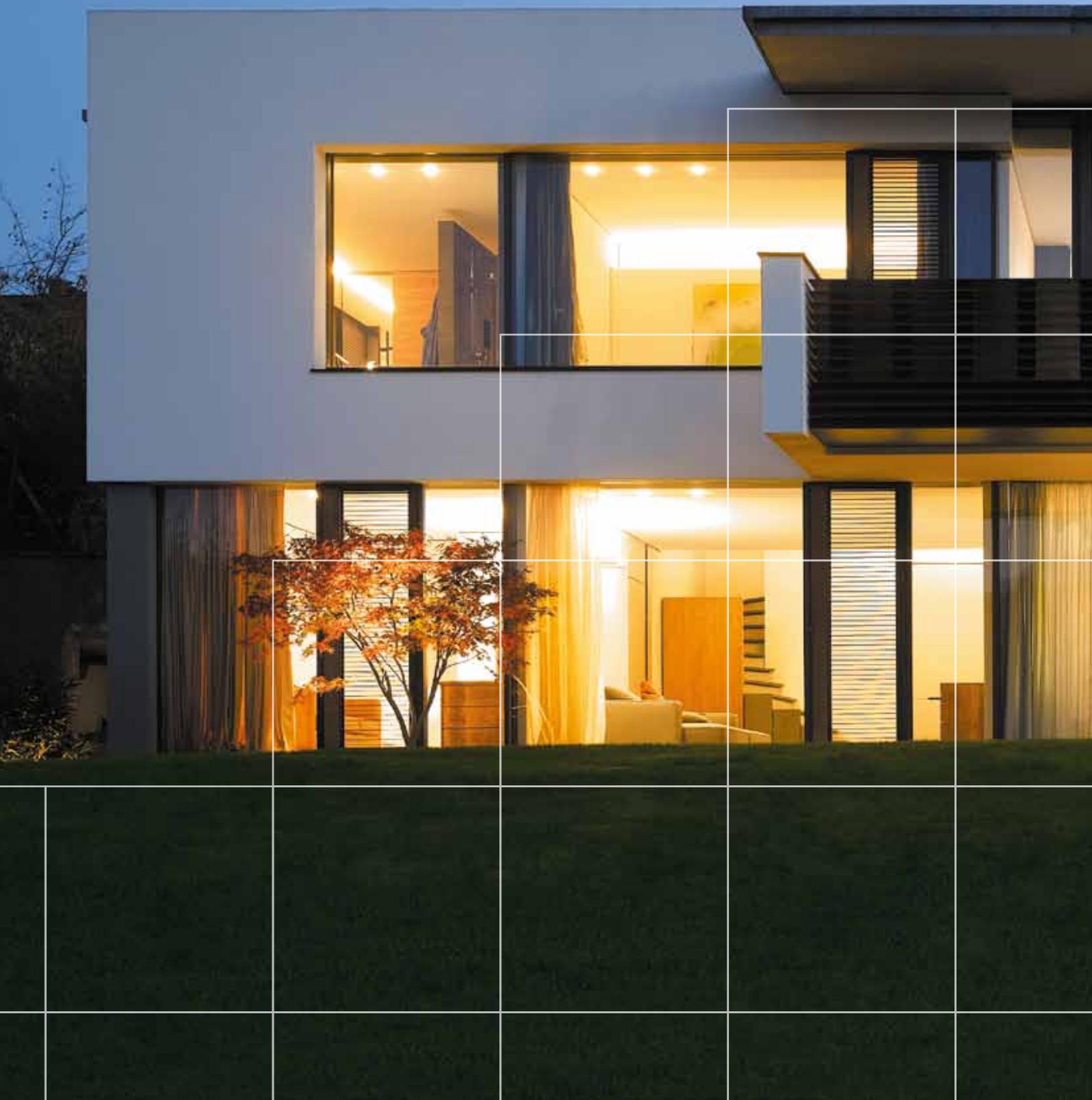
At Weishaupt, having a system means that care is taken from the start that all technical components form a logical unit, can be modularly extended and hence used in a flexible manner.

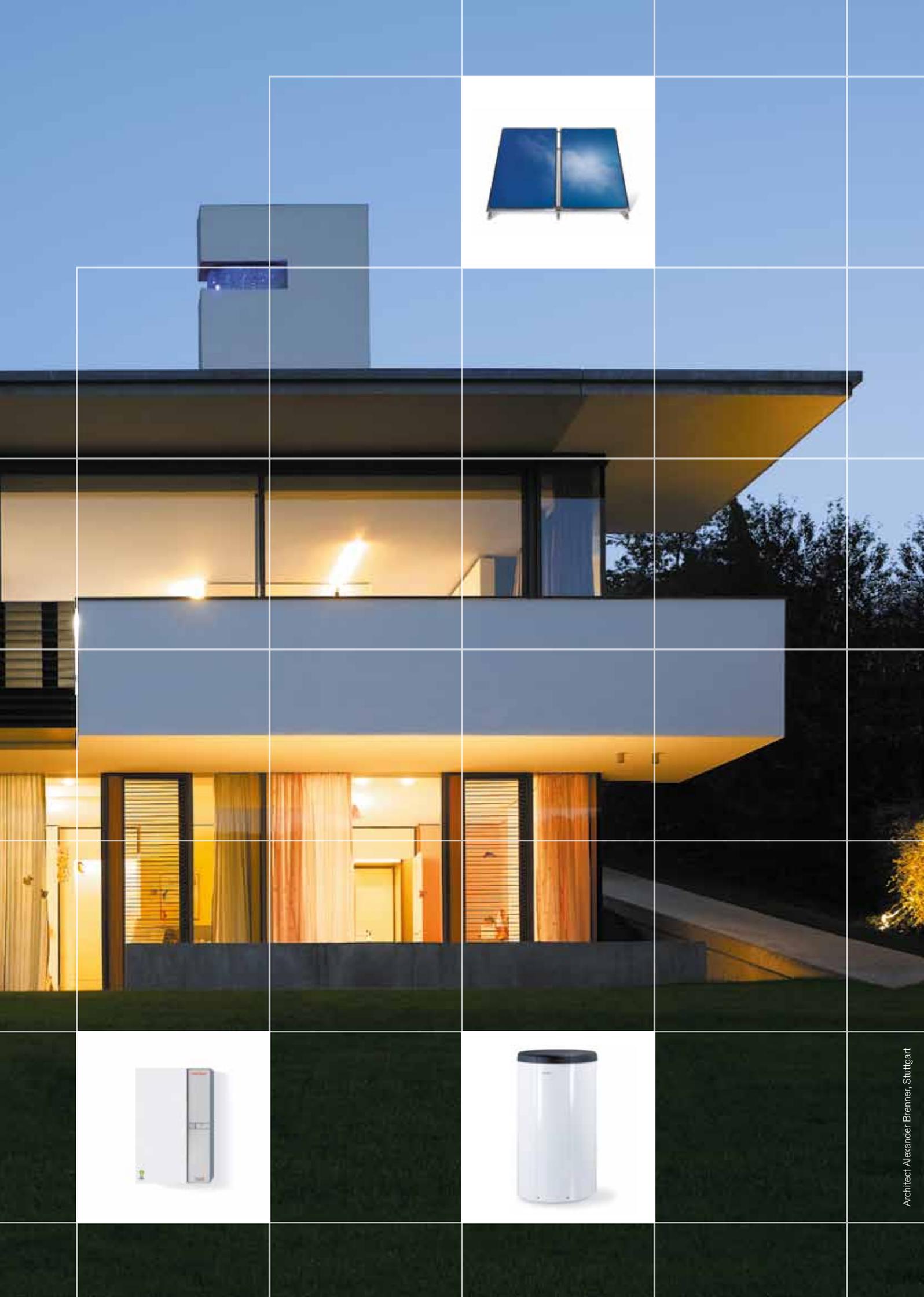
Having a system also means, however, that Weishaupt not only takes care of the technology, but also stands by its customers from supplying the products to ensuring their long-term functional efficiency.



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Weishaupt condensing systems:
technology that can be customised





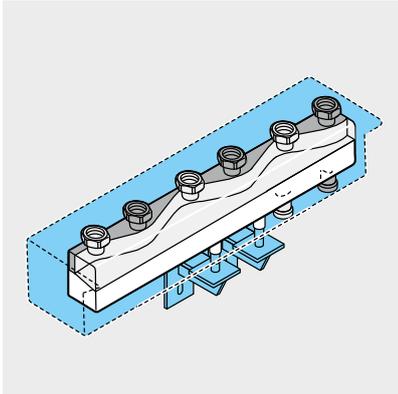


Wall-mounted condensing systems for gas and oil: compact can be so flexible



Weishaupt condensing systems in the capacity range from 5–60 kW are distinguished by compact design, high-quality materials and well-thought-out system components. This technology allows the classic fuels of gas and oil to be used in a particularly efficient, economic, environmentally friendly and reliable way.

