PELLET
BOILER

6 – 330 KW

HARGASSNER
HEATING TECHNOLOGY FOR BIOMASS

NANO PK
PELLETS

NEW:
NANO PK
PLUS

- **PLUS** Condensation
- **PLUS** Flue gas cool down

ENERGIE
GENIE
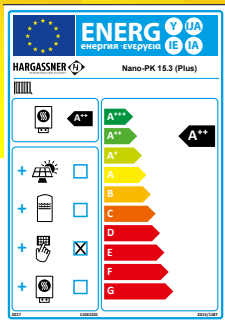
www.hargassner.com

Our vision is harmony between satisfied customers and the environment

In order to lower emission values in oil or gas reliant countries, Hargassner is endeavouring to make high-performance biomass heating technology available to everyone. The company currently exports to more than 31 countries. The most important markets are Germany, France, Switzerland, Spain, Italy, Belgium, the Netherlands and the UK. However, Scandinavia, Ukraine, Czech Republic, Bulgaria, Greece, Slovenia, Hungary, Japan, New Zealand and North America are growing markets, which are trying to reduce their CO_2 emissions as well. At this time, export represents 70% of our annual turnover. Numerous awards confirm that our philosophy is more than just lip-service.

Markus, Elisabeth & Anton and Anton Hargassner

Multiple tested and confirmed

- More than 36 years of experience
- We export to 31 countries worldwide
- Company premises: more than 3,6 hectares
- More than 110,000 satisfied customers
- International successful

Dynamic, team spirit, closeness to nature, family and success are image elements that characterise Hargassner. And they are precisely the values people associate with the members of Austria's ski jumping team. Hargassner became an official partner of the ÖSV ski jumping team in September 2018.

PROUD
PARTNER OF SKI
AUSTRIA

CONTENT

PELLET-BOILERS
6 – 330 kW

NANO PK
6 – 15 kW

Especially suitable for:
- Single-Family-Home
- Double-Family-Home
- Lowest-Emission-Home

NANO PK
PLUS
6 – 32 kW

- **NEW:**
- **PLUS** Condensation technology
- **PLUS** Flue Gas Cool Down

NANO PK
20 – 32 kW

Especially suitable for:
- Double-Family-Home
- Multi-Family-Home

Recommended by our customers:

Single-Family-Home, Fam. Gerner, Nano-PK 6 kW
„Installation in a secondary room of a new built single-family-home. The boiler is compact and does not need much space. It could be installed everywhere in the house. Additionally, 3 sides of the boiler where next to the walls and all openings and connections are on the front side. Due to the fully ligned combustion chambers with refractory stones, heating with Pellets is a very cost efficient solution for us!"

Double-Family-Home, Fam. Röhr, Nano-PK 12 kW
„The Nano-PK is a real wonder, when it comes to the required space. Furthermore, we do not need an additional boiler-room! Our boiler fits next to the WS210 and a bag silo into the laundry-room next to the washing maschine! Our neighbours also decided for a Nano PK 12 - because of the low storage requirements."

SMART PK
NEW

17 – 32 kW

Especially suitable for:
- Weekend cottage
- Small living units
- Also available as Combi-Boilerl

CLASSIC

12 – 22 kW
40 – 60 kW

Especially suitable for:
- Single-/Double-Family-Homes
- Multi-Family-Homes
- Public Buildings
- Catering

ECO PK

70 – 330 kW

Especially suitable for:
- Gastronomy, Hotels
- Industry
- District-Heating

Pellet boiler in cascade up to 2 MW

Town Hall Stambach, Classic Lambda 49 kW

„In the town hall, an oil boiler was installed originally. In the last couple of years, prices for oil increased tremendously. Thats why it got necessary to change the heating ystem. Decision to go for Pellets was done very quick and easy. Storage-and Boiler Room are located 6 m next to each other. A suction hose transports the Pellets to the boiler. Fast, Clean and Cheap.“

Hotel Draxler, Eco-PK 100 kW

„For us, it was tremendously important to change from our old oil-heating boiler to biomass. Fuel consumption was 11.000 liter! Now we use a 100kW Pellet-Boiler for the whole area. Pellets are being transported with auger and suction system to the boiler. Tremendous Fuel-Savings are the result! Despite of the Saving, we where also able to get high amount of subisdies.“

What is the benefit of heating with Pellets?

There are a lot of advantages, when using Pellets for heating:

- Lower costs than oil or gas
- Crisis-resistant, because of locally sourced fuel
- Short transportation
- Easy refuelling through blown pellet delivery
- Dust-free, odourless refill
- Small storage volume
- Effective and energy-efficient heating system

Pellets are an environmentally-friendly and CO_2 neutral fuel from your local area.

Pellets are made from 100% natural wood without any additives. Tonnes of wood waste materials are produced every day in wood-processing industries all over Europe.

Therefore, Pellets are an outstanding fuel for heating systems compared to fossil fuels like oil, electricity or heat pumps.

Pellets

PELLET CHARACTERISTICS (EN ISO 17225-2, ÖNORM 7135)		
	ÖNorm 7135	**EN 17225-2 – Klasse A1**
Heating value	> 18 MJ/kg = 5 kWh/kg	16,5 ≤ Q ≤19 MJ/kg = 5 kWh/kg
Weight	650 kg/m³	> 650 kg/m³
Diameter	6 mm	≤ 6 ± 1,0 mm
Lenght	5 – 40 mm	3,15 ≤ L ≤ 40 mm (99%), L ≤ 45mm (1%)
Water content	w < 10 %	w ≤ 10 %
Dust content	≤ 1 %	≤ 1 %
Ash content	< 0,5 %	≤ 0,7 %
Primary energy efforts 2,7 % of energy output		

ENSURE A
FUTURE
FOR OUR KIDS

Why Heating with Wood Pellets?

Warmth, growing again

Wood is growing. Austria and Germany have a high reserve of wood. More than 30 / 130 Mio fm of wood grow new each year. Although there is a high demand for wood, the wood-storage in the forest is still growing.

Future-proof

Enormous price fluctuations and incalculable risks feature heating with gas / oil. Much safer is heating with wood from the local forest. Austria and Germany produce Pellets out of wood processing only as a by-product, more than domestically needed.

Economically

In a 10-year comparison to oil / gas you can almost save half of the heating costs. Highly efficiant pellet boiler convert the contained energy into usable heat. The combination of low fuel costs and efficient use makes Pellets economically.

Comfort and Cleanliness

The fuel is delivered by silo truck and transported automatically from the storage to the boiler. Ignition, Control, boiler cleaning and ash removal are done fully automatic. What remains to be done is one to empty the ash box two times each heating season.

Environmental friendly

Due to the fact, that wood is using the same amount of CO_2 out the air when growing, wood-fuel avoids the rising of CO_2 concentration in the air. When using Pellets for heating, CO_2 is being reduced by more than 95% compared to fuel-oil. An important environmental advantage are extraordinary low emissions. Dry fuel, electronic control of the combustion air and the hot combustion chamberensure optimal and clean combustion.

Domestic Economy

The use of wood Pellets is not only beneficial to the environment but also offers clear economic benefits for customers, local companies and safe labour in a region.

Further advantages of a pellet boiler

Ideal use in the rehabilitation area, as well as higher flow temperatures are possible. The optimal heat supply even at very low outside temperatures gives a pleasant living comfort. No additional heating system necessary. No noise inside and outside. Very low heating costs.

These advantages make the

unique

„Nature is our lifeline. Without healthy nature, healthy living is not possible. „(Anton Hargassner) The sustainable and careful handling of our environment is a basic requirement. An essential component is choosing the right heating system. Ecological, economic and ideal reasons speak for heating with wood - the oldest and most natural fuel. Wood supplies us with wood chips and sawdust result in the popular heating material Pellets, which we use high-quality energy sources are - ideally suited for single-family homeowners, thanks to the low storage volume of Pellets therefore do not have to do without the crisis-proof heating with domestic wood. If you are environmentally friendly and forward thinking heat, the excellent heating technology of the Nano-PK is the right choice.

Small, compact design

Ideal for small installation- or boiler rooms and for houses with medium-low heating demand. Possible to place onto 3 walls, No additional space for maintenance works necessary! This unit may be placed to the wall with the backside and also with both sides. No storage room required! (depending on local regulations)
**Space requirement: 0.45 m² (Nano-PK 6-15) or
0.69 m² (Nano-PK 20-32)**

minimal transport time

Easy and fast transport

The boiler is fully cladded and may be transported in one piece. For complex installation areas, the boiler may be easily disassembled.

Integrated hydraulic module

The heat circuit-/HWS pump, the accumulator loading pump/circulation pump and all other piping is easy to access and ready to plug integrated in the boiler. You can choose 3 different hydraulic versions.

Maintenance openings only from front and from top

All components of the boiler are designed, to be reached from front. With the slogan: „Small is good – but it must be service-friendly!"

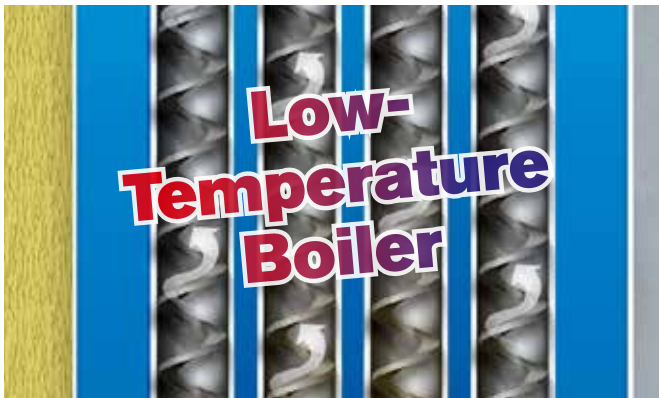**NEW: Air-independent operation
as a standard**

Nano-PK 6 – 15 kW

Nano-PK 20 – 32 kW

**Nano-PK 6-32
also available in red!**

**Also available as a
COMBI Boiler**

Pellets Low temperature boiler

Hargassner's outside temperature measurement system allows the boilers control unit to smoothly regulate the heating output. Boiler flow temperature, from 38°C to 75°C - with constant 95% efficiency! Only the required energy is being generated.

Air transport into the day-storage with double rotary valve

The storage is being filled according preadjusted filling times. The pellet suction turbine sucks Pellets automatically from the storage into the day storage.

Up to a hose length of about 20 m between boiler and storage room are possible without problems. The double rotary valve with a pressure compensation represents a 100% burn back protection.

Fully refractory-lined high-temperature combustion chamber with 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 a complete combustion, high efficiency and lowest emission values. The lambda sensor regulates exactly the right quantity of fuel in every output range according to the pellet quality. This is the only way to guarantee an optimum (i.e. economical and low emission) combustion that can save energy and money with more than 95%.

Ash container with compaction system and filling level indicator

A distributor mechanism on the sliding grate fills the drawer up to the last corner, this will cause much longer drain intervals! On the display, on the remote control, as well as on mobile Terminals will be displayed when the ash tray needs to be emptied- a filling reserve leaves you then about a week Time. That's Hargassner pellet heating comfort! For Nano-PK 20-32, this function takes over an ash discharge screw in combination with an ash box. Depending on the heating time the heat exchanger automatic cleaning switches to and free the boiler walls of fly ash residues that fall directly into the ashtray or ash box.

