

Heating with pellets



pelletstar

10 - 60 kW



Competence is our success...

HERZ FACTS:

- 35 companies
- Group headquarters in Austria
- Research & development in Austria
- Austrian owned
- 1,500 employees in more than 70 countries
- 9 production sites



HERZ – The company

Founded in 1896, Herz has been continuously active in the market for more than 110 years. With 6 sites within Austria, another 3 in Europe and more than 1,500 employees at home and abroad, HERZ is the only Austrian manufacturer that produces equipment for the entire heating and installation industry and is one of the most important internationally.

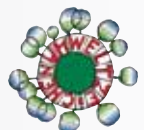


HERZ Energietechnik GmbH

HERZ Energietechnik employs more than 200 staff in production and sales. At the company sites in Pinkafeld, Burgenland and Sebersdorf, Styria, there is state-of-the-art production as well as a research institute for new, innovative products. For a number of years, HERZ has worked with local research and training institutes. Over the years, HERZ has established itself as a specialist in renewable energy systems. HERZ places a great importance on modern, cost-effective and environmentally friendly heating systems with the highest level of convenience and user-friendliness.

HERZ for the environment

All HERZ furnace systems fall below the strictest emission regulations. Numerous environmental endorsements bear witness to this.



HERZ quality

HERZ designers are in constant contact with recognised research institutes in order to improve the very high standards even further.



Convenient heating...



Decades of experience

- In-house development and test centre
- Austrian quality with Europe-wide sales
- Comprehensive service
- ISO 9001 certification

Economical and convenient heating using pellets.

The HERZ-pelletstar, established in the market since many years and in operation around whole Europe impresses with its high efficiency, easy operation and modern design.

The system "Plug and Play" - just assemble and heat - stands for the ideal environment and fully automatic heating system.

The great advantages of HERZ pelletstar:

- Highest efficiency
- Simple and automatic operation
- Automatic heat exchanger cleaning
- Automatic combustion grate cleaning
- High operation safety
- Efficient insulation
- Automatic pellet discharge with different systems available
- Compact design
- Constructed from high quality materials

Control unit for:

- Heating circuits
- Hot water preparation
- Return flow temperature
- Buffer management
- Solar circuit control

Easy, modern and comfortable...



With the user-friendly VGA color touch-screen controller, the burning-process, as well as heating circuits, a hot water tank, buffer tank and a solar system can be controlled.

T-CONTROL

A central controller for:

- Buffer management
- Return flow temperature bypass (pump and mixer valve)
- Domestic hot water preparation
- controlled heating circuits (pump and mixer valve)
- solar circuit control
- frost protection

The convenient menu and simple screen layout with schematic 3D-representation ensures maximum user-friendliness.

The “modular operation” of the T-CONTROL offers extension possibilities up to 55 modules. This allows the central control unit to process the combustion (with lambda sensor), buffer management, return temperature rise, heating circuits, hot water preparation, solar circuit and more optimal together. Additionally, the control system can be easily expanded or modified with the external modules.

... with the central control unit T-CONTROL



T-CONTROL



Remote access to the controller using VNC Viewer

As an additional option, the T-CONTROL offers the possibility for remote visualization and remote maintenance via smartphone, PC or tablet PC.

The handling is the same as in the touch controller directly in the boiler. The processes and parameters can be read and modified any time from anywhere.

Further advantages of the T-CONTROL:

- power-saving standby mode
- status and error messages via e-mail
- Data transfer and software updates via USB stick
- Possibility of Modbus-Communication
- easy and clear presentation of the functions from various components (hot water preparation pump, circulation pump, mixing valve, switchin valve, actuator-motors usw.)

Benefits and details...



**The HERZ
T-CONTROL
with touch display**

Central control unit as standard for:

- Buffer management
 - Return flow temperature bypass (pump and mixer valve)
 - domestic hot water preparation
 - controlled heating circuit (pump and mixer valve)
 - frost protection
- Simple screen design and convenient menu guide.
 - Extension modules up to 55 modules possible (heating circuits, solar-use, second buffer etc.)



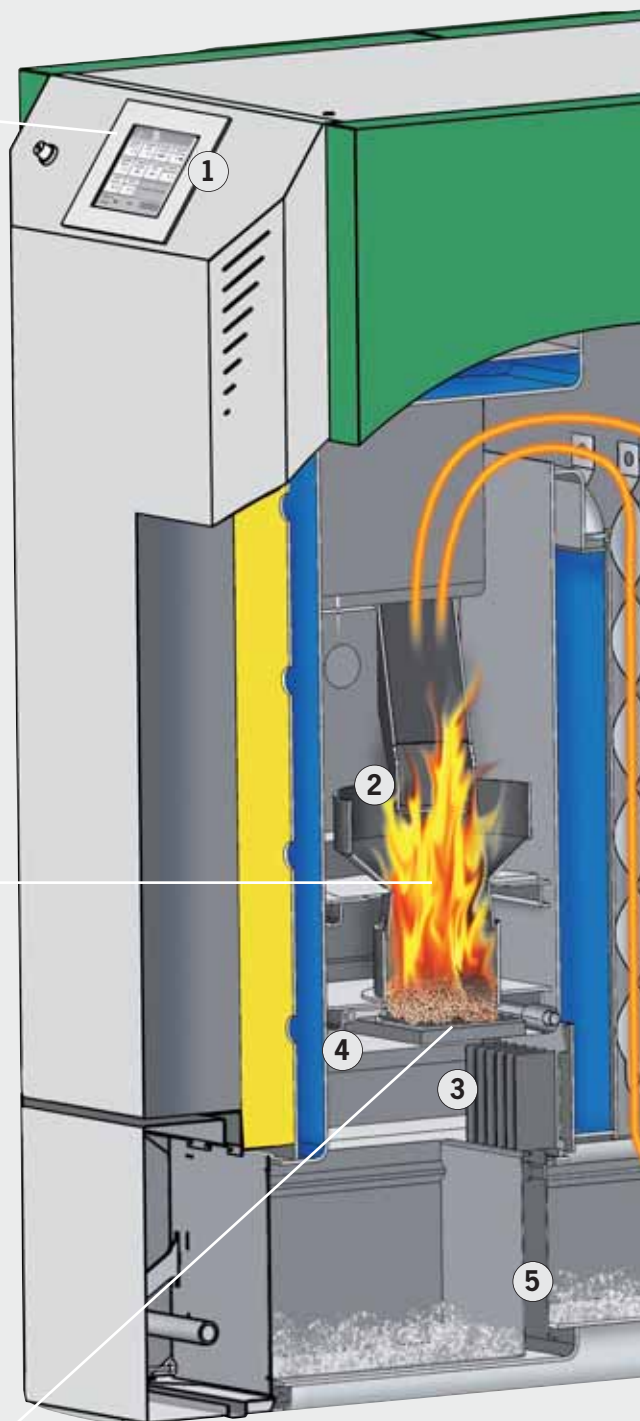
**High temperature-
resistant stainless
steel burning chamber**