Consistent system technology enables a needs-based operation of almost all requirements for heating detached houses and apartment buildings – often combined with solar thermal energy to heat domestic hot water or assist with heating.



Distributor with integrated de-couple

The combination of a distributor with an integrated hydraulic de-couple in an appliance is new. This system component makes assembly easier and saves valuable time and money.

There are versions for volumetric flows of 3.5 or 10 m³/h, in each case for connecting two or three heating circuits.



Biogenic fuels

Weishaupt condensing appliances are also equipped for combusting fuels made from renewable sources. Like natural gas, biogenic gases are natural products and hence subject to fluctuations in their composition.

The Weishaupt SCOT system ensures even combustion regardless of variations in gas quality.

Floor-standing condensing systems: for every application

Floor-standing condensing systems from Weishaupt cover a wide capacity spectrum. New to the range is the Weishaupt Thermo Condens WTC-GB 90 gas condensing boiler. It rounds out the lower end of the range of floor-standing gas condensing boilers, which now goes from 90–300 kW.

Cascading enables units with a rating of up to 1,200 kW to be produced. The Weishaupt system technology provides all the necessary components in this respect for regulation as well as hydraulic and flue systems.

Also new to the range is the WTC-OB oil condensing boiler with ratings of 20–35 kW. It adds to the series of innovative Weishaupt oil condensing appliances.





New

New system: the WTC-OB oil condensing boiler



The floor-standing WTC-OB oil condensing boiler comes in four rating stages and covers an output range of 20–35 kW. Its compact dimensions open up numerous installation options and also make it ideal for modernisation. Notable features of the new oil condensing boiler are the highly efficient aluminium heat exchanger, which makes the compact design possible, and the new two-stage Weishaupt purflam® burner, which keeps emissions low and efficiency high. Depending on the boiler rating, the difference in output between stages one and two is up to 13 kW.

The oil condensing boiler thus reaches a normal supply level of approx. 105% in relation to H_i (99% H_s), which represents a top value for this category. Of course, the WTC-OB is fully incorporated in Weishaupt's system technology: all WCM regulator components, the WAL flue system and the WHS hydraulic system can be perfectly used with all Weishaupt Thermo Condens systems in the same way.

The WCM control system enables the integration of solar power systems or the inclusion with building automation systems, just as reliably as remote monitoring, remote diagnostics and remote maintenance with the new WCM-COM communication module (see page 23).

Intelligent assembly benefits, convenient commissioning

The low weight, compact dimensions and smart transport aids make it easier to move to its ultimate installation point, even via narrow stairs and corridors.

The newly developed control technology, with the commissioning assistant as standard, ensures that all settings and precautions are easily carried out for reliable operation in very short time. The Weishaupt purflam® burner is preset at the factory. The recommended fuel is low-sulphur heating oil. This means that there is no need to neutralise the flue-gas condensate. The boiler can also be operated reliably with conventional heating oil.

Heating circuit supply

Heating circuit return

Condens manager with plug-in connection box

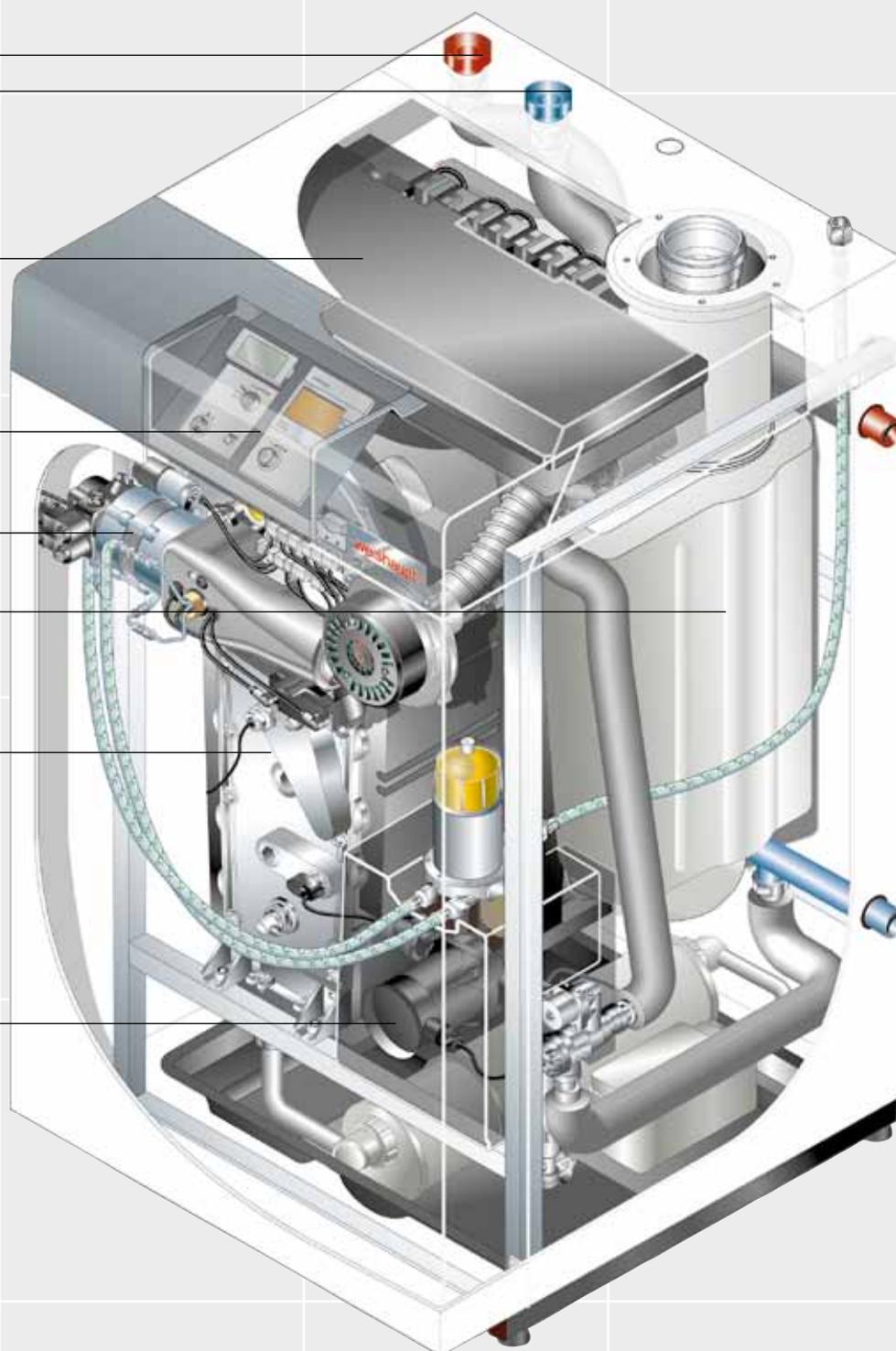
Control panel and remote-control station

Two-stage purflam® blue burner

Flue-gas sound absorber

High-performance heat exchanger

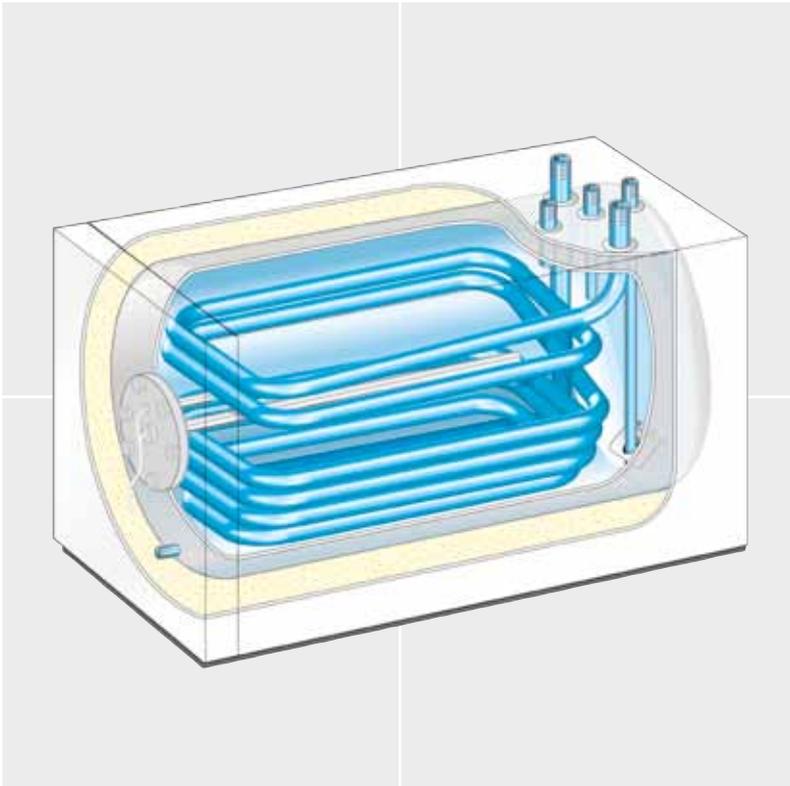
Energy-saving circulation pump



The Weishaupt WTC-OB oil condensing boiler (20–35 kW)

