PELLET BOILERS

6 – 330 kW

HARGASSNER
BIOMASS HEATING TECHNOLOGY

hargassner.com

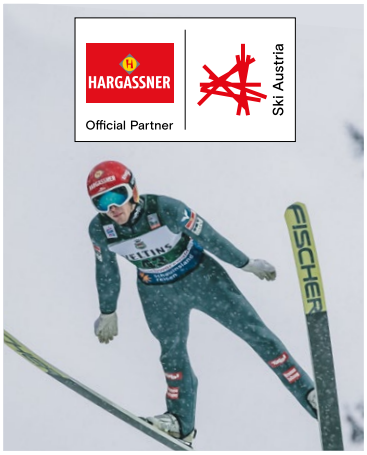
Table of contents

Left to right: Philipp Aschenwald, Jonas Gerner, Daniela Iraschko-Stolz

Winter sports
are our passion!

The fire burns in our eyes. Not just because we build sustainable biomass heating systems, but also because we are passionate sports fans. While it was once Anton Hargassner sr. himself who daringly pushed himself off the ski jump beam at a young age, he later kindled this fire for sport in Markus and Anton jr. Hargassner as well. This passion still burns in the Hargassner family today and the values of sport therefore also actively shape Hargassner's corporate culture. The "Hargassner Sport Family" unites this enthusiasm for sports, from youngsters to professionals, and shares it with the international fan community.

If you would like to be kept informed and experience first-hand everything that is going on in the world of the "Hargassner Sport Family", please follow them on their Facebook & Instagram social media channels. **#hargassnerfamily**



Our corporate values are characterised **by harmony between nature and satisfied customers**

Hargassner. Since 1984, as a pioneer in automated biomass heating systems, we have endeavoured to stand by our customers as a reliable partner – with trustworthiness from Innviertel. We have now grown into an internationally successful company with a pronounced spirit of innovation.

- Over **39 years of experience**
- **170,000 customers** worldwide
- **75,000 m² company floor space**
- More than **1,200 employees** at several locations
- **Export to 43 countries**
- **International awards**

Executive Board (left to right)
Markus & Anton jr. Hargassner

Heating with **Pellets**

Advantages

- **Lower costs than oil or gas**
- **Crisis-resistant**, because locally sourced
- **Short transportation**
- **Dust-free, odourless blow-in**
- **Low storage volume** (= low space requirements)
- **Easy filling** of the storage room through delivery by tanker or bags
- **Very high calorific value**

Environmentally friendly. Pellets are CO_2 neutral. In general, the cleaner combustion results in a CO_2 reduction of 95% compared to heating oil.

Local. Using wood pellets offers a future-proof market for local companies and secure jobs in the region.

Economical. The combination of low fuel costs and highly efficient combustion makes pellets so economical.

Comfortable & clean. The fuel is delivered by tanker and transported from the storage room to the boiler automatically. The ignition, control and boiler cleaning are also fully automatic.

Future-proof. Austria and Germany now produce more wood pellets as a by-product of wood processing than are consumed in those countries.

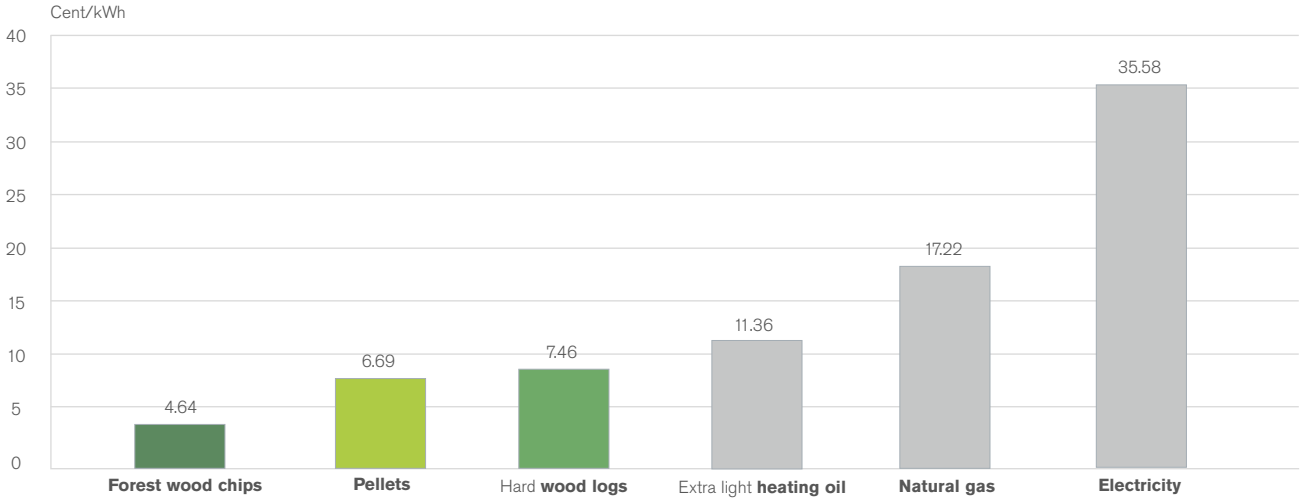
More good reasons.
They are ideal for use in the refurbishment industry, because higher flow temperatures are possible too. No noise development in the interior and exterior areas.

FACTS

Standards: EN ISO 17225-2, ÖNORM 7135, class A1
Calorific value: 4.8 – 4.9 kWh/kg
Density: 650 kg/m³
Ø / length: 6 mm / approx. 5 – 40 mm
Water content: w < 10%

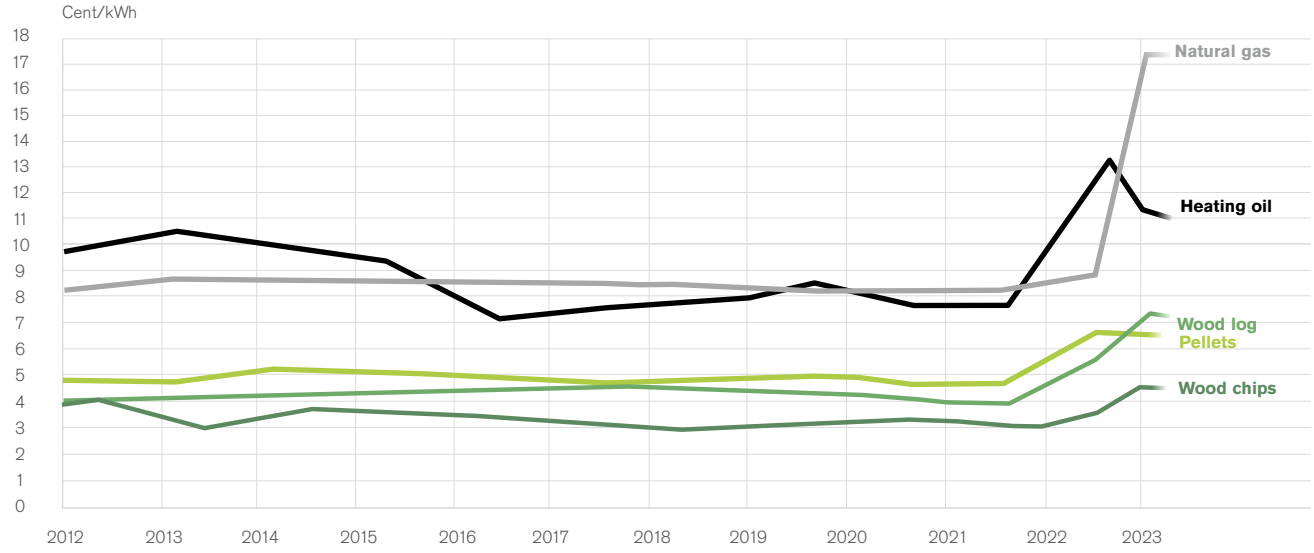
Energy prices per year*

Comparing the costs of individual fuels down into cents per kilowatt hour reveals an astonishing picture:



* Basis: Reference value is the calorific value 15,000 kWh gas, 3,500 kWh electricity excluding new customer discounts, 1,000 litres of extra light heating oil, weighted average consumer price free domicile (excl. tanker filling flat rate) for 1,000 litres of extra light heating oil free domicile, based on a delivery quantity of 3,000 litres. Source: proPellets, Landwirtschaftskammer Österreich, E-Control, IWO; Last updated: 24 April 2023

Long-term heating cost comparison for biomass - oil/natural gas In the ten years since 2013, pellets have been 44 % cheaper than heating oil on average. Even during the price changes due to global effects in 2023, wood pellets played to their strength and remain the cheapest convenient fuel.



Sources: Gas: e-control, heating oil: IWO, pellets: Genol, proPellets Austria and Biomasseverband Österreich

The variety of our **Pellet boilers**

NANO PK
6 – 15 kW

Perfect for:
- Detached houses
- Semi-detached houses
- Low-energy houses
- Renovation projects

For details, see p. 8

NANO PK
20 – 32 kW

Perfect for:
- Semi-detached houses
- Multi-dwelling units
- Renovation projects

For details, see p. 10

NANO PK PLUS
6 – 32 kW

Nano-PK series
- PLUS condensing technology
- PLUS condensation

For details, see p. 12

Biomass heating technology at its best

Products from Hargassner combine the highest quality, expertise and decades of proven technology. As a biomass pioneer, Hargassner researches and develops the future of heating with a keen sense of the environment. These innovations make the boilers some of the best biomass heating solutions available in the world today. Lowest emissions at the highest efficiencies, maximum convenience and long lifetime characterise the "Hargassner" brand.

HARGASSNER
BIOMASS HEATING TECHNOLOGY

SMART PK
17 – 32 kW

Perfect for:
- Detached houses
- Weekend homes

For details, see p. 18

CLASSIC LAMBDA
40 – 60 kW

Perfect for:
- Multi-dwelling units
- Renovation projects
- Restaurants
- Public buildings

For details, see p. 22

ECO PK
70 – 330 kW

Perfect for:
- Multi-dwelling units
- Restaurants, hotels
- Public buildings

For details, see p. 24

Research, quality control and the focus on customer satisfaction therefore characterise the daily tasks to a high degree. Many customers are already benefiting from this success story. A capacity of more than 30,000 boilers produced per year and over 170,000 satisfied buyers worldwide are proof of the top level of Hargassner heating technology.

Discover the wide world of Hargassner pellet boilers on the following pages.

ENERGIE GENIE / INNOVATION AWARD

Our Nano-PK and Smart-PK boiler series have been awarded the Energiegenie (energy genius) innovation prize. You can find more information about our awards and prizes on our website hargassner.com

NANO PK

6 – 15 kW

The low-temperature boiler is equipped with the latest heating technology for economical heating requirements. It is particularly suitable for detached or semi-detached houses and can be used where space is at a premium, such as in houses without a cellar.

- **Small, compact design** (0.45 m²)
- **Low-temperature boiler from 40°C** (usable range 40 to 75°C)
- **Possible to place onto 3 walls**
- **Simple installation** Maintenance openings at the front and top
- **Heating without boiler room** – depending on building regulations
- **Integrated hydraulic modules**

Also available with condensation heat exchanger! See pages 12

Also available as a wood log pellet combi boiler! See pages 20

Also available with particle separator – Nano-PK eCleaner

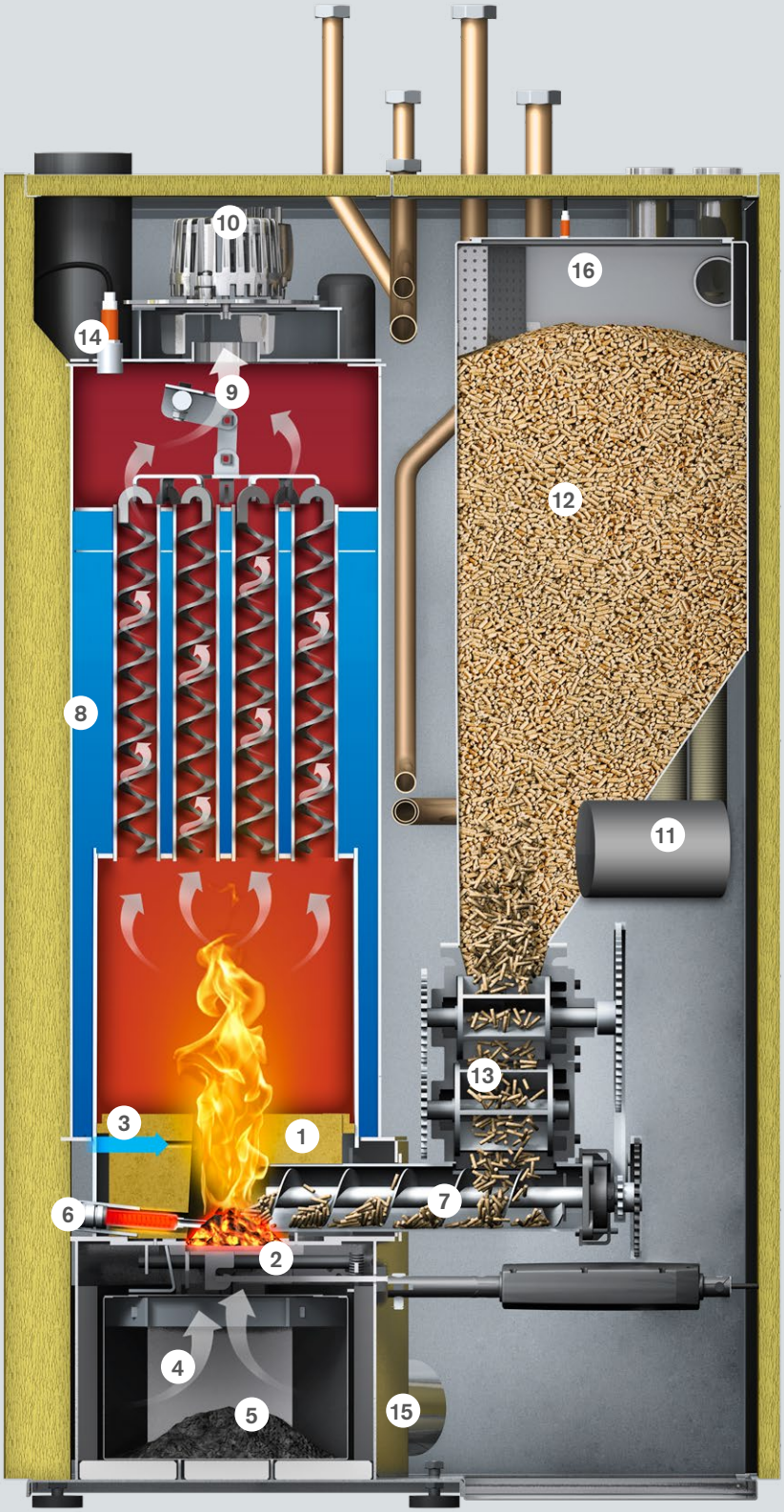
Application areas

- Detached houses
- Semi-detached houses
- Low-energy houses
- Renovation projects

- H x W x D = 1,350 x 780 x 580 mm
- Energy efficiency class A+
- Efficiency of up to 96 %
- 5-year warranty

For economical houses

Nano-PK 6 – 15



Nano-PK 6 – 15, front view

1 Fully refractory-lined combustion chamber
2 Sliding grate
3 Secondary air stream with inlet openings
4 Primary air
5 Ash pan
6 Automatic ignition with 300 W
7 Stoker auger
8 Heat exchanger
9 Turbulators with autom. boiler cleaning system
10 Exhaust fan
11 Pellet vacuum turbine
12 Pellet day hopper
13 Metering double rotary valve
14 Lambda sensor
15 Air connection AIO / ADO
16 Fill level indicator

AIO = Air-independent operation, ADO = air-dependent operation

NANO PK

20 – 32 kW

Low-temperature boiler with the latest heating technology for the low to medium output range. This boiler series is suitable for detached houses to multi-dwelling buildings and also particularly well suited for renovation projects.