- Made of high heat-resistant steel - for longest lifetime

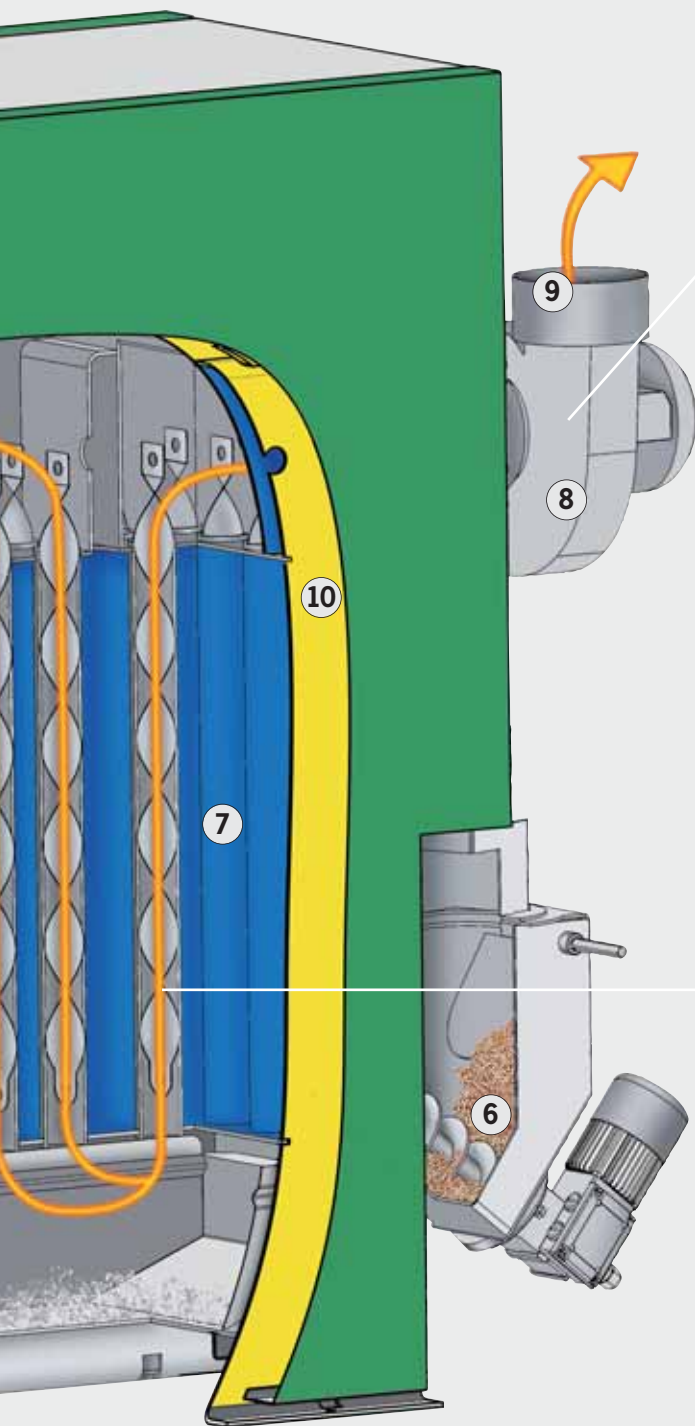


**Automatic cleaning
of the combustion
grate**

- Complete cleaning of combustion grate which automatically tips ash to extraction point.
- A clean combustion grate guarantees an optimum air supply.
- Minimises the manual cleaning requirement.



- 1 T-CONTROL**
central control unit
- 2 High temperature-resistant
burning chamber**
- 3 Tipping grate**
for complete cleaning



Energy saving combustion via the Lambda probe



- Thanks to the in-built Lambda probe, which continuously monitors the flue gas values, the boiler reacts to changes in fuel quality ensuring optimum combustion and extremely low emission values.
- The Lambda probe controls the air supply ensuring complete combustion, even in partial load operation.
- The results are low fuel consumption and the lowest emission values even with different fuel qualities.

Automatic cleaning of the heat exchanger



- The heat exchanger surfaces are automatically cleaned via the integrated turbulators, even during heating operation, eliminating manual cleaning.
- A consistently high level of efficiency thanks to cleaned heat exchanger surfaces enables low fuel consumption.
- The ash falls into the large ash bin, accessible from the front.

