



English

Heating with **wood chips & wood pellets**



firematic
20 - 60 kW



firematic
80 - 301 kW



Competence is our success ...

HERZ FACTS:

- 50 subsidiaries
- Group headquarter in Austria
- Research & development in Austria
- Austrian owner
- 3.000 employees in over 100 countries
- 30 Production sites



Herz Armaturen GmbH - The company

Founded in 1896, HERZ has been continuously active in the market for more than 120 years. With 6 sites within Austria, another 24 in Europe and more than 3,000 employees at home and abroad, HERZ is the only Austrian manufacturer that provides equipment for the entire heating and installation industry and is one of the most important internationally.

HERZ Energietechnik GmbH

HERZ Energietechnik employs 200 people 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. Proven cooperations with research and educational institutions can be intensified. Over the years, HERZ has established itself as a specialist in renewable energy systems. HERZ places a great importance on modern, cost-effective and environment-friendly heating systems with the highest level of convenience and user-friendliness.



BINDER Energietechnik GmbH - Bärnbach

At the factory site in Bärnbach in western Styria large scaled biomass boilers are produced for industrial applications. At the factory with a total area of approx. 6 ha and 6,200 m² production area, about 200 boilers up to 20.000 kW are manufactured every year. A reliable maintenance and repair service provides the service team in Bärnbach / Austria. This is supported by 13 service and sales offices in 11 countries worldwide.



HERZ for the environment

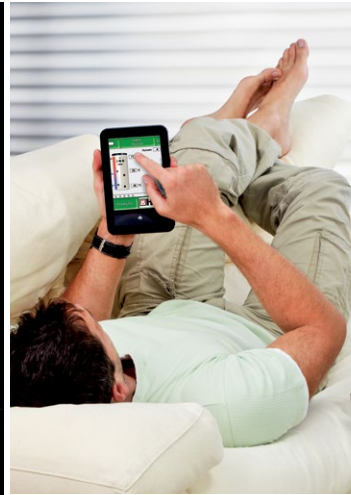
All HERZ biomass systems fall below the strictest emission regulations. Numerous environmental endorsements bear witness to this.

HERZ quality

Our HERZ design engineers are in permanent contact with acknowledged research institutions in order to improve the very high standards continuously.



Convenient heating...

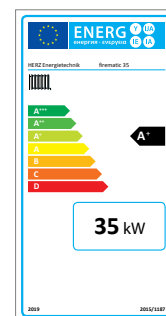


Boilers available in left or right version!



Decades of experience

- Internal development and test centre
- Austrian quality with a world wide market
- area covered service
- ISO 9001 certification
- FMEA approved boiler production



Energy labelling (firematic 20-60 kW)

Biomass boiler **A+**
Biomass boiler with integrated system controller **A+**

Economical and convenient heating with wood chips and wood pellets.

The cleanest combustion due to the lambda probe control even with different fuel qualities.

The quiet operation of the boiler is based on high-quality system components.

Lowest emissions to protect our environment!

The great advantages of HERZ firematic:

- Energy-saving drive technology
- Simple operation
- Consistently high level of efficiency
- Low space requirement
- Constructed from high quality materials

Automatic cleaning ...

- ... of the combustion grate
- ... of the vertical pipe heat exchanger

Automatic de-ashing of the combustion and fly ash in to an easily accessible ash container on the front side.

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.

A central control unit for:

- buffer management
- back flow elevation (pump and mixer valve)
- domestic hot water preparation
- controlled heating circuits (pump and mixer valve)
- Solar circuit controll
- frost protection monitoring

T-CONTROL



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.

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 (heating circuit pump, hot water tank loading pump, circulation pump, mixing valve, switching valve, actuator motors etc.)

... central control unit T-CONTROL



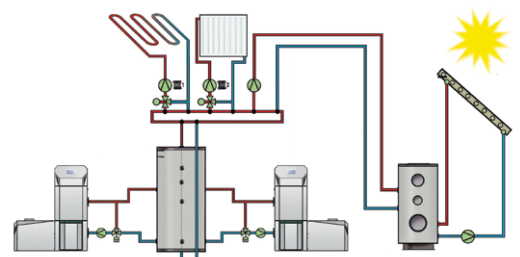
Remote access to the control via the myHERZ-portal very easy from everywhere

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-Control directly on the boiler. The processes and parameters can be read and modified any time from anywhere.

Remote access via **myherz.at**

Cascade operation

Using the HERZ T-CONTROL, up to 8 HERZ boilers equipped with T-CONTROL can be switched to cascade (CAN BUS). A special advantage of the cascade arrangement is the efficient utilization of the boiler at lower heat consumption (eg in the transitional period).



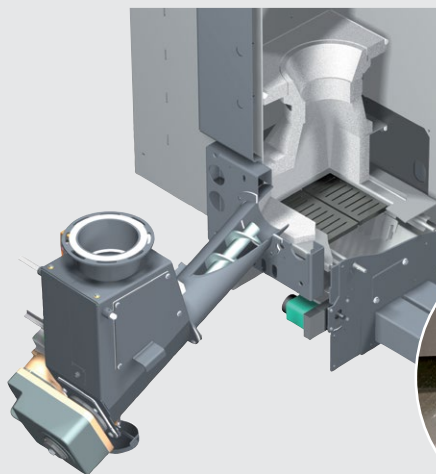
Benefits and details ...



T-CONTROL - the user-friendly control with touch display

Central control unit as standard for:

- buffer management
- back flow elevation (pump and mixer valve)
- domestic hot water preparation
- Controlled heating circuits (pump and mixer valve)
- frost protection monitoring
- Simple screen design and convenient menu guide.
- Extension modules up to 55 modules possible (further heating circuits, solar circuit control, 2. buffers, etc.)



Side load & automatic cleaning of the combustion grate

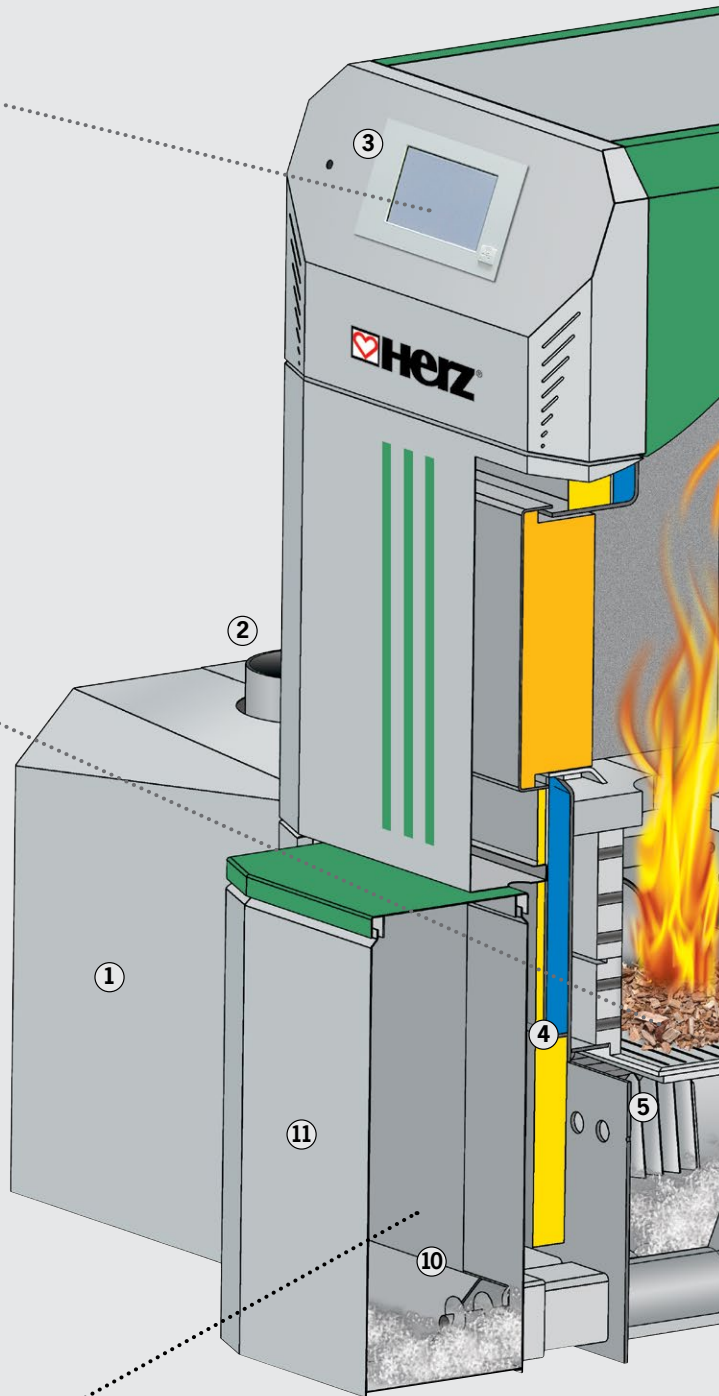


- Side load of wood chips or wood pellets into the combustion chamber.
- Complete cleaning of the grate due to automatic tipping on a cleaning device.
- Due to the clean combustion grate an optimum air supply is guaranteed
- Minimizes the manual cleaning requirement.