- **Small, compact design** (0.69 m²)
- **Low-temperature boiler from 40°C**
- **Possible to place onto 3 walls**
- **Simple installation**
  Maintenance openings at the front and top
- **Heating without boiler room** – depending on building regulations
- **Integrated hydraulic modules**

Also available with condensation heat exchanger!
See pages 12

Also available as a wood log pellet combi boiler!
See pages 20

Also available with particle separator – Nano-PK eCleaner

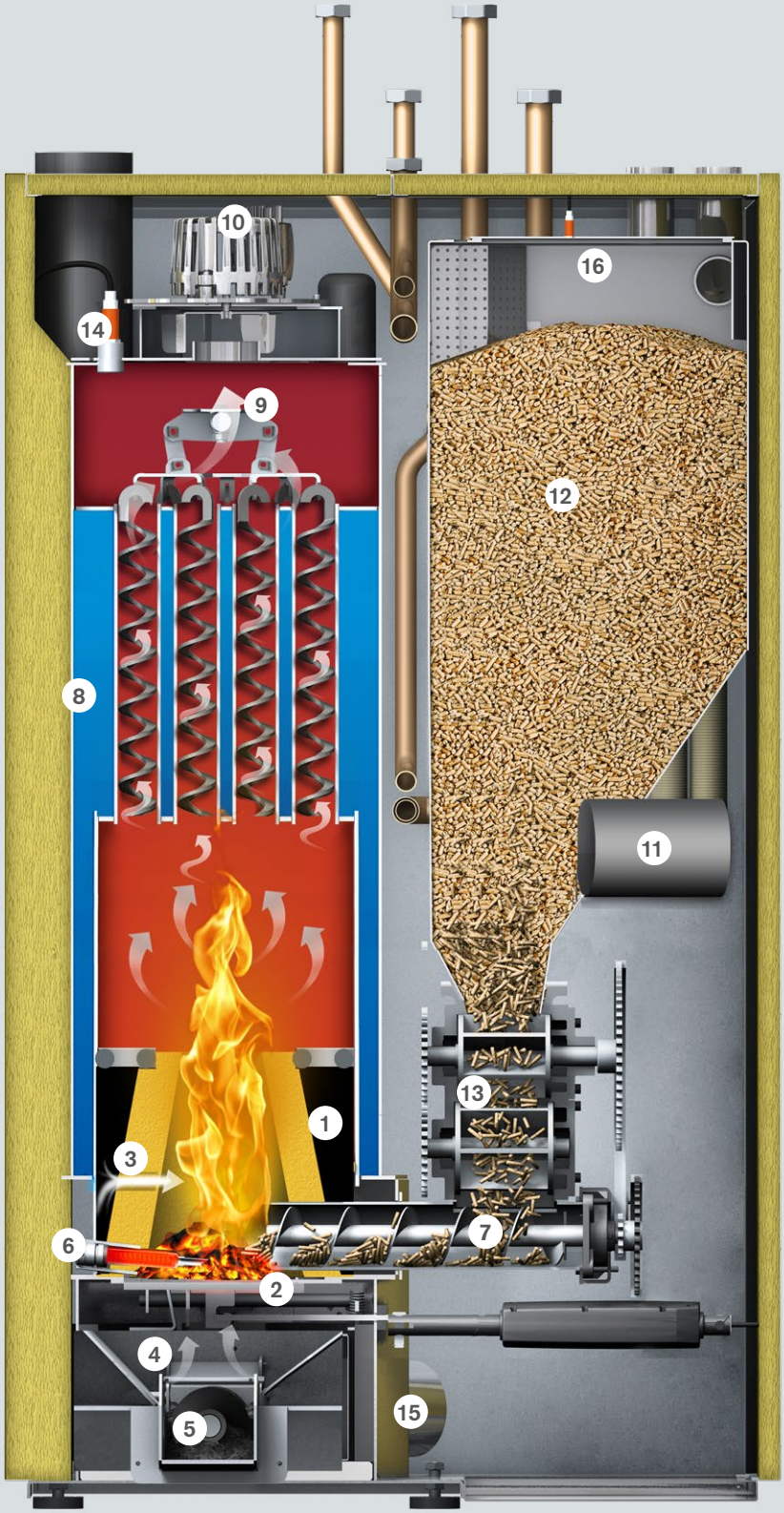
Application areas

- Detached houses
- Semi-detached houses
- Multi-dwelling units
- Renovation projects

- H x W x D = 1,550 x 980 x 700 mm
- Energy efficiency class A+
- Efficiency of up to 95%
- 5-year warranty

The strong compact device

Nano-PK 20 – 32



Nano-PK 20 – 32, front view

1 Fully refractory-lined combustion chamber
2 Sliding grate
3 Secondary air stream with inlet openings
4 Primary air
5 Ash extraction system
6 Automatic ignition with 300 W
7 Stoker auger
8 Heat exchanger
9 Turbulators with autom. boiler cleaning system
10 Exhaust fan
11 Pellet vacuum turbine
12 Pellet day hopper
13 Metering double rotary valve
14 Lambda sensor
15 Air connection AIO / ADO
16 Fill level indicator

AIO = Air-independent operation, ADO = air-dependent operation

NANO PK PLUS

6 – 32 kW

Every fuel has a certain water content. The water vapour and water content from the fuel produced during combustion are evaporated and normally escape outside with the flue gases through the chimney. The stainless steel exhaust gas heat exchanger extracts this energy from the flue gas. This increases efficiency up to 106%. Again, this reduces heating costs and pellet consumption.

Nano-PK 20 – 32 Plus

Also available with particle separator – Nano-PK eCleaner

- **PLUS condensation & condensing technology**
- **State-of-the art condensing boiler technology** with effective condensation
- **Micro-dust emissions are reduced** and flue gases filtered
- Robust structure of **stainless steel heat exchanger**

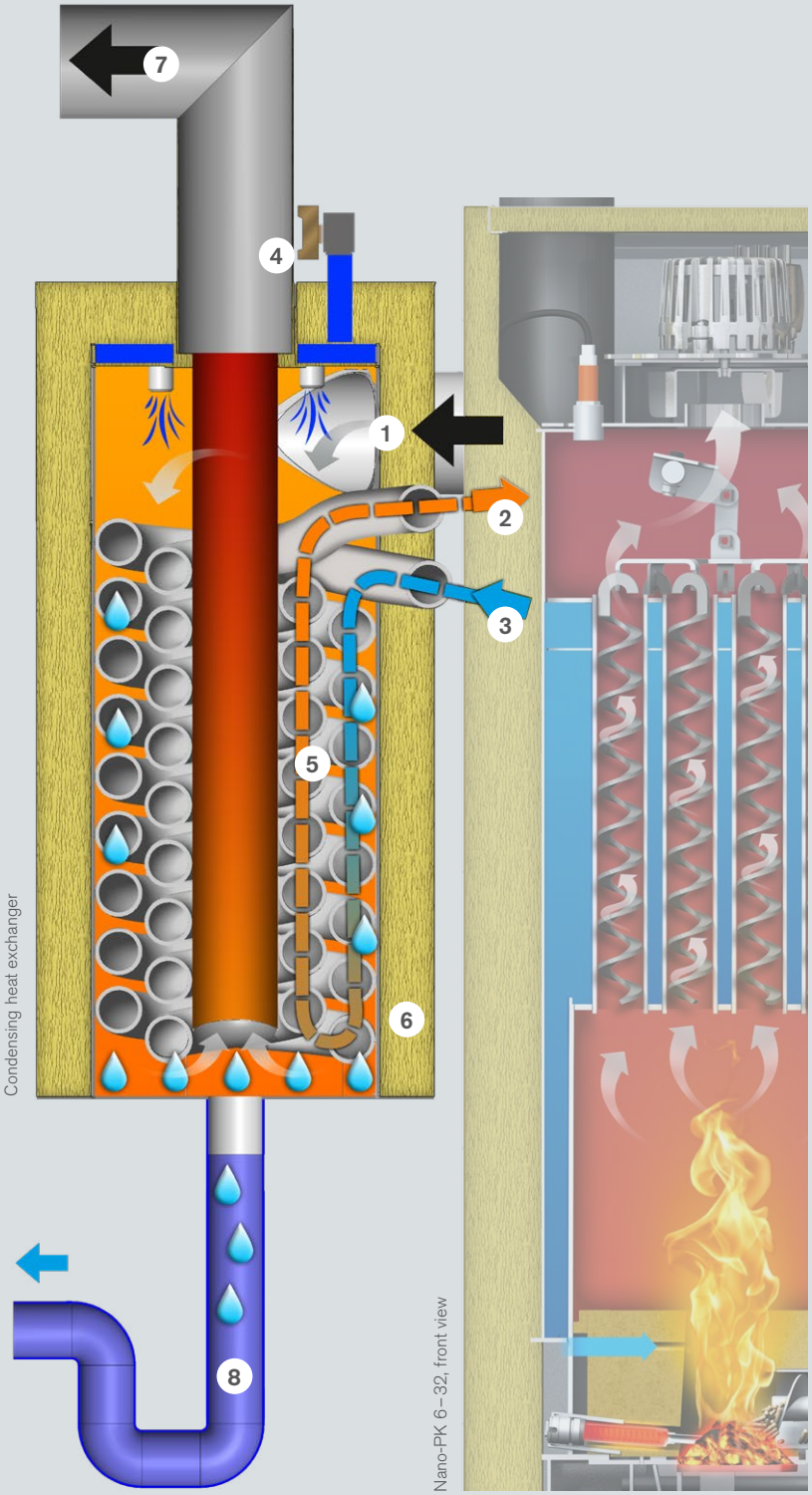
Application areas

- Detached and semi-detached houses with low-temperature heating systems

- H x W x D = 775 x 355 x 470 mm
- Energy efficiency class A++
- Efficiency of up to 106 %
- 5-year warranty

When 100 % is not enough

Nano-PK Plus 6 – 32



In addition to the sophisticated technology of the Nano-PK pellet boiler (for boiler details, see pages 8 – 11), the Nano-PK Plus impresses with state-of-the-art condensing boiler technology. The successful Nano model saves heating costs in the long term.

Condensing boiler technology

The flue gas heat exchanger brings the temperature down below the condensation point and condenses it again. The condensing technology uses the generated condensation heat and the reduced flue gas temperature to increase efficiency. However, the condensing boiler system also achieves a higher level of efficiency at higher return temperatures, because the flue gases are cooled to a significantly lower temperature.

Requirements for optimum use:

- Low return temperatures
- Moisture-resistant and soot-fire-resistant flue gas system
- Waste water connection for draining condensate/ flushing water
- Water connection for flushing water

1 Flue gas boiler
2 Boiler return flow
3 Heating return
4 Automatic cleaning (cold water flushing)
5 Stainless steel corrugated pipe heat exchanger
6 Insulation
7 Flue gas chimney
8 Condensate drain with siphon

Great for the environment **& the next generations**

NANO PK

This is what makes it unique

The Hargassner pellet boilers from the Nano series are the right choice for anyone looking for maximum comfort and powerful heating performance. The "Nanos" require little space and can even be installed in a niche in small technical rooms. The fully automatic technology ignites and cleans itself. It independently maintains the desired room temperature and you can enjoy cosy warmth yourself.

Small, compact design

Can be installed **flush with the wall on three sides** and is therefore ideally suited for small heating or installation rooms. and, depending on your local building regulations, it no longer has to be installed in a separate boiler room.

minimum space requirement:
0.45 m² (for Nano-PK 6 – 15) or
0.69 m² (for Nano-PK 20 – 32)

Quick to transport

The Nano-PK boiler is a single-unit system and therefore very easy to transport. In most cases, it **no longer has to be disassembled.**

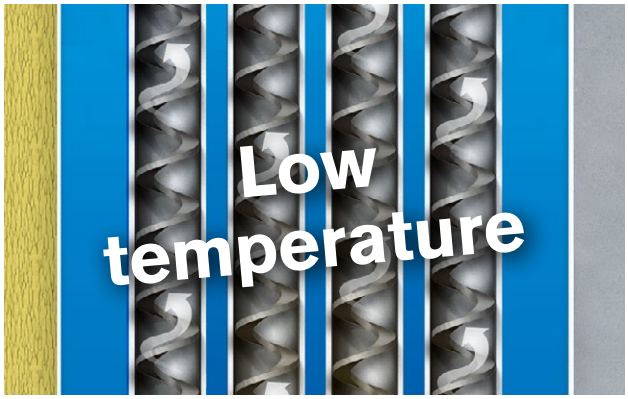
Quick installation

All accessories and piping are implemented in the boiler ready for connection. All the connecting components, such as the flue pipe, pellet transport pipes, etc. run upwards and away from the boiler. The easy installation **saves you time and money!**

Maintenance openings easy to access

All the boiler's components have been arranged in a way that allows them to be **accessed from the front or top easily**.

NANO PK
The future of heating

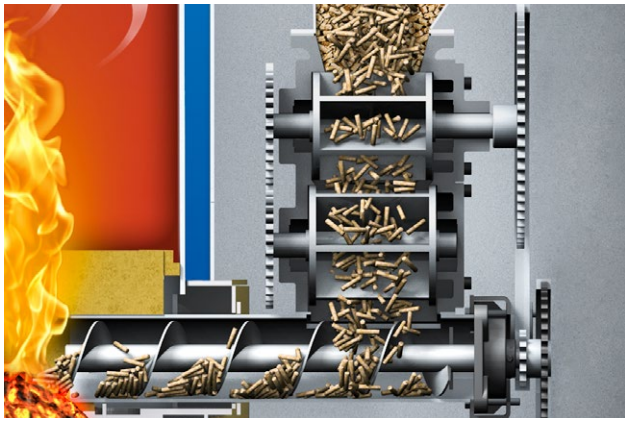


Most efficient low-temperature boiler
The usable output range for the heating water circuit of the Nano extends from low to high temperature. In these heating systems, an outside temperature sensor smoothly adjusts the boiler output to the current heat demand. Economical buildings or transitional periods often require heating water temperatures that can be lowered to approx. 40°C. The low-temperature boiler therefore only ever generates as much heat for the radiators as is actually needed. This **saves radiation losses** and less power is lost through the chimney.

Practical consumption display
A reliable reminder on the display, remote control, mobile phone or tablet automatically provide a notification when pellets need to be refilled.

Fully refractory-lined high-temperature combustion chamber with a lambda sensor
Refractory has proven itself as the best material available in terms of heat storage, function and durability. The high combustion chamber temperature at full and partial load contributes to very good combustion efficiency of up to 96% and low emission values.

The **lambda sensor** regulates exactly the right quantity of fuel in every output range according to the pellet quality. This guarantees economical and low-emission combustion.



Automatic pellet transport

The hopper in the boiler is filled automatically at the set times and as required. A **suction system** transports the pellets via the fuel extraction system into the hopper with the help of a turbine. With suction hoses, the pellets can thus be transported up to 20 m from a storage room.

A **metering double rotary valve** in a cast design provides 100% protection against burn-back by means of pressure compensation. The fuel falls through the rotary valve into the feed auger. This then transports the pellets directly into the combustion chamber.

Intelligent ash disposal

A distribution mechanism on the sliding grate compacts the ash and fills the ash pan to the last corner. This allows much **longer emptying intervals.** The display of the boiler, the remote control or mobile devices reliably shows when the pan needs to be emptied. A filling reserve then gives you about another week. That is Hargassner pellet heating comfort!

Depending on the heating time, an **automatic cleaning system** for the heat exchangers is activated. This clears the boiler walls of residue, which then falls directly into the ash pan.

In the **Nano-PK 20 – 32**, the **ash is discharged** by a transport auger in combination with an **ash box.**

SMART PK

17 – 32 kW

Manual filling enables sensational price-performance ratio and individual control over fuel filling. The hopper allows a continuous burning time of up to ten days.