Pellet consumption indicator

If the minimum stock level is reached, a Warning message on the display (remote control, mobile phone, tablet) will be displayed. You can continue heating without disturbance, need only pellet storage needs to be refilled after this message.

NANO PK
6 – 15 kW

Hargassner – latest Pellets heating technology for small scale applications. Especially designed for single- und double-family-homes.

- Space requirement **(0.45 m² only)**
- **Reasonably priced & energy-efficient**
- Innovative in design & technology
- Installation up against 3 walls
- Easy assembly
- Low temperature boiler-down to 38°C
- Double rotary valve
- Fully refractory-lined combustion chamber
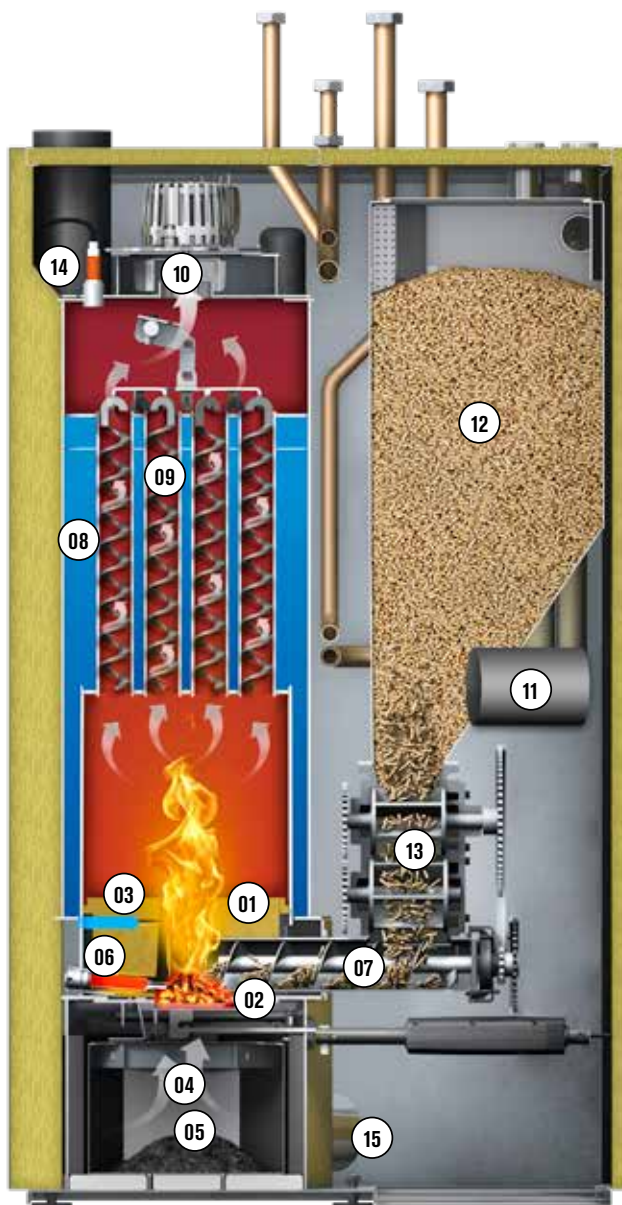- Automatic de-ash into ash box
- **Touch-Display**

Efficiency Class A+

Efficiency up to **96%** Pellet-Boilers

5 YEARS WARRANTY acc. warranty card

No boiler room NEEDED! (depending on local regulations)

ENERGIE GENIE

01 Fully refractory-lined combustion chamber
02 Sliding grate
03 Secondary air stream with inlet openings
04 Primary air
05 Ash box
06 Autom. ignition
07 Stoker auger
08 Heat exchanger
09 Turbulators with automatic heat exchanger cleaning
10 Exhaust fan
11 Pellet-Vacuum turbine
12 Pellet day hopper
13 Double rotary valve
14 Lambda sensor standard
15 Air connection independent (RLU) / dependent (RLA)

Space-saving & cost-efficient

New: Hot-Water-Storage Nano-WS 210

NANO PK
20 – 32 kW

Hargassner – latest Pellets heating technology for medium scale applications. Especially designed for single- und double-family-homes.

- Space requirement **(nur 0,69 m²)**
- **Reasonably priced & energy-efficient**
- Innovative in design & technology
- Installation up against 3 walls
- Easy assembly
- Low temperature boiler-down to 38°C
- Double rotary valve
- Fully refractory-lined combustion chamber
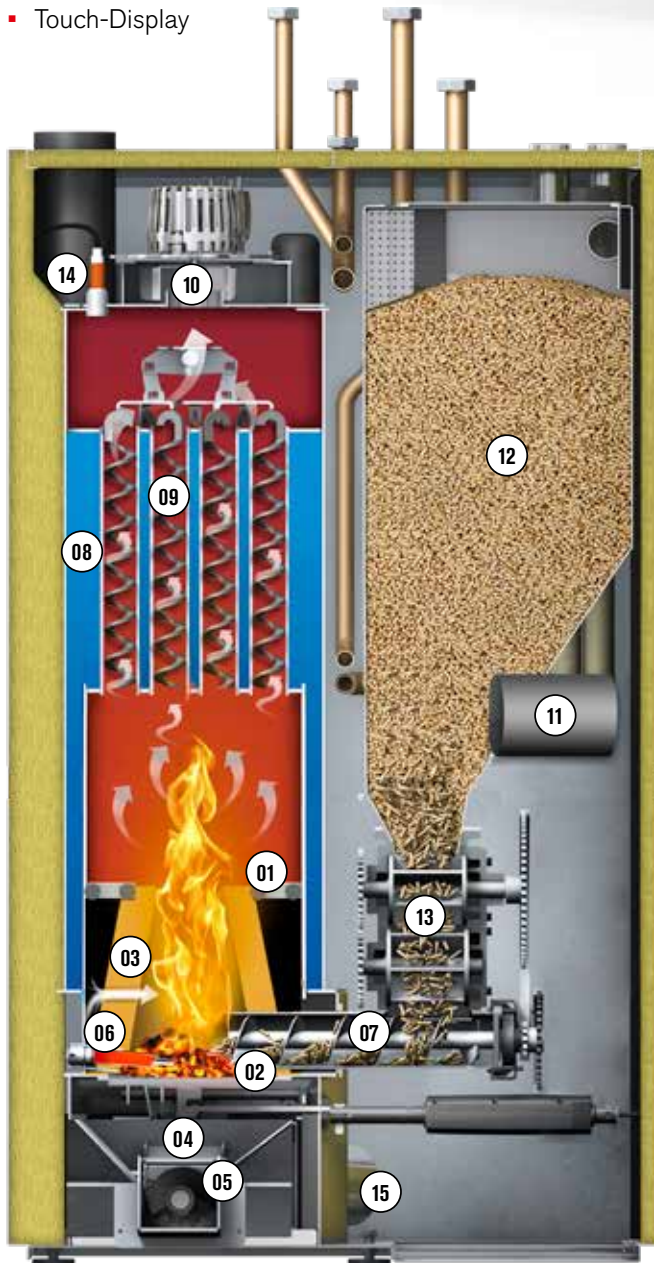- Automatic de-ash into ash box
- Touch-Display

Efficiency Class

A⁺

Efficiency up to **95%** Pellet-Boilers

5 YEARS WARRANTY acc. warranty card

✓ **No boiler room NEEDED!** (depending on local regulations)

01 Fully refractory-lined combustion chamber
02 Sliding grate
03 Secondary air stream with inlet openings
04 Primary air
05 Ash box
06 Autom. ignition
07 Stoker auger
08 Heat exchanger
09 Turbulators with automatic heat exchanger cleaning
10 Exhaust fan
11 Pellet-Vacuum turbine
12 Pellet day hopper
13 Double rotary valve
14 Lambda sensor standard
15 Air connection independent (RLU) / dependent (RLA)

Installation possibility - storage room / workshop. NEW Hargassner flue pipes:

NANO PK PLUS

▪PLUS Condensation

Each type of fuel has a certain water content. During Combustion the water content evaporates and normally disappears with the exhaust gases. The stainless steel flue gas heat exchanger extracts this energy from the exhaust gas. This increases the efficiency up to 106% and reduces heating costs as well as reduces pellet consumption.

- ▪ **Modern condensing technology with effective condensation**
- ▪ **High efficiency over 106%**
- ▪ Lower heating costs
- ▪ Exhaust gases are filtered and particulate emissions are reduced
- ▪ Stainless steel heat exchanger with long service life
- ▪ Automatic cleaning
- ▪ Can be retrofitted at any time

Efficiency class
eg. Nano-PK15

A⁺⁺

Efficiency up to **106%** Pellet-Boilers

**5** YEARS WARRANTY acc. warranty card

Condensing boiler technology

Through the exhaust gas heat exchanger, the temperature is being brought below the condensing level and is condensing again. The resulting condensation heat and reduction the exhaust gas temperature is from condensing technology used to increase the efficiency. With the condensing system you reach higher return temperatures as well as a higher efficiency, because the exhaust gases are significantly be cooled down further.

01 Fully refractory-lined combustion chamber
02 Sliding grate
03 Secondary air stream with inlet openings
04 Primary air
05 Ash box
06 Autom. ignition
07 Stoker auger
08 Heat exchanger
09 Turbulators with automatic heat exchanger cleaning
10 Exhaust fan
11 Pellet-Vacuum turbine
12 Pellet day hopper
13 Double rotary valve
14 Lambda sensor standard
15 Air connection independent (RLU) / dependent (RLA)