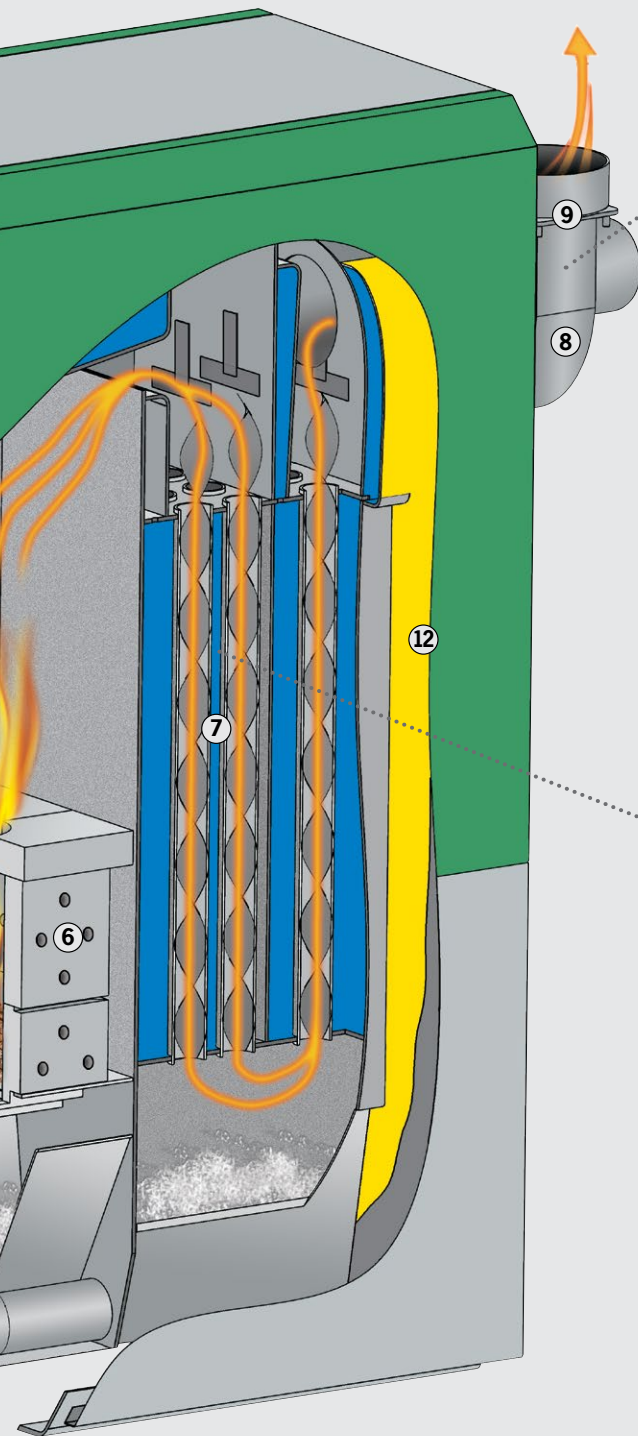
Automatic de-ashing

- Via two ash discharge screws the combustion ash and fly ash is automatically transported into the ash container(s).
- The removable ash container(s) with wheels enables simple and convenient emptying of the ash.



- 1. Intermediate container**
with infrared light barrier system
(removes the need for mechanical level control)
- 2. BBP**(back burn inhibit device)
BBI (back burn inhibit device; sprinkler system)
- 3. T-CONTROL**
central control unit

...of the HERZ firematic 20-60



Energy saving combustion via the lambda probe



- A built in lambda probe, which monitors continuously the flue gas content values, detects fuel quality changes and ensures optimum combustion and low emission values.
- The Lambda probe controls the primary and secondary 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 surface gets cleaned automatically via the integrated turbulators, even during heating operation, no manual cleaning necessary.
- A consistently high level of efficiency thanks to cleaned heat exchanger surfaces enables low fuel consumption.
- The fly ash is taken into the front ash container via a discharge screw.

4. automatic ignition
via hot air fan

5. Automatic tipping grate
for complete cleaning

6. Split 2-zones combustion chamber

7. Pipe heat exchanger
with turbulators and
automatic cleaning

8. Lambda probe control
Automatic flue gas and
combustion monitoring

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

10. Ash discharge screw
for
combustion and fly ash

11. Ash box on the front

12. Efficient heat insulation for
the lowest radiation losses

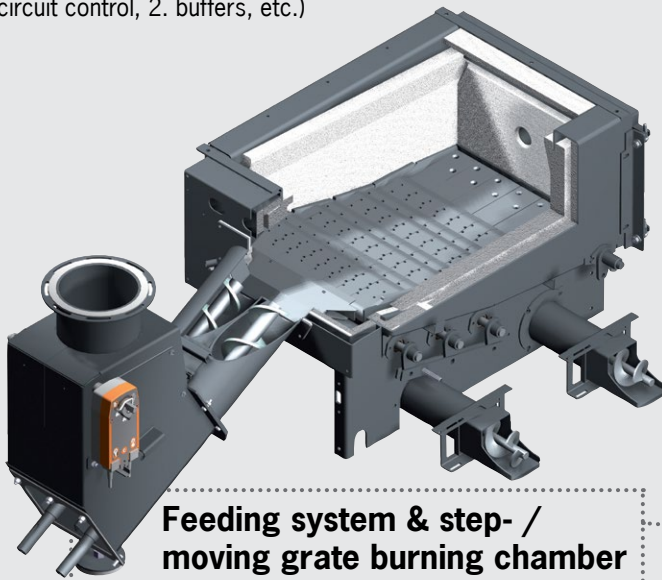
Benefits and details ...



T-CONTROL - the user-friendly control with touch display

Central control unit as standard for:

- buffer management
- back flow elevation (pump and mixer valve)
- domestic hot water preparation
- Controlled heating circuits (pump and mixer valve)
- frost protection monitoring
- Simple screen design and convenient menu guide.
- Extension modules up to 55 modules possible (further heating circuits, solar circuit control, 2. buffers, etc.)



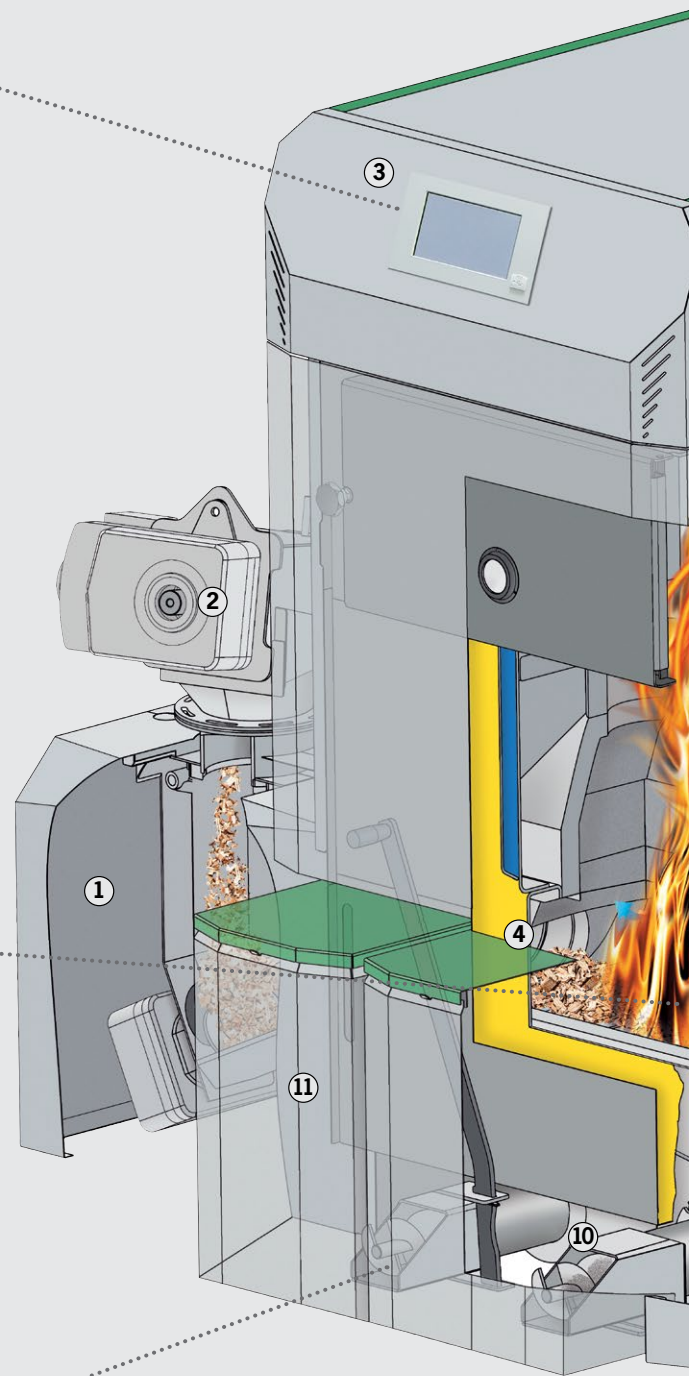
Feeding system & step- / moving grate burning chamber

- Wood chips or wood pellets are transported from the side into the combustion chamber (with single stoker screw for firematic 20-101 and double stoker screw for firematic 130-301).
- The movement of the step grate is also a cleaning mechanism of the burning chamber. These grate elements consist of special, high-quality cast iron. Through the movement of the step-/moving grid the biomass is transported through the combustion area.
- The cleaning of the combustion chamber from burning ash is carried by an automatically tipping grid. A subjacent mounted ash screw transports the ash directly into the ash container.
- Minimizes the manual cleaning requirement.