- **Compact design**
- **Pellet day hopper** 174 kg
- **Easy filling** with bags of pellets
- **Possible to place onto 3 walls**

Also available as a wood log pellet combi boiler!
See pages 20

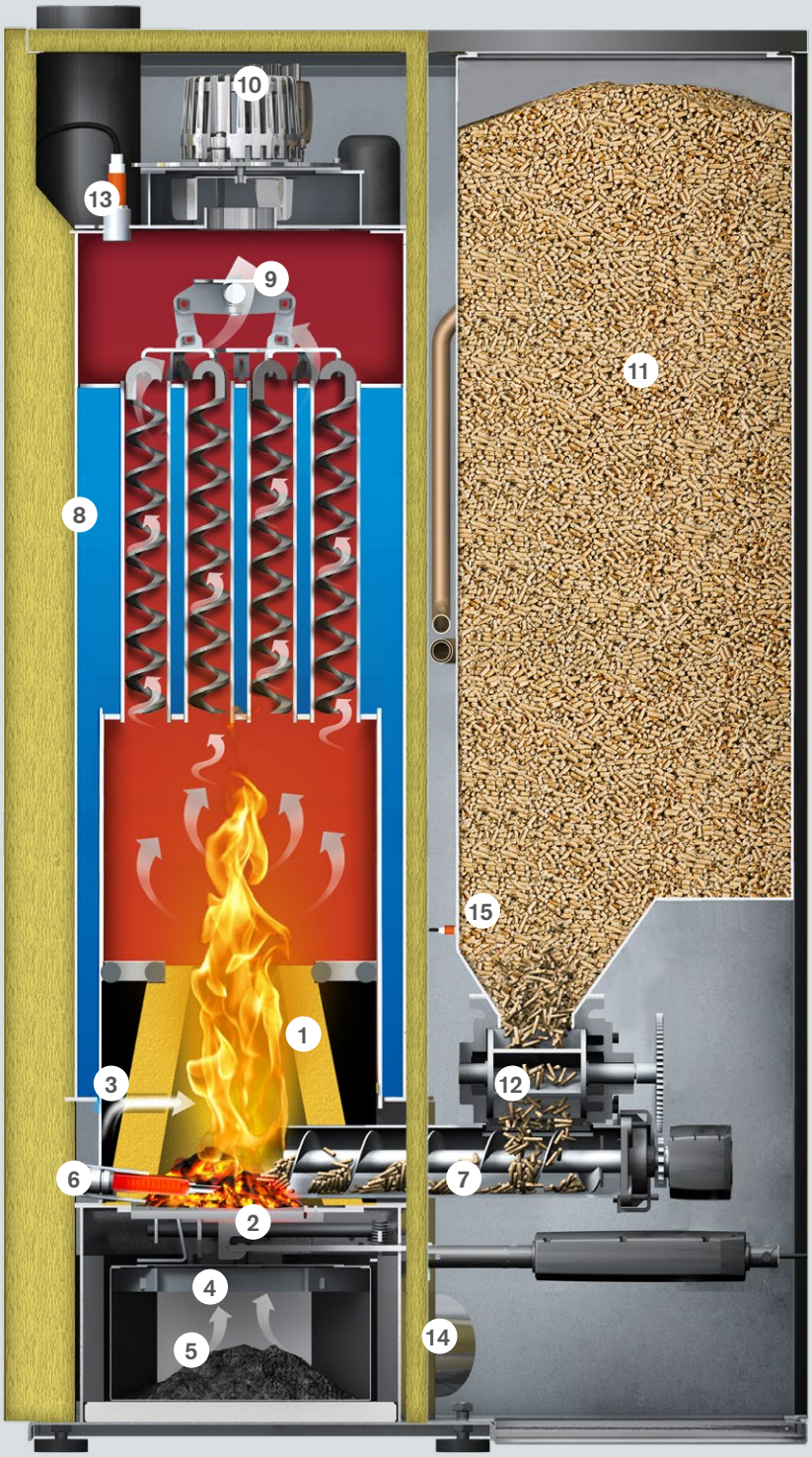
Application areas

- Detached houses
- Weekend homes

- H x W x D = 1,520 x 1,080 x 650 mm
- Energy efficiency class A+
- Efficiency of up to 96 %
- 5-year warranty

Best price-performance ratio

Smart-PK 17 – 32



Smart-PK 17 – 32, front view

1 Fully refractory-lined combustion chamber
2 Sliding grate
3 Secondary air stream with inlet openings
4 Primary air
5 Ash pan
6 Automatic ignition with 300 W
7 Stoker auger
8 Heat exchanger
9 Turbulators with manual heat boiler cleaning system
10 Exhaust fan
11 Pellet day hopper
12 Metering rotary valve
13 Lambda sensor
14 Air connection AIO / ADO
15 Fill level indicator

AIO = Air-independent operation, ADO = air-dependent operation

COMBI BOILER

Combines the best of wood logs & pellets

Hargassner has decades of experience in biomass heating technology. A know-how advantage that leads to particularly sophisticated technology when combining wood logs and pellets. The arrangement with two separate heat exchangers achieves the highest system efficiencies. At the same time, the advantages – the comfort of pellets and the low cost of logs pieces – are ideally combined.

Combination of wood log boiler Neo-HV & pellet boiler Nano-PK

- **Highest controllability and maximum efficiency**
- **Fuel supply security** for the future
- **Two separate, efficient heat exchanger systems**
  for just one chimney
- **Fully automatic changeover**

Application areas

- Detached houses
- Semi-detached houses

- Energy efficiency class A+
- Efficiency of up to 96 %
- 5-year warranty
- **More information in the combi boiler brochure**

NEO HV + NANO PK
20 – 60 kW 6 – 32 kW

The allrounder for maximum comfort
This combi option is impressive because it consists of an automatic wood log boiler boasting a large filling chamber and a pellet boiler with an automatic heat exchanger cleaning system and an innovative fuel extraction system. The wood log boiler is ignited automatically when the accumulator can no longer cover the heat demand. If the wood log boiler has not been filled, the system will automatically switch to the pellet boiler. The pellets are automatically suctioned out of their storage room and into the hopper.

NEO HV + SMART PK
20 – 60 kW 17 – 32 kW

For wood log boiler operator with sporadic pellet operation
This combination consisting of an automatic wood log boiler with a large filling chamber and a pellet boiler with manual filling and long filling intervals of up to a week guarantees maximum heating convenience. The wood log boiler is ignited automatically when the accumulator can no longer cover the heat demand. If the wood log boiler has not been filled, the system will automatically switch to pellets. This combi option can run for up to ten days without being refilled.

SMART HV + NANO PK
17 – 23 kW 6 – 32 kW

For the pellet boler operator with occasional wood log operation
This option consisting of a pellet boiler with an automatic heat exchanger cleaning system and a fuel extraction system in conjunction with a Smart-HV wood log boiler is distinguished by its small, compact design. The pellets are automatically suctioned out of their storage room and into the hopper. This combi option can run completely automatically and is suitable for occasional wood log operation.

SMART HV + SMART PK
17 – 23 kW 17 – 32 kW

The combi boiler for the economical customer
This cost-efficient Hargassner solution consists of a wood log boiler and a pellet boiler that are both filled manually. The heat exchanger is also cleaned manually. If the wood log boiler has not been filled, the system will automatically switch to pellets. This combi option can run for up to ten days without being refilled. All this at top price-performance ratio.

CLASSIC LAMBDA
40 – 60 kW

This line of high-temperature pellet boilers made by Hargassner are equipped with the latest technology for the medium output range. They are particularly well-suited to multi-dwelling buildings, restaurants and public buildings.

- **Fully automatic operation**
- **High-temperature operation**
  also ideal for renovation projects
- **Robust and proven continuous burner**
- **Optimum price-performance ratio**

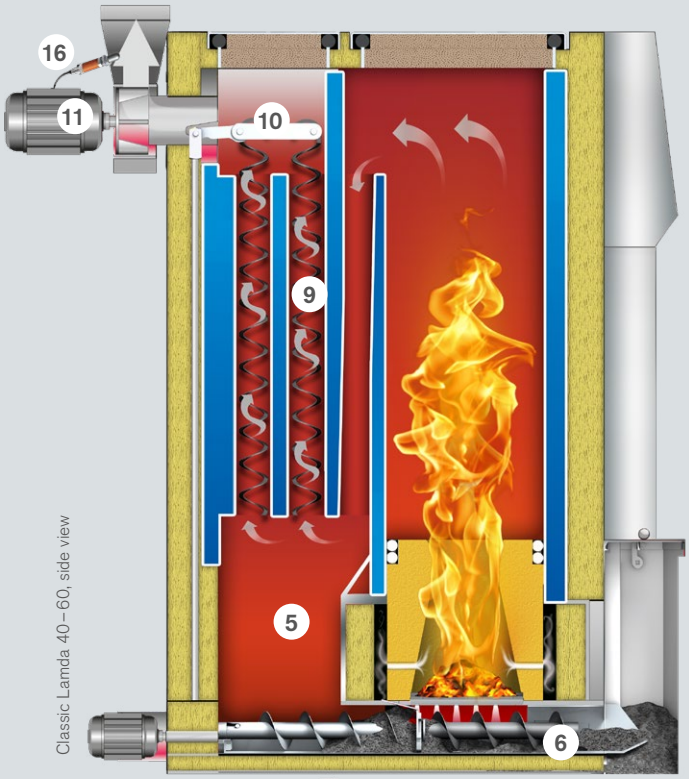
Application areas

- Multi-dwelling units
- Commercial businesses
- Restaurants
- Public buildings

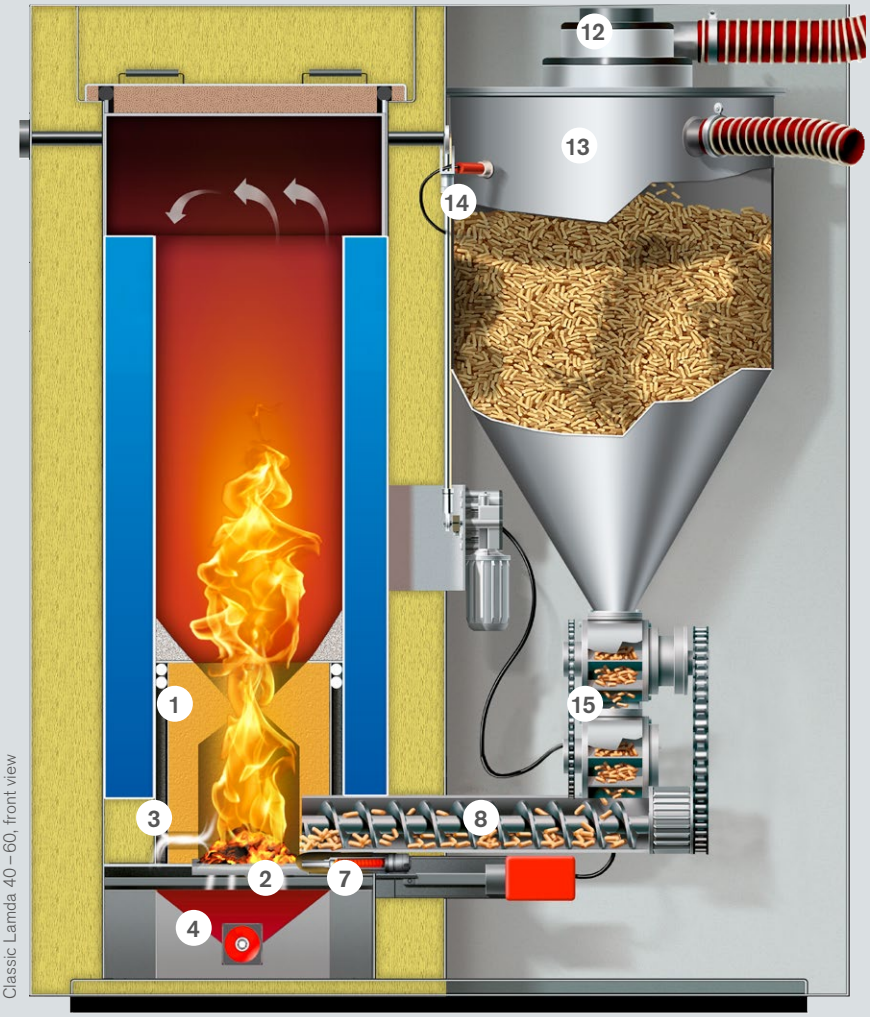
- H x W x D = 1,480 x 1,210 x 920 mm
- Energy efficiency class A++
- Efficiency of up to 95%
- 5-year warranty

Proven heating appliances

Classic Lamda 40 – 60



Classic Lamda 40 – 60, side view



Classic Lamda 40 – 60, front view

1 Fully refractory-lined combustion chamber
2 Sliding grate
3 Secondary air stream with inlet openings
4 Primary air
5 Fly ash separator
6 Ash extraction in ash box
7 Automatic ignition with 300 W
8 Stoker auger
9 Heat exchanger
10 Turbulators with autom. boiler cleaning system
11 Exhaust fan
12 Pellet vacuum turbine
13 Pellet day hopper
14 Fill level indicator
15 Metering double rotary valve
16 Lambda sensor

ECO PK

70 – 120 kW

The Eco-PK systems are large-scale boilers and precisely matched to higher heat requirements. The model up to 120 kW is the entry-level class of Eco high-temperature boilers and is powerful enough for apartment buildings, restaurants or public buildings, meaning that optimum operation can be achieved for suitable property sizes.

- **Cost-cutting** thanks to eco mode
- **Firebed level control** with lambda sensor
- **Step grate**
- **Eco-Control** for very low micro-dust levels

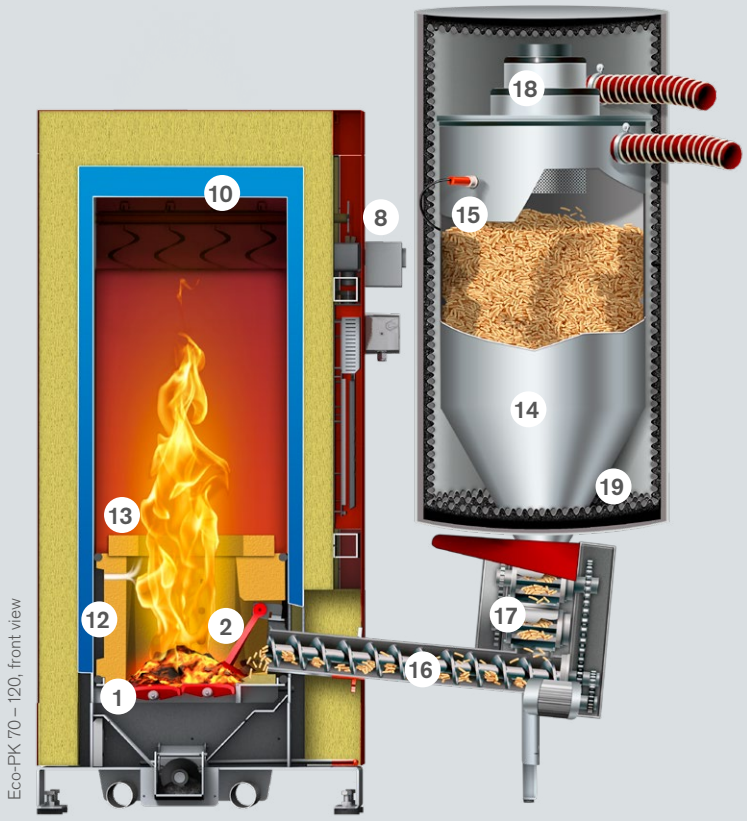
Application areas

- Multi-dwelling units
- Restaurants
- Public buildings
- Commercial & industrial businesses

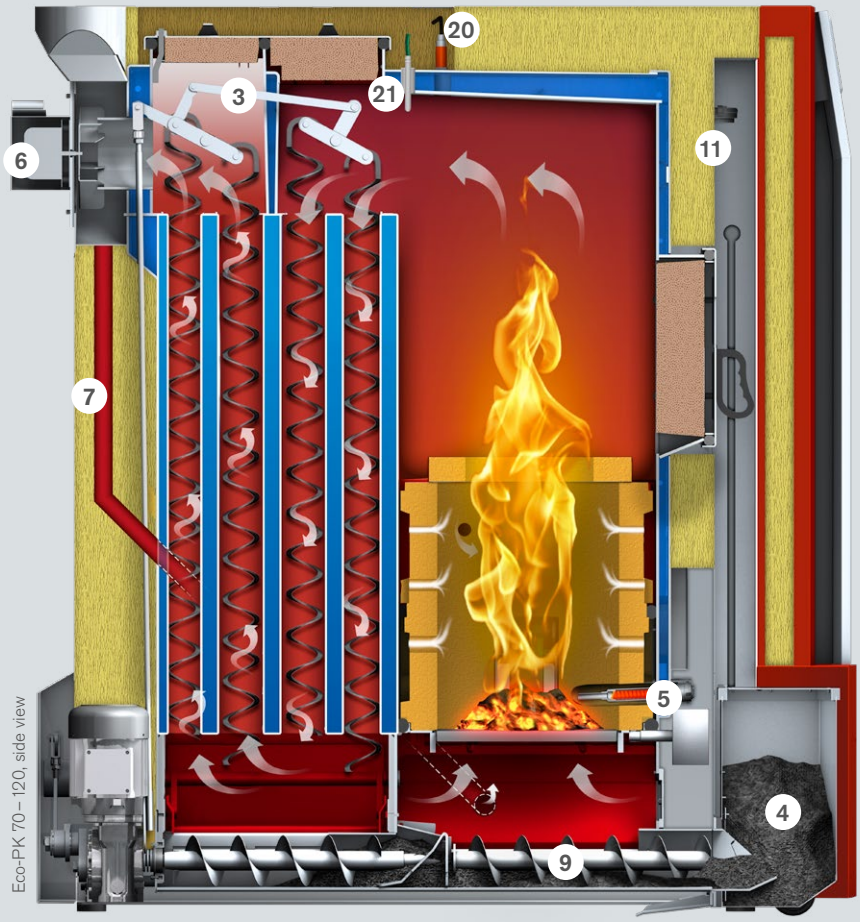
- H x W x D = 1,610 x 745 x 1,560 mm
- Energy efficiency class A+
- Efficiency of up to 95%
- 5-year warranty

Entry-level class of the "big ones"

Eco-PK 70 – 120



Eco-PK 70 – 120, front view



Eco-PK 70 – 120, side view

1 "Step grate" system
2 Firebed level control
3 Turbulators with automatic boiler cleaning device (also in 1st pass)
4 Ash box 30 l; optional: ash suction system for very long maintenance intervals
5 Automatic ignition with 300 W
6 Exhaust fan (EC motor) with negative pressure monitoring
7 Recirculation
8 Integrated back-end protection, optional
9 Ash extraction system for fly and grate ash
10 Heat exchanger: no thermal safety circuit necessary
11 Negative pressure monitoring
12 Fully refractory-lined combustion chamber
13 Flame concentration jets made of high-quality refractory
14 Pellet day hopper
15 Fill level indicator
16 Stoker auger
17 Metering double rotary valve
18 Pellet vacuum turbine
19 Acoustic insulation
20 Lambda sensor
21 Flame temperature monitor

ECO PK
130 – 230 kW

The Eco-PK series in the large output class is the allrounder for higher heat requirements. It is very powerful and well suited for apartment buildings, catering establishments or public buildings.