4. Automatic ignition
using hot air fans

5. ash-box for combustion and fly ash
easy access from the front,
easy to handle

6. BBP (back burn protection device; flap)

7. Pipe heat exchanger
with turbulators and
automatic cleaning

8. Lambda probe control
Automatic flue and
combustion monitoring

9. Draught fan
speed controlled and monitored
for the highest operating safety

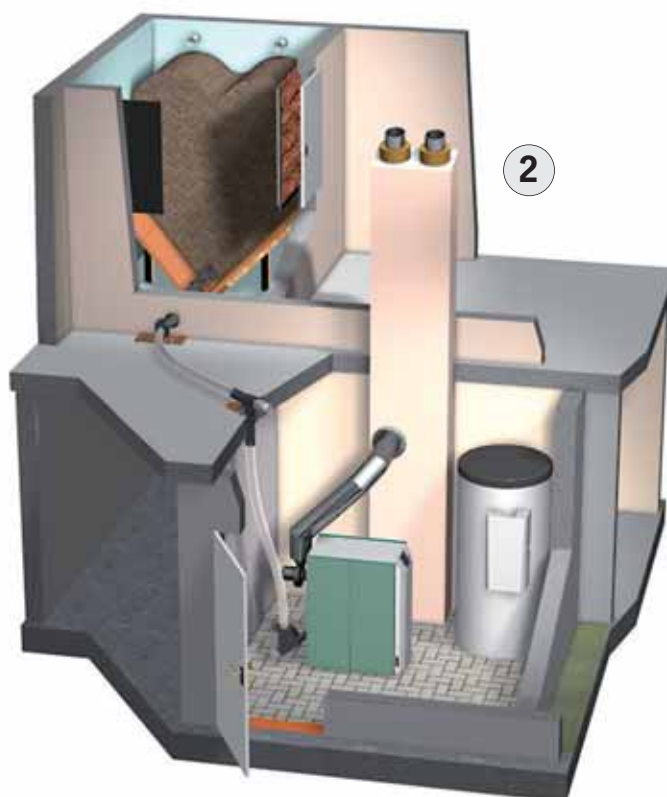
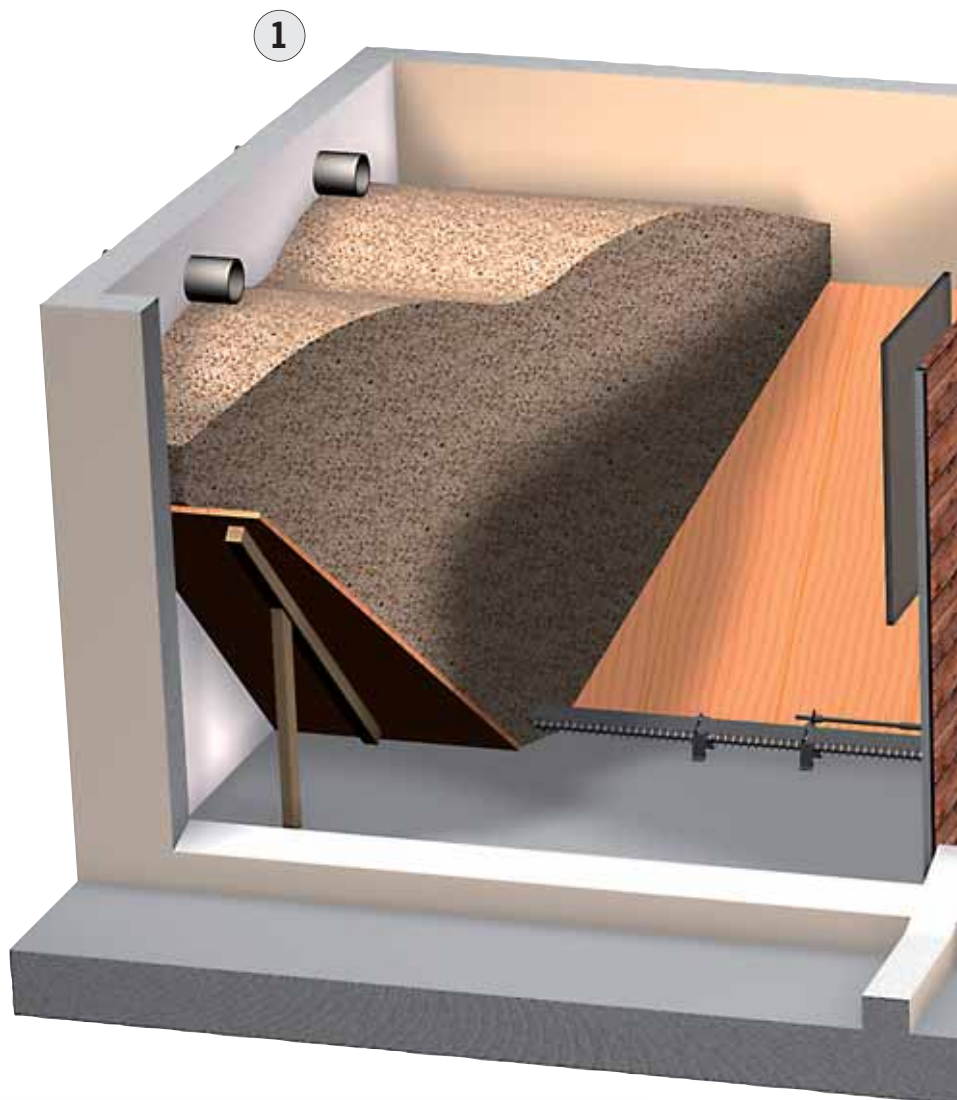
10. Efficient heat insulation
for the lowest radiated heat loss

Discharge systems ...