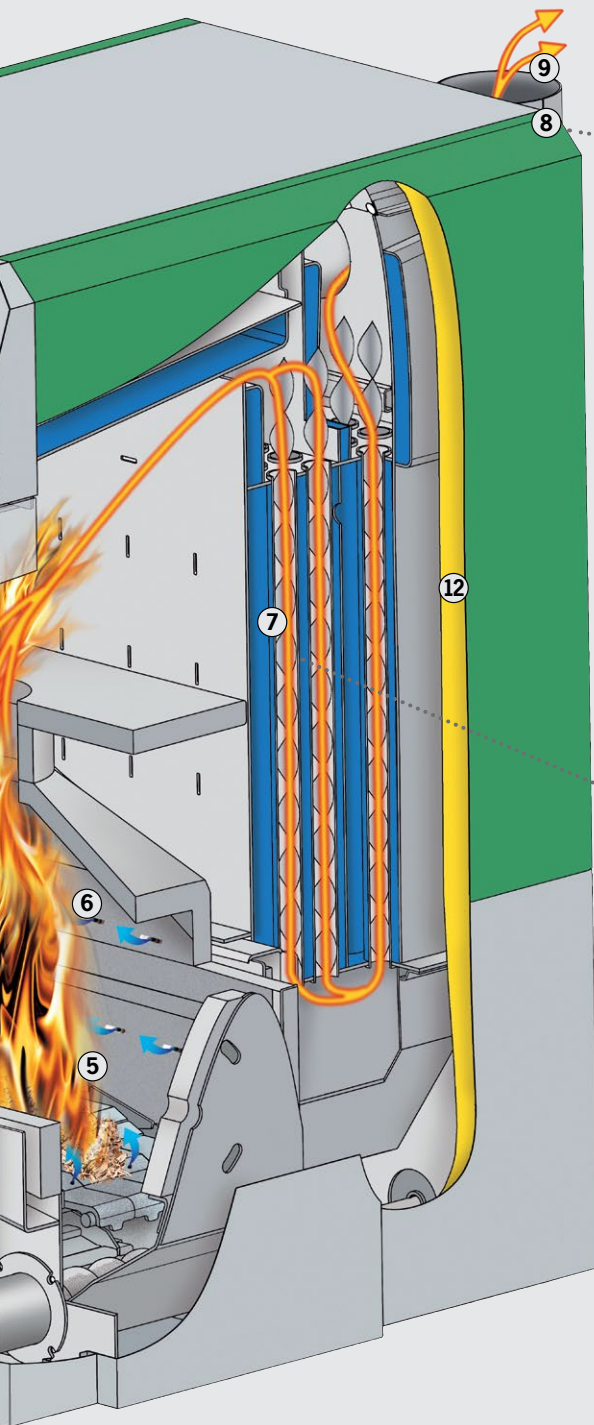
Automatic de-ashing

- Via the two ash discharge screws the combustion and fly ash is automatically augered into the ash bins.
- The removable ash containers with wheels enables simple and convenient emptying of the ash.



- 1. Intermediate container**
with infrared light barrier system
(removes the need for mechanical level control)
- 2. BBP(back burn inhibit device) BBI (back burn inhibit device; sprinkler system)**
- 3. T-CONTROL**
central control unit

...of the HERZ firematic 80-301



Energy saving combustion via the lambda probe



- A built in lambda probe, which monitors continuously the flue gas content values, detects fuel quality changes and ensures optimum combustion and low emission values.
- The Lambda probe controls the primary and secondary 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 surface gets cleaned automatically via the integrated turbulators, even during heating operation, no manual cleaning necessary.
- A consistently high level of efficiency thanks to cleaned heat exchanger surfaces enables low fuel consumption.
- The fly ash is taken into the front ash container via a discharge screw.

4. automatic ignition
via hot air fan

5. Step- /moving grate
with automatic cleaning

6. Split 2-zones combustion chamber

7. Pipe heat exchanger
with turbulators and automatic cleaning

8. Lambda probe control
Automatic flue gas and combustion monitoring

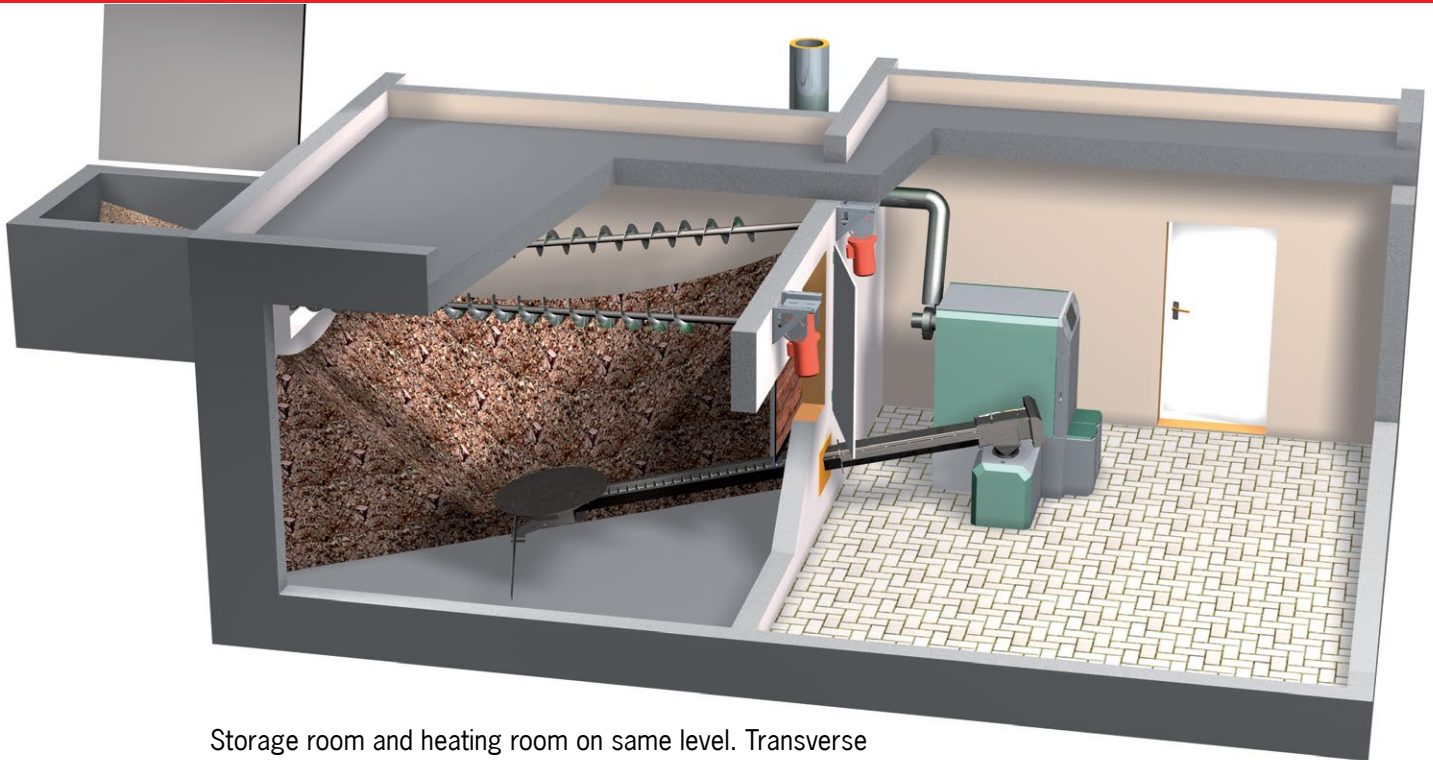
9. ID fan
speed controlled and monitored for the highest operating safety

10. Ash discharge screwfor combustion and fly ash

11. 2 front ash containers

12. Efficient heat insulation for the lowest radiation losses

Discharge systems ...