Condensing heat exchanger PLUS:
16 exhaust gas boiler
17 boiler return flow
18 heating return flow
19 Automatic cleaning (flushing)
20 Stainless steel corrugated tube heat exchangers
21 Insulation
22 Exhaust chimney
23 Condensate drain with siphon
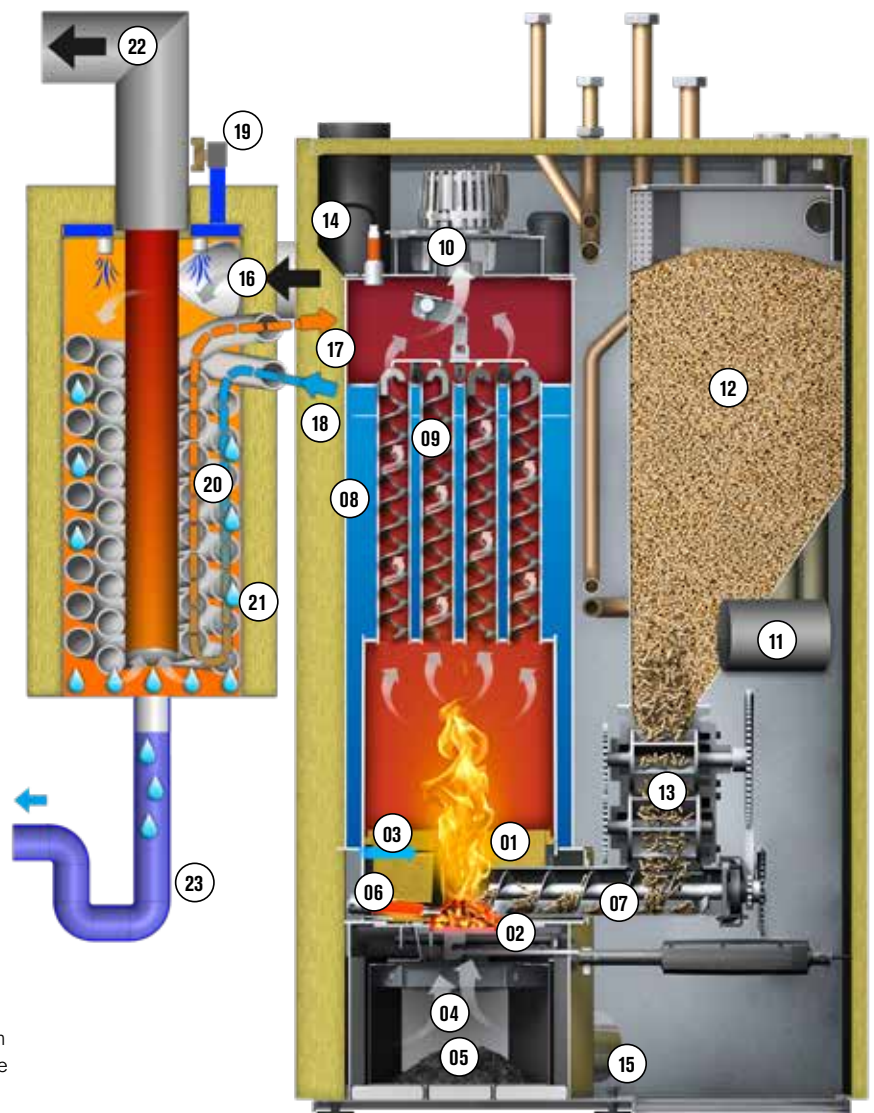
Requirements for optimal use:
- ▪ Low return temperatures
- ▪ Moisture-resistant & soot fire-resistant exhaust system
- ▪ Duct connection for condensate / rinse water drainage
- ▪ Water connection for rinse water

SMART PK
17 – 32 kW

The new Smart-PK impresses with its contemporary design, compact size, functionality and of course with its perfect price-performance ratio. This pellet boiler has a filling space for bag filling perfectly matched to its performance. The ingenious combustion technology comes from its big brother - the Nano-PK. It has a new easy to use touch display and is equipped with a manual cleaning device and an ash box. The applications range from use with very low pellet requirements such as in weekend retreats, chalets, and small residential units through to use as a combination module.

- **Small, compact design**
- Possible to place onto 3 walls
- **Low-temperature tube heat exchanger**
- Automatic energy-saving ignition with just 300 W
- Full refractory-lined high-performance combustion chamber
- Lambda control with automatic calorific value detection
- Speed controlled "energy-saving" exhaust fan
- Automatic sliding grate and ash drawer with compacting system
- Manual boiler cleaning lever for cleaning the heat exchanger tubes
- Smoke outlet at the top, left side and back.
- Pellet day hopper with cover, top grid and integrated fill level indicator.
- Easy filling from bags of Pellets
- Metering cell wheel for 100 % burn-back protection
- Integrated hydraulic module available (option)
- Easy to use touch display

Efficiency class

A+

Efficiency up to **96%** Pellet-Boilers

5 YEARS WARRANTY acc. warranty card

SMARTLINE ENERGIE GENIE 2020

01 Fully refractory-lined combustion chamber
02 Sliding grate
03 Secondary air stream with inlet openings
04 Primary air
05 Ash tray
06 Autom. ignition
07 Stoker auger
08 Heat exchanger
09 Turbulators with manual heat exchanger cleaning system
10 Exhaust fan
11 Pellet day hopper
12 Metering cell wheel rotary valve
13 Lambda sensor standard
14 Air connection RLU / RLA

NEW
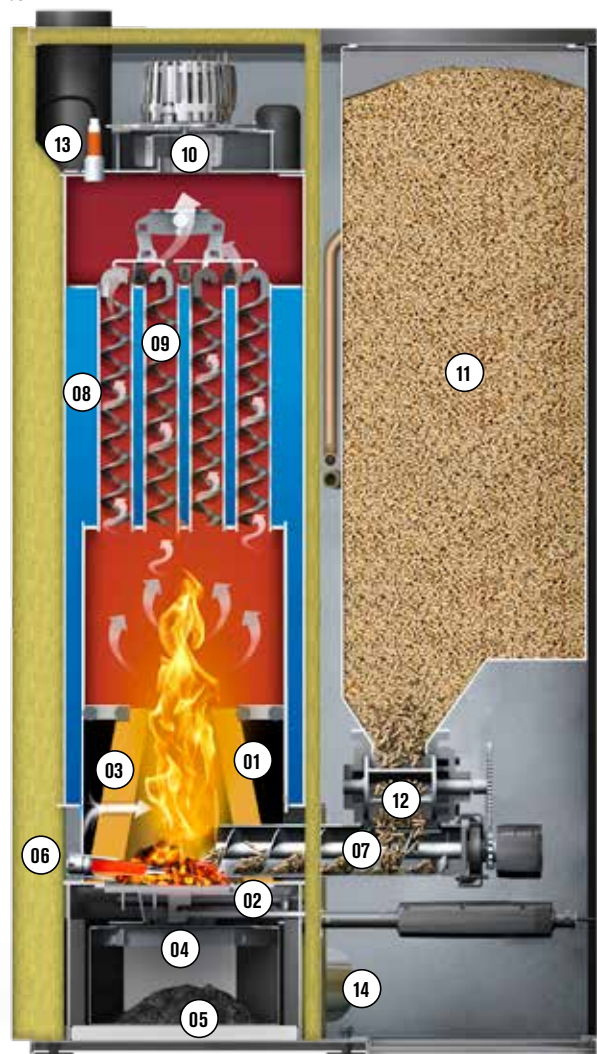
Also available as a COMBI Boiler

CLASSIC
12 – 22 kW

Hargassner – latest pellet heating technology for small scale applications. Especially designed for single- und double-family-homes with low-temperature heating system.

- Heat exchanger with integrated back end protection without pump
- Lambda sensor with fuel-quality detection
- NEW: 300 Watt-ignition, with optimized ignition
- Fully refractory-lined combustion chamber
- Automatic sliding grate with integrated ash compression
- Automatic ash level indication
- Fully automatic boiler cleaning system
- Double rotary valve for 100% burn back-protection
- Lambda sonde, standard
- Pellet consumption display
- Highly efficient suction system with small storage
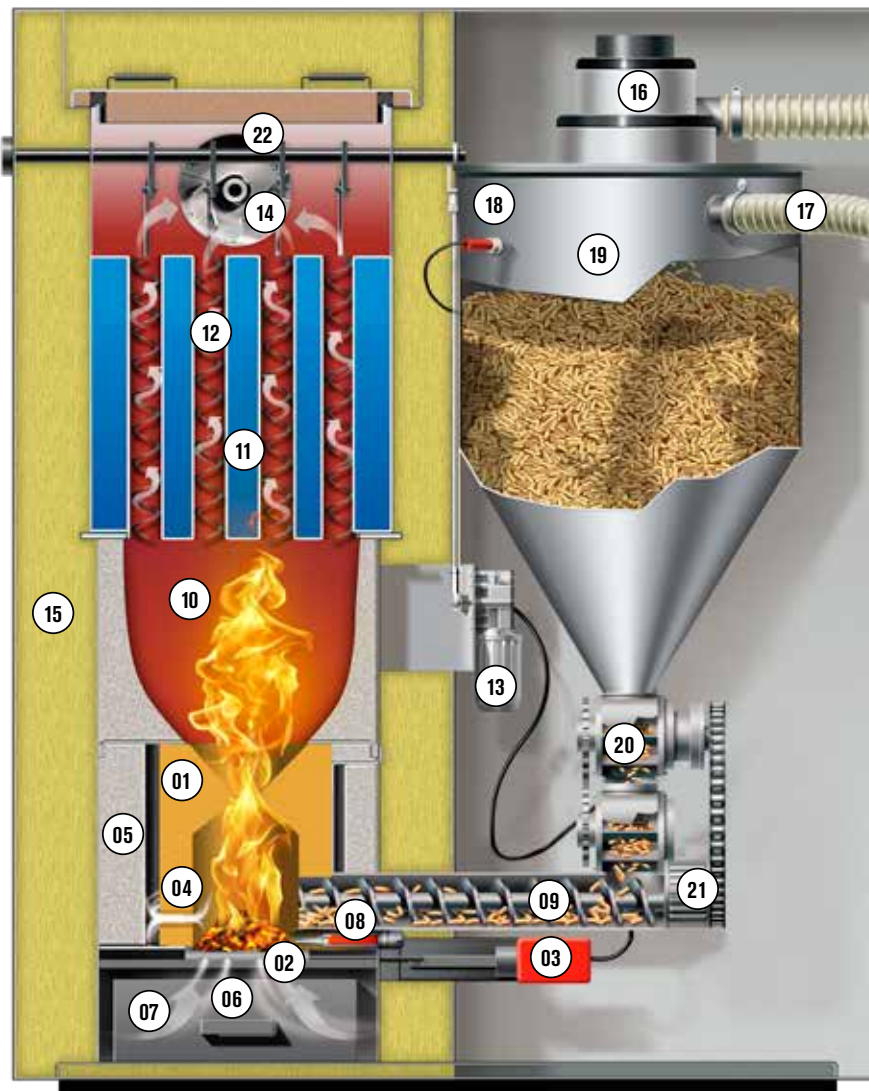- **High temperature boiler**

Efficiency Class
A⁺

Efficiency up to **93%** Pellet-Boilers

5 YEARS WARRANTY acc. warranty card

01 Fully refractory-lined combustion chamber
02 Sliding grate
03 Drive motor for sliding grate
04 Secondary air flow
05 High temperature resistant insulation plates
06 Primary air
07 Ash box
08 Automatic ignition (300 W only)
09 Stoker auger
10 Circulation zone
11 Boiler heat exchanger
12 Turbulators
13 Automatic boiler cleaning system
14 Induced draught fan
15 Cover insulation
16 Pellets vacuum turbine
17 Closed vacuum system, maintenance-free, no filter
18 Level detector
19 Cyclone hopper
20 Double rotary valve
21 Motor drive unit
22 Lambda-Sonde

CLASSIC LAMBDA
25 – 60 kW

Hargassner – latest Pellets heating technology for medium scale applications. Especially designed for multi-family-homes, gastronomy and municipal buildings.