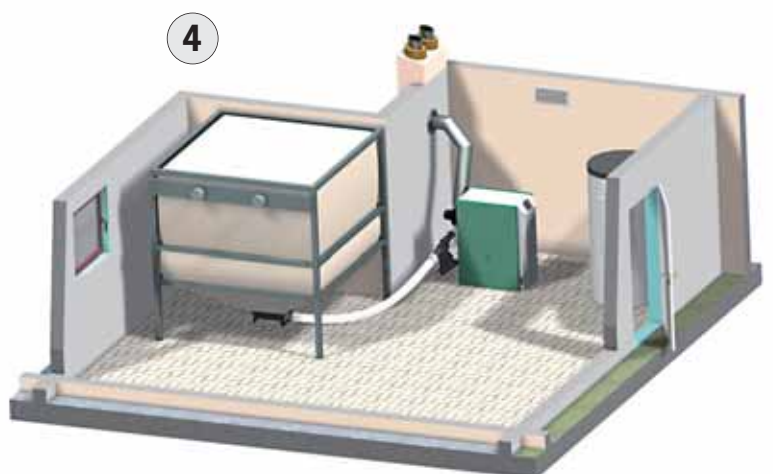
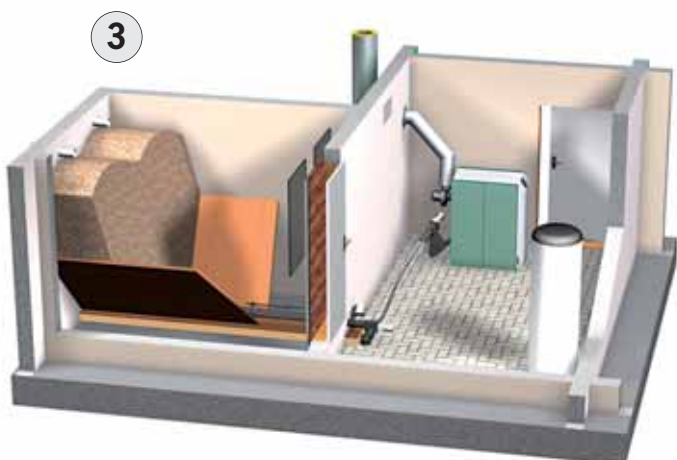
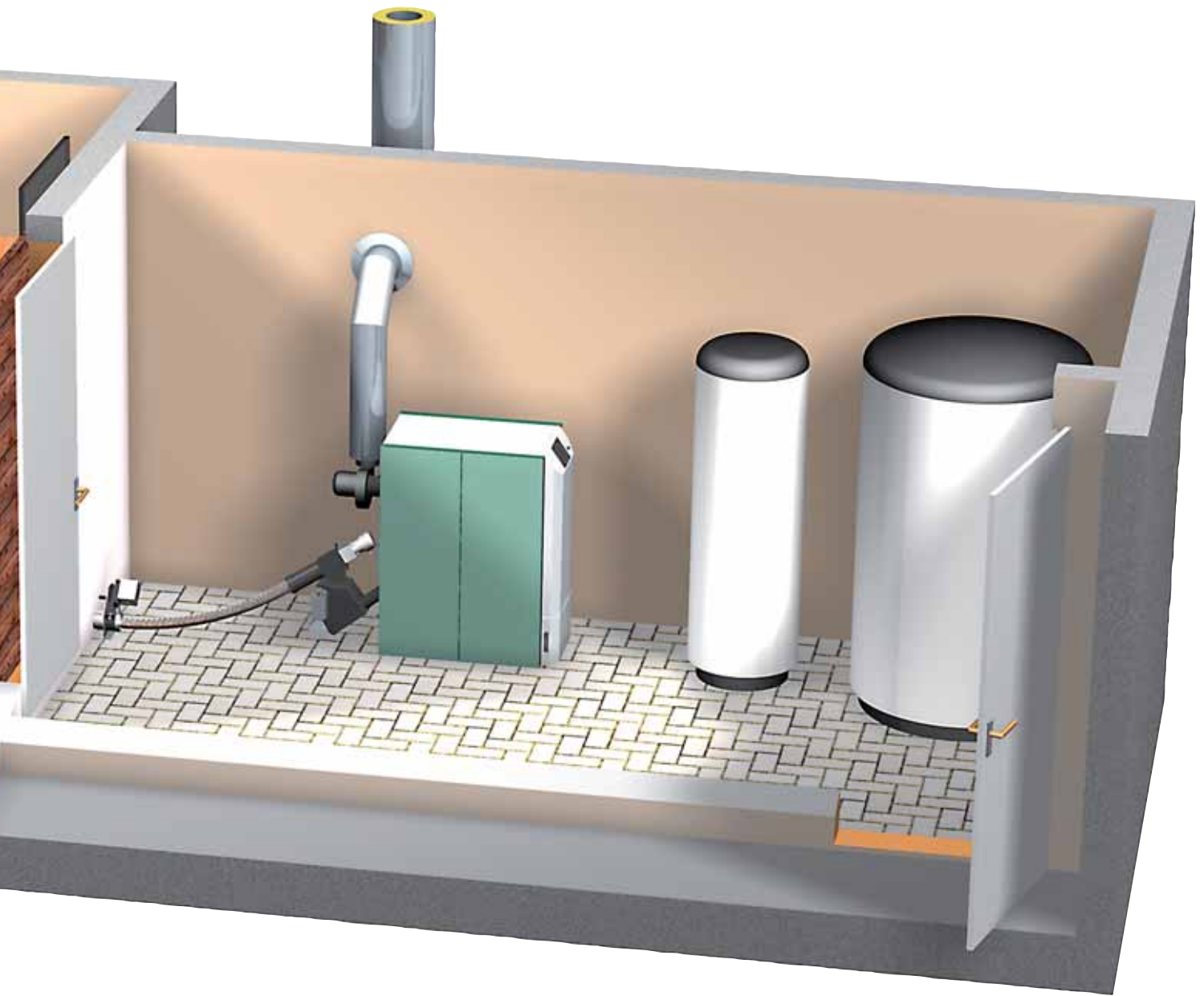
HERZ offers for different room and space situations a variety of solutions to store the pellets and to discharge the pellets via various feeding systems to the boiler.

Flexible screw discharge from HERZ

- 1 The room discharge with a flexible screw is an easy and energy saving solution to empty the storage room in an efficient way.