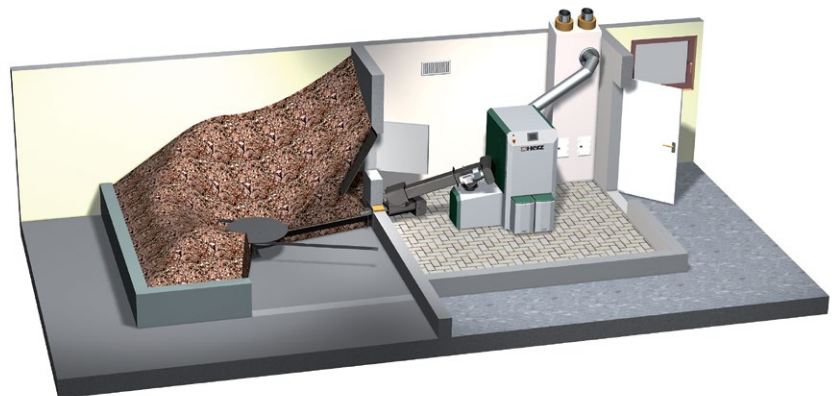


Storage room and heating room on same level. Transverse discharge with spring agitator and 2 filling screws.

HERZ spring agitator and drive technology:

Robust agitator with heavy duty gearing and pressure relief for reliable operation. Agitator discharge up to 6 m in diameter available, up to 5 m in diameter (at firematic 20-60) with 230 V operation possible.

Additional discharge system via a pendulum screw from a silo, or a storage room discharge via hydraulic walking floor and straight discharge screw available.



Room discharge via horizontal spring agitator with climbing screw for optimum storage room utilisation.



Storage room and boiler room at different levels. Horizontal discharge with spring agitator and chute pipe.

The vertical filling system of HERZ offers the opportunity to fill the storage room optimally.

Wood chips are transported via a vertical screw into the wood chip storage room and are distributed optimally via a horizontal screw in the storage room.

- Filling trough lengths up to 6 meters
- Modular extensions of 0,6 m and 1,2 m possible
- Hinged, galvanized cover of the filling trough
- High corrosion resistance - fully galvanized panel for outdoor areas
- All engines are suitable for outdoor areas
- Vertical height up to 10 meters
- Perfectly wood chip distribution in the storage room by a storage room filling screw (up to 12 meters possible)



Filling capacity: < 60 m³/h
For double systems < 120 m³/h



SUITABLE FOR:

Wood pellets according to

- EN ISO 17225-2: Property class A1, A2
- ENplus, ÖNORM M 7135, DINplus or Swisspellet

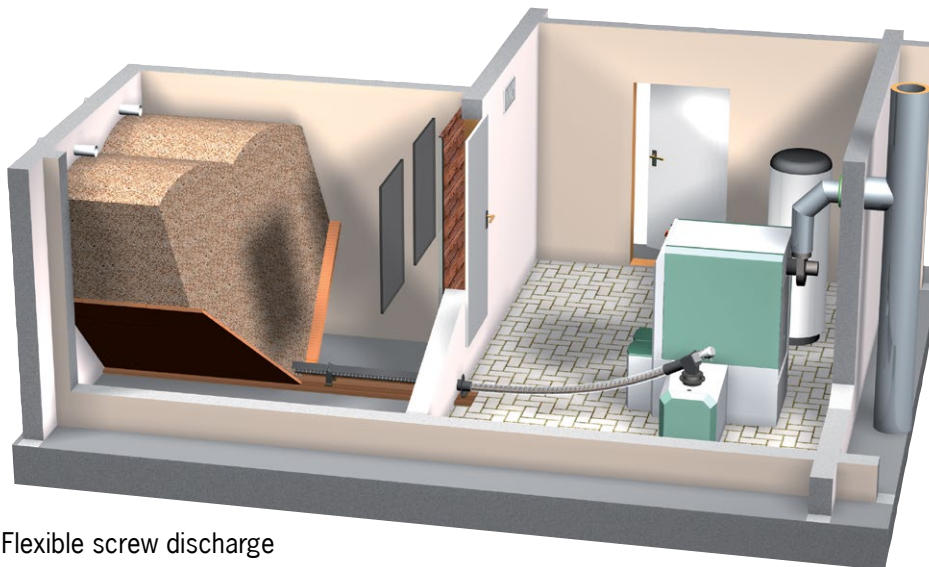
Wood chips M40 (water content max. 40%) according to

- EN ISO 17225-4: Property class A1,A2, B1 and particle size P16S, P31S
- ÖNORM M7133: G30-G50

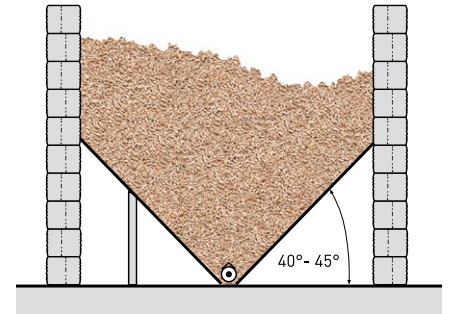


Discharge systems ...

Discharge systems for wood pellets with flexible screw (up to 201 kW)

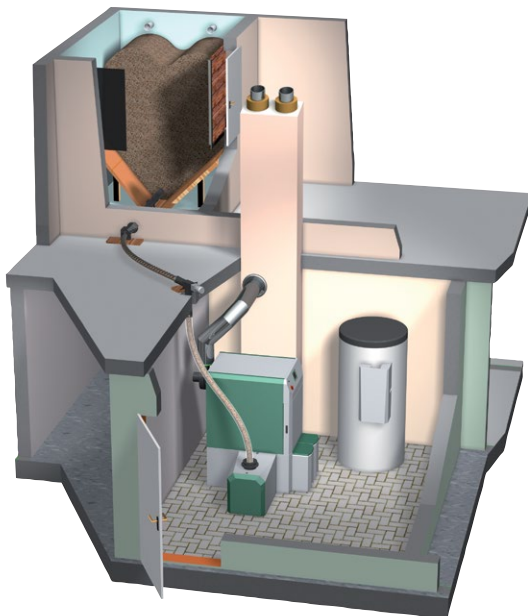


Flexible screw discharge

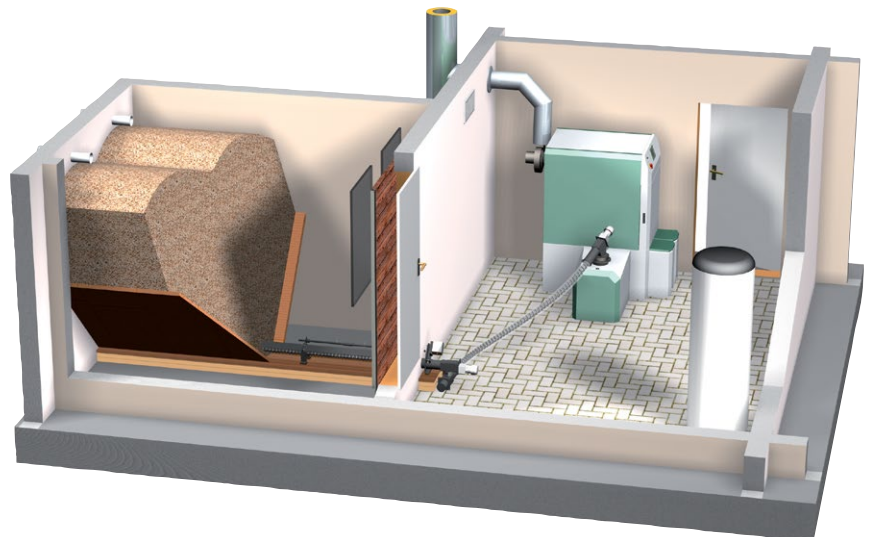


Sliding angle of 40° - 45° in the pellet-store with a smooth surface

For pure pellet operation, the flexible screw is a cost-saving solution. In order to empty the storage room completely a sloping floor is recommended. For this system no transport of wood chip is possible.



Flexible screw discharge with chute pipe system



Flexible screw discharge with transfer hopper (2 screws)

Agitator discharge - the useful system for wood chips and wood pellets.

If you want to burn wood chips in the system too, the discharge with an agitator has to be used. Nevertheless, the agitator system is also possible with exclusive pellet operation. The advantage with an agitator is the efficient utilization of storage space and the possibility that the boiler can be filled with wood chips too.