New

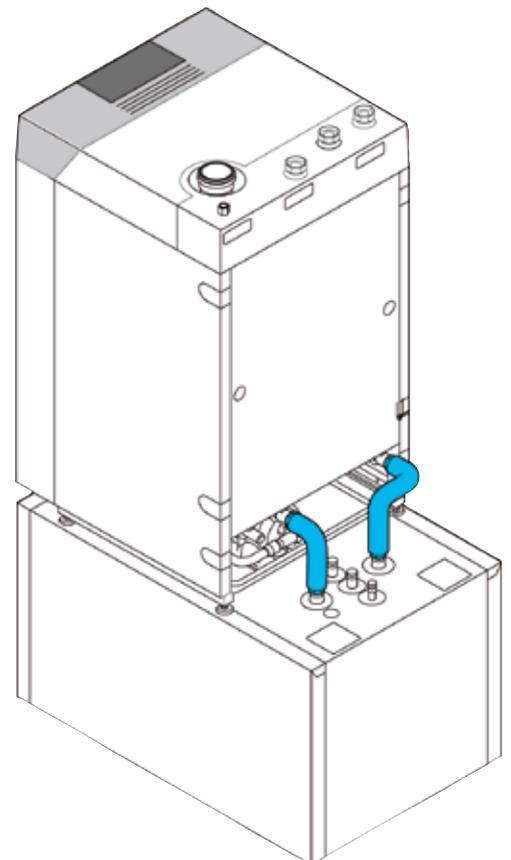
A system with plenty of room for new features



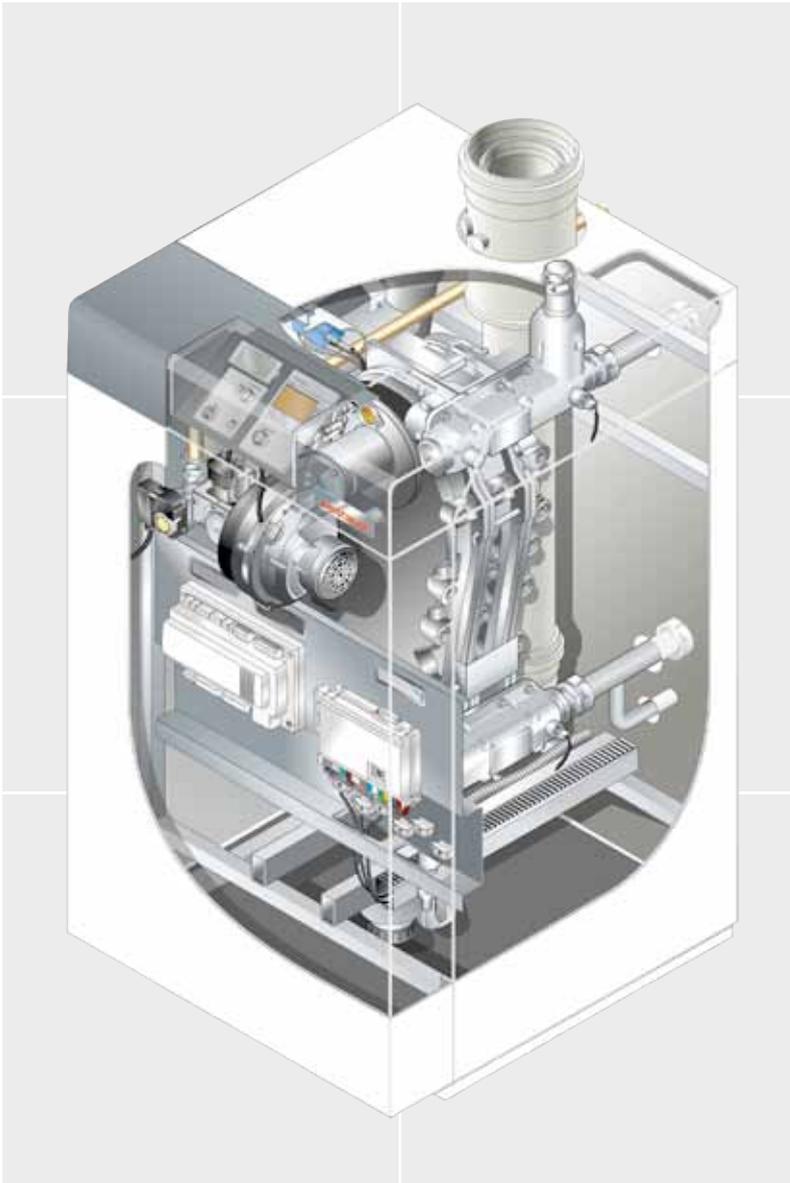
Base reservoir Weishaupt Aqua Bloc 155

Even where space is at a premium, the new WAB 155 base reservoir enables the convenience of unlimited hot water. Its compact design allows it to fit underneath a Weishaupt oil condensing boiler, therefore taking up hardly any extra floor space.

The connections arranged on top minimise the distance to the wall and thus also save valuable space.



*Assembly diagram: WAB 155 base reservoir
with WTC-OB condensing boiler*



Weishaupt WTC-GB 90 gas condensing boiler

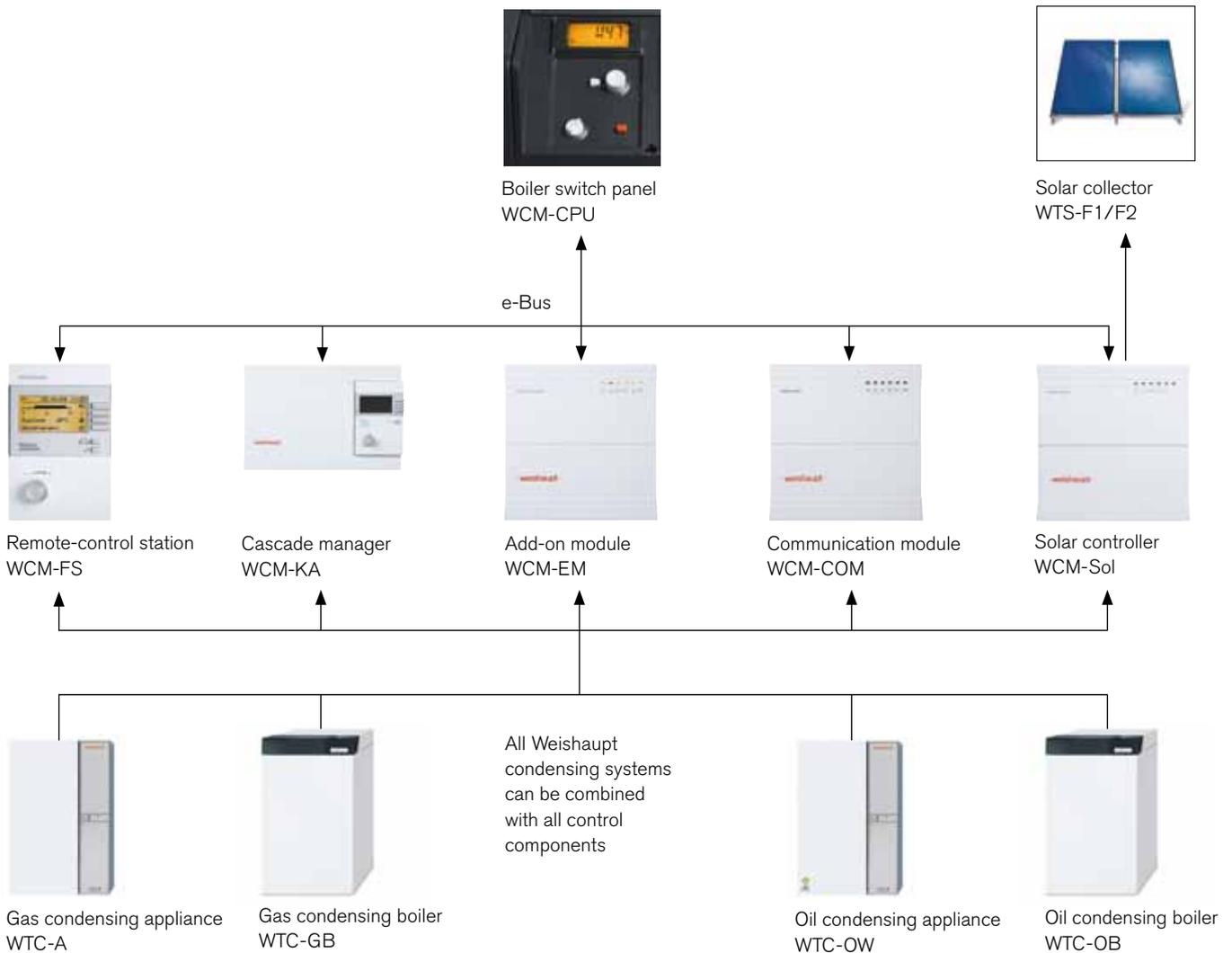
WTC-GB 90 gas condensing boiler The floor-standing condensing boiler bridges the gap between the wall-mounted Weishaupt condensing appliances (up to 60 kW) and the larger output range from 120 kW and up. The modulating premix gas burner provides an output spectrum of 18.2–90.0 kW. This size was made to achieve a more flexible adaptation of the Weishaupt condensing technology to the respective installation conditions.