- 3-path heat exchanger
- Lambda sensor with fuel-quality detection
- Fully refractory-lined combustion chamber
- Up to 95% efficiency
- Automatic sliding grate and autom. ash-extraction
- Automatic ash level indication
- Fully automatic boiler cleaning system
- Double rotary valve for 100% burn back-protection
- Lambda sonde
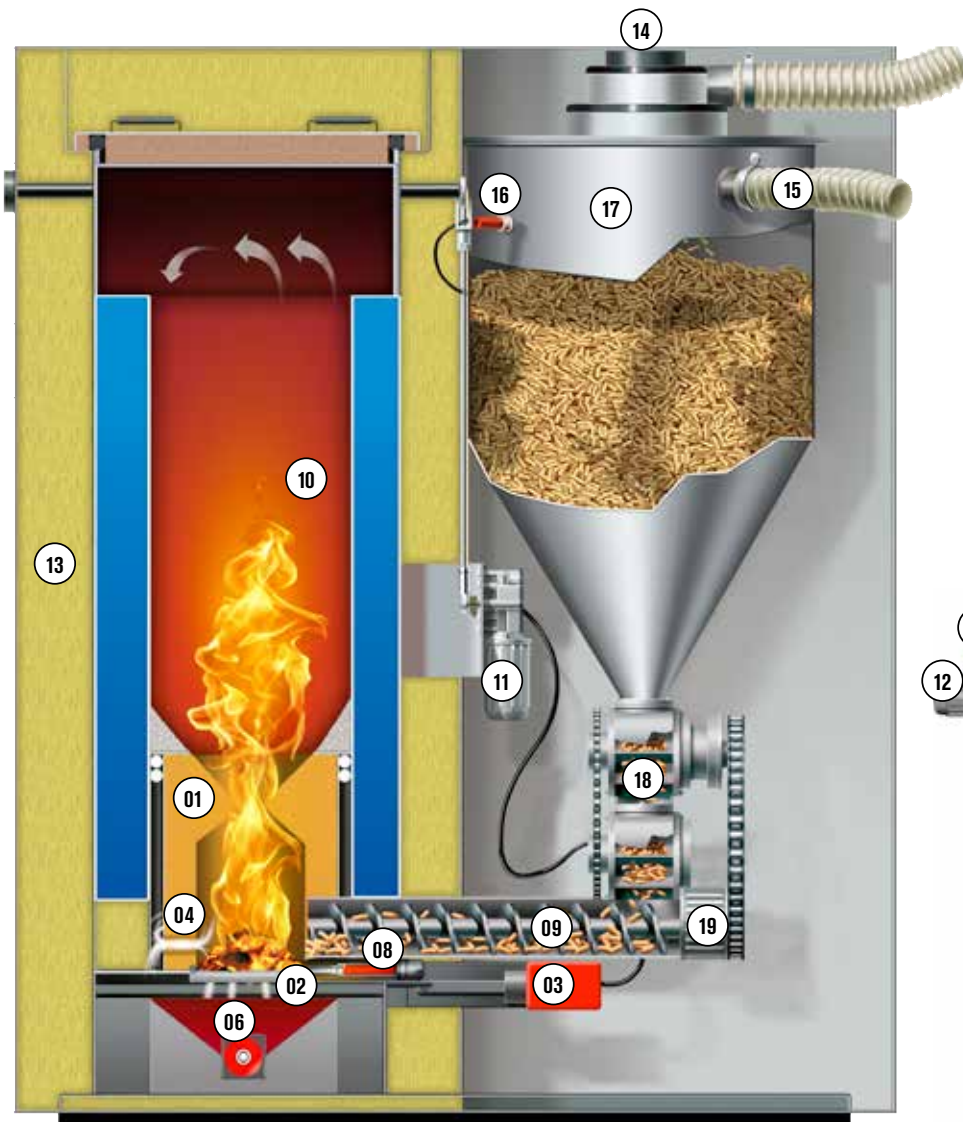- Pellet consumption display
- **High temperature boiler**

Efficiency Class

A⁺⁺

Efficiency up to **95%** Pellet-Boilers

5 YEARS WARRANTY acc. warranty card

01 Fully refractory-lined combustion chamber
02 Sliding grate
03 Drive motor for sliding grate
04 Secondary air flow
05 Fly ash separation
06 Primary air
07 Ash extraction
08 Automatic ignition
09 Stoker auger
10 Circulation zone
11 Automatic boiler cleaning system
12 Induced draught fan
13 Cover insulation
14 Pellets vacuum turbine
15 Closed vacuum system, maintenance-free, no filter
16 Level detector
17 Cyclone hopper
18 Double rotary valve
19 Motor drive unit
20 Lambda sensor
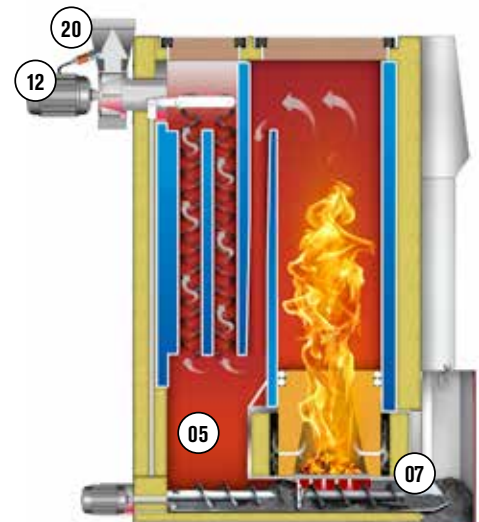
These advantages make the
ECO PK unique

Hargassner - state-of-the-art pellet heating technology for all power ranges
Hargassner has many years of experience in the field of biomass heating technology - a know-how leading edge in the field of biomass heating technology Hargassner pellet boilers bring a huge technology boost. Both in the design area as well as in the control conception provide the best ideas and solutions for the most efficient heating systems.

Energy-saving ECO-Operation

Speed-controlled EC exhaust fan with negative pressure monitoring
For the ECO-PK Hargassner uses energy-efficient EC exhaust fans. The main advantage of this GreenTech EC technology is the significantly higher efficiency rate of up to 90 %. This saves energy and electricity. The negative-pressure unit constantly measures the pressure conditions in the combustion chamber. The Lambda Touchtronic uses this data to control the speed of the draught fan, thus keeping the negative pressure at an ideal level. This concept ensures combustion with minimal exhaust gas temperatures and therefore maximum efficiency.

Energy-saving ignition
Due to the new design of the ignition element, electrical power consumption has been reduced to just 300 W (up to 1000 W less) and, at the same time, the efficiency of the ignition process has been increased.

- **Electricity savings of over 88 %**
- **Intelligent Ignition Monitoring**
- **Completely silent**

*in ECO PK 150-200 are two ignition-systems integrated

Eco-PK 70 – 120 kW
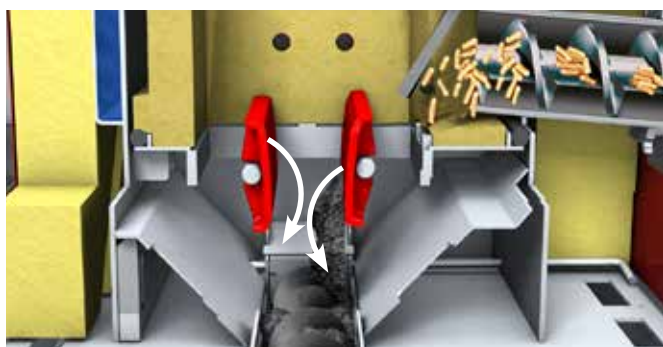
Eco-PK 150 – 200 kW

Unique double rotary grate

Closed grates in the combustion chamber with a high firebed - this results in an optimal **gasification process with the lowest fine dust emissions.**

If regular Pellets are used, only the **rear de-ash grate** opens. The ash falls down and the embers remain.

When the boiler is cold, the combustion chamber is completely cleaned before restarting. **Opening both grates,** cold ash and other parts such as stones, nails etc. are being disposed.
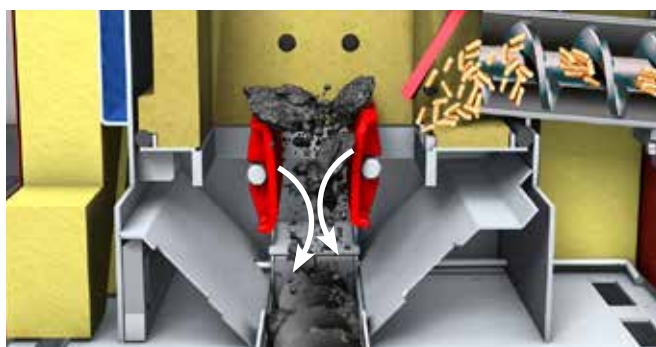
For fuel with a very low ash-melting point, the clinquer is being broken up with the additional „**crusher-function"** of the rotary grate.

Large scaled Pellet Boiler up to 330 kW

Pelletboilers up to 330 kW & in caskade 2 MW

Direct auger connection for Pellets 70-330 kW

Pellets are being transported with a direct auger from the pellet storage to the boiler.
Details page 36 – 38

NEW:
Pellet-Direct Auger RAP

Eco-PK 220 – 330 kW with RAP

The ECO PK –
ECO friendly heating technology

Firebed monitoring & Lambda sensor

Lowest emissions guaranteed!

Through the exact and **contact-free firebed-height monitoring system** with sensors, the most effective combustion conditions (dependent on fuel quality) is detected. Your heating system is always working with the required heat output at optimum combustion values.

It doesn't matter which type of fuel is stored - wood chips soft, hard, dry or damp - the control unit uses the lambda sensor to detect the relevant calorific value and regulates the optimum fuel air mixture. This is how convenient controls work today - constant manual adjustment of the system to the fuel is a thing of the past.

Fully refractory-lined high performance combustion chamber with integrated back end protection

The refractory combustion chamber guarantees high combustion temperatures through optimum heat storage (also at part-load), which minimises the ignition procedure and reduces emissions.

To reduce **ash-clinkering** of very dry fuel ECO-HK each has installed a flue-gas recirculation. Ash can be disposed easily and completely automatically.
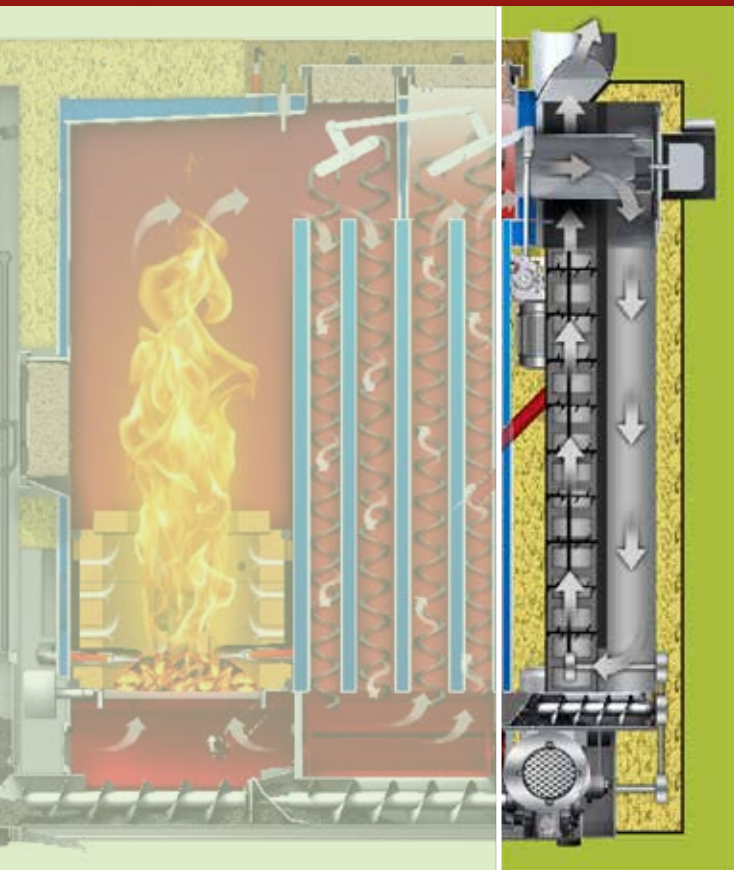
PARTICLE SEPARATOR
70 – 220 eCLEANER

The optionally available particle separator **eCleaner** can be ordered with the boiler and it can also be retrofitted at any time. With this particle separator, fine dust emissions are considerably reduced depending on the type of fuel.