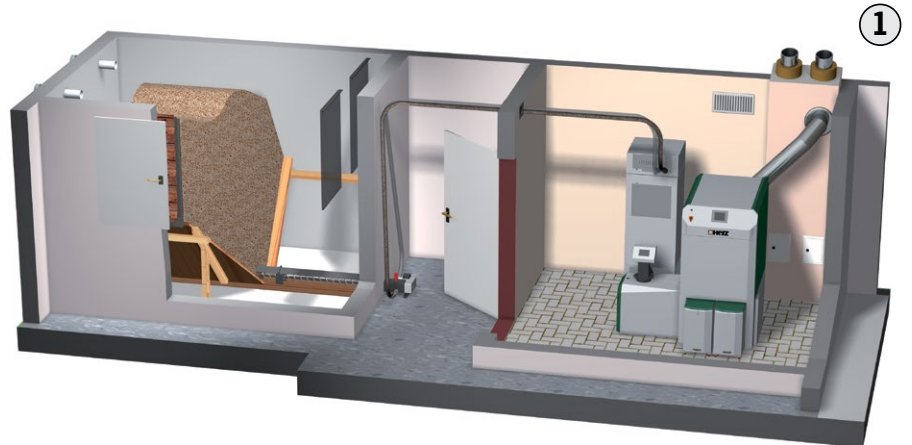
Pellets extraction via suction system (up to 201 kW)

For pure pellets operation of the firematic and long distances from the storage room to the boiler room the use of a suction hopper provides an optimum solution. Wood pellets can be sucked up to a distance of 25 m and a maximum height difference of 5 m.

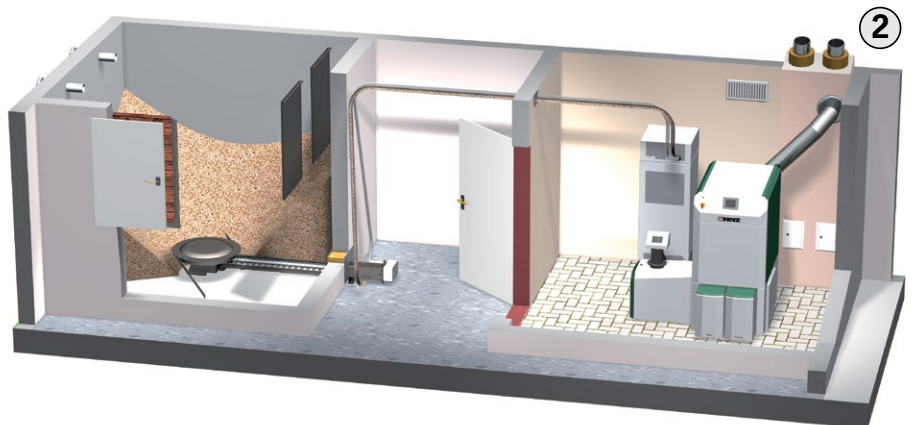
There are 3 possibilities to discharge the wood pellets out of the storage room:

- 1 A screw discharge in the middle of the storage room (to empty the storage room completely, we recommend making slidings) or
- 2 an agitator for efficient storage space usage (for this case the slidings are not needed).
- 3 4-point suction system
The position of the 4 suction points is individually selectable.

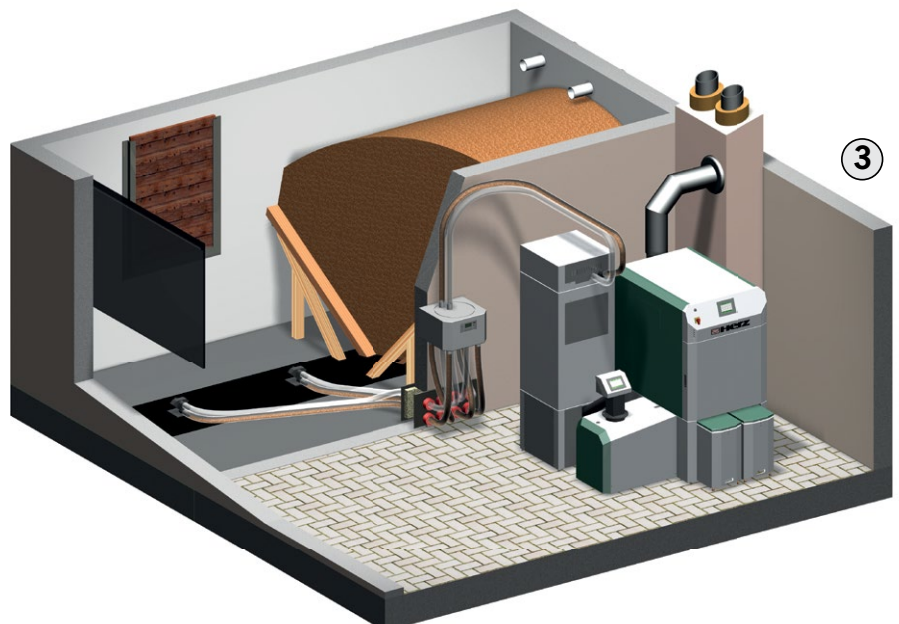
NOTE: For double-suction hoppers (necessary for firematic 130-201 kW) 2 discharge systems are necessary (for example 2 agitators, 2 screws, 2 4-point suction systems)



Modular pellet screw in the storage room (with slidings) and suction tank.



Pellet agitator in the storage room with suction discharge and suction hopper. Efficient use of storage space by eliminating the sliding angles.



4-point suction system - The system can be easily installed and is adaptable to different storage room situations and is an universal solution.

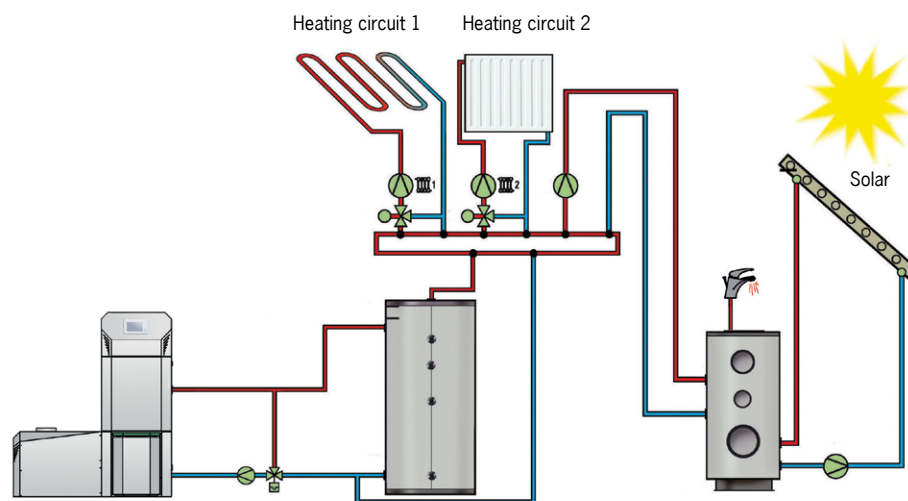
A range for all requirements

The HERZ T-CONTROL:

The control enables a multiplicity of application options, 2 of the most common cases are shown below.

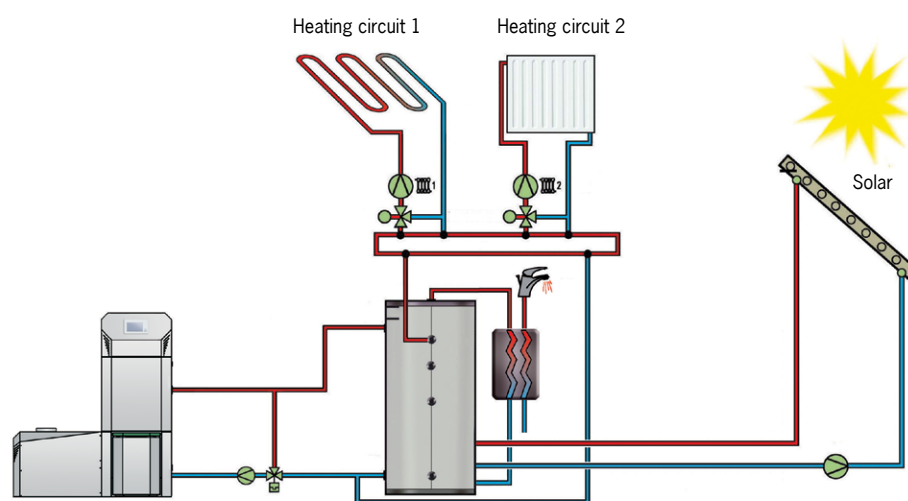
The installation of a buffer tank considerably increases the efficiency of the heating system, especially during periods of part load. A buffer is not absolutely necessary, but recommended for each biomass heating system!

The differential temperature control and weather-driven control optimise energy usage and allow an environmentally friendly and energy saving heating. The usage of energy is thereby significantly optimized.