High-quality materials, compact design and efficient advanced technology are the key characteristics even on the smallest version of this well-established series. This includes the highly efficient aluminium heat exchanger, the quiet premix burner and, last but not least, the intelligent control technology that is common to all Weishaupt condensing appliances.

It enables a reliable cascading system as well as the ability to extend the unit to several heating circuits and use renewable energy sources. Remote communication is also possible via the Internet or GSM mobile technology.

New

Weishaupt control systems: modular, flexible and intelligent

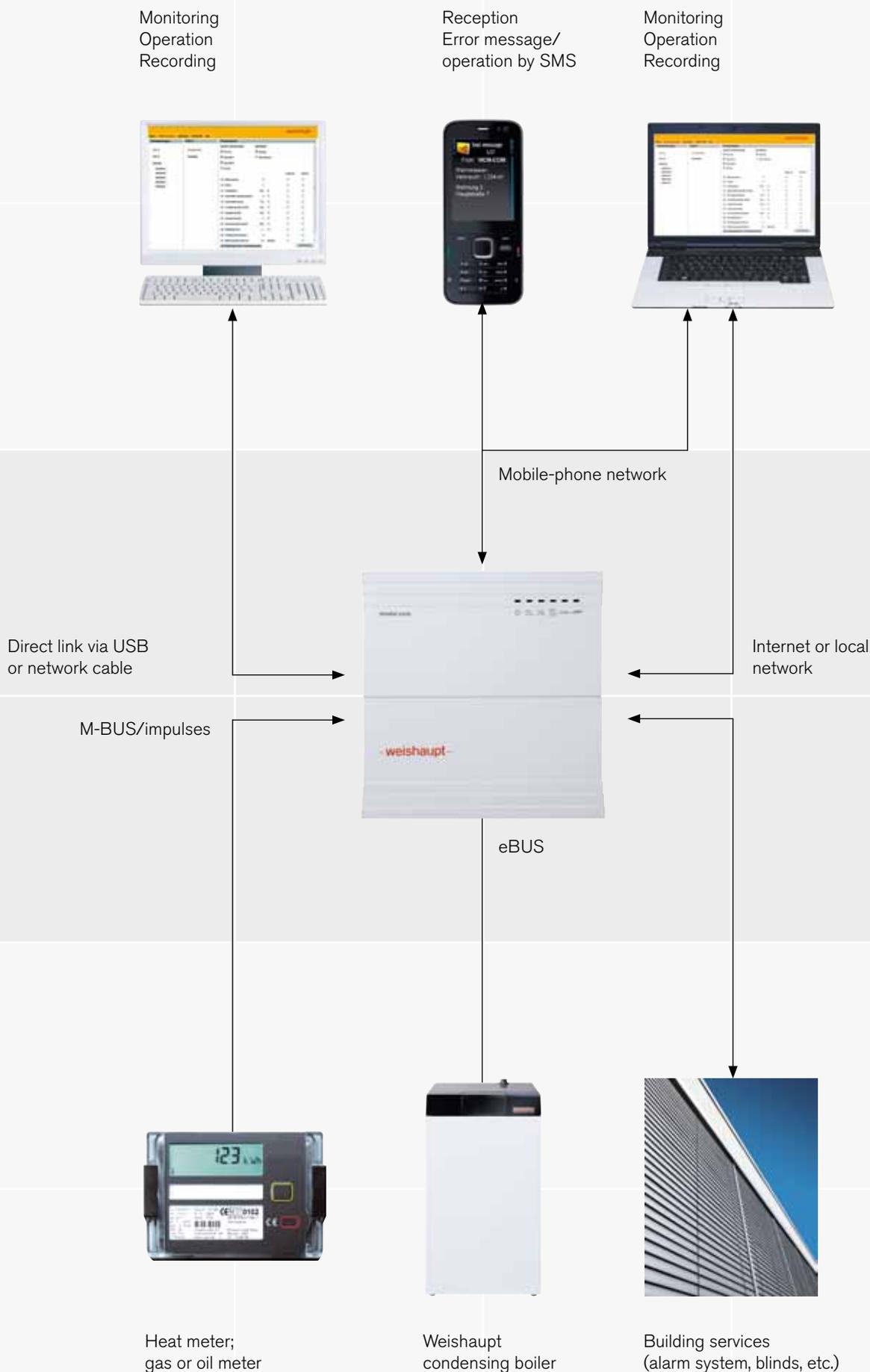


The modular WCM control system with its strategic platform design offers advantages to both heating engineers and users. For different applications, there are modules to match that communicate with each other by eBUS and thus ensure that every unit operates in a convenient and reliable way. The centrepiece is the central processing unit (WCM-CPU) in the boiler switch panel. It is complemented by a remote-control station (WCM-FS).

If required, up to seven add-on modules (WCM-EM) can be used for extra heating circuits. The cascade manager (WCM-KA) also communicates with the central processing unit. Major benefit: you only pay for as much as you use. At the same time, the system can also be extended later to ensure the greatest possible flexibility.

The WCM-COM communication module

The communication module enables a system to be monitored and operated by a PC and can send reports about its operating status by email or SMS to a chosen recipient. This allows a technician keep an eye on an installed system at all times and to make sure it is working to its full capacity.