- **Cost-cutting** thanks to eco mode
- **Firebed level control** with lambda sensor
- **Step grate**
- **Eco-Control** for very low micro-dust levels

Application areas

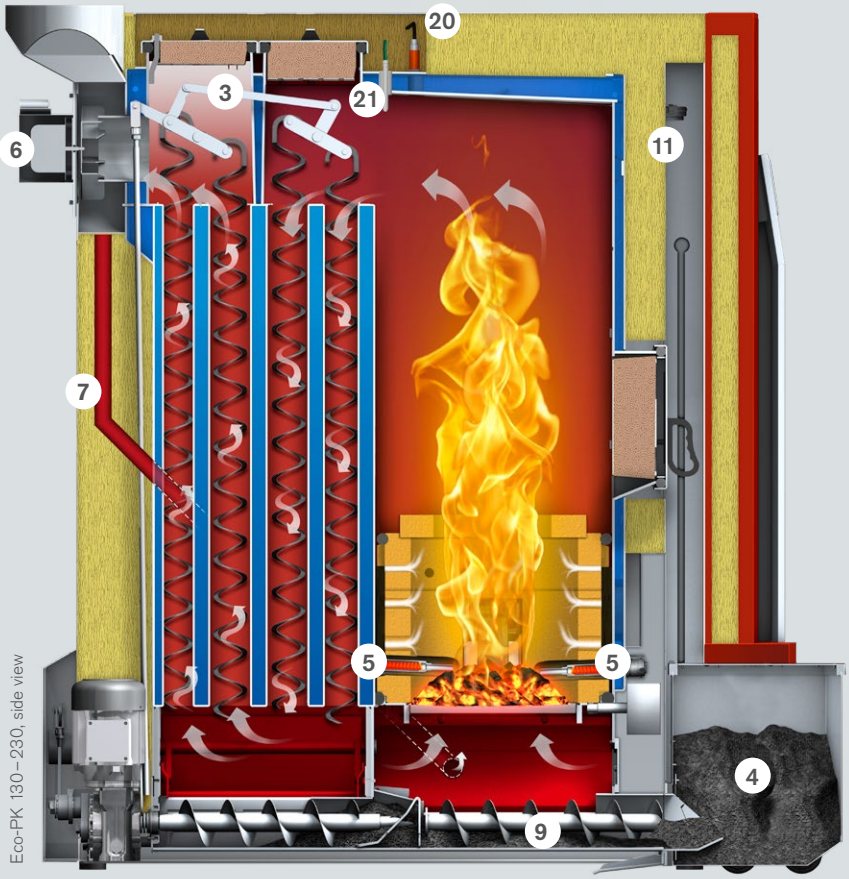
- Multi-dwelling units
- Restaurants
- Public buildings
- Commercial & industrial businesses

- H x W x D = 1,765 x 875 x 1,790 mm (Eco-PK 130 – 170)
- H x W x D = 1,915 x 945 x 1,905 mm (Eco-PK 200 – 230)
- Efficiency of up to 95 %
- 5-year warranty

The allrounder of the "big ones"

Eco-PK 130 – 230

Eco-PK 130 – 230, front view



Eco-PK 130 – 230, side view

1 "Step grate" system
a) De-ash grate
b) Stoker grate
c) Fixed grate
2 Firebed level control
3 Turbulators with automatic boiler cleaning device (also in 1st pass)
4 Ash box (75 l)
5 Automatic ignition with 2 x 300 W
6 Exhaust fan (EC motor) with negative pressure monitoring
7 Recirculation integrated as standard
8 Integrated back-end protection, optional
9 Ash extraction system for fly and grate ash
10 Heat exchanger: no thermal safety circuit
11 Negative pressure monitoring
12 Fully refractory-lined combustion chamber
13 Flame concentration jets made of high-quality refractory
14 Pellet day hopper
15 Fill level indicator
16 Stoker auger
17 Dual metering double rotary valve
18 Pellet vacuum turbine
19 Acoustic insulation
20 Lambda sensor
21 Flame temperature monitor

ECO PK
250 – 330 kW

This output class is the most powerful pellet boiler from the Eco series. The high-temperature boiler is particularly suitable for use in large apartment buildings, hotels, public buildings and enables energy-saving and cost-reducing heating.

- **Cost-cutting** thanks to eco mode
- **Firebed level control** with lambda sensor
- **Step grate**
- **Eco-Control** for very low micro-dust levels

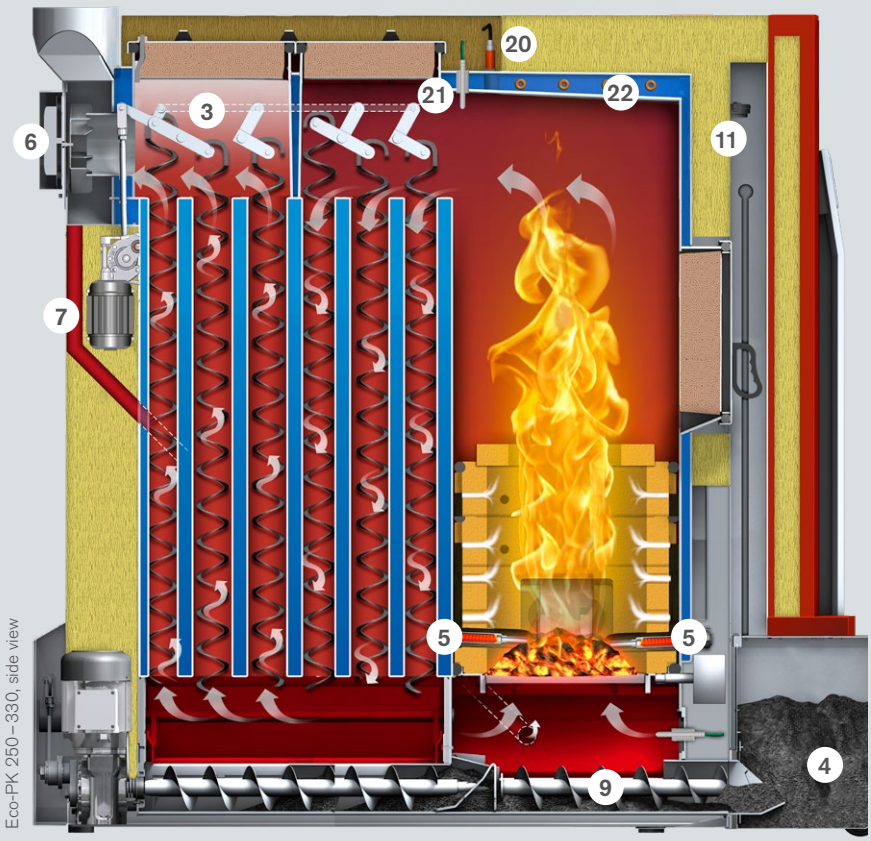
Application areas

- Multi-dwelling units
- Restaurants
- Public buildings
- Commercial & industrial businesses

- H x W x D = 2,015 x 1,155 x 2,285 mm
- Efficiency of up to 95%
- 5-year warranty
- Up to 2 MW possible in cascade connection

The strong power package
Eco-PK 250 – 330

Eco-PK 250 – 330, front view



Eco-PK 250 – 330, side view

1 "Step grate" system
a) De-ash grate
b) Stoker grate
c) Fixed grate; additional breaker grate
2 Firebed level control
3 Turbulators with automatic boiler cleaning device (also in 1st pass)
4 Ash box (75 l)
5 Automatic ignition with 2 x 300 W
6 Exhaust fan (EC motor) with negative pressure monitoring
7 Recirculation
8 Integrated back-end protection, optional
9 Ash extraction system for fly and grate ash
10 Heat exchanger
11 Negative pressure monitoring
12 Fully refractory-lined combustion chamber
13 Flame concentration jets made of high-quality refractory
14 Pellet day hopper
15 Fill level indicator
16 Stoker auger
17 Quadruple metering double rotary valve
18 Pellet vacuum turbine
19 Acoustic insulation
20 Lambda sensor
21 Flame temperature monitoring
22 Cooling coil for therm. safety circuit

ECO PK

Large-scale pellet boiler series up to 330 kW

The pellet boilers from the Eco series are the right choice for all applications that already require a medium to higher heating output. If (up to 6) boilers are connected in cascade, i.e. in series, an output of up to 2 MW is possible. This is heating technology at its best, equipped with many energy-saving extras, so that heat can be produced with reduced emissions and at low cost when energy demands are higher. The "Ecos" stand for effective and efficient heating.

Energy-saving **Eco operation**

Speed-controlled EC exhaust fan with negative pressure control

Hargassner uses energy-saving EC exhaust fans in its Eco-PK boilers. The crucial advantage of this GreenTech EC technology is the significantly higher efficiency level of up to 95%. This saves energy and therefore electricity costs as well. The negative pressure unit constantly measures the pressure conditions in the combustion chamber. The "Lambda Touchtronic" control software regulates the speed of the exhaust fan, thus keeping the negative pressure at an ideal level. This concept ensures combustion with the lowest possible emissions and therefore maximum efficiency.

Energy-saving ignition

Thanks to the new design of the ignition element, the power consumption has been reduced to just 300 W (up to 1,000 W less)* and, at the same time, the efficiency of the ignition process has been increased.

- ✓ **Energy savings of more than 88 %**
- ✓ **Smart ignition monitoring**
- ✓ **Silent operation**

One boiler – **two options**

Suction extraction system with day hopper for pellets

The wood pellets are suctioned out of the fuel storage room, temporarily held in the day hopper and fed into the boiler via a double rotary valve.

Direct fuel extraction system (RAP) for pellets

The wood pellets are transported by means of a direct auger from the pellet storage to the boiler.

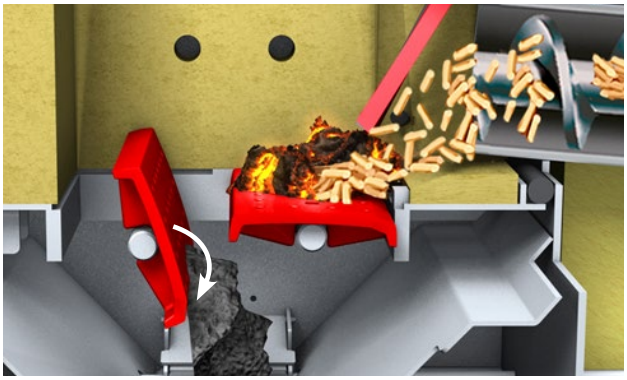
Eco-PK 70 – 120 with hopper

Eco-HK 70 – 120 with RAP

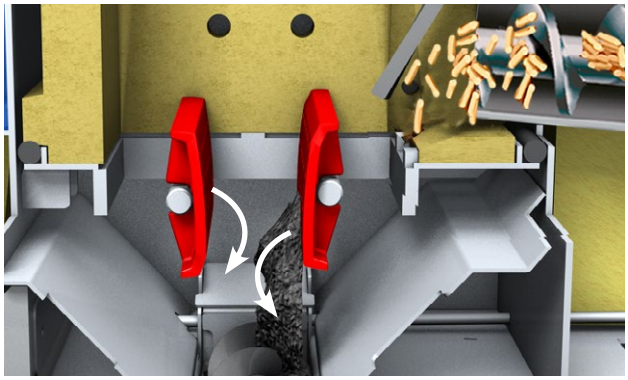
* Eco-PK 130 – 330 have two ignition elements; EC technology = brushless energy-saving motor, RAP = fuel extraction for pellets

Strong **step grate**

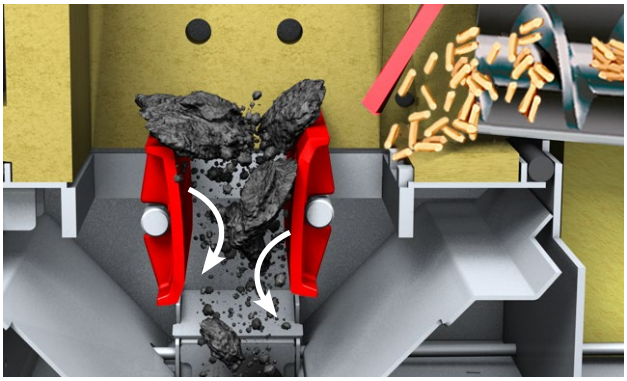
Closed grates in the combustion chamber with a high firebed – optimises the **gasification process and minimises micro-dust emissions.**



During the heating cycle, only the **rear rotary grate** is opened during the de-ash process. The ash falls down, the residual embers remain and enable further combustion of the newly extracted fuel.



The combustion chamber is cleaned completely before the boiler is restarted. **Both grates open** and cold ashes and foreign bodies such as stones or nails are disposed of.



For fuel with a very low melting point, the rotary grate's additional "**breaker function**" will break the clinker.

Sophisticated technology

Fully refractory-lined combustion chamber with standard recirculation

The refractory combustion chamber's **very good storage effect** guarantees high combustion temperatures (even for partial load), minimises the number of times the boiler has to be ignited and reduces emissions.

Every Eco-PK has **flue gas recirculation** integrated as standard to combat ash clinkering caused by dry fuel or fuel with a low ash melting point. Cooling the firebed prevents the ash of low-grade fuels with low melting points from melting. The residues can then be disposed of very easily via the ash extraction system.

Independent firebed monitoring

Non-contact sensors monitor the height of the firebed, so the most efficient combustion condition is achieved.

Lambda sensor control

The **lambda sensor** integrated into the control unit detects the calorific value of the fuel and thus regulates the optimum fuel/air mixture.

Automatic pellet transport

The hopper in the boiler is **filled automatically**. A suction system transports the pellets via the fuel extraction system into the hopper with the help of a turbine. With suction hoses and air, the wood pellets can thus be transported up to 20 m from a storage room.

A **metering double rotary valve** in a solid steel design provides 100% protection against burn-back. The fuel falls through the rotary valve into the feed auger in a constant quantity. This then transports the pellets directly into the combustion chamber.

Optimised cleaning for high convenience

ALL heat exchanger pipes – including the first pass – are cleaned at regular intervals. The edges of the auger turbulators efficiently remove any fly ash residue from the boiler pipes and this drops straight onto the ash auger. Both the fly ash and the grate ash are transported into a **fully integrated ash box** by just **one** ash extraction auger. The residues are crushed as they are being transported and then compacted in the box, resulting in increased annual efficiency and a higher degree of cleaning convenience.

With Eco-PK 70 – 230, only one drive is required for heat exchanger cleaning and ash extraction. Optionally, there are also different ash transportation systems in a 240 or 300 l ash bin.