Hot water tank with solar usage and buffer tank:

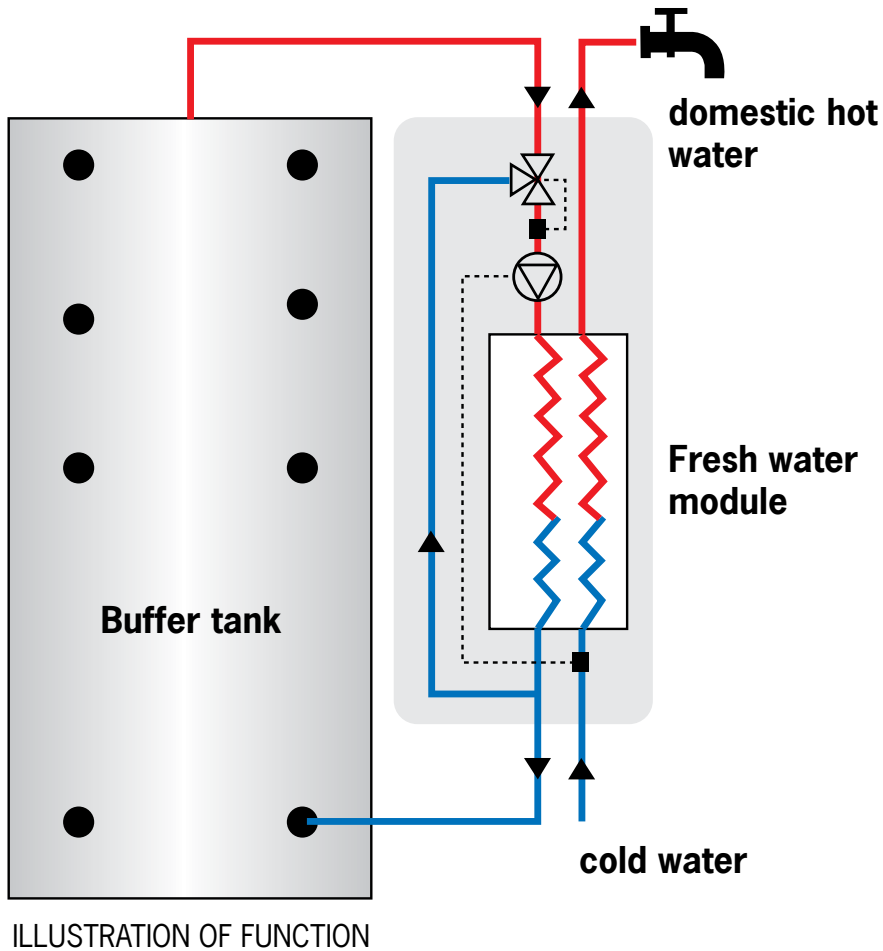
With this system configuration solar energy is utilised to provide the domestic hot water. When the solar input is insufficient to meet the hot water demand, additional heat is taken from the buffer tank. Additional heating circuits such as under floor heating and the radiators are supplied with heat from the buffer tank.



Solar heating support and domestic hot water preparation:

With this system configuration the solar energy heats the water in the buffer tank directly. Thus, free solar energy is also used for heating purposes. The domestic hot water module for hot water preparation heats the water in continuous flow mode with energy from the buffer tank. Additional heating circuits such as under floor heating and the radiators are supplied with heat from the buffer tank.

HERZ fresh water heater & buffer tanks



Fresh water module

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 benefits:

- Domestic hot water – hygienic & fresh
- Simple installation
- Very compact (low space required)

Useful supplementation for your heating system: HERZ buffer tanks

When using a buffer tank the generation of energy takes place over a longer period. As a result the number of boiler starts is reduced and the efficiency of the entire system increases.

A buffer tank ensures a constant heat supply for different heating circuits (eg underfloor heating and radiators) and ensures optimum operating conditions.

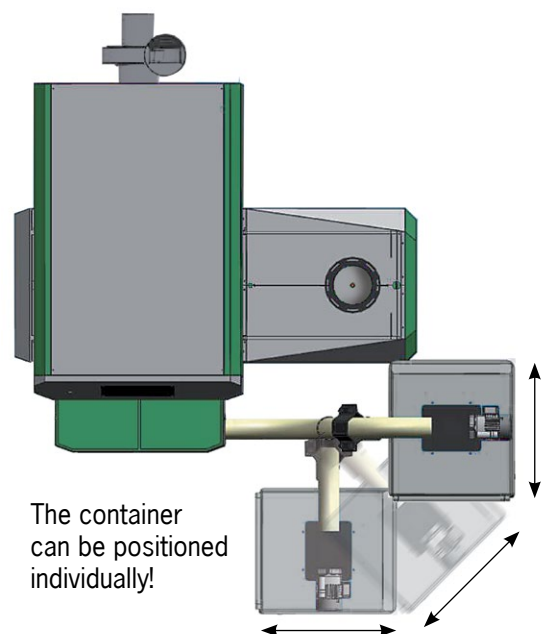
Ash discharge into an external container - 240 liters



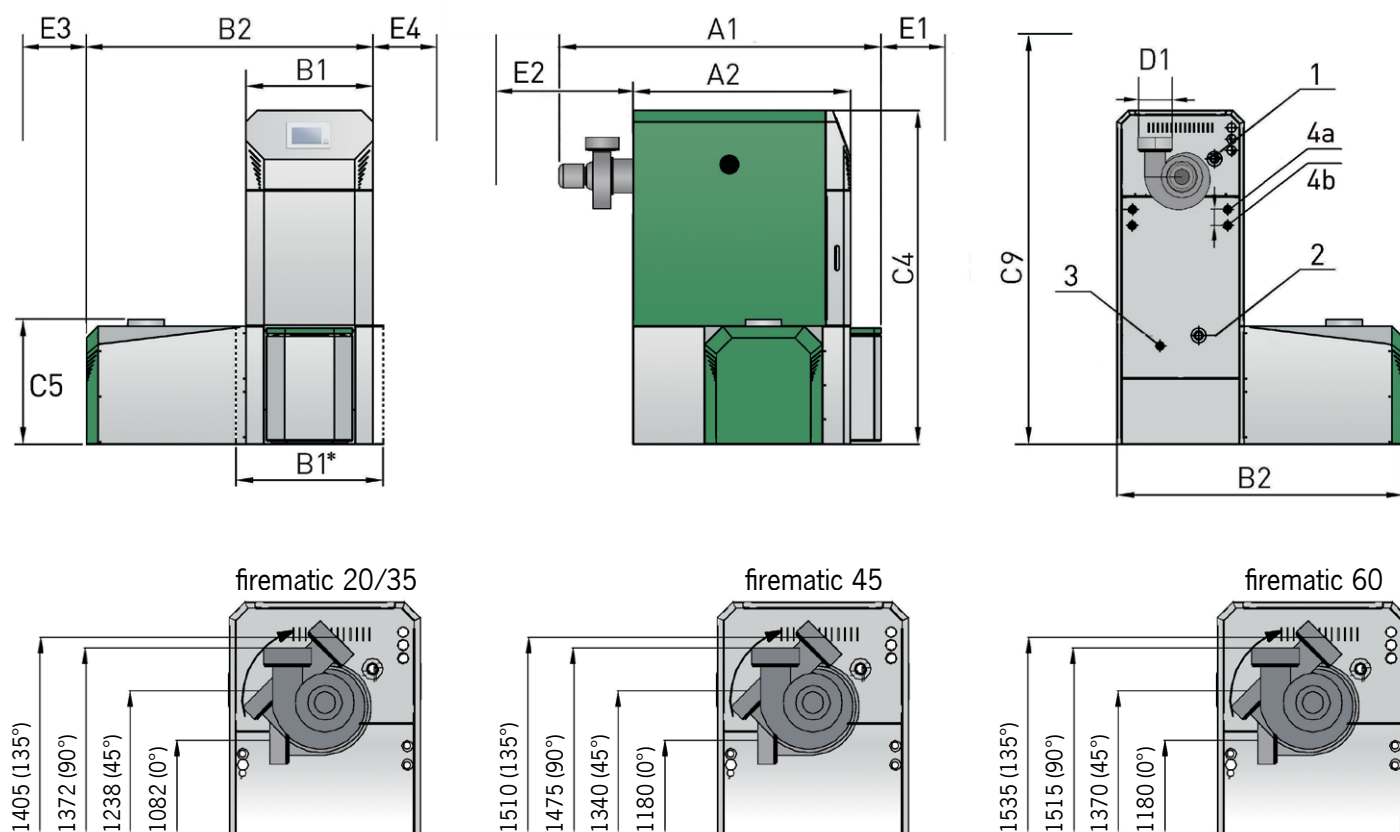
For even more comfort, there is the possibility of fully automatic ash removal into an external, bigger ash container with a volume of 240 liter

With a flexible screw the combustion and fly ash are transport automatically in an ash container with a capacity of 240 liters.