In the **eCleaner** particles are being charged electrostatic, which are then deposited on the walls and fall down through the automatic cleaning device. A ash auger transports them into the common ash box.

NEW FOR:
ECO-HK / PK 130 – 220 kW!

Your Advantages:

- Small space requirement
- Reduces fine dust to a minimum
- Automatic cleaning and transport into the ashbox
- Optional - can be retrofitted anytime
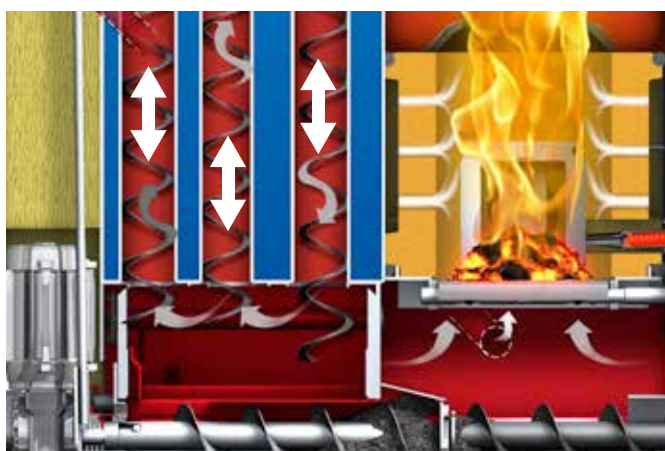
Perfect cleaning - increased efficiency!

A new developed cleaning concept is cleaning **ALL Heat-Exchanger pipes** regularly. NEW - also the first pipe! The sharp edges of the turbulators help to get rid of fly-ash directly through the ash-auger.
Our new developed de-ashing system is cleaning the boiler regularly. Only **ONE** ash-auger (patent pending) transports fly-ash as well as normal ash from combustion into the **fully-integrated ashbox**. The ash is being shrinked and compressed on the way to the ashbox. Maximum cleaning comfort and highest efficiency are the result!
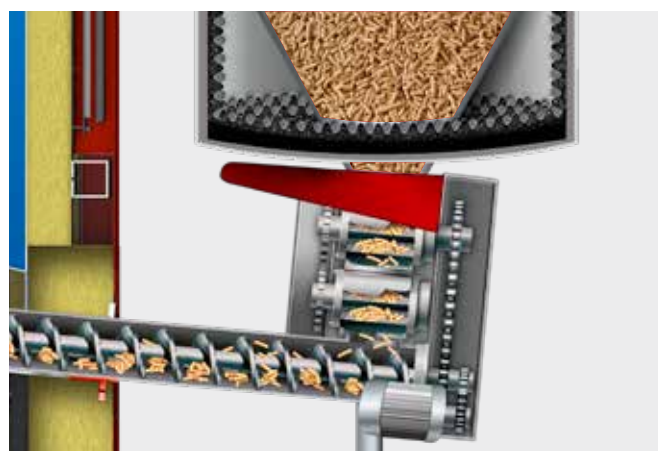
From the hopper into the double rotary valve

The Hargassner pellet vacuum turbine sucks the Pellets into the hopper; either from an extracting auger, a single, double, three or four point vacuum feeding system, or a bag silo. A hose length of **up to 20 m** makes it easy to overcome architectural barriers and handle complex boiler and storage room combinations. To turn off the vacuum turbine after refilling the hopper, a level detector is integrated. A constant amount of Pellets fall through the double rotary valve and the stoker auger transports the Pellets into the refractory-lined combustion chamber.

ECO PK
70-120 kW

- Cost-efficient due to **eco-mode**
- New grate system: **double rotary grate**
- Latest combustion technology Eco-Control
- **Firebed level control** with Lambda sensor
- **NEW: 300 Watt-ignition, with optimized igniti-on-surveillance**
- Heat exchanger cleaning (also in 1. + 2. draught)
- Bicameral **rotary valve in Z-form** for 100% burn back-protection
- Pellet suction process possible during combustion
- Exhaust fan (EC-motor) with negative pressure mo-nitoring
- Reciculation included as standard
- Patented ash extraction system for fly- & grate ash
- No thermal discharge safety device necessary
- Flame concentration jets out of high-end steel cast
- Suction system with acoustic insulation

Efficiency Class
A⁺

Efficiency up to **95%** Pellet-Boilers

5 YEARS WARRANTY acc. warranty card

01 New grate system „Double rotary step grate"
02 Firebed levelling
03 Heat exchanger cleaning (also in 1. draught)
04 Ash suction system for longer maintenance intervals, optional
05 New ignition: 300 W, without fan
06 Innovative integrated Touch control
07 Exhaust fan (EC-motor) with negative pressure monitoring
08 Recirculation - standard
09 Optional: Integrated back end protection
10 Patented ash extraction for fly and grate ash
11 No thermal discharge safety device necessary
12 Combustion chamber fully integrated in heat exchanger
13 Flame concentration jets out of high-end steel cast
14 Cyclone Pellet Storage
15 Closed suction system - maintenance-free, without filter
16 Fuel indicator
17 Stoker auger
18 Double-rotary valve with pressure balance
19 Drive unit
20 Pellet Vacuum turbine
21 Acoustic insulation
22 Lambdasonde
23 Flame temperature monitoring
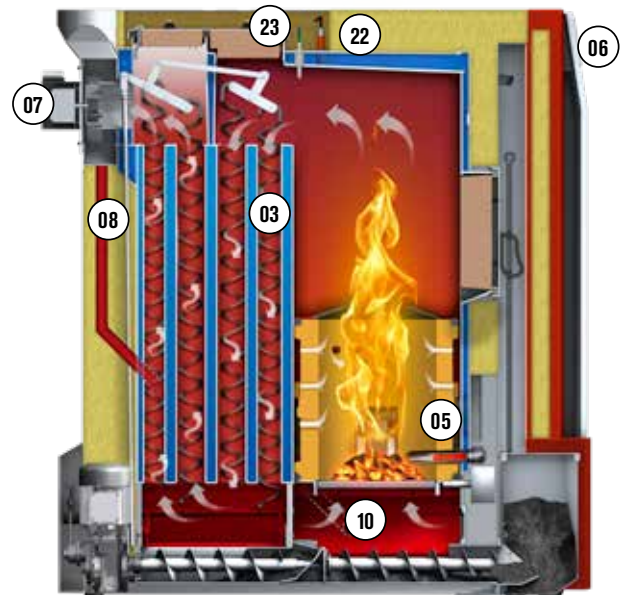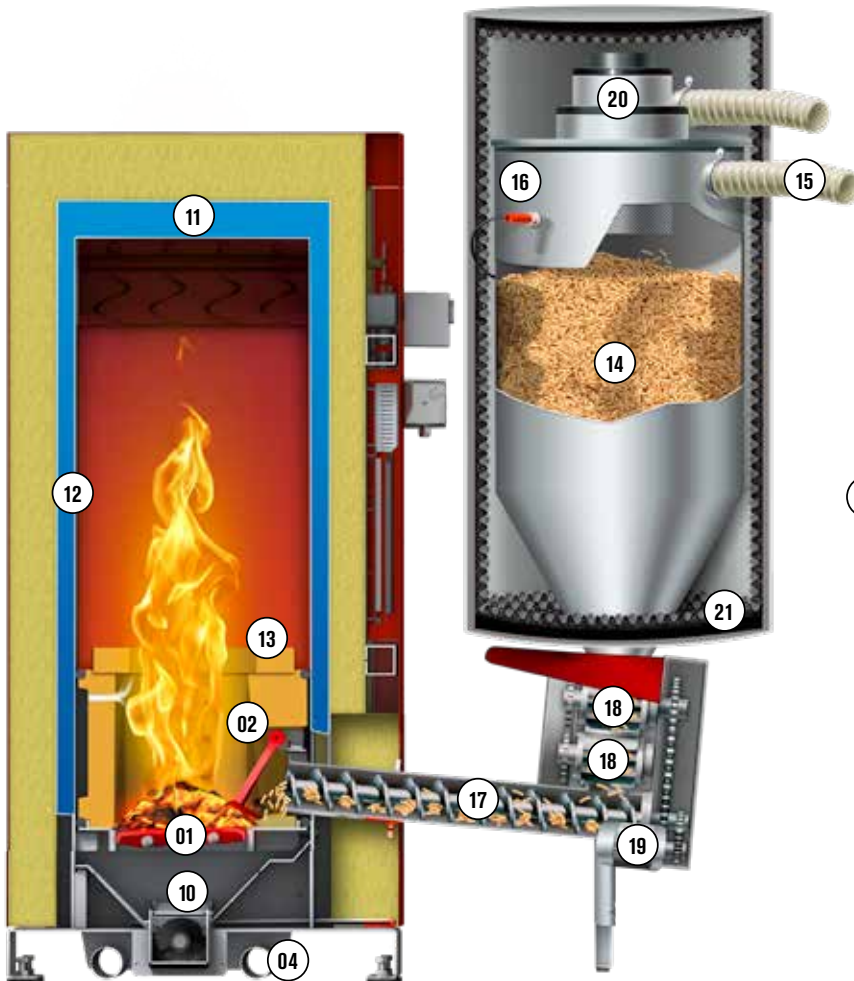
Pellet boiler in cascade up to 2 MW

ECO PK
130-220 kW
250-330 kW

This high-temperature pellet boiler from Hargassner is equipped with the latest heating technology in the larger capacity range. This boiler series is particularly suitable for residential buildings, restaurants or public buildings.