For even better **and clearer air**

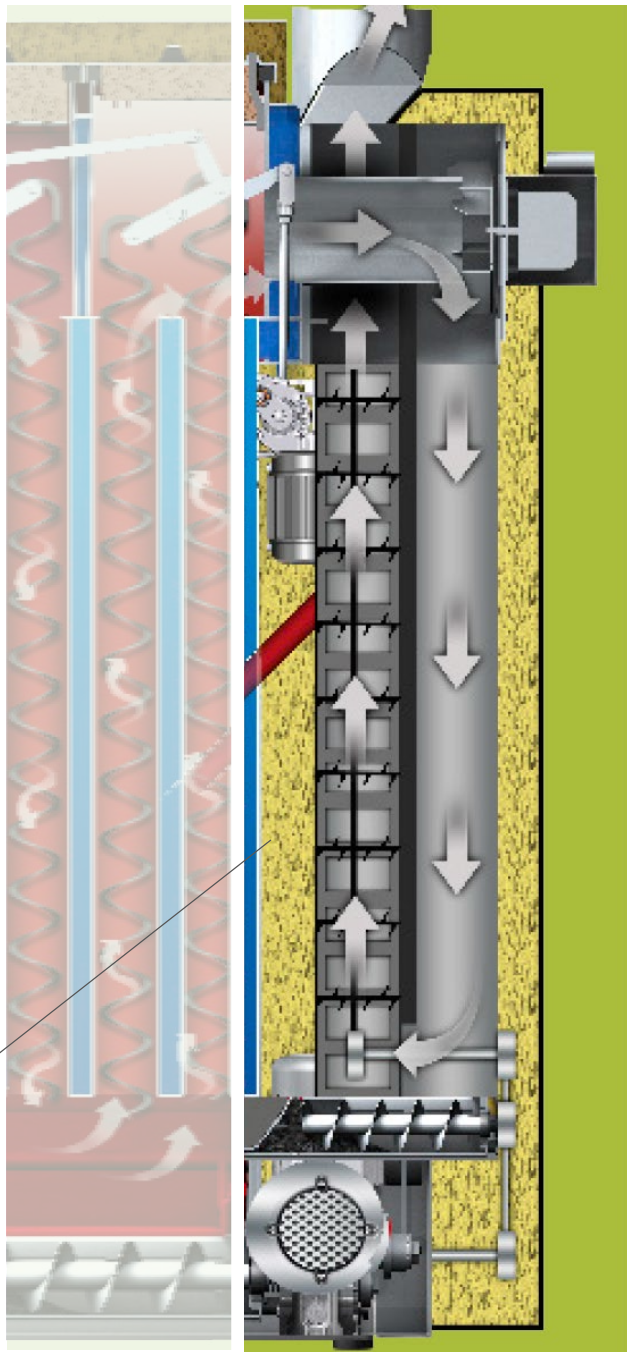
PARTIKELFILTER
6 – 230 eCLEANER

Unique filter technology

The filter will significantly reduce your boiler's micro-dust emissions, depending on the quality of the fuel it's running on.

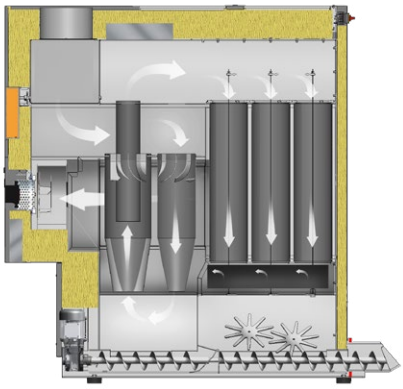
Electrostatic particle charging takes place in the eCleaner. They deposit on the walls and fall down through the automatic cleaning device. An auger moves them to the boiler's ash box.

- **Low space requirements**
- **Micro-dust emissions** minimised
- **Automatic cleaning and transport** into the ash box
- Optional, easy to retrofit at any time



MULTI ZYKLON
Combined with eCleaner

- **Specially for Eco-PK & Eco-HK 130 – 330**
- **Total dust** minimised
- **Accessories: Large ash box**
  75 litres or AFS with 240 litres or 300-litre bin



Anywhere, **anytime**

Hargassner app
Click here to download for iOS!

Hargassner app
Click here to download for Android!

APP AWARD 2022
1. PLATZ
Heizungshersteller

Awarded
1st place for the
App-Award 2022

SMART HOME & BOILER ACCESSORIES

Control accessories for every need

The Hargassner standard control covers the majority of the requirements in a modern house. However, if further heat circuits, solar collectors, etc. are to be connected, additional boards and remote controls are available. The right solution for every requirement: for more information, visit our homepage or contact your Hargassner installation company.

Heat circuit module HKM: This heat circuit module is used to extend heat and HWT circuits. It is integrated into the control unit of the entire system and controls up to two mixer-controlled heat circuits & one HWT circuit with DHW circulation pump. Additionally, an external heat circuit or an accumulator tank and other HKM's can be connected.

Heat circuit controller HKR with touch: The HKR is a weather-compensated outdoor temperature controller with touch control unit. The controller sends the heating system the information about whether to heat up or not. This way, the room heat can be controlled and kept constant with a maximum of eight heat circuits and five HWT circuits. Among other things, this automatic feature ensures energy-saving heating operation. "Standalone operation" is also possible.

Additional boards: Hargassner offers a wide variety of additional boards for extending heat circuits, etc. **Additional board A/B** are used to add a heat circuit and a hot water tank to a heating system. **Additional board F** is used to control mixed district lines. If up to two additional sensor inputs are required, **additional board PF** is used. Furthermore, there is also **additional board S**, which acts as a differential controller for a solar system in single-circuit or double-circuit operation. Your specialist Hargassner dealer will be happy to explain all other additional boards and their exact use to you.

Remote control via phone or tablet

App for mobile boiler control

The Hargassner app allows you to control the boilers quickly and on the move and view information worldwide around the clock. The app immediately sends important information to the mobile end device via email or push message. This way, you know the status of the boiler at all times. (Requirements: Internet connection to the control unit on the boiler, smartphone with Android or iOS)

Convenient remote controls

You want to change a setting on your boiler or see the current status – without going to your boiler room? No problem! The practical remote controls leave no operating wishes unfulfilled. They are simple, intuitive and boast a design that's perfectly tailored to your needs! Details of our analogue and digital (touch) remote controls can be found on our website hargassner.com

Smart home connections

"Smart home" is an innovative way of controlling the management of energy in your home according to your needs. Hargassner has a connection ready for the most common home automation systems (Loxone, KNX, Mod-Bus, etc.). The benefits are clear. You save energy and costs and enjoy comfort and safety at the same time.

LOXONE KNX Modbus

Simple **boiler operation**

Hargassner has control programmes for all boiler series; these programmes are all clearly arranged and easy to use. They provide a convenient way to control heat circuits and hot water.

Hargassner Lambda Touchtronic
This software controls the Nano-PK, Classic Lambda and Eco-PK boiler series from transport of the fuel and combustion to the heat circuits and hot water tanks. It is guided by weather conditions, so recognises changes in conditions as soon as they occur and seamlessly adjusts the boiler's output accordingly. As a result, the boiler is always running in the optimum output range, enabling you to save both fuel and unnecessary costs.

Hargassner Smart-Touch
The Smart-PK boiler series is equipped with Hargassner's new Smart-Touch control unit. It is complemented by extra capacity for up to three mixed heat circuits and hot-water production, provided in the form of an additional board or module. An interface for combi operation of a pellet boiler with a Hargassner wood log boiler has also been integrated. This makes the new Smart-Touch control a perfectly tailored solution for the entire heating system.

Lean back and relax –
your heating system will do the rest!

Control of heat circuits

The **Lambda Touchtronic** can control multiple heat circuits that are independent of each other. You can specify different settings in detail. For example, you can specify the room temperature you would like on a particular heat circuit at a particular time of day.

Hargassner's **3G day/night reduction mode** makes it possible to set three outdoor temperature thresholds. One mode for "Heating during the day", one for "Reduction during the day" and one for "Reduction during the night". As a result, the heating system only operates if necessary – this is convenient for energy saving. Thanks to the clever residual heat use feature, the energy remaining in the boiler after it has been shut down is efficiently fed into the heat circuits.

Hot water tank

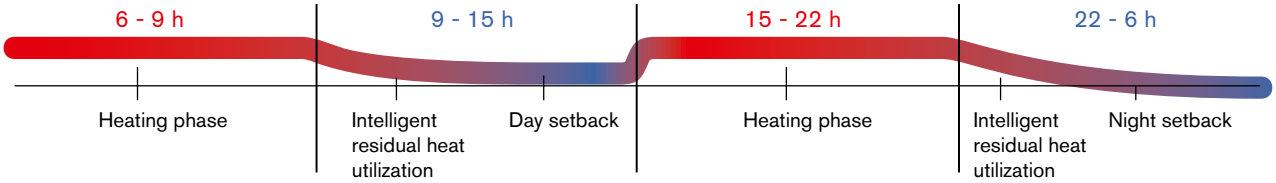
It's only necessary to set the desired hot water tank temperature and loading time. The control unit takes care of the rest. Hargassner guarantees hot water - 24 hours a day.

Another advantage is the automatic HWT priority. This ensures that the room temperature does not cool down during hot water tank loading periods.

Your home therefore remains warm and cosy at all times.

Example of a day heating sequence with reduction logic

Fixed outdoor thresholds above which heating is required:
Day from 16°C, night from - 5°C (22:00 – 6:00 h)



Heating period 1

06:00 – 09:00: Outside it is -7°C, well below the defined threshold of +16°C. **The boiler switches on.**

Day reduction period

09:00 – 15:00: Outside, the temperature rises to -1°C, which is below the day reduction threshold of +8°C. **The boiler switches on in day reduction mode.**

Heating period 2

15:00 – 22:00: The outside temperature rises to +1°C, which is considerably lower than the threshold of +16°C. **The boiler remains on.**

Night reduction period

22:00 – 06:00: The temperature cools down to -2°C, which is above the night reduction threshold of -5°C. **The boiler switches off.**

Always a **suitable solution**

Optimum storage and transport **of pellets**

Hargassner offers the right storage system for every customer.
From bag silos to fuel extraction systems and point extractions to underground tanks. Interesting solutions for buildings with too little space are container heating modules placed outside. These consist of a technical room and have an appropriately dimensioned storage room integrated.

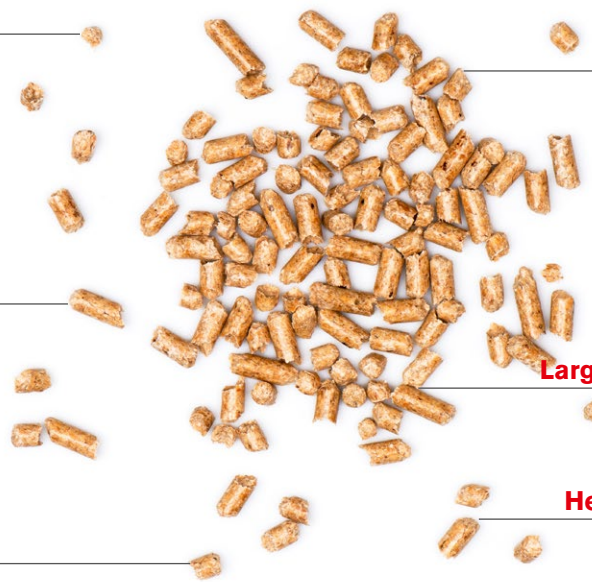
Storage room for pellets
Interesting information

Size
Calculation formula of the storage space:
Storage room size in m³ = building heating load in kW x 0.90 Pellet requirements in tonnes = building heating load in kW x 0.40

Example: A detached house with a building heating load of 15 kW requires a storage room of 13.50 m³, which corresponds to approx. 2 x 3 m of floor space and a height of 2.2 m. The calculated reserve allows you to buy pellets at the best time every year.

Position
The pump hose of a pellet tanker is max. 50 m long. The distance between the storage room and the boiler room must not exceed 20 m.

Requirements for the storage room
The storage room should be as dry as possible. The design in residential areas (in Austria) must be fire-resistant in accordance with fire resistance class F 90 (depending on the applicable building regulations). Electrical installations are not permitted and water-carrying pipes should be avoided.



Bag silo
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Fuel extraction auger
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Underground tank
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Weekly storage
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Large-scale boiler extraction systems
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Heating modules
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Point suction
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Bag silo – complete storage room system

Hargassner also offers a range of different types and sizes of bag silos for pellets – from 2 to 8.2 t storage capacity. You choose between a fixed (GWTS) or "growing" (GWT-MAX) solution.

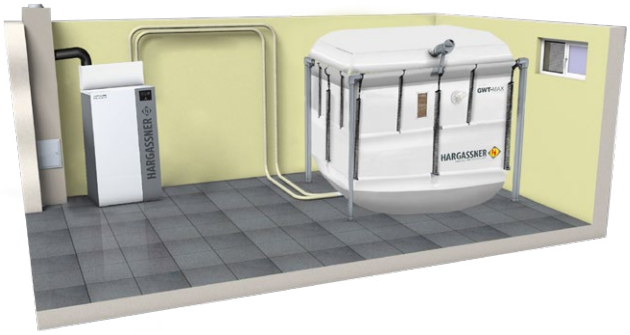
- **Minimum space requirements**
- **Quick and easy to install**
- **Dust-tight, durable and antistatic filter fabric**
- **Protected against condensation**
- **Flood protection cover optional**
- **Outdoor installation possible**
  For details, see installation

Design & material: The bag silo consists of a high-quality, durable, anti-static and dust-proof filter fabric with a tubular steel frame. The fabric is water-repellent (condensation). As protection against floods, we offer a special flood protection cover.

Installation: The bag silo can be installed in the boiler room but also in adjacent buildings (depending on the applicable building regulations). If it is installed outdoors, it must be placed on a surface that is guaranteed to remain stable and also given an all-over cover that protects it from UV radiation and moisture.

GWTS = bag silo, GWT-MAX = bag silo MAX

Pellet storage at the cutting edge



Bag silo GWTS
for 2 – 6.5 t pellets
The stable GWTS bag silo is equipped with point extraction. The four-sided sloping floor guarantees complete emptying. If required, several bag silos can also be connected together with a changeover unit.

Bag silo GWT-MAX
for 2.5 – 8.2 t pellets
The "growing" GWT-MAX bag silo has an elastic base element with tension springs. If it is filled, the base suspension elements at the side drop due to the weight of the pellets. This enables the silo to be filled to a maximum. If the silo is emptied, the base is pulled upwards. This ultimately creates a four-sided sloping floor for complete emptying. If required, several bag silos can also be connected together with a changeover unit.

Space requirements & sizes:

Type: GWTS

Bag silo	Filling weight	Width x depth x height
GWTS 160 x 160	2,0 – 2,5 t	168 x 168 x 195 – 250 cm
GWTS 200 x 200	3.1 – 3.8 t	208 x 208 x 195 – 250 cm
GWTS 200 x 250	3.7 – 4.6 t	208 x 258 x 195 – 250 cm
GWTS 250 x 250	4.4 – 5.7 t	258 x 258 x 195 – 250 cm
GWTS 250 x 250 XL	6.5 t	258 x 258 x 270 cm

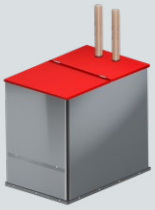
Type: GWT-MAX

Bag silo	Filling weight	Width x depth x height
GWT-MAX 160 x 200	2.9 – 3.8 t (2.5 t)*	168 x 208 x 195 – 250 cm (175)*
GWT-MAX 200 x 200	3.6 – 5.0 t (3.1 t)*	208 x 208 x 195 – 250 cm (175)*
GWT-MAX 160 x 250	3.6 – 5.0 t (3.3 t)*	168 x 258 x 195 – 250 cm (185)*
GWT-MAX 200 x 250	4.4 – 6.0 t (4.1 t)*	208 x 258 x 195 – 250 cm (185)*
GWT-MAX 250 x 250	5.6 – 7.6 t (5.2 t)*	258 x 258 x 195 – 250 cm (185)*
GWT-MAX 250 x 250	max. of 8.2 t	258 x 258 x 280 cm

* The feet of the GWT-MAX 160 x 200 & 200 x 200 can be shortened by up to 20 cm to allow an installation height of 175 cm.
The feet of the GWT-MAX 160 x 250 & 200 x 250 & 250 x 250 can be shortened by up to 10 cm to allow an installation height of 185 cm.
This also reduces the filling volume (weight/height) accordingly.