The larger capacity of the ash container reduces the emptying intervals, that saves time and increases comfort.



Dimensions & technical datas firematic 20-60



firematic 20-60

| Technical datas | | 20 | 35 | 45 | 60 |
|------------------------------|--|--------|--------|---------|-----------|
| Output range WOOD CHIPS (kW) | | 6,0-20 | 6,0-35 | 12,1-45 | 12,1 - 60 |
| Output range PELLETS (kW) | | 5,9-20 | 5,9-35 | 12,6-45 | 12,6-60 |
| Dimensions (mm) | | | | | |
| A1 | Length - total | 1389 | 1389 | 1496 | 1496 |
| A2 | Length - casing | 960 | 960 | 1070 | 1070 |
| B1 | Width | 600 | 600 | 710 | 710 |
| B1 * | Bring In wide with removal of components | 574 | 574 | 684 | 684 |
| B1 * | Bring In wide with the casing (without casing removal) | 620 | 650 | 730 | 730 |
| B2 | Width – with push-in | 1300 | 1300 | 1410 | 1410 |
| C4 | Height | 1490 | 1490 | 1590 | 1590 |
| C5 | Delivery – upper edge | 645 | 645 | 645 | 645 |
| C9 | Minimum room height | 2100 | 2100 | 2300 | 2300 |
| D1 | Flue pipe – diameter | 150 | 150 | 150 | 180 |
| E1 | Minimum space front | 600 | 600 | 700 | 700 |
| E2 | Minimum space rear | 500 | 500 | 530 | 530 |
| E3 | Minimum space left | 300 | 300 | 300 | 300 |
| E4 | Minimum space right | 300 | 300 | 300 | 300 |

| Technical datas | | | | | |
|--|------|---------------|---------------|---------------|---------------|
| Boiler weight | kg | 517 | 517 | 620 | 620 |
| Combustion efficiency η_f | % | >94 | >93 | >94 | >94 |
| Permissible operating pressure | bar | 3,0 | 3,0 | 3,0 | 3,0 |
| Max. permissible operating temperature | °C | 95 | 95 | 95 | 95 |
| Water capacity | ltr. | 80 | 80 | 116 | 116 |
| Flue gas mass flow rate at nominal load: wood chips (wood pellets) | kg/s | 0,014 (0,012) | 0,024 (0,022) | 0,028 (0,027) | 0,038 (0,035) |
| Flue gas mass flow rate at part load: wood chips (wood pellets) | kg/s | 0,005 (0,005) | 0,005 (0,005) | 0,009 (0,009) | 0,009 (0,009) |

| Energy labelling | | | | | |
|--|--|----|----|----|----|
| Biomass boiler | | A+ | A+ | A+ | A+ |
| Biomass boiler with integrated system controller | | A+ | A+ | A+ | A+ |

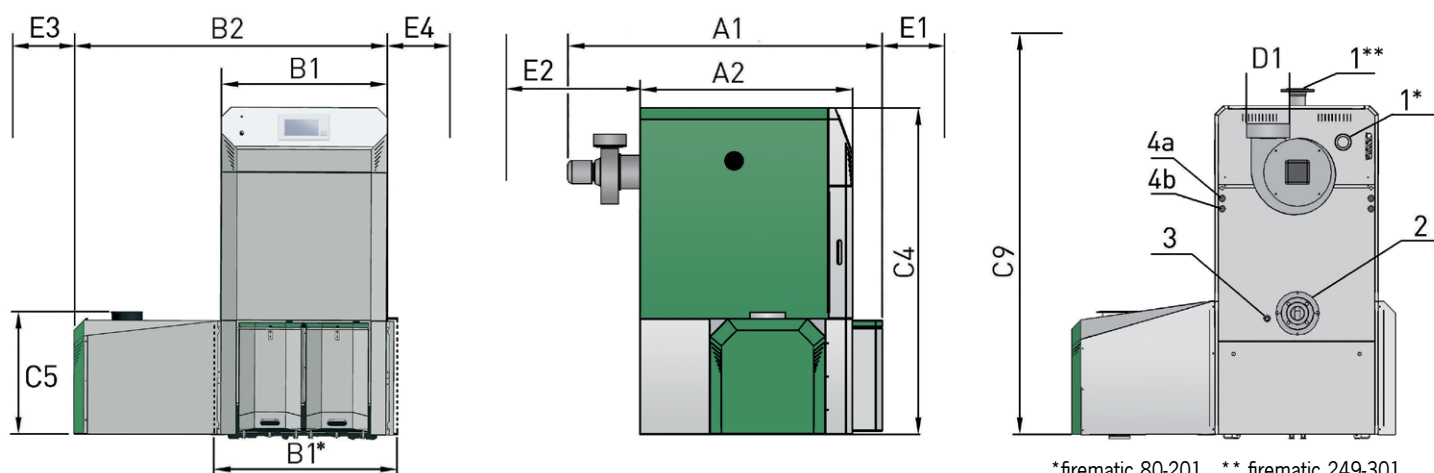
firematic 20-35:

1... Flow, 1" IT 2... Back flow, 2" IT
 3... Filling / draining connection, 1/2" IT
 4a... Safety heat exchanger input, 1/2" IT
 4b... Safety heat exchanger output, 1/2" IT
 IT... internal thread

firematic 45-60:

1... Flow, 6/4" IT 2... Back flow 6/4" IT
 3... Filling / draining connection, 1/2" IT
 4a... Safety heat exchanger input, 1/2" IT
 4b... Safety heat exchanger output, 1/2" IT

Dimensions & technical datas firematic 80-301



*firematic 80-201 ** firematic 249-301

firematic 80-151

| Technical datas | 80 | 100 | 101 | 120 | 130 | 149 | 151 |
|--|---------|---------|----------|----------|----------|----------|----------|
| Output range WOOD CHIPS (kW) | 23,2-80 | 23,2-99 | 23,2-101 | 35,1-120 | 35,1-130 | 35,1-149 | 35,1-151 |
| Output range WOOD PELLETS (kW) | 23,2-80 | 23,2-99 | 23,2-101 | 34,8-120 | 34,8-130 | 34,8-149 | 34,8-151 |
| Dimensions (mm) | | | | | | | |
| A1 Length - total | 1709 | 1709 | 1709 | 2083 | 2083 | 2083 | 2083 |
| A2 Length - casing | 1178 | 1178 | 1178 | 1504 | 1504 | 1504 | 1504 |
| B1 Width | 846 | 846 | 846 | 982 | 982 | 982 | 982 |
| B1* Bring In wide with removal of components | 800 | 800 | 800 | 950 | 950 | 950 | 950 |
| B1* Bring In wide with the casing (without casing removal) | 907 | 907 | 907 | 1024 | 1024 | 1024 | 1024 |
| B2 Width – with push-in | 1636 | 1636 | 1636 | 1908 | 1908 | 1908 | 1908 |
| C4 Height | 1690 | 1690 | 1690 | 1825 | 1825 | 1825 | 1825 |
| C5 Delivery – upper edge | 645 | 645 | 645 | 771 | 771 | 771 | 771 |
| C9 Minimum room height | 2115 | 2115 | 2115 | 2420 | 2420 | 2420 | 2420 |
| D1 Flue pipe – diameter | 180 | 180 | 180 | 200 | 200 | 200 | 200 |
| E1 Minimum space front | 800 | 800 | 800 | 750 | 750 | 750 | 750 |
| E2 Minimum space rear | 750 | 750 | 750 | 750 | 750 | 750 | 750 |
| E3 Minimum space left | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| E4 Minimum space right | 700 | 700 | 700 | 700 | 700 | 700 | 700 |

| Technical datas | | | | | | | |
|--|------|---------|---------|---------|---------|---------|---------|
| Boiler weight | kg | 1140 | 1140 | 1140 | 1445 | 1445 | 1445 |
| Combustion efficiency η_f | % | >93 | >93 | >93 | >95 | >93 | >94 |
| Permissible operating pressure | bar | 3,0 | 3,0 | 3,0 | 5,0 | 5,0 | 5,0 |
| Max. permissible operating temperature | °C | 95 | 95 | 95 | 95 | 95 | 95 |
| Water capacity | ltr. | 179 | 179 | 179 | 295 | 295 | 295 |
| Flue gas mass flow rate at nominal load: | kg/s | 0,048 | 0,059 | 0,060 | 0,071 | 0,083 | 0,092 |
| Wood chips (wood pellets) | | (0,046) | (0,059) | (0,059) | (0,069) | (0,077) | (0,088) |
| Flue gas mass flow rate at part load: | kg/s | 0,016 | 0,016 | 0,016 | 0,024 | 0,037 | 0,024 |
| Wood chips (wood pellets) | | (0,016) | (0,016) | (0,016) | (0,026) | (0,022) | (0,023) |