- Cost-efficient due to **eco-mode**
- New grate system: **double rotary grate**
- Latest combustion technology Eco-Control
- **Firebed level control** with Lambda sensor
- **NEW: 300 Watt-ignition, with optimized ignition-surveillance**
- Heat exchanger cleaning (also in 1. + 2. draught)
- Bicameral **rotary valve in Z-form** for 100% burn back-protection (fourfold for 250-330 kW)
- Pellet suction process possible during combustion
- Exhaust fan (EC-motor) with negative pressure monitoring
- Reciculation included as standard
- Patented ash extraction system for fly- & grate ash
- No thermal discharge safety device (only for 130-220 kW)
- Flame concentration jets out of high-end steel cast
- Suction system with acoustic insulation
- Particle separator e-Cleaner (for 130-220 kW)

Efficiency up to **95%** Pellet-Boilers

5 YEARS WARRANTY acc. warranty card

01 New double rotary grate a) De-ash grate b) Stoker grate c) Fixed grate; additional breaker grate (for 250-330 kW)
02 Firebed levelling
03 Heat exchanger cleaning (also in 1. draught)
04 Large ash box (75 l)
05 New ignition: 2 x 300 W, without fan
06 Innovative integrated Touch-control
07 Exhaust fan (EC-motor) with negative pressure monitoring
08 Recirculation - standard
09 Optional: Integrated back end protection
10 Patented ash extraction for fly and grate ash
11 No thermal discharge safety device (only at 130-220 kW)
12 Combustion chamber fully integrated in heat exchanger
13 Flame concentration jets out of high-end steel cast
14 Cyclone Pellet Storage
15 Closed suction system - maintenance-free, without filter
16 Fuel indicator
17 Stoker auger
18 Bicamerla-rotary valve with pressure balance (fourfold for 250-330 kW)
19 Drive unit
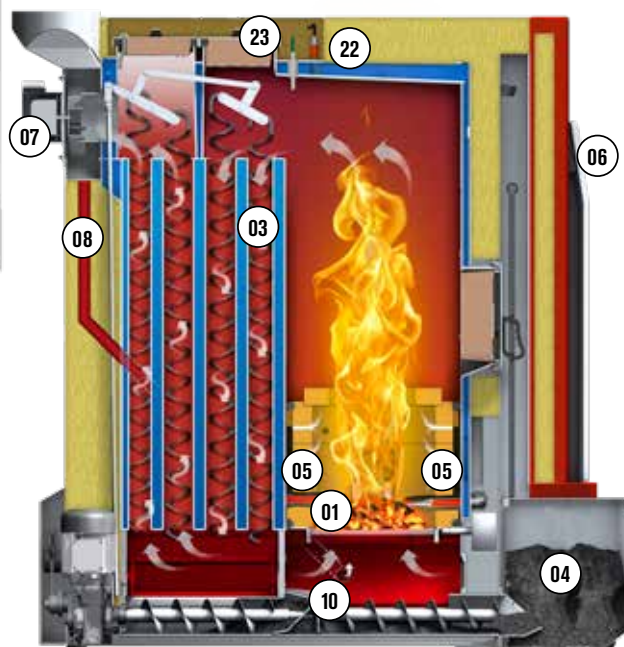**20** Pellet Vacuum turbine
21 Acoustic insulation
22 Lambdasonde
23 Flame temperature monitoring

fig. 130-220 kW

Sit back and relax –
your heating system is doing the work for you

The Lambda-Touchtronic has a userfriendly touch screen. The system controls the complete combustion
process, the back end protection and the loading of the accumulator. Furthermore, all heating circuits and hot water circuits may be regulated. The control works according to external conditions, recognising the changes in conditions as soon as they occur and adjusting the boiler output accordingly. Maximum comfort guaranteed!

Hot water tank

It is only necessary to set the desired hot water tank temperature and charging time. Your control unit will take care of the remaining steps automatically.

Hargassner guarantees 24 hours hot-domestic-water. Beside of regular loading schedules of the Hot Water Tank, a **„minimum-boiler-loading"** ensures the supply of your hot domestic water needs.

Further advantage is the HWT priority control. Means, if a HWT is being loaded, it is ensured that heating-circuits are not reduced permanently and room temperature would cool down.

Lay back and enjoy your warm home.

Control of the heating circuits

The Lambda-Touchtronic may control several independent heating circuits. The client is able to define different settings in detail; e.g. indoor room temperature on all heating circuits, depending on time of day and outside temperature.
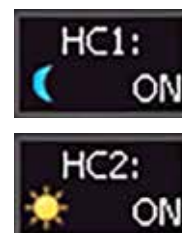
Hargassner's 3G day/night reduction mode enables the client to set 3 thresholds. One mode for 'Heating during the day', one for 'Reduction during the day' and one for 'Reduction during the night'. As a result, the heating system only operates if necessary. This saves energy without sacrificing comfort.

Through the ingenious residual heat use programme, the remaining energy in the boiler is used efficiently after the shutdown of the boiler.

KeBoiler before starting: Display of Lambda Touchtronic shows a not-heated boiler. HWT and Accumulator are cold - not loaded

Boiler in Full-Load: Display shows a working boiler. HWT and Accumulator are being loaded already. Heating Circuits ensure required temperature in each living-area.

Boiler in Part-Load: Boiler is only working with half-power. Boiler and Accumulator are loaded already. Heating Circuits ensure required temperature in each living-area.

6 a.m. - 9 a.m.	9 a.m. - 3 p.m.	3 p.m. - 10 p.m.	10 p.m. - 6 a.m.

Heating | Intelligent use of residual heat | Day reduction | Heating | Intelligent use of residual heat | Night reduction
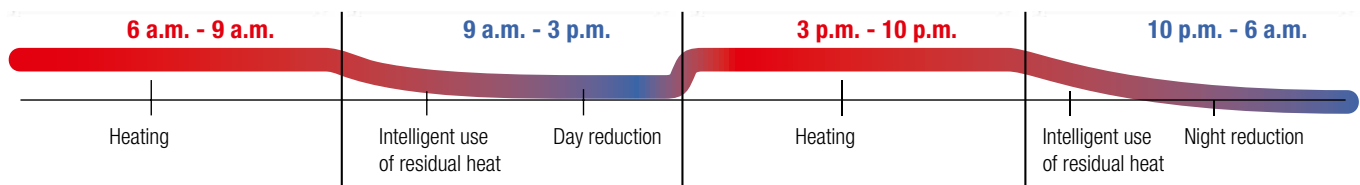
Heating time 1:
6 a.m. – 9 a.m.
Outside it is -7°C, so considerably less than the threshold value of +16°C - the heating switches on.

Day-reduced temperature:
9 a.m. – 3 p.m.
Outside temperature increases to -1°C considerably less than the day time reduced temperature threshold of +8°C. Heating day-reduced temperature operation.

Heating time 2:
3 p.m. – 10 p.m.
The outside temperature climbs to +1°C; so considerably less than the threshold value of +16°C. The heating remains switched on.

Night-reduced temperature:
10 p.m. - 6 a.m.
The temperature cools to -2°C, so above the threshold value for the night-reduced temperature of -5°C. The heating switches off.

CONTROL ACCESSORIES

The mobile remote control for your heating system!

You want to change a setting on your boiler or see the current status - without going to your boiler room? No problem! The all new remote controls. Easy, self-explaining and perfectly visualised!

LCD FR35 Backlight: With this LCD-remote control you can see all important temperatures on a digital screen. You can set the room temperature and/or day-reduced or heating operation. The FR35 can be connected with or without room-temperature dependence. A warning light is integrated to inform the client about the status of the heating system.

Wireless version for LCD FR35: Same function as described above - but radio version with transmitter and receiver.

FR 40 Touch remote control: All functions of the boiler are controllable through the living room You can set the room temperature and the heating statuses, you can change all heating temperatures and times.

Analog FR25: you can use the temperature controller to adjust the room temperature up or down. With or without room-temperature dependence. A warning light is integrated to inform the client about the status of the heating system.

Touch accessories

Hargassner offer a wide range of Touch accessories. This contains the extension of heat circuits and furthermore remote controls to increase customer convenience.

Control board A/B: This control board is to extend the control by 1 heat circuit and 1 HWT. The board may be integrated in the boiler or the extension module HKM. Also in the HKR - additional control boards can be installed. (Sensors must be ordered separately.)

NEW: Control board B

Control board F: mixed district line, Control of the district line pump and the distr. line mixer incl. sensor

Control board PF: for 2 additional sensor inputs. All together you can connect 5 sensors on the buffer now. (Sensors must be ordered separately.)

Control board D: for differential control of a separate heat source and one accumulator or hot water tank. This differential controller can be used for an external boiler (Log, Oil, Gas, etc.) as well as for a solar system in single circuit or double circuit operation. The control of the pumps is constant (no speed control with PWM). Incl. 1 HWT-sensor and 1 Solar sensor (temp. resistant)

Control board E: for controlling a substation flushing valve (no sensors required).

Extension module HKM (with or without Touch Display): This module is used for the extension of additional heating- or hot water tank circuits. A maximum of 2 mixer-controlled heat circuits & 1 HWT with DHW-circulation pump can be connected to the boiler. Additionally an external heat circuit or an accumulator and other HKM's can be connected.

Heat circuit controller HKR with Touch Display: Control unit based on atmospheric conditions for 2 mixing valve controlled heating- and 1 hot water tank circuits with DHW-circulation pump; 1 accumulator or external boiler, 1 external HC, 1 long-distance heating or accumulator pump, extension to a max. of 16 HKR's. An extension with a max. of 2 HKM's, ZSP-A allows additional 8 HC and 5 HWT circuits.

Overvoltage protection: If the CAN-Bus modules are in two different buildings - the overvoltage protection guarantees a potential equalisation.

Housing with/without main switch: If no space is available in the boiler control cabinet when using several additional boards, then a universal expansion module can be used. Housings are available either with and without main switch or with a housing + main switch + three-phase current board.

Additional functions

Accumulator- & Solar logic(standard): The PSP-Logic with 3 SENSORS and part load control revolutionizes the current accumulator control. This guarantees long boiler run times, less start-up cycles and maximum boiler efficiency. For peak loads a forced loading cycle can be activated. Solar buffer logic: First the hot water stored in the tank from solar-energy is used, before the biomass boiler fires up using automatic ignition.
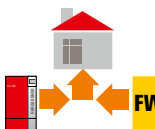
External heat control: If desired, an additional external boiler, e.g. Pellet, oil or gas boiler, may be integrated. Changeover between the two boilers occurs fully automatically.

Cascade control: The cascade controller for 2-6 boilers enables a parallel operation of several boilers. This controller automatically switch on or change over control of boilers, based on outside temperature. Priority mode, equality of operation hours possible, auto change-over mode after error. New: control of an external peak-load or back-up boiler.

Remote control via Phone or Tablet

Internet-Gateway: required for App and Web-Service. The internet gateway establishes a save TLS-encrypted connection between the Hargassner boiler control to the Internet router. Only with that a save access to your heating system is possible.

App: With the all new Hargassner APP you may easily change heating times, temperatures and operation modes and receive information regarding the current boiler status. Important information can be sent via email or push notification to your mobile. You know at any time the status of your boiler. (Requirements: Internet - Gateway; Smart phone with Android or IOS)

Web solution: With the Hargassner Web-Service the installer may set the heating system ONLINE - via Login. (Requirement: Internet gateway)

SmartHome Solutions

Hargassner offers interfaces for all main smart home solutions. Efficient energy control and heat distribution in your house is now at a new level. SmartHome compatibility is the perfect opportunity for an even more efficient energy control. Save energy and costs. Enjoy convenience and safety. Electrical devices, heating and lights are connected to one central control unit. Via internet you are able to look at your home - also if you are on the way!

LOXONE: Integrate your Hargassner boiler to your Loxone SmartHome. Appropriate boiler control based on Loxone singe room control. Loxone enables the configuration and control of each single room - according to your demand.
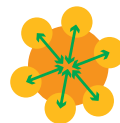
Mod Bus: With the MOD-BUS interface /TCP the boiler can be integrated into a building management system or can be connected to a visualisation software.

KNX: Connection to a KNX-house automation. Interface between boiler (LAN) and KNX-Bus -> Bus coupler.

Heat meter: with M-Bus interface. Connection of heat meter 403 from Kamstrup to the Hargassner Touch-Tronic. This allows you to read out your heat data conveniently on the boiler or via WEB.

HARGASSNER
FUEL STORAGE

NEW: AUP 8-POINT

Extraction RAPS

Pure suction system; used for small and ideally square storage rooms. For larger rooms three or four-point suction systems are available, either with manual or auto suction changeover unit.

Extraction RAS

This auger-suction combination is used for large or elongated storage rooms. Distances up to 30 m from the boiler room to the storage room can be overcome.