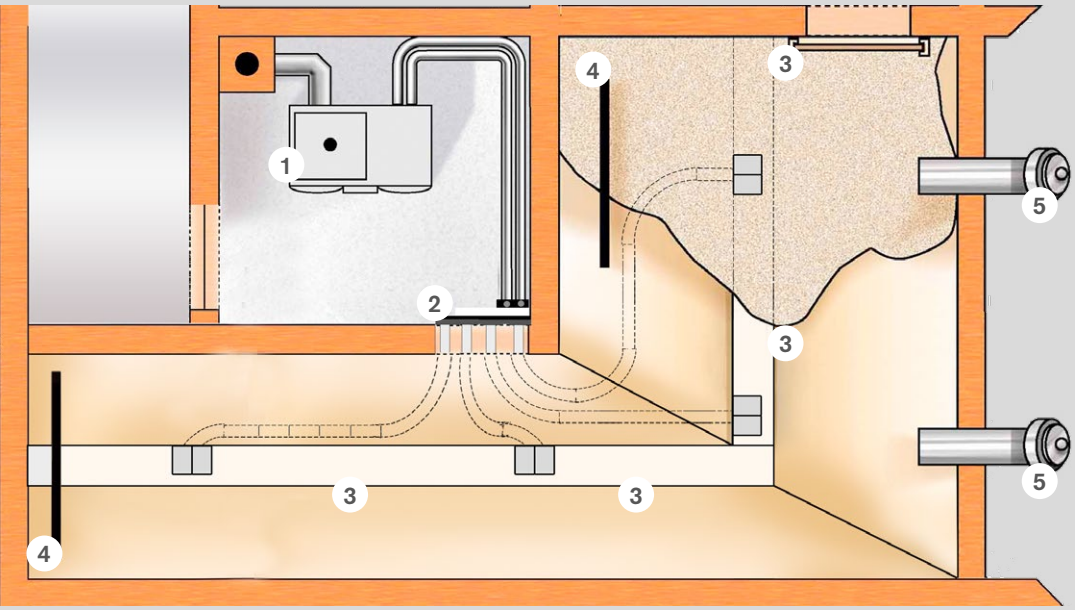
Small pellet stores for indoor use

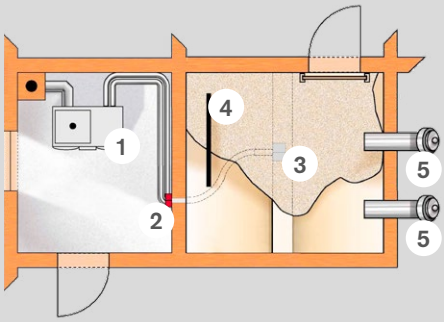
There are two different week hoppers. The standard hopper has an optimal filling height and a large filling space; therefore, it is very convenient to fill with bags. The second week hopper is specially developed for the combination with the Nano-PK pellet boiler and impresses with its tall, narrow design.



Weekly storage
- 770 l filling chamber
- for 500 kg pellets
- 770 x 1,150 x 1,090 mm
- Filling with bags

Nano-PK
Weekly storage
- 340 l filling chamber
- for 220 kg pellets
- 580 x 580 x 1,220 mm





1 Pellet boiler
2 Manual or automatic changeover unit for several point extraction systems
3 RAPS point extraction
4 Impact protection mat
5 Fill socket

Complex room section with four extraction points (RAPS)

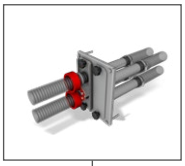
Point suction

ideal for all room shapes

No matter whether small, square or complexly cut storage rooms, a point extraction system (RAPS) works everywhere.

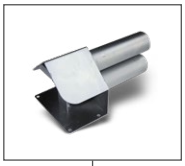
One or more flexible extraction points suck the pellets out of the storage room. For this purpose, sloping floors made of wooden boards with a 35 degree slope are installed beforehand. They guarantee good emptying towards the extraction points. If an area of the storage room is empty, the system switches manually or automatically to another extraction point. The changeover units (AUP) are available in 2-, 3-, 4- or 8-fold versions. They can even be used in small rooms without a sloping floor.

- ✓ **Ideal for small to complex rooms**
- ✓ **Distances up to 20 m**
  between storage & boiler room
- ✓ **Makes optimal use of the room volume**
- ✓ **AUP saves costs**
- ✓ **No sloping floor** necessary in small storage rooms

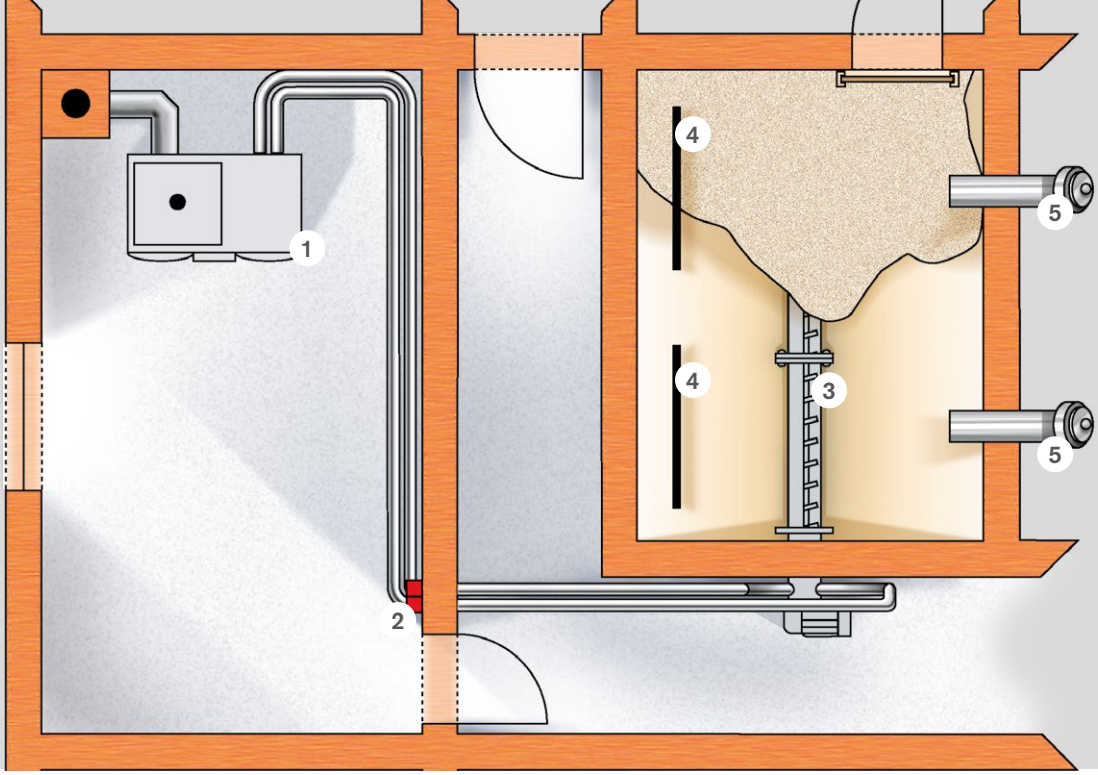


Manual changeover unit for two or three RAPS point extraction systems

Automatic changeover unit for two, three, four, six or eight RAPS point extraction systems



RAPS point extraction



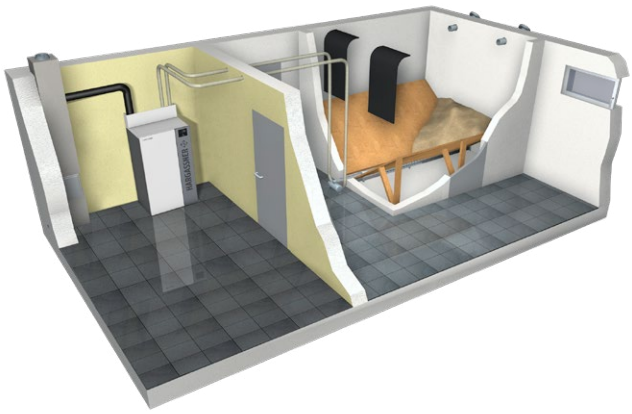
1 Pellet boiler
2 Fire protection sleeve
3 RAS fuel extraction auger
4 Impact protection mat
5 Fill socket

Fuel extraction auger

reliable for any size

Thanks to the combination of suction system and extraction auger (RAS), every pellet finds its way safely to the boiler.

Fuel extraction augers show their robust strength in long storage rooms with space for an extraction motor. With the transport auger, the pellet quantity can be finely adjusted during transport. The suction system is completely emptied when it is switched off, thus avoiding overfilling jams. Sloping floors help with the optimal feed of pellets to the auger. It is even possible to combine two extraction augers, in which case an automatic changeover unit (AUP) is used to switch between them.

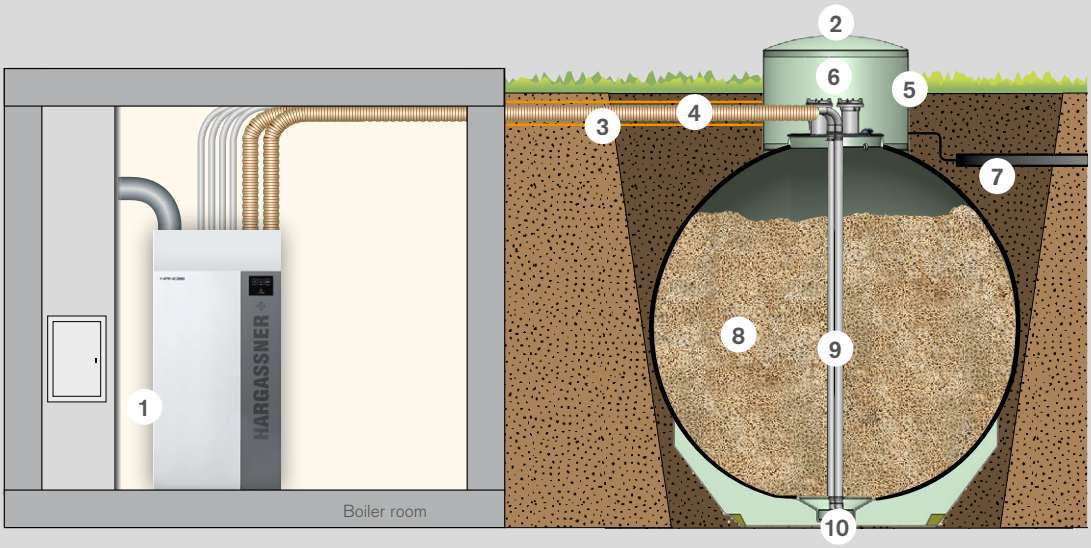


- ✓ **Ideal for long rooms**
- ✓ **Distances up to 30 m**
  between storage & boiler room
- ✓ **Robust and reliable**
- ✓ **Makes optimal use of the room volume**
- ✓ **Auger lengths of 1.5 – 8 m**

Fuel extraction auger RAS from 1.5 – 8 m

Changeover unit AUP

RAPS = fuel extraction pellet suction, AUP = automatic changeover unit, RAS = fuel extraction auger, RAP = fuel extraction for pellets



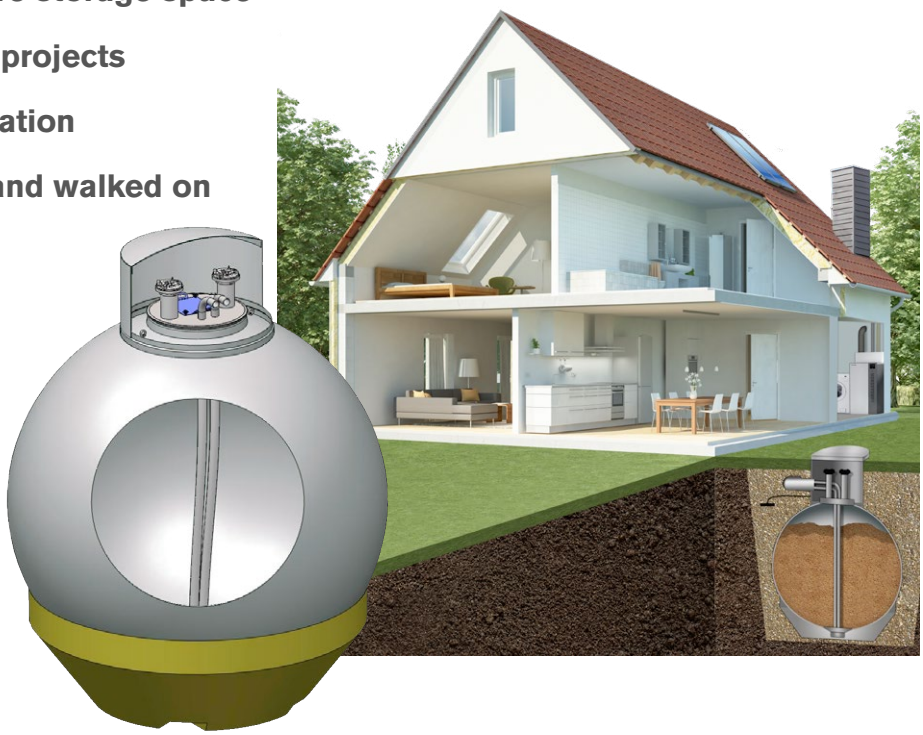
1 Pellet boiler
2 Pellet underground tank
3 Protective underground pipe
4 Pellet suction hoses
5 Dome shaft
6 Filling nozzle
7 Earthing
8 Filling material
9 Pellet steel pipes
10 Pellet extraction system

Underground tanks

a great thing for simply more space

Hargassner pellet underground tanks (PET) are ready-made spherical storage rooms for underground use. By simply sinking them into the garden or driveway, they create open spaces in the house for life.
The corrosion-resistant and glass-fibre reinforced polyester resin requires no further reinforcement and ensures maximum operational reliability. From above, you can only see a discreet cover. This can be walked on and (optionally) driven over. The special system enables easy extraction of the pellets and almost complete utilisation of the spherical volume. Underground tanks eliminate a pellet storage problem, making them the optimal solution for buildings with little or no space for a storage room. This saves conversion costs.

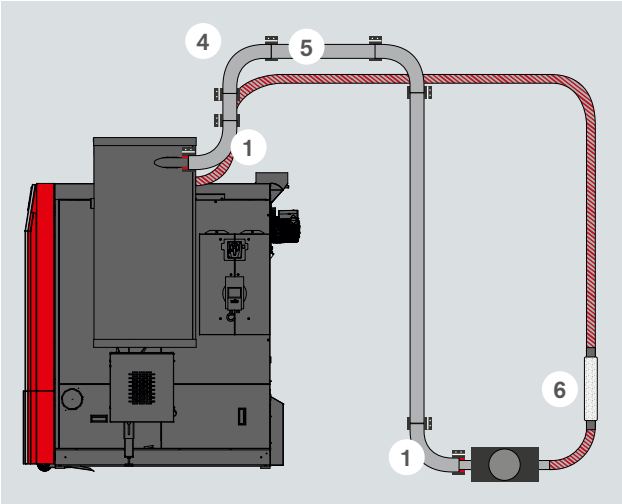
- **Creates cost-effective storage space**
- **Ideal for renovation projects**
- **Concrete-free installation**
- **Can be driven over and walked on**



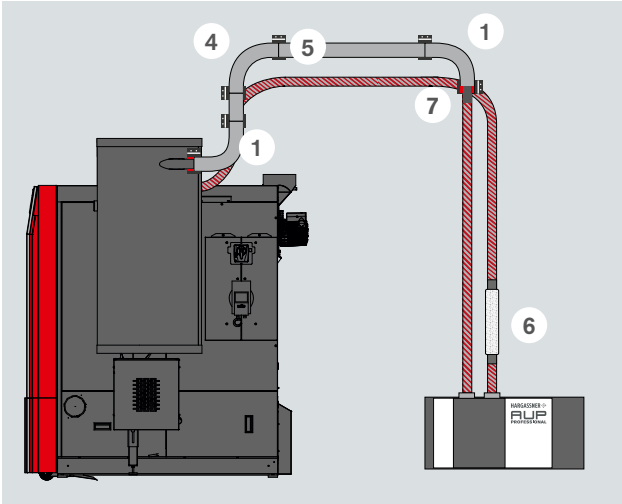
PET = Pellet underground tank

Steel suction tube system for pellets

For systems from 130 kW, we recommend an installation with steel pipe systems instead of the suction hose. The maximum suction length increases by 10 m depending on the extraction type. For point extraction at 30 m or 40 m with RAS auger fuel extraction.