SUITABLE FUELS:



Wood chips M40 (water content max. 40%) according to

firematic 20-60:

- EN ISO 17225-4: Property class A1, A2, B1 and particle size P16S
- ÖNORM M7133: G30-G50

firematic 249-301:

- EN ISO 17225-4: Property class A1,A2, B1 and particle size P16S, P31S
- ÖNORM M7133: G30-G50

Wood pellets

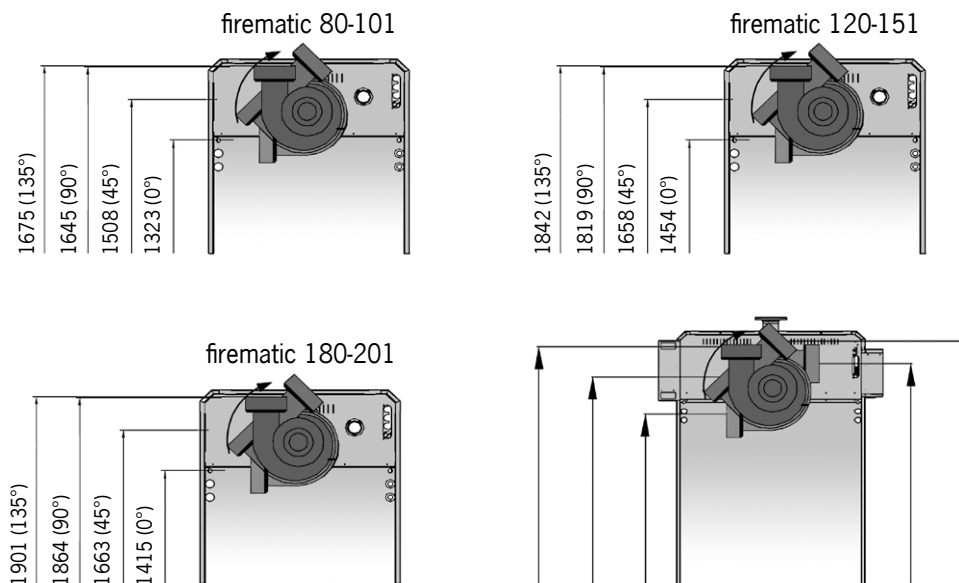
firematic 20-60:

- EN ISO 17225-2: Property class A1
- ENplus, ÖNORM M 7135, DINplus or Swiss-pellet

firematic 249-301:

- EN ISO 17225-2: Property class A1, A2
- ENplus, ÖNORM M 7135, DINplus or Swisspellet

Dimensions & technical datas firematic 80-301



firematic 180-301

| Technical data | 180 | 199 | 201 | 249 | 251 | 299 | 301 |
|--|----------|----------|----------|----------|----------|----------|----------|
| Output range WOOD CHIPS (kW) | 35,1-180 | 35,1-199 | 35,1-201 | 69,6-249 | 69,6-251 | 69,6-299 | 69,6-301 |
| Output range PELLETS (kW) | 34,8-180 | 34,8-199 | 34,8-201 | 74,4-249 | 74,4-251 | 74,4-299 | 74,4-301 |
| Dimensions (mm) | | | | | | | |
| A1 Length - total | 2242 | 2242 | 2242 | 2681 | 2681 | 2681 | 2681 |
| A2 Length - casing | 1504 | 1504 | 1504 | 1909 | 1909 | 1909 | 1909 |
| B1 Width | 982 | 982 | 982 | 118 | 118 | 118 | 118 |
| B1* Bring In wide with removal of components | 950 | 950 | 950 | 1065 | 1065 | 1065 | 1065 |
| B1* Bring In wide with the casing (without casing removal) | 1024 | 1024 | 1024 | 1230 | 1230 | 1230 | 1230 |
| B2 Width – with push-in | 1908 | 1908 | 1908 | 2078 | 2078 | 2078 | 2078 |
| C4 Height | 1825 | 1825 | 1825 | 1915 | 1915 | 1915 | 1915 |
| C5 Delivery – upper edge | 771 | 771 | 771 | 772 | 772 | 772 | 772 |
| C9 Minimum room height | 2420 | 2420 | 2420 | 2600 | 2600 | 2600 | 2600 |
| D1 Flue pipe – diameter | 200 | 200 | 200 | 250 | 250 | 250 | 250 |
| E1 Minimum space front | 750 | 750 | 750 | 750 | 750 | 750 | 750 |
| E2 Minimum space rear | 750 | 750 | 750 | 750 | 750 | 750 | 750 |
| E3 Minimum space left | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| E4 Minimum space right | 700 | 700 | 700 | 700 | 700 | 700 | 700 |
| Technical datas | | | | | | | |
| Boiler weight | kg | 1445 | 1445 | 1445 | 2264 | 2264 | 2264 |
| Combustion efficiency η_f | % | >93 | >93 | >93 | >94 | >94 | >93 |
| Permissible operating pressure | bar | 5,0 | 5,0 | 5,0 | 5,0 | 5,0 | 5,0 |
| Max. permissible operating temperature | °C | 95 | 95 | 95 | 95 | 95 | 95 |
| Water capacity | ltr. | 295 | 295 | 295 | 436 | 436 | 436 |
| Flue gas mass flow rate at nominal load: | kg/s | 0,114 | 0,125 | 0,127 | 0,151 | 0,151 | 0,182 |
| Wood chips (wood pellets) | | (0,108) | (0,117) | (0,118) | (0,154) | (0,154) | (0,181) |
| Flue gas mass flow rate at part load: | kg/s | 0,024 | 0,024 | 0,024 | 0,048 | 0,048 | 0,048 |
| Wood chips (wood pellets) | | (0,023) | (0,023) | (0,023) | (0,053) | (0,053) | (0,053) |

firematic 80-101:

- 1... Flow, 2" IT
- 2... Back flow 2" IT
- 3... Filling / draining connection, 3/4" IT
- 4a... Safety heat exchanger input, 1/2" IT
- 4b... Safety heat exchanger output, 1/2" IT

firematic 130-201:

- 1... Flow, 2" IT
- 2... Back flow 2" IT
- 3... Filling / draining connection, 3/4" IT
- 4a... Safety heat exchanger input, 1/2" IT
- 4b... Safety heat exchanger output, 1/2" IT

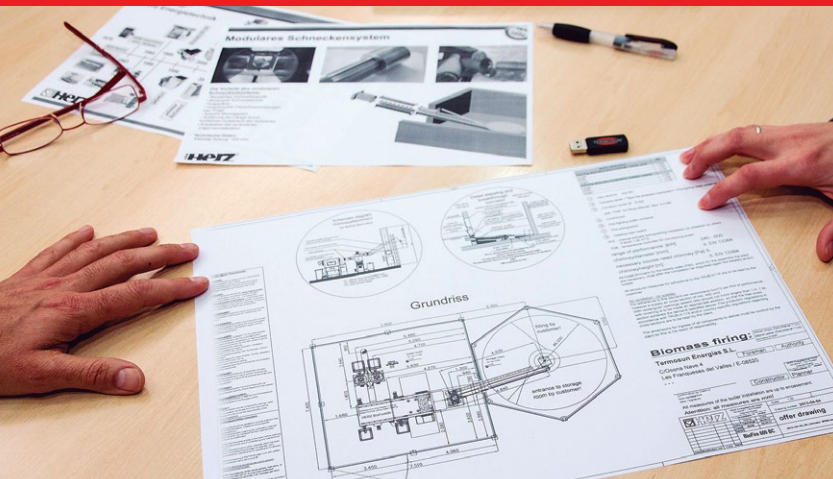
firematic 249-301:

- 1... Flow, DN80, PN 6
- 2... Back flow, DN80, PN 6
- 3... Filling / draining connection, 3/4" IT
- 4a... Safety heat exchanger input, 1/2" IT
- 4b... Safety heat exchanger output, 1/2" IT

IT... internal thread

IT... internal thread

HERZ customer-oriented...



- Advising in planning phase
- Planning of discharge system according to customer requirements and local conditions
- area covered service
- HERZ training:
 - for operators
 - for planners, technical departments
 - for plumbers
 - as well as continuous training of the maintenance staff



We reserve the right of errors, misprint, typographical failures and technical modifications! Data about our products are not guaranteed characteristics. Mentioned and illustrated discharge systems are system-dependent and only available as an option. In case of discrepancies between documents with regard to the scope of supply the information in the current offer is valid. All images are representations as a symbol and serve only to illustrate our products.

Your partner:



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

HERZ Armaturen GmbH
Fabrikstraße 76, 71522 Backnang
Deutschland/Germany
Tel.: +49(0)7191/9021-21
Fax: +49(0)7191/9021-79
Mail: zentrale-bk@herz.eu
Internet: www.herz.eu



HERZ biomass boilers
underbid the strictest
emission regulations.