Functional diagram of the WCM-COM communication module

Weishaupt solar thermal energy:
solar energy for every requirement



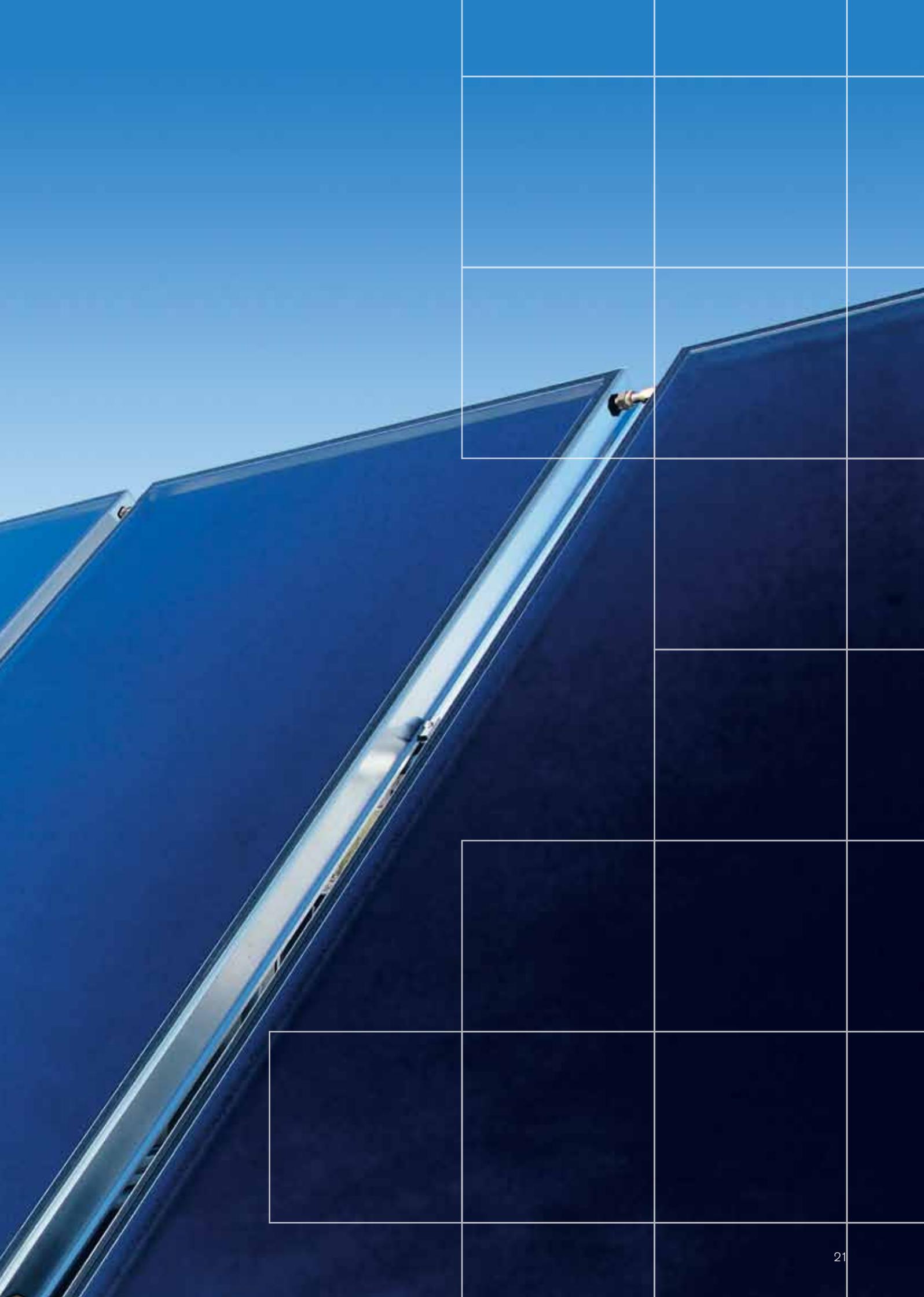


Systematic use of solar energy

Experts know the particular benefits of Weishaupt solar collectors: sturdy design, high production precision and a good solar yield. Thanks to the Mirotherm multilayer coating, Weishaupt solar collectors also use diffused light to recover heat and achieve a high level of efficiency.

Today we can see more and more buildings with solar collectors for heating domestic hot water and supplying back-up heat. Not only residential homes, but also large buildings are connected to the economical source of heat direct from the generator. Weishaupt has now developed a new collector system especially for large installations: the WTS-F2 system.





New

Custom-made solar components



Weishaupt WTS-F2 solar collectors

WTS-F2 solar collector

The new solar collectors add to the range of existing Weishaupt systems. They are designed above all for buildings with a high heating requirement. Hotels, sports facilities and large apartment complexes can use this system to get plenty of solar power to heat domestic hot water and supply solar backup heating.

Integrated hydraulic manifolds in the collectors allow up to ten collectors to be combined in a row. The collectors are linked by a metallic sealing screw connection. Combined with compensators that adjust for movement from thermal expansion, these connections help to give the solar power system a long lifespan.

As a result, there are clear assembly benefits for heating professionals. They can save on additional materials like pipes, seals and insulation, as well as on time and tools. Height-adjustable rails and roof anchors make it easy to align the collectors and adapt them to various types of roofing.

The WTS-F2 collector system is designed for assembly on sloping and flat roofs. System components such as matching hydraulic units, system cables, solar and energy storage devices and innovative solar controllers ensure that all parts work perfectly together.



Solar controller WCM-Sol 1.0

The new Weishaupt WCM-Sol solar controller is part of the Weishaupt WCM controller system. It is operated via the remote-control station for the heating system, which can be used to access additional information, for example solar yield with history, temperatures, flow rates, etc.

Two standard hydraulic units for heating drinking water or supplying backup heat from solar power are integrated in the controller as standard.



WHP-Sol solar-pump assembly

The new Weishaupt WHP-Sol solar-pump assembly is equipped with an energy-saving pump, which is eligible for BAFA funding and already fulfils the current European eco-design directive for energy-related products (ErP).

Integrated in the new solar-pump assembly are forward and reverse sensors as well as a flow sensor for regulation and recording yields. All connections on the WHP-Sol pump assembly are designed with metallic seals.



Weishaupt heat pumps:
using nature's energy





Weishaupt heat pumps: efficiency in series

With its heat pumps, Weishaupt offers a comprehensive product range with a variety of output ranges. In this respect, Weishaupt places particular value on offering everything from a single source, from geothermal drilling to services from qualified specialists. Weishaupt heat pumps are highly efficient and have impressive output figures according to EN 14511:

- Air to water A2/W35 up to 3.8
- Brine to water B0/W35 up to 5.0
- Water to water W10/W35 up to 5.5

Furthermore, the new generation of Weishaupt heat pumps works particularly quietly thanks to integrated vibration decoupling. All new models are fitted as standard with an electronic expansion valve and an integrated heat meter.

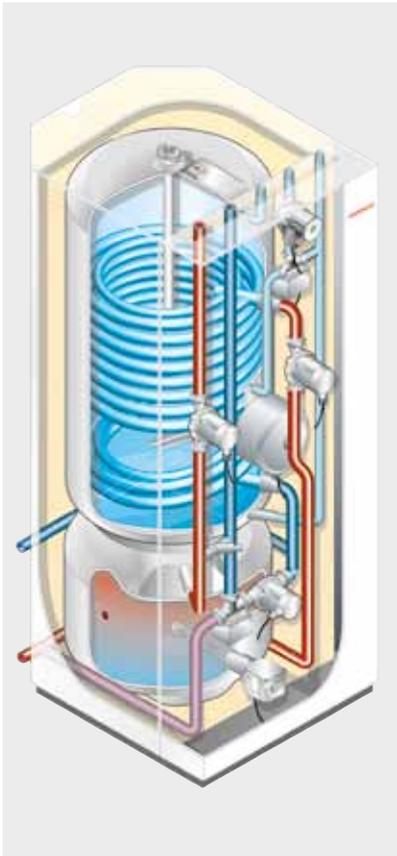




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New

The new products in the heat-pump system



WKT compact tower

WKT compact tower

The new compact tower combines all the components necessary for linking the heat pump with the heating circuit in compact housing. This considerably reduces the heating engineer's time and effort during installation and assembly. It contains a 300-litre water tank, a 100-litre buffer tank, hydraulic components, circulating pump and an electric auxiliary heating unit. The compact tower is designed to be combined with the new Weishaupt heat pumps with an output up to 14 kW. (Available from September 2011)



Heat-pump cascade manager

Heat-pump cascade manager

When it comes to large projects, several heat pumps connected in parallel are increasingly being used. In order to operate these systems with ultimate efficiency, there is the new cascade manager. It measures and detects the building's heating or cooling requirements and controls up to 14 heat pumps, which respond on demand.



Energy-saving brine-circulating pump

Energy-saving brine-circulating pump

To improve the annual coefficient of performance on brine-to-water heat pumps, Weishaupt uses energy-saving pumps of efficiency class A for the brine circuit.