- 2 The storage room is higher than the boiler room or located in the attic of your house? This is no problem for the flexible screw discharge with chute pipe system!
- 3 Room discharge with flexible screw and transfer hopper (with 2 flexible screws): even more flexible and suitable for longer distances
- 4 Room discharge with flexible screw from a bag silo. The bag silo can normally be placed into the boiler room (please pay attention to your local safety laws!). This solution is used if no separate storage room is available.

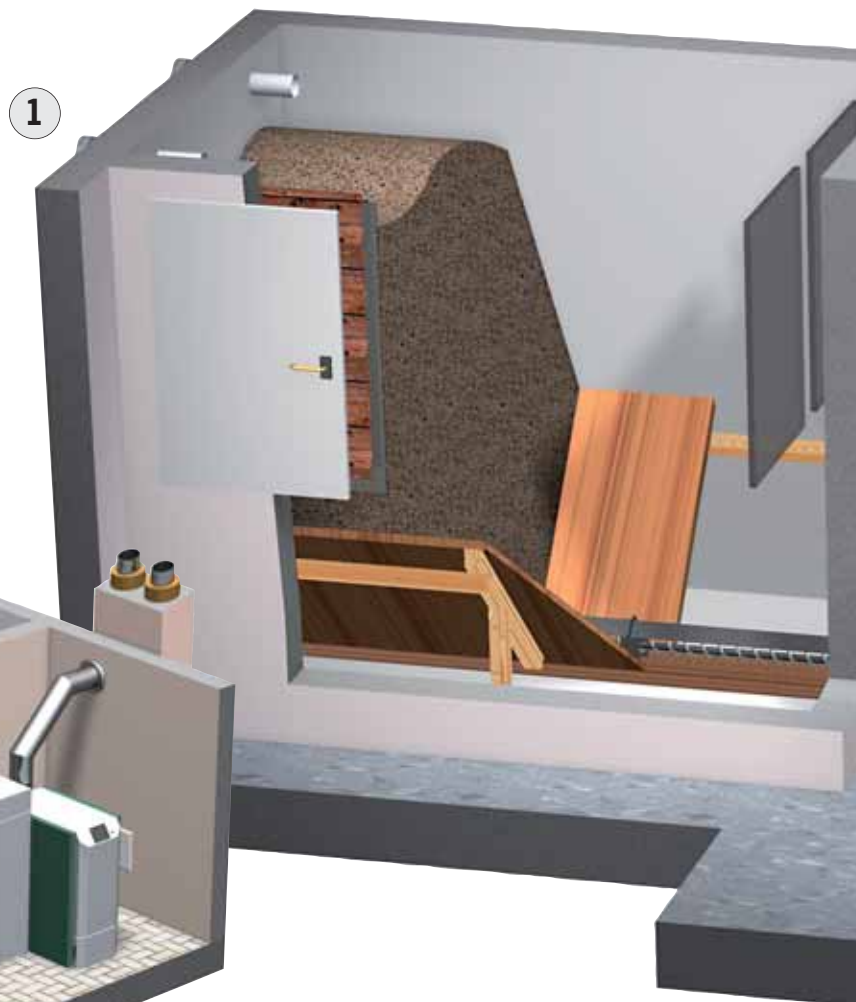
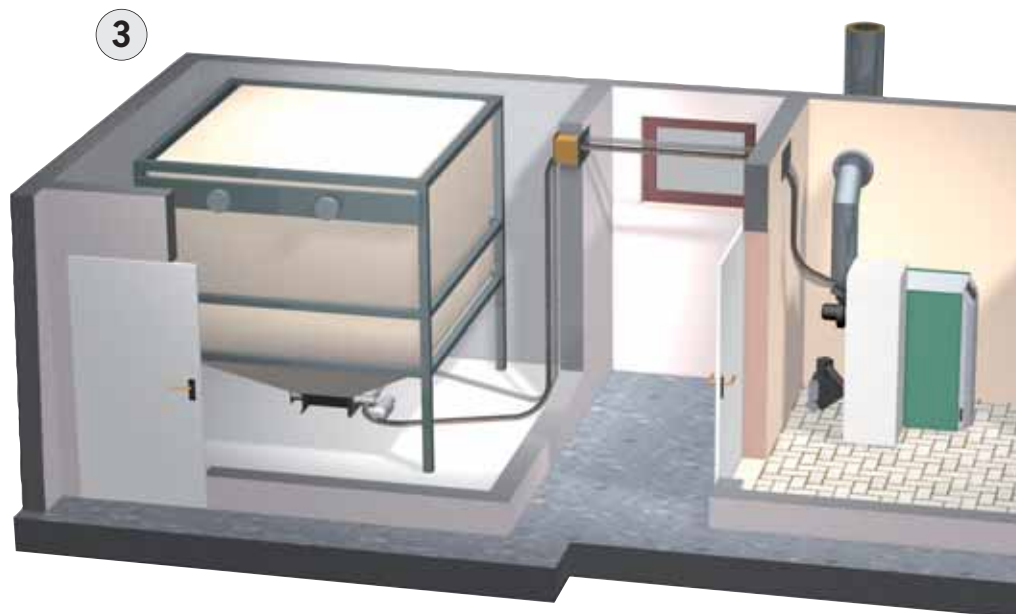