Heating modules

Available as
- single floor
- double floor
- multi heating modules
in various lengthes 4-8 m

Eco-Box

The new heating solution: Boiler room and fuel storage room in one.

up to 17m² EXTRA SPACE

Underground PET

Available in 8 or 10 m³.

Pellet boiler with external storage

Pellet boiler with an external weekly storage bin (out of steel, incl. point suction system):
- 770 litres volume
- Volumen 500 kg
- Dimensions:
  770 x 1.150 x 1.090 mm
- for manual filling with pellet bags

Nano-PK external weekly storage bin

- 340 litres volume
- 230 kg Pellets
- 580 x 580 x 1.220 mm

NEW

Bag silo GWTS & GWT-MAX

Hargassner's bag silo represents a complete storage room solution. The silo can be placed inside or outside the boiler room (depending on building regulations).

Extraction RAP Pellet-Directauger

Extraction System with direct auger into the boiler for Eco-HK 70-330.

Nano-PK weekly storage

- 340 l filling volume
- Fill volume 220 kg Pellets
- Dimensions: 580 x 580 x 1,220 mm
- for manual refill

Requirements for the Pellets storage room

Storage room - size
Calculate the storage space requirement according to the formula:

Building heating load in: kW x 0.90 = storage room size in m³
                            kW x 0.40 = Pellets needed in tonnes

Example: A single-family house with building heating load of 15 kW needed Accordingly, a storage room of 13.50 m³, which corresponds to approximately 2 x 3 m Base area and 2.2 m height. Through the included reserve can You buy Pellets at the best time every year.

Location
The silo trucks for filling the storage room have a pump hose with max. 50 m in length. The storage room can be from the boiler room to Max. 20 meters away.

Requirements for the storage room
The storage room should be as dry as possible. In Austria, the execution must of the storage room in residential areas fire-resistant to F 90 be. (depending on the construction regulations). Electrical installations are not permitted and water pipes should be avoided.
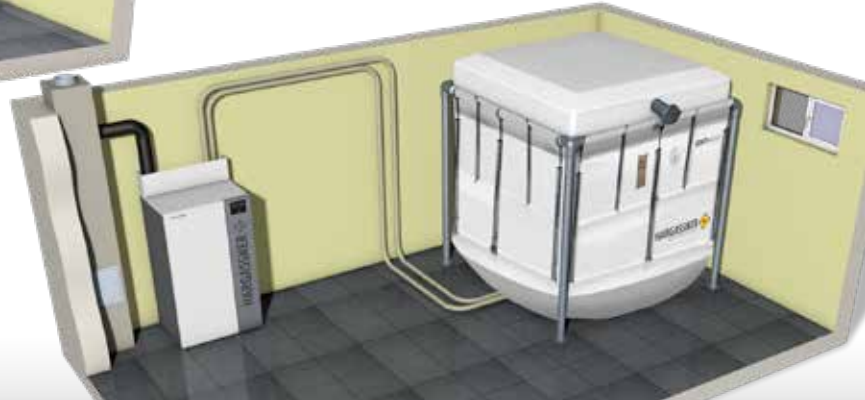
Pellet boiler with GWTS

Hargassner's bag silo represents a complete storage room solution. The silo can be placed (depending on building regulations) either inside or outside the boiler room. If installed outside, the silo has to have a stable floor and needs to be protected against UV-radiation and rain. Equipped with a single-position feeding system, the silo is made out of a special, high-quality, anti-static and dust-proof material. Because of this material, only one pellet fill socket is needed. Depending on the room height, the pellet fill socket can be installed above or below the easily assembled steel construction.

Pellet boiler with bag silo GWT-MAX
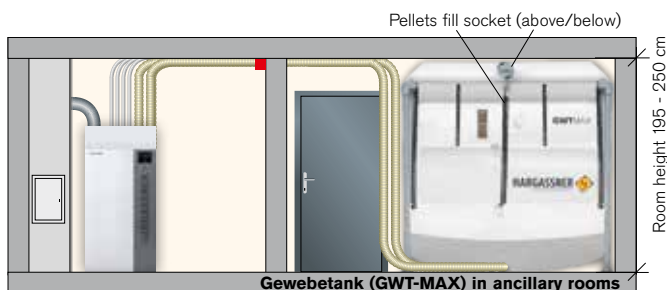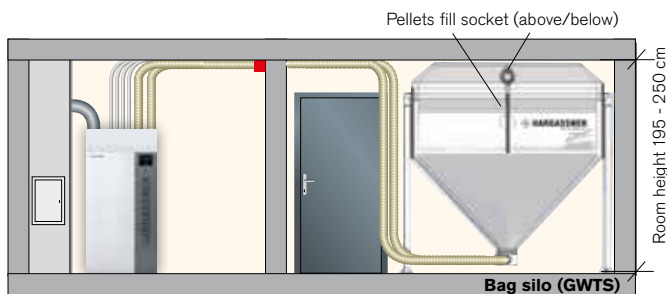
The bag silo GWT-MAX has an elastic floor element with tension springs. If he is filled, the floor element is lowered through the weight the lateral floor suspension. The silo will thereby filled to a maximum. If the tank empties, the weight is reduced and the floor is turned upwards drawn. At the end, a 4-sided sloping floor is created, which guarantees complete emptying. The silo bag bottom is made of water-repellent material (protection against condensation).

- **MAX**imum volumen up to 7,6 Tonnen
- **MAX**imum space utilization
- **MAX**imum operational safety

Minimum dimensions

All technical details see page 39.

Pellets fill socket (above/below)

Room height 195 - 250 cm

Bag silo (GWTS)

Pellets fill socket (above/below)

Room height 195 - 250 cm

Gewebetank (GWT-MAX) in ancillary rooms

Pellets fill socket (above/below)

Room height 195 - 250 cm

Bag silo (GWT-MAX) in the boiler room

Pelletboiler with room extraction auger suction RAS

RAS stands for "Room extraction Auger Suction". This system is mostly used for large and elongated storage rooms. Distances up to 30m from the boiler room to the storage room can be overcome. The Pellets are transported outside the storage room through the auger into the vacuum system. The special construction of the auger trough prevents overfilling and guarantees a constant delivery rate. As a result, the storage room will be emptied down to the last pellet. The storage room has to be equipped with a 35° sloping floor. The integrated insert profiles for shuttering boards facilitate installation.
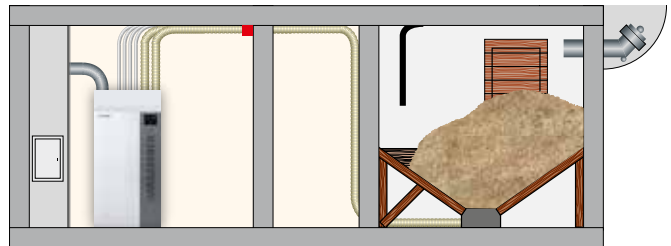
2 storage room extraction augers for one 2-point auto changeover unit

For large and square wood pellet storage rooms, 2 extraction augers are installed. The changeover from one to the other auger takes place through a 2-point auto changeover unit. The result is an optimum storage room extraction and an efficient way to use larger pellet volumes over longer distances.
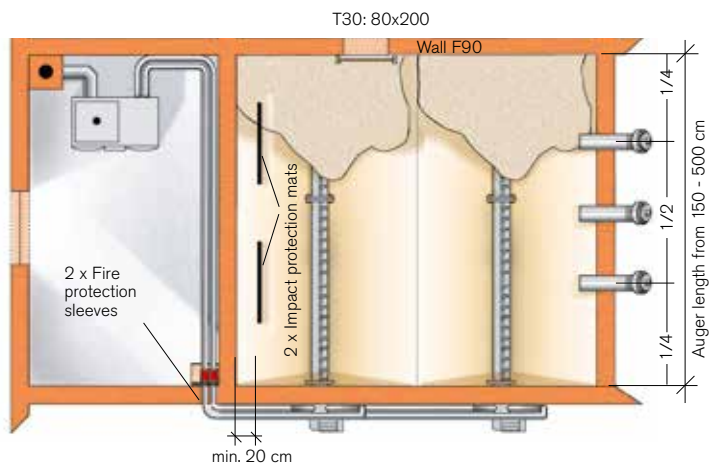
For boiler 70-200 kW up to a length of 8 meter.
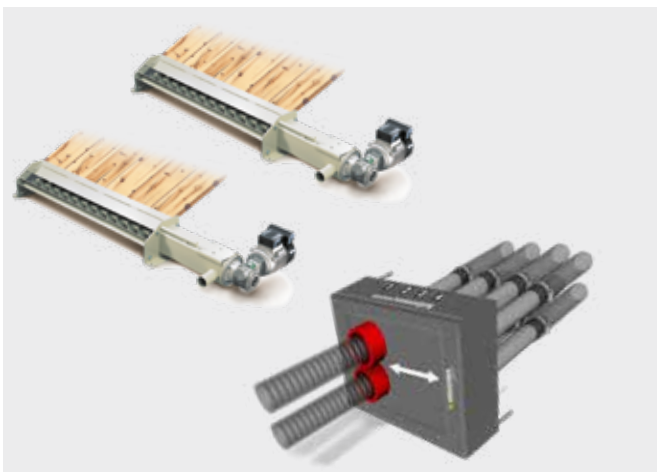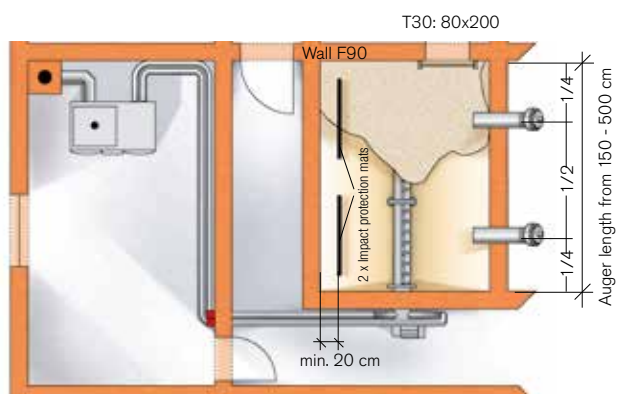
Pellet boiler with RAPS

The RAPS-System is a pure suction system. Mostly used for small and ideally square storage rooms. The suction points are installed in the middle of the room and accommodate complex room situations. In order to unload large storage rooms, three and four-position vacuum feeding systems are available, optionally with manual or auto changeover unit. The storage room has to be equipped with a 35° sloping floor.

For smaller storages an AUP 8 points can be installed also without floor.