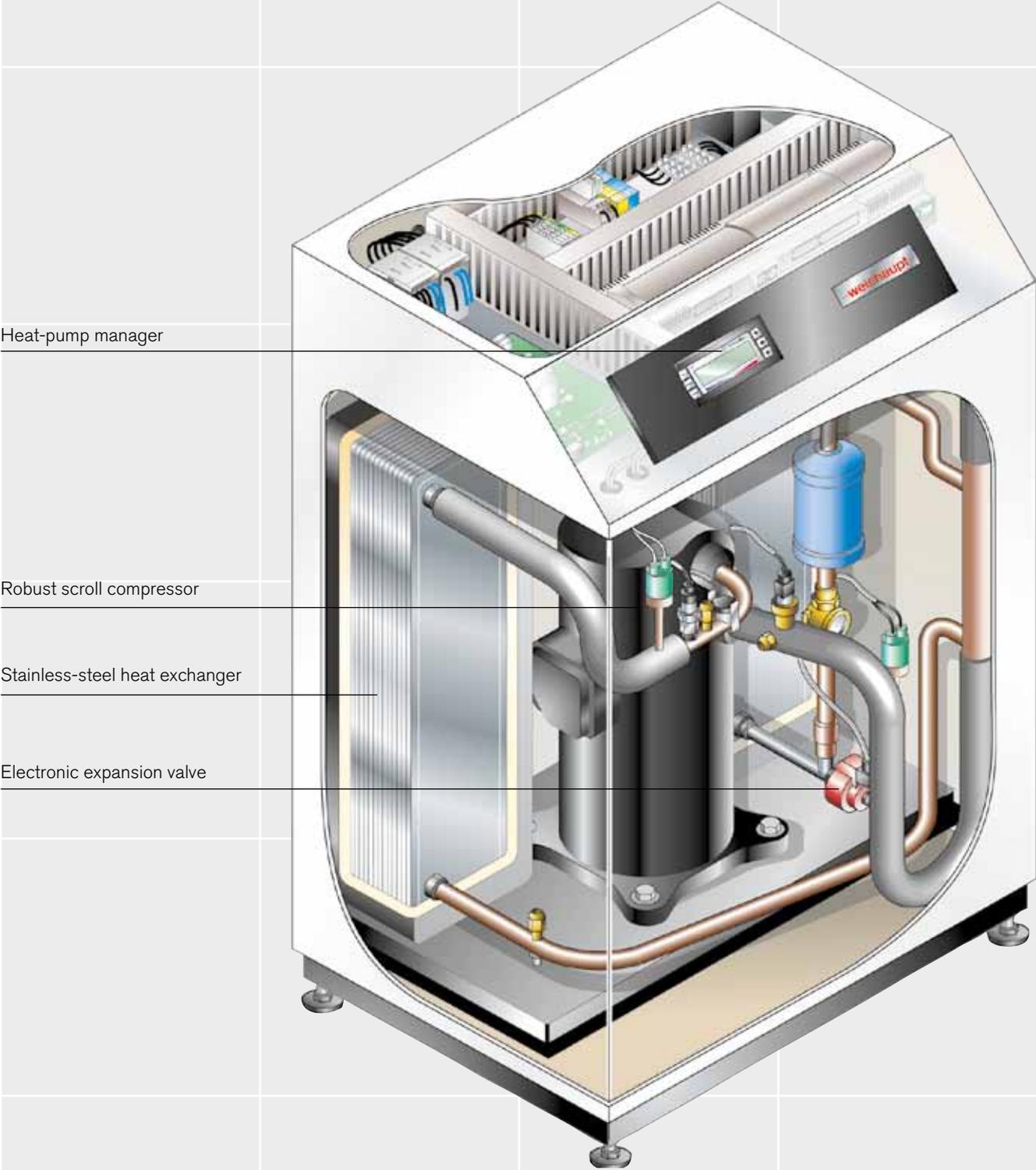
Pico-Web Internet interface

With the aid of this plug-in card, the operating statuses of heat pumps can be recorded, transmitted and hence have a direct influence on heat-pump systems via the Internet. In addition, Weishaupt offers an EIB/KNX interface, which can be used to integrate heat pumps in higher-level building automation systems.