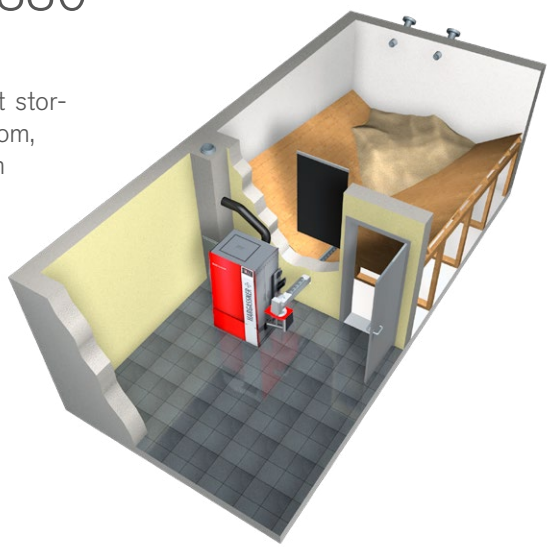
Sketch structure RAS 1; fig. side view ; FL steel/RL suction hose

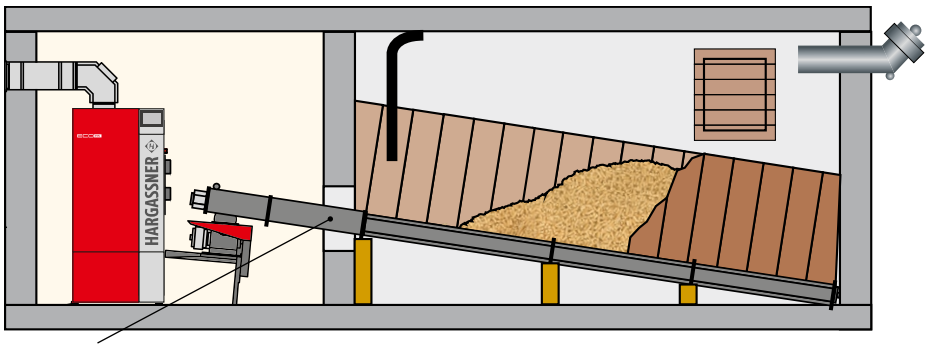


Sketch structure AUP 1; fig. side view ; FL steel/RL suction hose

RAP direct auger for Eco-HK 70–330

The pellets are transported by means of a direct auger from the pellet storage to the boiler. Open pellet troughs are located in the fuel storage room, whose modular design makes them optimally adapted to the room length. Outside, they can be lengthened individually with closed extensions (of up to 6 m). Various accessories can be added to the RAP direct auger. Here are some examples: Ascending auger, vertical connection auger, etc.





Extension

RAS = fuel extraction auger, AUP = automatic changeover unit for pellets, FL = flow, RL = return

Heating modules for outdoor – storage with a system

Our heating container with a boiler and integrated pellet storage room saves an enormous amount of space in the building and generally makes it easier to switch to biomass.

This ideal combination of external boiler and storage rooms comes as a cost-effective system design and as single, double or multiple containers. The modules allow individual lengths, widths and heights and, of course, heat outputs and can therefore be used everywhere from detaches houses, public buildings, commercial and industrial buildings to local heating power plants (heat contracting). They are also very good price-performance ratio.

- **Set up quickly and easily**
- **Customised size & design**
- **Additional storage space**
- **Easily to expand**

Eco-Box 9 kW pellets, detached house

Eco-Box 20 kW Pellets, apartment building

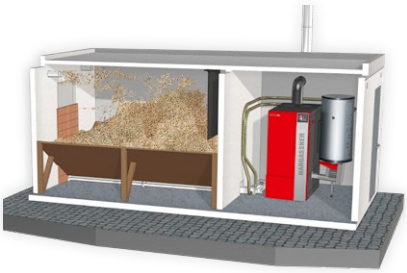
Eco-Box
the external space miracle for the entry-level class

The Eco-Box is a special version of the single-floor heating module with storage capacity for up to 8 t of pellets. Equipped with a silo bag as a pellet storage hopper, the Eco-Box remains maximally free inside, which brings space for up to 17 m² of extra storage area in the container. A roller shutter creates a large access point with a flick of the wrist. The Eco-Box is ideal for external solutions for a modern detached house.

Eco-Box
for 4 – 8 t pellets
for pellet systems of 6 – 49 kW
- Detached and semi-detached houses
- For buildings with limited space
- A crane is not required for positioning
- Up to 17 m² of extra storage space

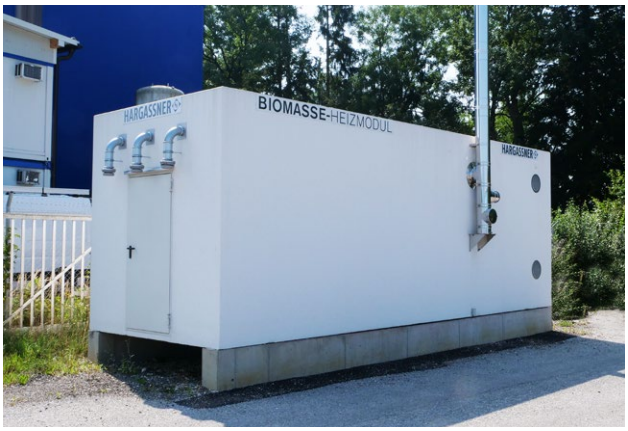
Optimum heating solution
for all applications

A Hargassner heating module can be dimensioned to suit any type of building. Of course, all wishes are open to you in terms of exterior design: whether plain in the standard version with a concrete wall, clad to match the house or commercial property.



Single floor heating module
for 9 – 19 t pellets
for pellet systems of 40 – 200 kW
- Apartment buildings
- Hotels

Double-floor heating module
for 18 – 29 t pellets
for pellet systems of 140 – 660 kW
- Apartment buildings
- Hotels, industry, contracting



Single-floor heating module 120 kW for pellets, commercial property

Double-floor heating container 2 x 90 kW pellets, industry

Accumulator systems for storing heat

By storing heat in an accumulator or domestic hot water tank, the boiler does not have to be in operation all the time and can therefore be operated efficiently. Depending on the model, either the heating water, the domestic water or both are stored.

Nano-PK hot-water storage tank WS 210

This storage tank is perfectly matched to the Nano-PK series. The heating surfaces are optimally dimensioned and ensure a short heat up time for the high continuous output. Thanks to the connection set available, the WS 210 can be installed and commissioned very quickly.

Household
People: 4*

Baths
Evening: 1*

Showers
Morning: 3* &
Evening: 2*

Nano-PK hybrid accumulator tank HWS 320 FWS / FWS-Z

This particularly compact heat storage tank with a space requirement of only 0.36 m² was specially developed for and matched to the Nano-PK series. It is available with a classic accumulator function as a pure compensating heat storage tank or supplemented with a freshwater station – optionally with or without a hot water circulation pump.

Expansion tank: HWS 320
- Heat storage tank with 315 l volume
- Optimum accumulator volume as an expansion function

With freshwater module:
- Hygienic hot water preparation
- Fully installed components

Household
People: 4*

Baths
Evening: 1*

Showers
Morning: 3* &
Evening: 2*

*The values given are guide values that depend on user behaviour and the actual temperature settings

Universal heat storage tank – layered accumulator SP for 500 – 5,000 l

The layered accumulator SP and its solar variant can be used for all Hargassner boilers. The Hargassner partner installation company will be happy to recommend the right solution. The addition of a freshwater station to the models is planned. The heat energy is used efficiently thanks to an integrated return spread sheet and the variable sensor positioning. This saves heating costs in the long run. Depending on the model, either the heating water alone or heating and domestic water are stored.

- **Optimised energy utilisation** by a special spread sheet in the accumulator tank
- **Efficient insulation** with hard casing
- Suitable for **combination with solar**
- **Easy and flexible installation**, can be switched in parallel
- **Very little space required**
- **Special accumulator sizes** available on request

Layered hygienic accumulator HSP – for 500 – 1,500 l

By means of the continuous flow principle and a built-in corrugated stainless steel pipe, this accumulator also enables domestic hot water to be heated. The generous size guarantees a high hot water output that is also safe from legionella. The HSP uses the heat energy particularly efficiently thanks to an integrated return spread sheet and variable sensor positioning. This heat storage tank is also available as a solar variant.

- **Hygienic hot water production**
- **Optimised energy utilisation** by a special spread sheet in the accumulator tank
- **Efficient insulation** with hard casing
- Suitable for **combination with solar**
- **Easy and flexible installation**, can be switched in parallel
- **Very little space required**
- **Calcification protection through** flexible stainless steel corrugated pipe

SP = layered accumulator, HSP = hygienic layered accumulator, WS = hot-water storage tank, HWS = hybrid accumulator tank, FWS = freshwater module, FWS-Z = freshwater module with circulation pump

Sunny outlook for the future

Premium **solar panels**

As an ideal complement to biomass heating systems, Hargassner offers high-quality solar panels for the preparation of heating and hot water. They are available as flat-plate collectors with high performance and a long lifetime, and they are available in reinforced versions for regions with high snow loads. The Hargassner Group also markets vacuum flat-plate collectors globally.

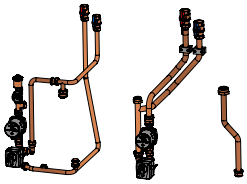
Hargassner is the full-range supplier for biomass central heating systems.
Hydraulic components, accessories of all kinds are available extensively and in individual designs for all requirements. Precise coordination of the entire heating solution guarantees optimal cooperation of each individual component with each other. Additional information can be found in further product brochures or on hargassner.com (also as download).

Find out more about our heating accessories at hargassner.com

Versatile **heating components**

Substation, heat meter, freshwater station & heat circuit groups

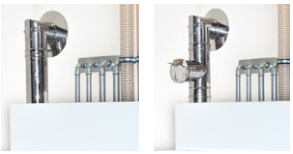
Expandable hydraulic components for heat circuit groups, freshwater preparation, etc. are adapted to the Hargassner boilers. Their control functions are taken over exactly by the Hargassner control system on the boiler.



from left to right: IHM base module, extension IHM 1, extension IHM 2

Integrated hydraulic modules

A wide variety of designs are available for the hydraulic modules of the Nano-PK and Smart-PK pellet boilers. All pumps, connections and piping are easily accessible and run upwards.



e.g. stainless steel flue pipe connection set Ø100/130 mm AIO and ADO

Stainless steel flue pipe connection set Ø 100/130 AIO / ADO or Ø 150 mm

The high-quality flue pipe sets in various diameters made of stainless steel integrate all the necessary components such as bows, pipes, boiler collars, seals and clamp rings. Available as air-dependent operation (ADO) with integrated chimney draught stabiliser (explosion protection) and air-independent operation (AIO) without chimney draught stabiliser or on-site on the chimney.

OekoTube-Inside

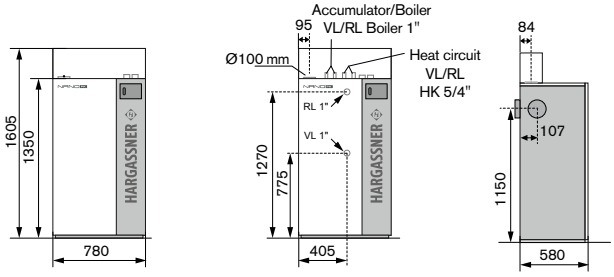
The OekoTube-Inside is an electrostatic micro-dust separator recognised and eligible for funding by BAFA (Germany's Federal Office for Economic Affairs and Export Control) as an approved measure for reducing micro-dust levels. The separator is suitable for wood log and pellet boilers up to 60 kW.

AIO = Air-independent operation, ADO = air-dependent operation

TECHNICAL DATA

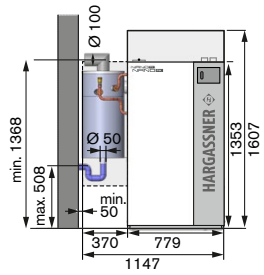
Nano-PK 6 – 15

Nano-PK 6 – 15



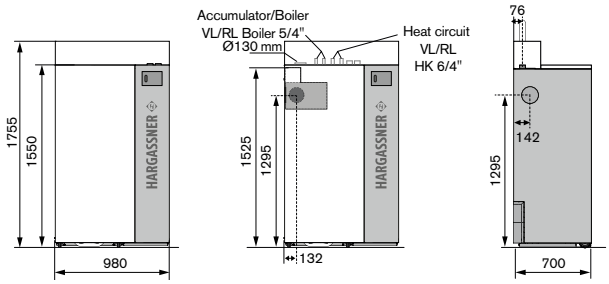
* Version with eCleaner upon request

Nano-PK 6 – 15 PLUS



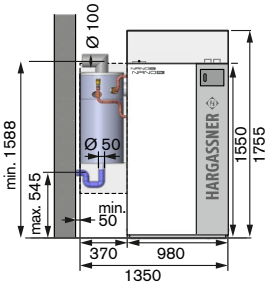
Nano-PK 20 – 32

Nano-PK 20 – 32



* Version with eCleaner upon request

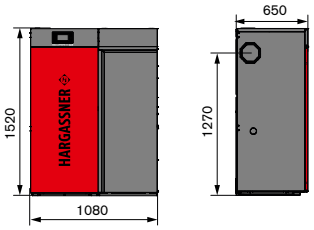
Nano-PK 20 – 32 PLUS



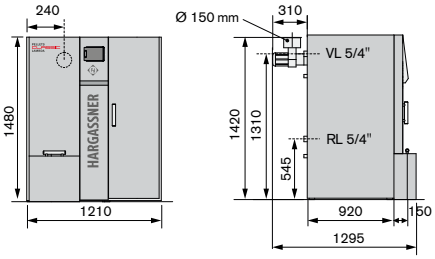
Smart-PK 17 – 32

Smart-PK 17 – 32

Classic Lambda 40 – 60

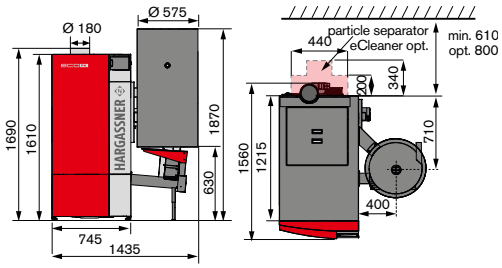


Classic Lambda 40 – 60

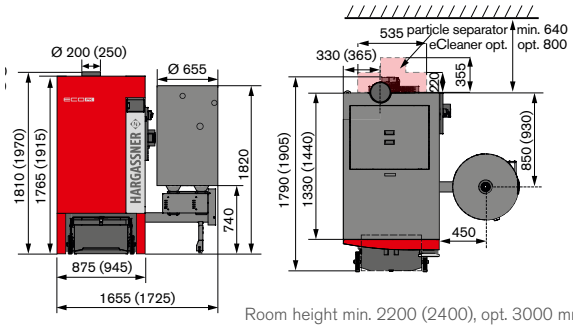


Eco-PK 70 – 120

Eco-PK 70 – 230



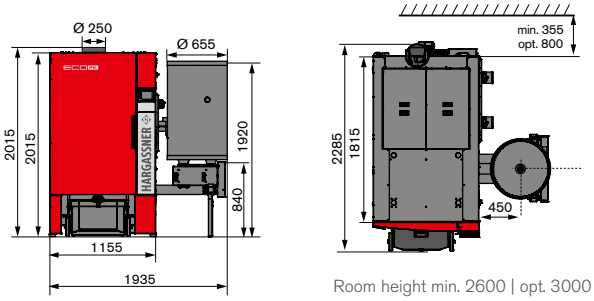
Eco-PK 130 – 230



Room height min. 2200 (2400), opt. 3000 mm

Eco-PK 250 – 330

Eco-PK 250 – 330



Room height min. 2600 | opt. 3000 mm

Nano-PK 6 – 15

	Unit	Nano-PK 6	Nano-PK 9	Nano-PK10	Nano-PK12	Nano-PK 15
Power range	kW	1.8 – 6.6	2.7 – 9	3.2 – 10.5	3.6 – 12	4.5 – 15
Efficiency Full load / Partial load	%	94.7 / 94.7	94.8 / 94.7	94.9 / 94.7	94.9 / 94.9	94.9 / 95.3
Fuel heat output - full load	kW	7	9.5	11.1	12.6	15.8
Flue pipe diameter	mm	100				
Water content	l	24				
Boiler temp. range	°C	(38) 48 – 78				
BEP necessary		acc. to hydraulic scheme				
Water-side Resistance ΔT 10 / 20 [K]	mbar	6 / 3	8.2 / 4	10.3 / 5	12.5 / 6	16.8 / 6
Flow / Return	inches	1	1	1	1	1
Weight	kg	220				
Size H / B / T	mm	1350x780x580				
Transport dimensions H / B / T	mm	1380x780x580				
Boiler label	Category	A+	A+	A+	A+	A+
Composite label incl. the control	Category	A+	A++	A++	A++	A++

Max. operation temperature 85 °C, max. operating pressure 3 bar, boiler temperature range 38-78 °C, electrical connection 230 V AC, 50 Hz, 13 A fuse

Condensation heat exchanger PLUS

Width: 355 mm

Water volume: 9 litres

Weight: 17 kg

Condensate drain: DN40 mm

Cold-water connection point: 3/4" ET max. 15 dH

Condensate / NL Std.