... with flexible screw

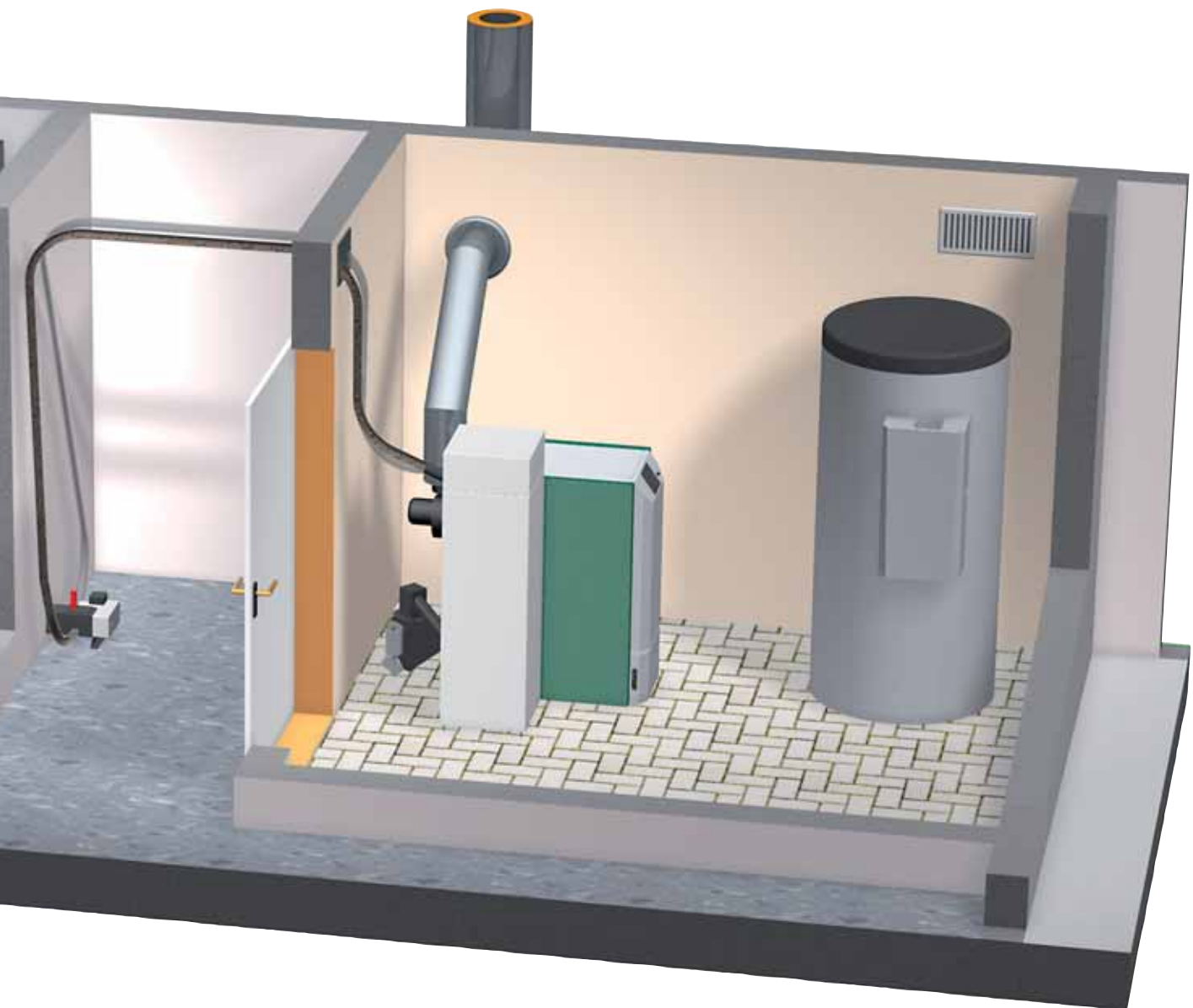
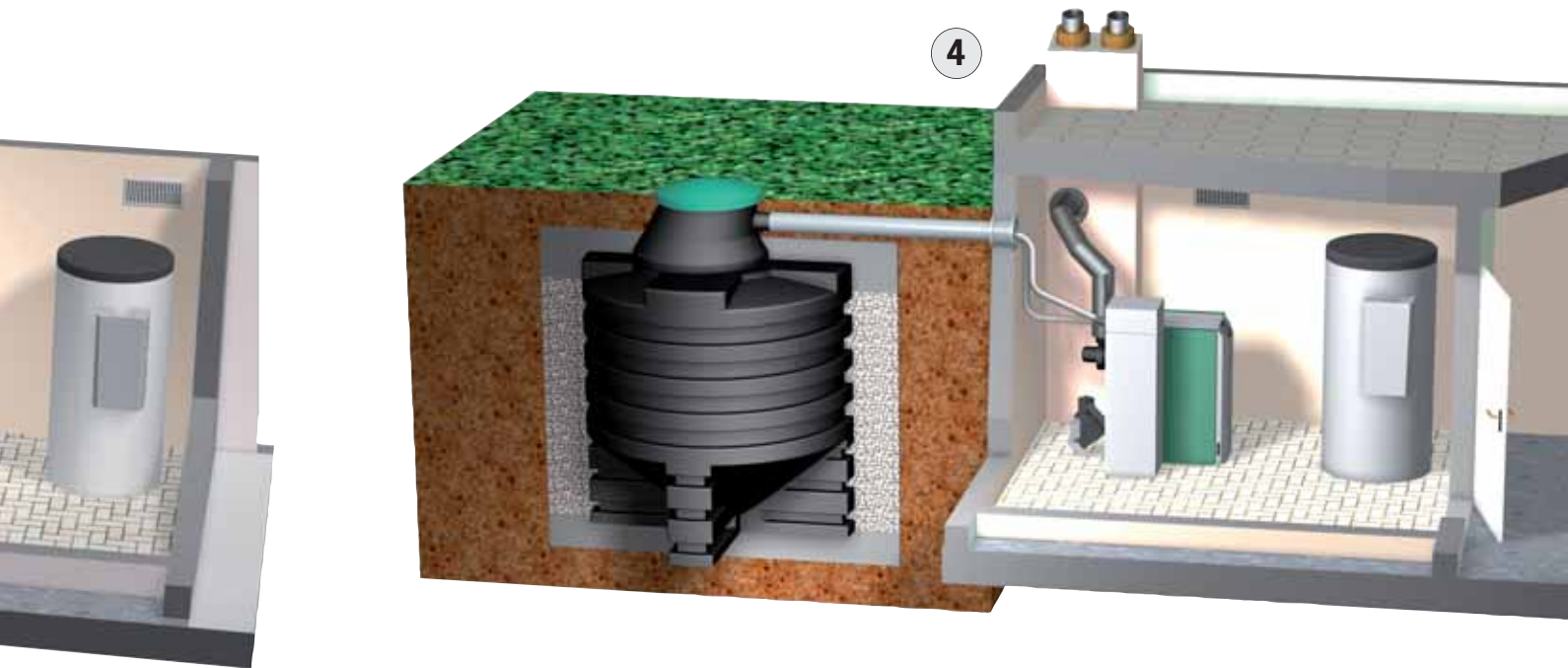