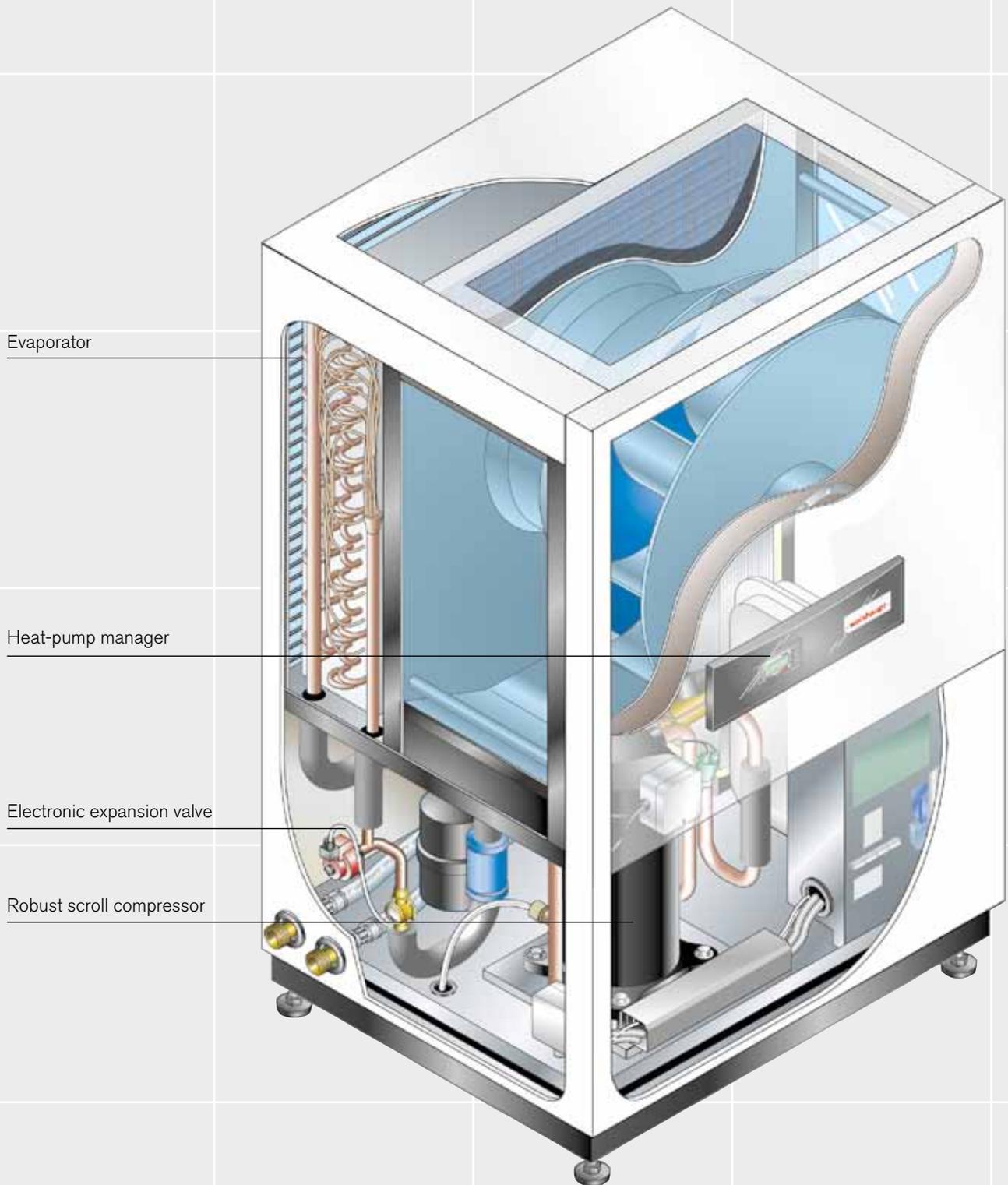


Pico-Web Internet interface

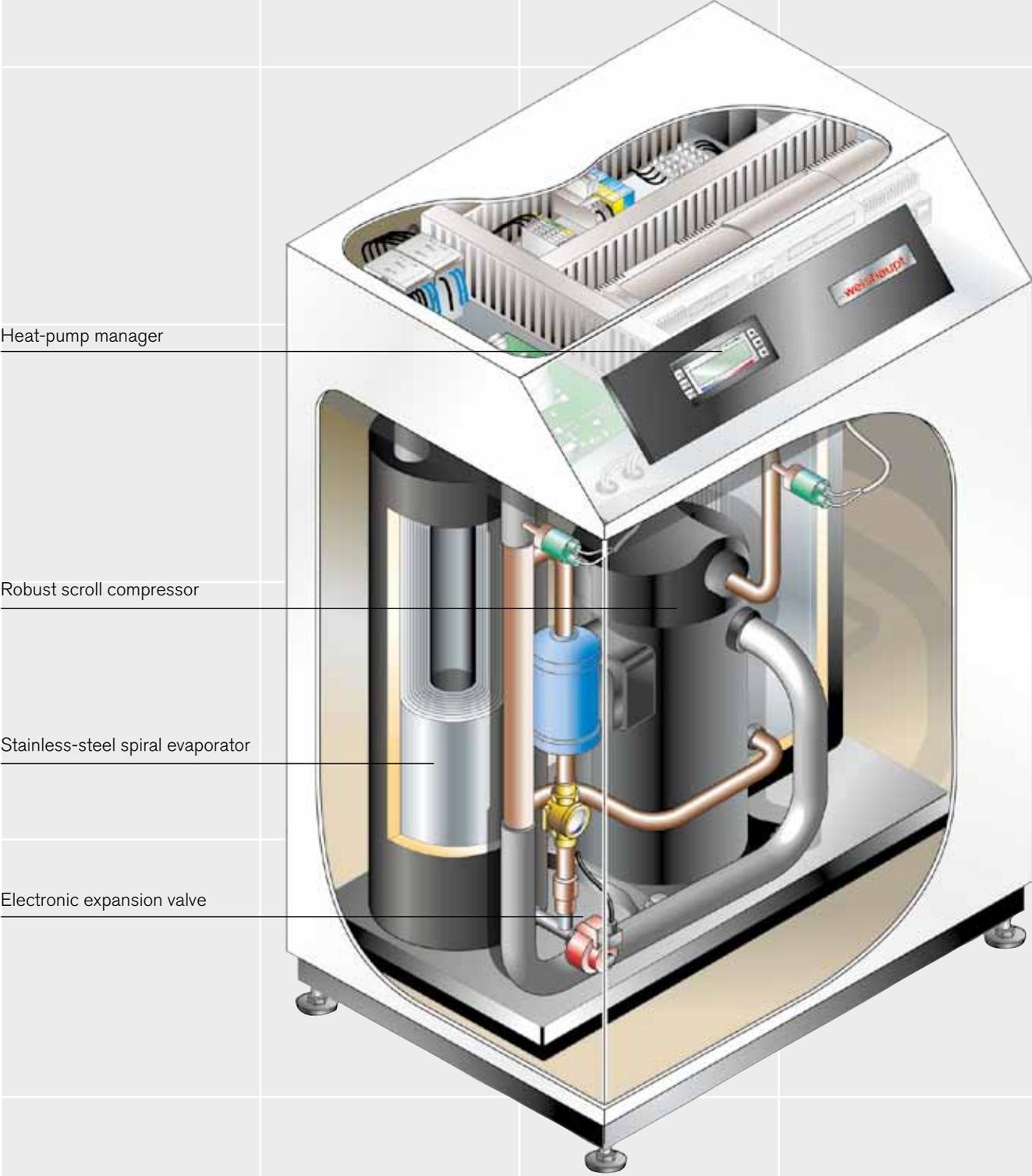
Highly efficient brine-to-water heat pump



Highly efficient air-to-water heat pump



Highly efficient water-to-water heat pump



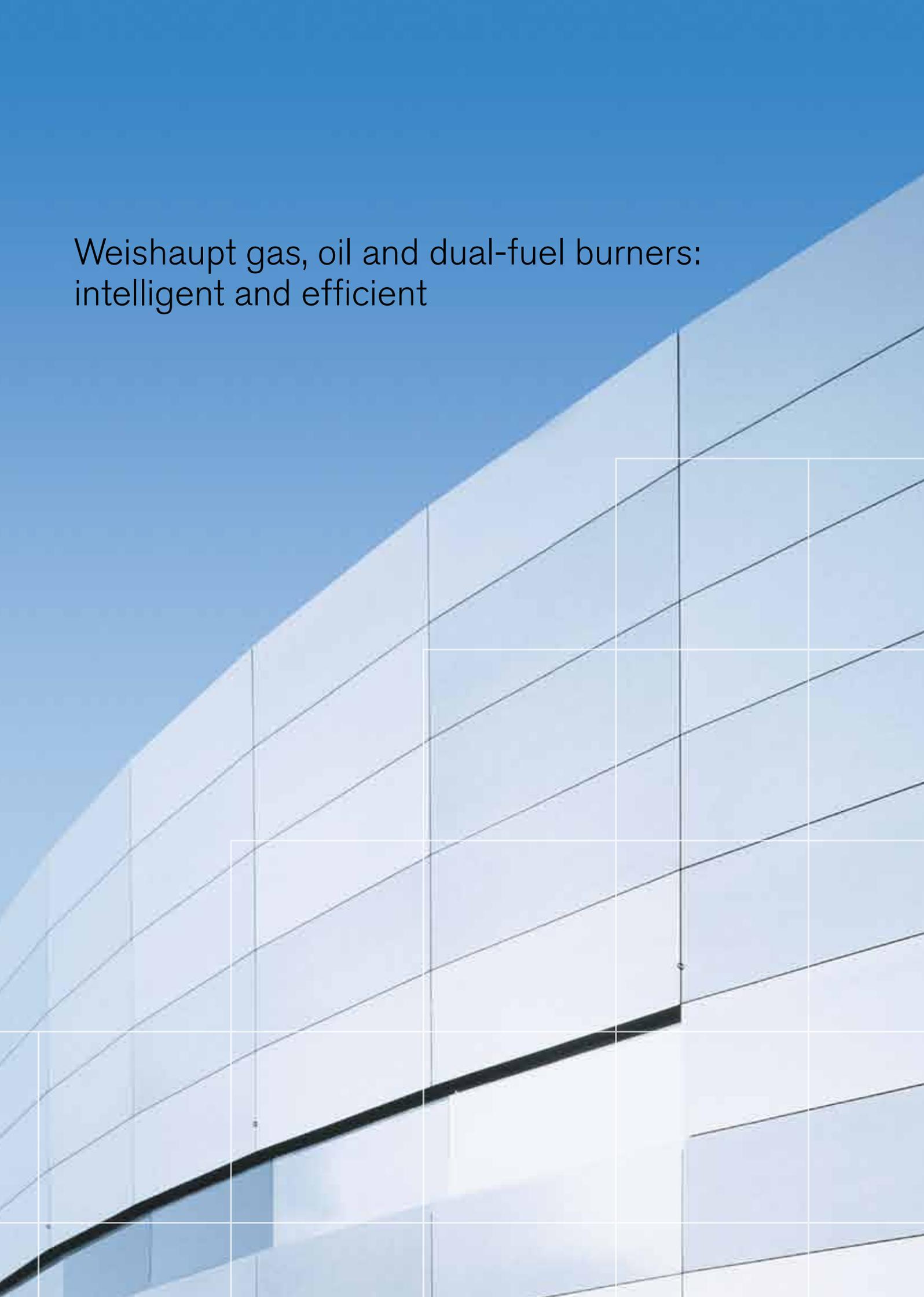
Heat-pump manager

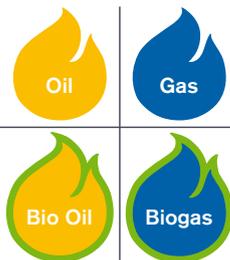
Robust scroll compressor

Stainless-steel spiral evaporator

Electronic expansion valve

Weishaupt gas, oil and dual-fuel burners:
intelligent and efficient





A big system that keeps energy costs low

Weishaupt gas, oil and dual-fuel burners are used all over the world. Any place where it comes down to reliability, safety and function, the qualities of Weishaupt burners are especially appreciated. Alternative fuels are also being increasingly used. Thanks to the committed work by the Weishaupt research and development centre, when buildings, planners and system operators can rely