Nano-PK 6	Nano-PK 9	Nano-PK 12	Nano-PK 15
0.6 litres	0.9 litres	1.2 litres	1.5 litres

Nano-PK 20 – 32

	Unit	Nano-PK 20	Nano-PK25	Nano-PK 32
Power range	kW	6.5 – 21.7	7.5 – 25	9.6 – 32
Efficiency Full load / Partial load	%	95 / 96.4	95.1 / 96.2	95.3 / 95.8
Fuel heat output - full load	kW	22.8	26.3	33.6
Flue pipe diameter	mm	130		
Water content	l	42		
Boiler temp. range	°C	(38) 48 – 78		
BEP necessary		acc. to hydraulic scheme		
Water-side Resistance ΔT 10 / 20 [K]	mbar	27 / 10	28 / 12	29 / 16
Flow/Return	inches	5 / 4	5 / 4	5 / 4
Weight	kg	370		
Size H / B / T	mm	1550x980x700		
Transport dimensions H / B / T	mm	1550x575x540		
Boiler label	Category	A+	A+	A+
Composite label incl. the control	Category	A+	A+	A+

Max. operation temperature 85°C, max. operating pressure 3 bar, boiler temperature range 38-78°C, electrical connection 230 V AC, 50 Hz, 13 A fuse

Condensation heat exchanger PLUS

Width: 355 mm

Water volume: 9 litres

Weight: 17 kg

Condensate drain: DN40 mm

Cold-water connection point: 3/4" ET max. 15 dH

Condensate / NL Std.

Nano-PK 20	Nano-PK 25	Nano-PK 32
2.0 litres	2.5 litres	3.2 litres

Smart-PK 17 – 32

	Unit	Smart-PK 17	Smart-PK 20	Smart-PK 25	Smart-PK 32
Power range	kW	5.1 – 17	6.5 – 21.7	7.5 – 25	9.6 – 32
Efficiency Full load / Partial load	%	95.1 – 92.4	95 – 96.4	95.1 – 96.2	95.3 – 95.8
Fuel power full load	kW	17.9	22.8	26.3	33.6
Flue pipe diameter	mm	130			
Day hopper	kg	174			
Water content	l	42			
Water-side Resistance ΔT 10 / 20 [K]	mbar	20 / 7	27 / 10	28 / 12	29 / 16
Flow/Return	inches	5/4			
Weight	kg	290			
Size H / B / T	mm	1520x1080x650			
Transport dimensions H x W x D	mm	1520x575x605			
Boiler label	Category	A+	A+	A+	A+
Composite label incl. the control	Category	A+	A+	A+	A++

Max. operation temperature 85°C, max. operating pressure 3 bar, electrical connection 230 V AC, 50 Hz, 13 A fuse

Classic 40 – 60

	Unit	Classic 40	Classic 49	Classic 60
Power range	kW	12 – 42	14.7 – 49	18 – 60
Efficiency Full load / Partial load	%	94.9 / 94.6	94.5 / 96.4	93.8 / 96.4
Fuel heat output - full load	kW	44.3	51.9	64
Flue pipe diameter	mm	150	150	150
Water content	l	124	124	124
Boiler temp. range	°C	69 – 85		
Back end protection		58		
Water-side Resistance ΔT 10 / 20 [K]	mbar	24 / 6.4	32 / 8.6	56.4 / 14.4
Flow/Return	inches	5 / 4		
Weight	kg	480		
Size H / B / T	mm	1480x1210x920		
Transport dimensions H / B / T	mm	1480x760x800		
Boiler label	Category	A++	A++	A++
Composite label incl. the control	Category	A++	A++	A++

Max. operation temperature 85 °C, max. operating pressure 3 bar, boiler temperature range 69-78 °C, electrical connection 230 V AC, 50 Hz, 13 A fuse

Eco-PK 70 – 230

	Unit	Eco-PK 70	Eco-PK 90	Eco-PK 100	Eco-PK 110	Eco-PK 120	Eco-PK 130	Eco-PK 150	Eco-PK 170	Eco-PK 200	Eco-PK 220	Eco-PK 230
Power range	kW	21 – 70	27 – 90	29.7 – 99	32.4 – 108	36 – 120	39 – 130	44.7 – 149	49 – 166	59 – 199	59 – 216	67.8 – 226
Efficiency Full load / Partial load	%	94.6 / 95.2	94.1 / 95.3	93.8 / 95.3	93.6 – 95.4	93.3 / 95.4	93.5 / 95.7	93.8 / 96.1	94.2 / 93.7	94.7 / 97.4	94.7 / 97.4	94.7 / 97.4
Fuel heat output - full load	kW	74	95.6	105.5	115.4	128.6	139	158.8	176.2	210.1	228.1	240.7
Flue pipe diameter	mm	180					200			250		
Water content	l	180					253			360		
Boiler temp. range	°C	75 – 78										
BEP necessary	°C	58										
Water-side Resistance ΔT 10 / 20 [K]	mbar	57.1 / 14.6	94.4 / 24.1	112.4 / 28.7	133.7 / 34.1	165.1 / 42.1	160 / 42.7	184.6 / 49	209.2 / 55.5	227 / 63	250 / 69	263 / 72
Flow/Return	inches	6/4					2 / 2			2.5 / 2.5		
Weight of boiler / suction vessel	kg	865 / 100		890 / 100			1190 / 150			1320 / 150		
Size H / B / T	mm	1610x745x1560					1765x875x1790			1915x945x1905		
Transport dimensions H / B / T	mm	1690x745x1320					1810x875x1435			1970x945x1595		
Boiler label	Category	A+	-	-	-	-	-	-	-	-	-	-
Composite label incl. the control	Category	A+	-	-	-	-	-	-	-	-	-	-

Max. operation temperature 95°C, max. operating pressure 3 bar, boiler temperature range 69-78°C, electrical connection 400 V AC, 50 Hz, 13 A fuse

Eco-PK 250 – 330

	Unit	Eco-PK 250	Eco-PK 300	Eco-PK 330
Power range	kW	74.7 – 249	89.7 – 299	99 – 330
Efficiency Full load / Partial load	%	94.6 / 97.3	94.4 / 97	94.3 / 96.8
Fuel heat output - full load	kW	263.2	316.7	349.9
Flue pipe diameter	mm	250		
Water content	l	570		
Boiler temp. range	°C	75 – 78		
BEP necessary	°C	58		
Water-side Resistance ΔT 10 / 20 [K]	mbar	203 / 51	294 / 74	356 / 89
Flow/Return	inches	2.5		
Weight of boiler / suction vessel	kg	2150 / 200		
Size H / B / T	mm	2015x1155x2285		
Transport dimensions H / B / T	mm	2015x1155x1965		
Boiler label	Category	-	-	-
Composite label incl. the control	Category	-	-	

Max. operation temperature 95 °C, max. operating pressure 3 bar, boiler temperature range 69-78 °C, electrical connection 400 V AC, 50 Hz, 13 A fuse

TECHNICAL DATA

Eco-Box

Type	ECO-BOX 550	ECO-BOX 600	ECO-BOX 700	ECO-BOX 750
Length	550 cm	600 cm	700 cm	750 cm
Width	298 cm	298 cm	298 cm	298 cm
Outside height	271 cm	271 cm	271 cm	271 cm
Height inside	232 cm	232 cm	232 cm	232 cm
Weight	approx. 15 t	approx. 16.5 t	approx. 18.5 t	approx. 20 t

Heating modules

Single-floor heating modules	possibilities	BC 400	BC 500	BC 600	BC 700	BC 800
Length	200 – 800 cm	400 cm	500 cm	600 cm	700 cm	800 cm
Width	280 – 348 cm	298 cm	298 cm	298 cm	298 cm	298 cm
Outside height	265 – 320 cm	265 cm	265 cm	265 cm	265 cm	265 cm
Height inside	228 – 283 cm	228 cm	228 cm	228 cm	228 cm	228 cm
Weight	9 – 35 t	approx. 15 t	approx. 20 t	approx. 25 t	approx. 30 t	approx. 35 t

Double-floor heating modules	possibilities	DC 600	BC 700	BC 800	BC 700-ÜB	BC 800-ÜB
Length	200 – 800 cm	600 cm	700 cm	800 cm	700 cm	800 cm
Width	280 – 696 cm	298 cm	298 cm	298 cm	348 cm	348 cm
Outside height	265 – 640 cm	540 cm	308 cm	308 cm	320 cm	320 cm
Height inside	228 – 605 cm	505 cm	271 cm	271 cm	228 cm	228 cm
Weight	9 – 37 t	approx. 24 t + approx. 16 t	approx. 30 t	approx. 35 t	approx. 32 t	approx. 37 t

Design

Precast reinforced concrete walls REI 90, wall thickness approx. 13 cm, floor with a high-quality epoxy coating, wipe-resistant emulsion paint on the inside, exterior walls coated in high-grade white render, grains 2 - 3 mm in size. The heating modules include all the openings for the auger, ventilation and bleed valves, chimney, district line, fill sockets, etc. They can be filled with wood chips, pellets or elephant grass.

Accessories

A roof coating, an REI 90 partition wall, a steel door, an EI 30 fire door, an EI 30 tank room door, a stainless steel chimney and additional openings, and a ladder with an intermediate landing.

Bag silo

Type	Filling weight	Width	Depth	Height
GWTS 160 x 160	2,0 – 2,5 t	168 cm	168 cm	195 - 250 cm
GWTS 200 x 200	3.1 – 3.8 t	208 cm	208 cm	195 - 250 cm
GWTS 200 x 250	3.7 – 4.6 t	208 cm	258 cm	195 - 250 cm
GWTS 250 x 250	4.4 – 5.7 t	258 cm	258 cm	195 - 250 cm
GWTS 250 x 250 XL	6.5 t	258 cm	258 cm	270 cm
GWT-MAX 160 x 200	2.9 – 3.8 t (2.5 t)*	168 cm	208 cm	195 – 250 cm (175)*
GWT-MAX 200 x 200	3.6 – 5.0 t (3.1 t)*	208 cm	208 cm	195 – 250 cm (175)*
GWT-MAX 160 x 250	3.6 – 5.0 t (3.3 t)*	168 cm	258 cm	195 – 250 cm (185)*
GWT-MAX 200 x 250	4.4 – 6.0 t (4.1 t)*	208 cm	258 cm	195 – 250 cm (185)*
GWT-MAX 250 x 250	5.6 – 7.6 t (5.2 t)*	258 cm	258 cm	195 – 250 cm (185)*
GWT-MAX 250 x 250 XL	max. of 8.2 t	258 cm	258 cm	280

Underground tank

PET model	8 m³	10 m³
Volume	4.5 – 5.2 t	5.8 – 6.5 t
Diameter	250 cm	268 cm
Weight	280 kg	330 kg
Pit dimensions		
Diameter (min.)	3.50 m	3.75 m
Height (min.)	3.60 m	3.85 m
Filling material	19 m³	22 m³

Extraction system: suitable for all models! Safe and reliable, and complete emptying down to the last pellet guaranteed. Suitable for ALL Hargassner pellet boilers.

Hybrid accumulator tank HWS 320

	Unit	HWS 320
Accumulator Volume	l	315
Width x Depth (incl. trim) x Height	mm	595 x 580 (658) x 1755
Installation footprint	m²	0.36
Tilt dimension	mm	1870
Required installation height	mm	1955 – 1980
Weight (incl./excl. FWS)	kg	84 / 80
Electric immersion heater connection points	inches	6/4 IT
Connection point for drinking-water ball valves	inches	1 IT
Heating connection points	inches	1 ET
Fresh-water station: delivery rate		**Delivery rate:**
Accumulator tank temperature 60 °C when loaded, HW withdrawal temperature 45° (without reloading)		22 l/min, 345 litres
Accumulator tank temperature 70 °C when loaded, HW withdrawal temperature 60° (without reloading)		16 l/min, 266 litres
Accumulator tank temperature 78 °C when loaded, HW withdrawal temperature 40° (without reloading)		26.37 l/min, 667 litres

The hot-water output is sufficient for an average household of four people. If you are supplying more people or require more hot water, you will need to choose another Hargassner accumulator, such as an HSP 500-2000 or SP 825-1000-FWS model.

Water quality:

Heating water: VDI 2035; SWKI BT 102-01; ÖNORM H 5195–1;
cold water: 6 – 15°dH

Hot water tank Nano-WS 210

	Unit	Nano-WS 210
Contents	l	210
Heat surface	m²	0.71
Dimensions WxDxH (Height panel)	mm	580 x 580 x 1350 (1600)
Installation space Nano-PK + Nano WS-210	m²	0.79
Weight	kg	76
Connection points for HW, CW, circ. and boiler FL + RL	inches	3/4
Blind flange	mm	150/i85
Constant output tCW=10°C, THW=45°C, HV=80°C/15kW	l/h	360
Power output NL	l/h	3.2

SP + SP-SW 1+2

	Unit	SP 500	SP 650	SP 825	SP 1000	SP 1500	SP 2000	SP 2600	SP 3000	SP 4000	SP 5000
Accumulator Volume	Litre	476	647	796	892	1445	1904	2506	2871	3887	4885
Diameter ø without insulation	mm	650	750	750	790	990	1100	1250	1250	1600	1600
Diameter ø with insulation for energy efficiency class C	mm	850	950	950	990	1230	1340	1490	1490	1840	1840
Diameter ø with insulation for energy efficiency class B	mm	-	-	-	1070	1310	-	-	-	-	-
Height without insulation	mm	1630	1660	1910	2020	2090	2250	2320	2620	2250	2760
Height with insulation for energy efficiency class C	mm	1720	1750	2000	2110	2180	2340	2410	2730	2340	2895
Height with insulation for energy efficiency class B	mm	-	-	-	2150	2220	-	-	-	-	-
Tilt dimension without insulation	mm	1650	1670	1920	2030	2104	2268	2411	2690	2460	2900
Connectors 8 pcs IT	inches	6/4	6/4	6/4	6/4	6/4 (2)	6/4 (2)	10 x 2	10 x 2	10 x 2	10 x 2
Weight SP (without insulation)	kg	78	92	105	116	164	216	288	325	437	576
Weight SW1 (without insulation)	kg	102	107	130	160	-	-	-	-	-	-
Solar heat exchanger bottom SW1 1" IT	m²	2	2	2	3	-	-	-	-	-	-
Weight SW2 (without insulation)	kg	-	-	154	185	252	-	-	-	-	-
Solar heat exchanger top/bottom SW2 1" IT	m²	-	-	2/2	2/3	3/3	-	-	-	-	-

Max. operating pressure 3 bar, max. operating temperature 95 °C
An accumulator tank can only be delivered with a boiler! Individual delivery on request.

HSP + HSP-SW 1+2

	Unit	HSP 500	HSP 650	HSP 825	HSP 1000	HSP 1500
Accumulator Volume	Litre	476	647	796	892	1445
Diameter ø without insulation	mm	650	750	750	790	990
Diameter ø with insulation for energy efficiency class C	mm	850	950	950	990	1230
Diameter ø with insulation for energy efficiency class B	mm	930	1030	1030	1070	1310
Height without insulation	mm	1630	1660	1910	2020	2090
Height with insulation for energy efficiency class C	mm	1720	1750	2000	2110	2180
Height with insulation for energy efficiency class B	mm	1760	1790	2040	2150	2220
Tilt dimension without insulation	mm	1650	1670	1920	2030	2110
Port 8 pcs IT	inches	6/4	6/4	6/4	6/4	6/4
Stainless steel pipe - water volume	Litre	23	23	37	37	45
Stainless steel pipe 5/4" ET square	m²	4.1	4.1	6.7	6.7	8.2
Weight HSP (without insulation)	kg	103	117	133	144	195
Weight SW1 (without insulation)	kg	119	141	157	188	-
Solar heat exchanger bottom SW1 1" IT	m²	2	2	2	3	-
Weight SW2 (without insulation)	kg	-	-	182	213	284
Solar heat exchanger top/bottom SW2 1" IT	m²	-	-	2/2	2/3	3/3

Max. operating pressure 3 bar, max. operating temperature 95 °C, max. drinking-water operating pressure 6 bar
Hargassner accumulator tanks are only available in combination with a Hargassner biomass boiler! Individual delivery on request.

HARGASSNER
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