HERZ Suction systems for longer distances to the boiler

- 1 Room discharge with a modular screw (in the storage room) and in combination with suction turbine.
- 2 4-point suction system
The positioning of the 4 suction probes can be individually selected. The system can be easily installed, is adaptable to different storageroom situations and is an universal solution.
- 3 Suction discharge from a bag silo.
The bag silo can be assembled easy & fast.
- 4 Suction discharge from a ground silo (outside of the house).



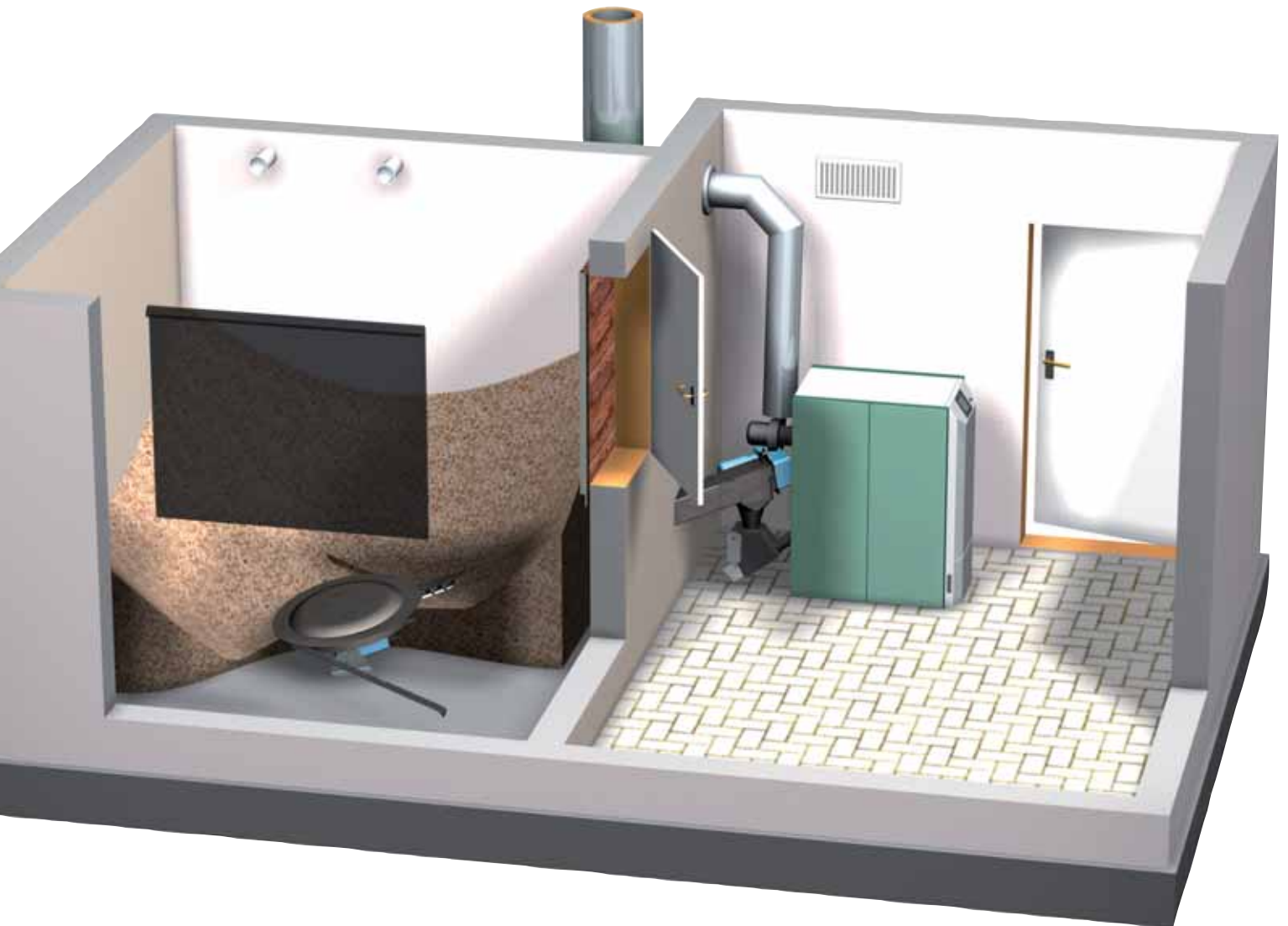
... with suction system



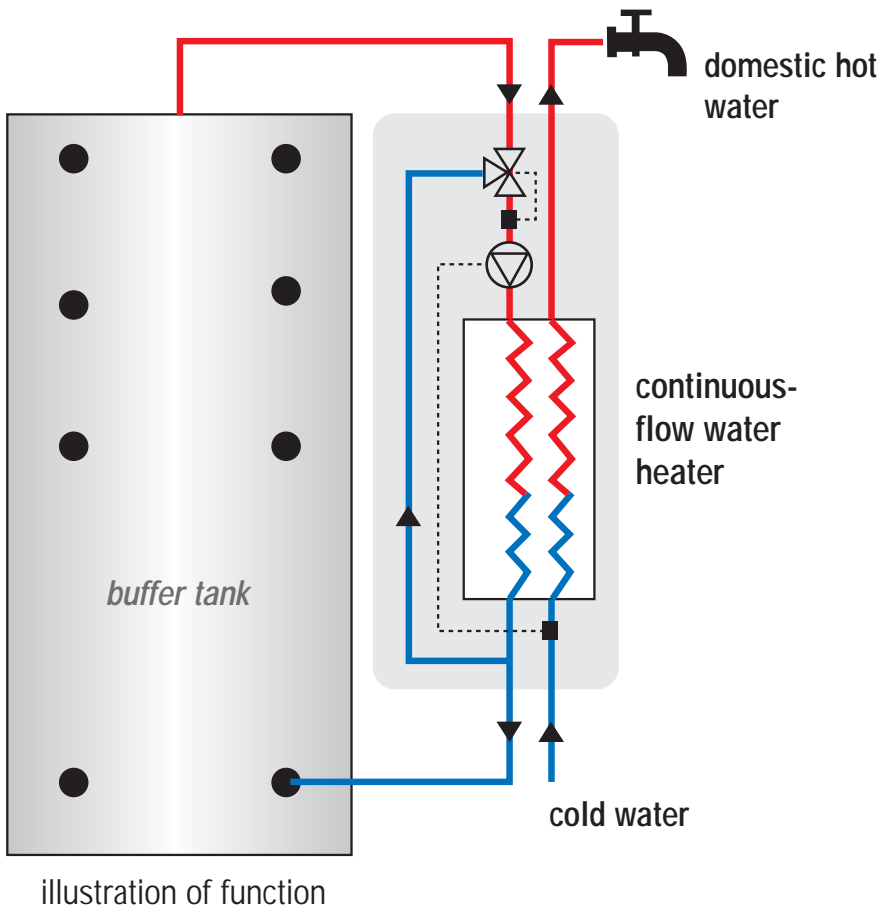
Another discharge system

Efficient storage room discharge with an agitator

The pellet agitator in the storage room allows an efficient use of storage space by eliminating the slip angles.



HERZ continuous-flow water heater & buffer tanks



The HERZ continuous-flow water heater prepares the domestic hot water in an efficient way. The fresh cold water is heated up via a plate heat exchanger with water from the buffer tank.

The fresh water module is characterized by its compact design, low pressure drop, low water content and is easy to install

The advantages:

- Domestic hot water – hygienic & fresh
- Easy to install
- very compact (low space required)

Useful supplementation for your heating system: HERZ buffer tanks

Integrating a buffer tank into the system provides an energy store. It reduces the number of boiler start-ups, guarantees a continuous heat leak, and allows the boiler to optimise when it turns on.

Using a buffer store, continuous power generation can be sustained for a longer period. Thus frequent cycling of the boiler can be avoided and the level of efficiency improved.

Opportunities & combinations



Hopper for the discharge with a suction system

The pelletstar suction hopper is available in 2 sizes:

- 135 liter
- 180 liter

The hopper with 135 liter can be used with the pelletstar 10-30, and the hopper with 180 liter can be installed with the pelletstar boiler 10-60.

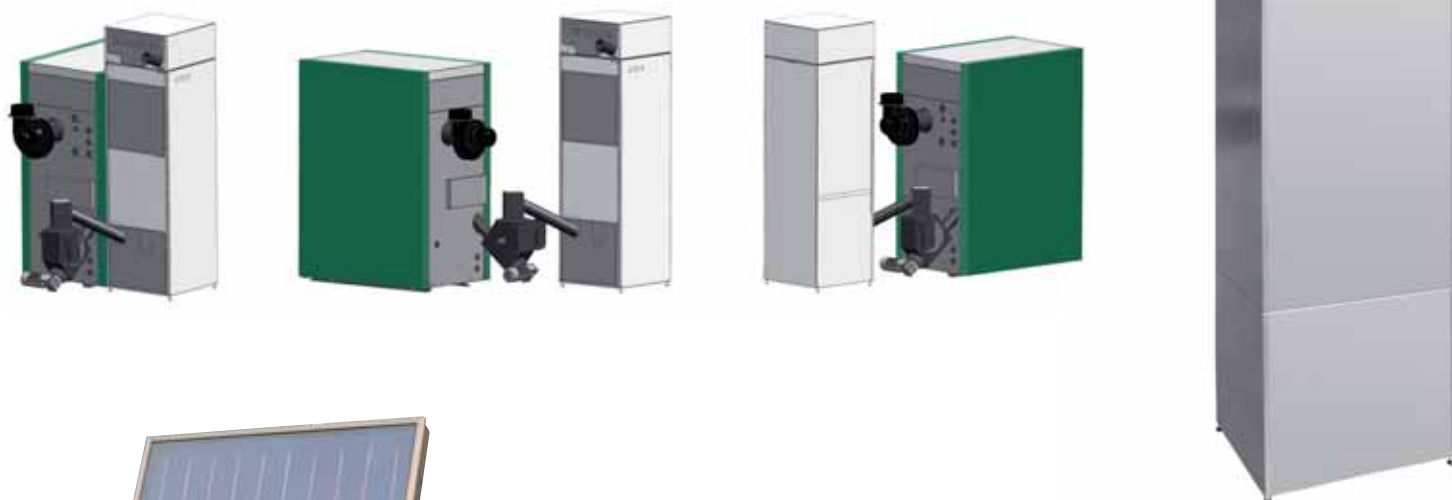
Hopper for hand filling

If the automatic discharge from a storage room is not required, the customer has the option for filling the hopper manually by hand. The hopper for manual filling is available in 2 sizes:

- 165 liter
- 210 liter

The hopper with 165 liter can be used with the pelletstar 10-30, and the hopper with 210 liter can be installed with the pelletstar boiler 10-60.