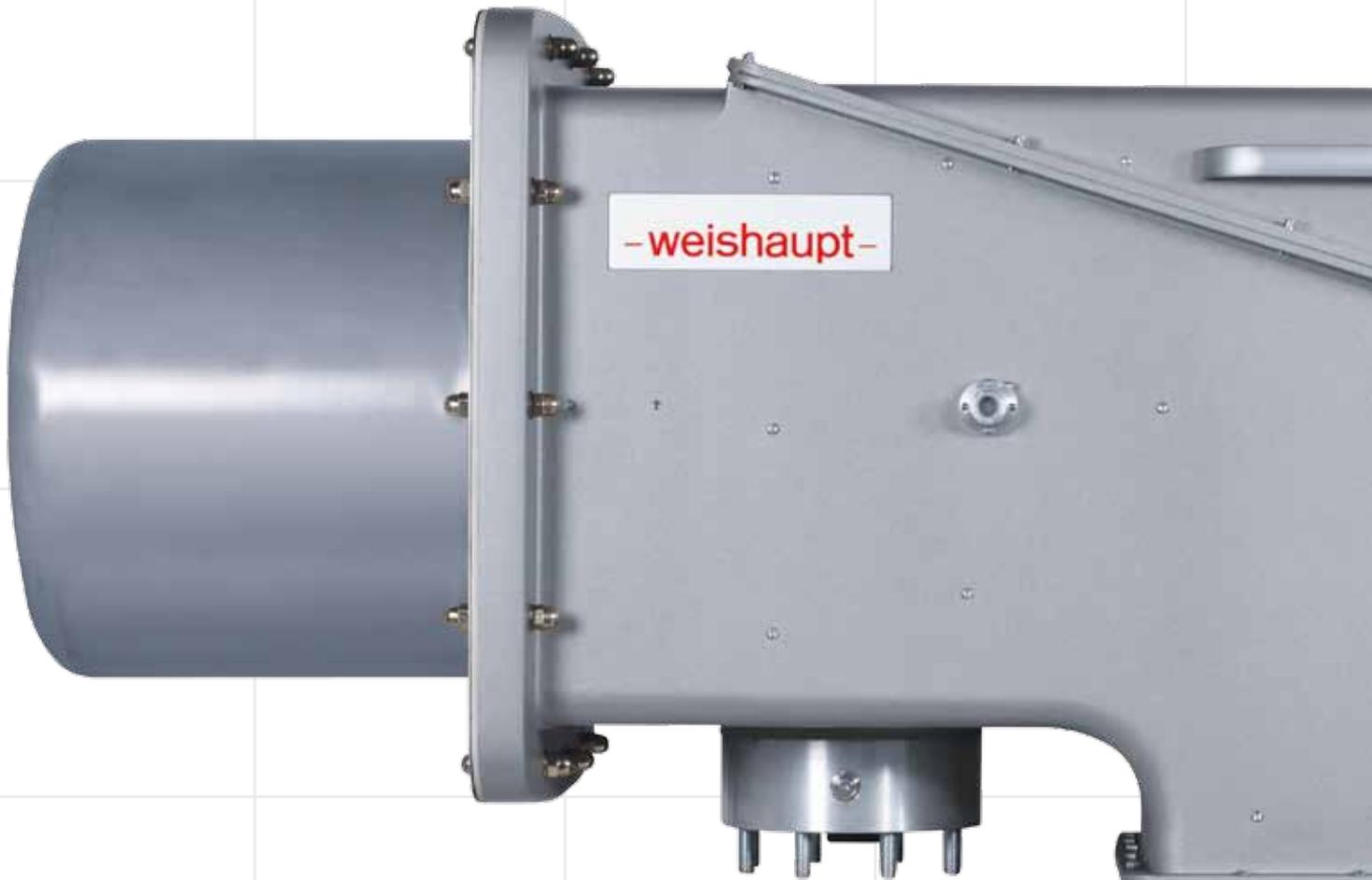
on the fact that Weishaupt burners will work equally well with biogenic fuels as with conventional gas or oil. Furthermore, the Weishaupt development centre has come up with processes for the simultaneous combustion of fuels in different compositions be they biogenic fuels or special fuels.





New

Weishaupt WK 80: packed with 22 megawatts of power



WK 80 industrial burner

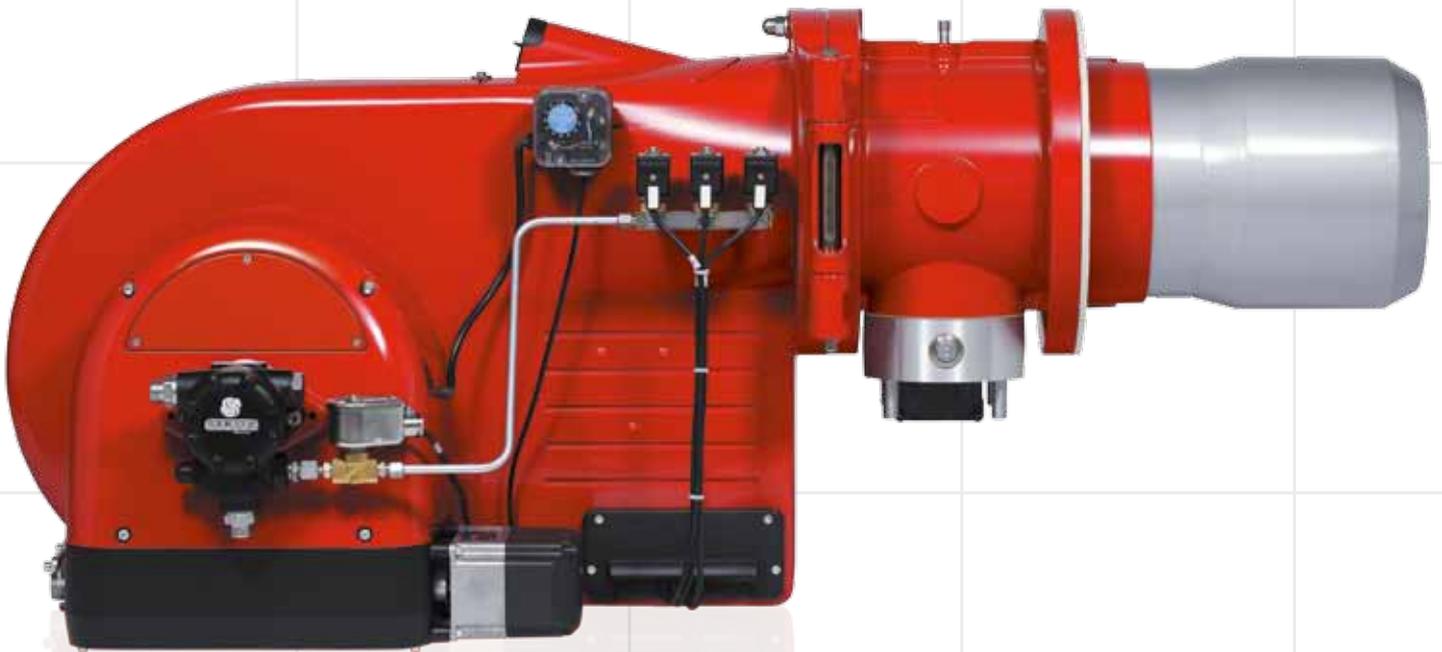
With a rating of 22 MW, the WK 80 is the biggest and best-performing Weishaupt burner of all. The new revised model is able to burn all standard fuels and can be supplied as a gas, oil and dual-fuel burner. The WK 80 is the only burner of its kind in Europe that is supplied type-tested from the factory. That saves an individual approval procedure on site.

In the 'swirlflame' design, this burner can now also heat water-tube boilers with very short combustion chambers. For this purpose, it uses a newly developed mixing head in which the combustion air is 'swirled' without putting the flame stability at risk. Tests at the Weishaupt research and design centre have demonstrated that the process works. This is the only place with a test flame tube for such outputs – it is the biggest in the world.



New

New burners – as reliable as ever



WM20 multiflam®

WM20 multiflam®

The new WM20 burners now come in a multiflam® design with an output range up to 2,000 kW. They are available both as a dual-fuel burners and as a pure gas or oil burners.

With all fuels (heating oil, natural and liquid gas), the burners fulfil the NO_x class 3 in accordance with EN 267 and EN 676, i. e. 80 mg/kWh with natural gas and 120 mg/kWh with oil.



WM-G30 LN

WM-G30 LN

The Weishaupt monarch® WM-G30 LN gas burner (LowNO_x design) covers the output range from 350–5,400 kW. The range of monarch® burners with an LN design, previously available up to 1,550 kW, has therefore been extended upwards by an enormous margin. The WM-G30 LN is suitable for natural gas and liquid gas, thus offering ultimate flexibility in terms of fuel selection.

Thanks to its completely new mixing head, the WM-G30 LN meets the strict emission requirements for NO_x class 3 in accordance with EN 676 (≤ 80 mg/kWh) for all the gas types mentioned.

WGL40 dual-fuel burner

The compact, particularly quiet-running WGL40 dual-fuel burner (125–550 kW) is a completely new type of burner. It features digital combustion management with integrated valve proving and LCD display for settings and maintenance work. The gas-air compound is controlled electronically by stepping motors. Integrated as standard are an eBUS interface, a fault output terminal for recording error messages and an operating-hour counter.

The gas valve train is serially equipped with a thermally activated shut-off device and a multifunction assembly with two class A valves, gas pressure regulator, gas filter and gas pressure switch.



WGL40

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