Examples for the connection possibilities of the suction hopper or the hopper with hand filling:



A good combination for the future: **Pellet boiler with solar heating**

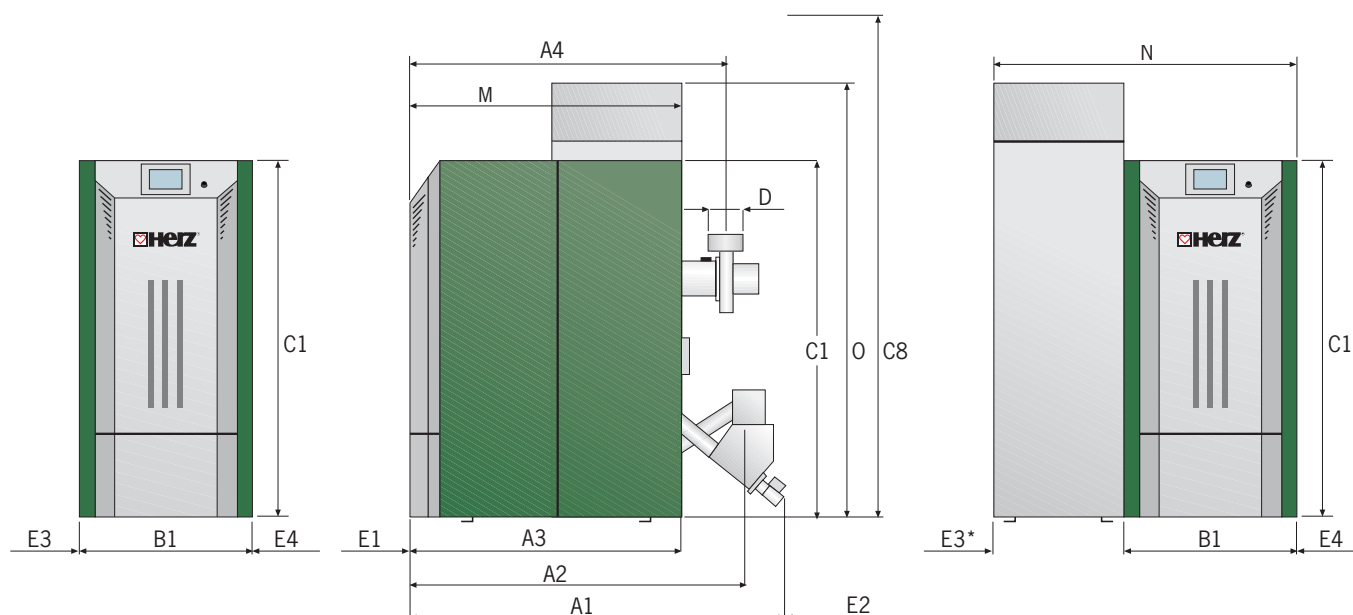
The HERZ Sunstar flat collector is hot!

- To increase convenience and reduce costs, solar collectors can be connected either directly to the domestic hot water cylinder, providing 'free' top up hot water or supplied into the buffer tank to supplement the hot water to the space heating system.



woodpellets according to

- EN 14961-2: property class A1
- Swisspellet, DINplus, ENplus or ÖNORM M7135



pelletstar 10-60 We reserve the rights for technical modifications!

Technical data		10	20	30	45	60
Output range	kW	4,8-16	6,2-21	6,2-30	10,1-45	10,1-60
Boiler weight	kg	261	310	310	518	518
Degree of efficiency η_f	%	>93	>93	>93	>93	>93
Permissible operating pressure	bar	3,0	3,0	3,0	3,0	3,0
Max. permissible operating temperature	°C	95	95	95	95	95
Dimensions (mm)						
A1	Length - total	1400	1400	1400	1620	1620
A2	Length boiler plus distance to BBP centre line	1235	1235	1235	1455	1455
A3	length - casing	900	980	980	1140	1140
A4	Length boiler plus distance to flue pipe centre line	1065	1140	1140	1290	1290
B1	width	590	590	590	750	750
C1	height	1130	1230	1230	1480	1480
C8	Minimum room height	1500	1600	1600	2100	2100
D	flue pipe - diameter	130	130	130	150	150
E1	Minimum space at the front	750	750	750	750	750
E2	Minimum space at the back	500	500	500	600	600
E3	Minimum space left (without hopper)	750	750	750	750	750
E3*	Minimum space left (with hopper)	500	500	500	500	500
E4	Minimum space right	150	150	150	150	150

pelletstar 10/20/30: flow connection 1" return flow connection 1"
 pelletstar 45/60: flow connection 6/4" return flow connection 6/4"

Dimensions with additional hopper* (mm)

M	Overall length	900	980	980	1140	1140
N	Overall width	1040	1040	1040	1195	1195
O	Height	1505	1505	1505	1755	1755

*For manual filling and suction discharge

HERZ Customer-orientated...



- Advice during planning
- Planning of energy centre and fuel storage room
- Planning of chamber discharge according to customer requirements and local conditions
- Planning of installation according to customer requirements
- Comprehensive services
- HERZ training:
 - for the machine operator
 - for designers and technical offices
 - for pipe fitters and installers
 - as well as continuous training of the maintenance staff

Business partners in:

- AUSTRIA
- BELGIUM
- BULGARIA
- CANADA
- CROATIA
- CZECH REPUBLIC
- DENMARK
- ESTONIA
- FINLAND
- FRANCE
- GERMANY
- GREAT BRITAIN
- GREECE
- HUNGARY
- IRELAND
- ITALY
- LATVIA
- LITHUANIA
- LUXEMBOURG
- NETHERLANDS
- POLAND
- PORTUGAL
- ROMANIA
- RUSSIA
- SERBIA
- SLOVAKIA
- SLOVENIA
- SOUTH TYROL
- SPAIN
- SWEDEN
- SWITZERLAND
- UKRAINE



HERZ - biomass boilers exceed the strict emission regulations.

Your partner:



Heating *at work.*

Hamworthy Heating Ltd
Fleets Corner, Poole, BH17 0HH

Tel: 01202 662500

Fax: 01202 662550

E-mail: sales@hamworthy-heating.com

Web: www.hamworthy-heating.com



HERZ Energietechnik GmbH
Herzstraße 1, 7423 Pinkafeld
Österreich/Austria
Tel.: +43(0)3357/42840-0
Fax: +43(0)3357/42840-190
Mail: office-energie@herz.eu
Internet: www.herz.eu