RAPS
Single point

Auto changeover unit for double or three position vacuum feeding system.
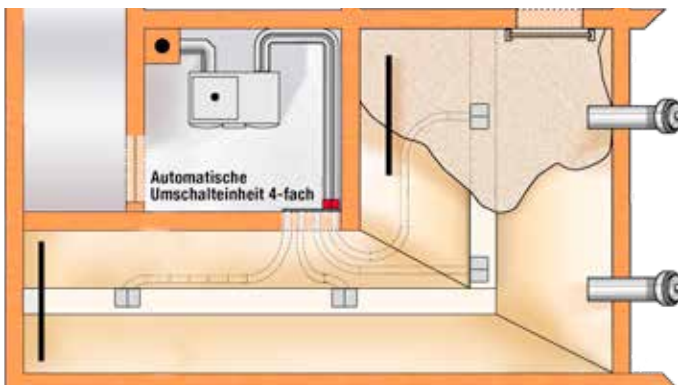
Auto changeover unit RAPS, Four positions
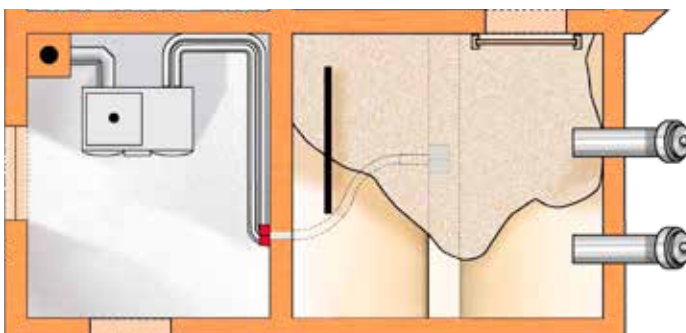
RAPS, Single position
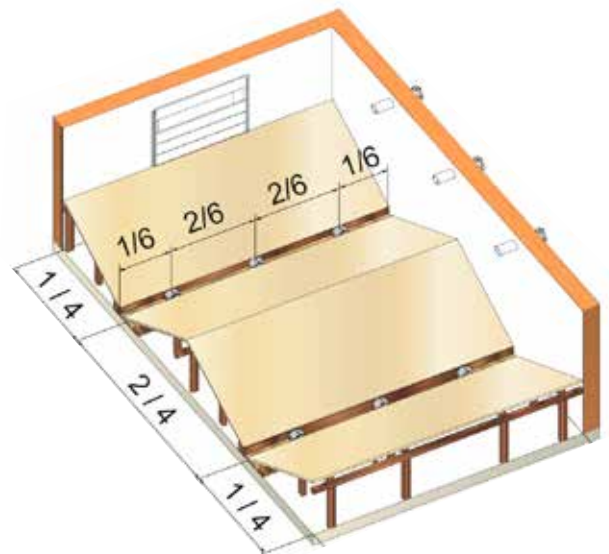
Auto changeover unit AUP
AUP professional 6-8 points with floor

Auto changeover unit for two, three, four, six and eight single point RAPS.

Automatic Changeover Unit AUP

These new switching units AUP 6 and 8-fold can now also be used for **small storage also with slanted floor.** This results in a larger storage volume and saves costs in storage room manufacturing.

For **very large storages a slanted floor** will be still needed, whereby the many flexible extraction points also storage rooms with unusual formats can be emptied. Because in many countries or federal states the fire protection regulations have been relieved, the new **AUP has no more fire protection collars** integrated - These must therefore be ordered separately if required.

RAP-Directauger with extension for Eco-HK 70-330

Pellets are being transported from the pellet storage to the boiler. In the storage are open shaft-auger - up to maximumg 6 m.

Prolongation
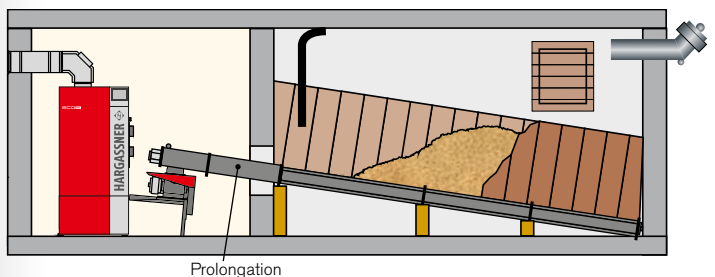
The RAP can be combinded with various accessoires, such as :

RAP with ascending auger

Ascending auger   Prolongation
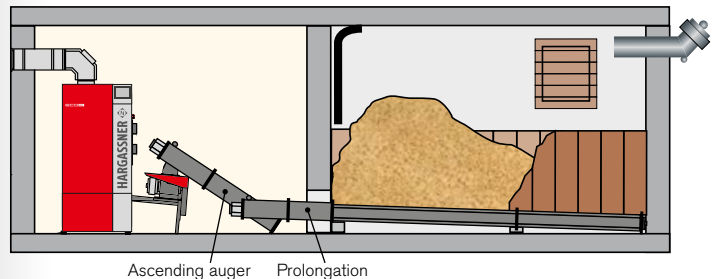
RAP with vertical connection auger

Vertical connection auger   Prolongation
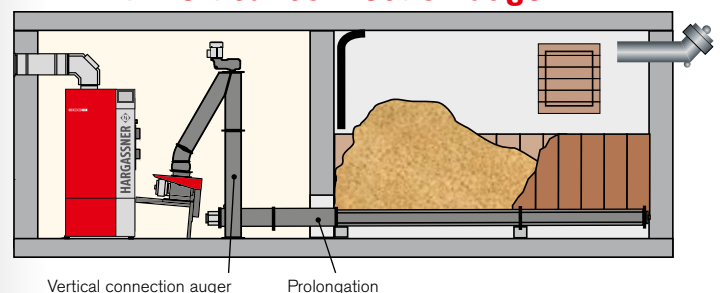
Additional connection augers or a down-pipe is also possible.

AUP with 6 points without slented floor

Underground
Pellet Tank PET

Another possibility for wood pellet storage is spherical underground tanks made of corrosion-resistant, fiber-glass-reinforced polyester resin GFK. Highest operation safety, through a special safety package with full explosion protection for the vessel, is guaranteed.

The extraction system consists of a base body, all necessary connections for the filling, as well as connections for the suction process.

A well-engineered extraction system provides 100 % usage of the sphere volume. The underground tank can be placed in the garden or under a driveway. The covers are accessible by foot or optionally by car or truck. This creates free available space for leisure time. Cos-effective storage room for renovations or new buildings where there is no storage room.

Suitable for ALL Hargassner pellet boilers!

Pellet boiler

Under-ground Pellet Tank

Boiler room
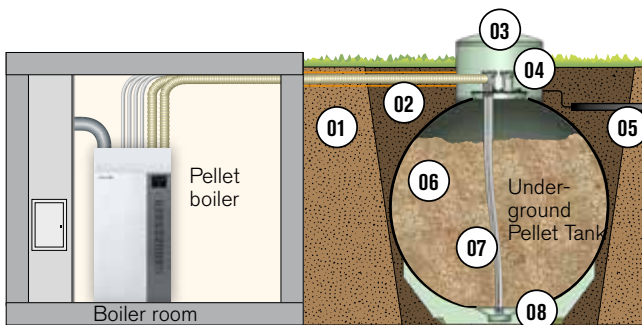
01 Protective pipe
02 Suction hose
03 Manhole pit
04 Fill socket

05 Grounding
06 Fuel
07 Suction hose
08 Point suction system

All technical datas see page 39.

Double-Container

Single-Container

Heat modules & Eco-Box

Best combination of plant room and storage room

Containers are available in single, double or triple design, according to requirements. Because of the modular construction, our containers are easily positioned, assembled and installed. The main advantage is the enormous space and cost saving, either in new or refurbished buildings.

Concrete containers are especially useful for public buildings, industrial enterprises, hotels or shared housing communities. Because of the comparatively low investment costs, Hargassner's containers are also perfectly suited for heat contracting businesses.

Eco-Box

Up to 17m² Extra SPACE

for 4 – 8 t Pellets
Pelletboilers from 6 – 49 kW
- Single- and Double Family Homes
- Public buildings etc.

- for Renovations/New Built Houses with limited space
- no crance for installation necessary

Single-Container

for 9 – 19 t Pellets
Pelletboilers from 40 – 200 kW
- Multi-family-homes
- Restaurants

Double-Container

for 18 – 29 t Pellets
Pelletboilers from 140 – 600 kW
- Multi-family-homes
- hotels
- industry, contracting, etc

Detatched house in Hall bei Admont, 9 kW Pellets

Social institution „Paulusstift" in Neuötting (D), 80 kW Pellets

Company Zweimüller in Ennsdorf, 2 x 90 kW Pellets

ACCESSORIES

Pellet fill and ventilation sockets:

A minimum of two sockets have to be installed in every storage room. One to fill and one to close the vacuum circuit. As a result, dustfree filling is guaranteed.

Pellet fill socket straight

Pellet fill socket - bent 45°

Impact protection mat

Suction hose

Mounting clips

Carrying shell

Suction hose connection

Suction hose bow

Fire protection stopple

Fire protection sleeve

Door protection set 1 + 2
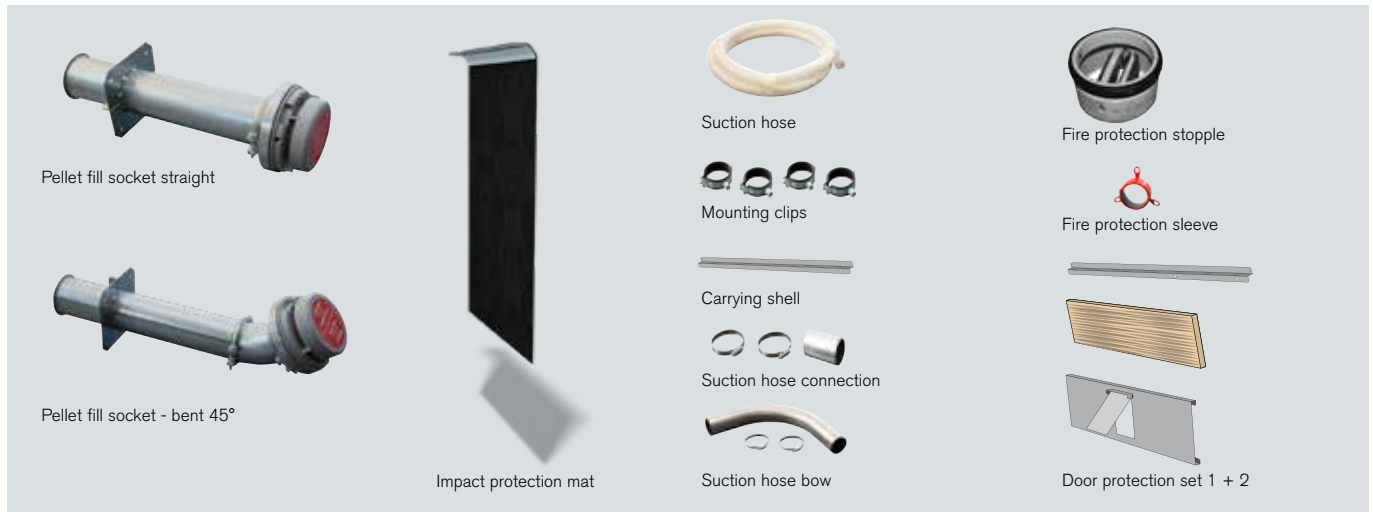
Hydraulic Module / Integrated Back-End Protection

For Nano PK various hydraulic-modules are availble - with and without heating circuits. We also offer integrated back-end protections with energy-saving pumps and efficient mixing valves. Your advantages: fast and simple installation, compact and economical.

Substation, Heatmeter, Freshwaterstations and Heatcircuitgroups

Hargassner offers hydraulic components specially designed for the boilers. All control functions are performed by the Hargassner controls on the boiler.

Further details can be found in the „Accessories" brochure or at www.hargassner.at
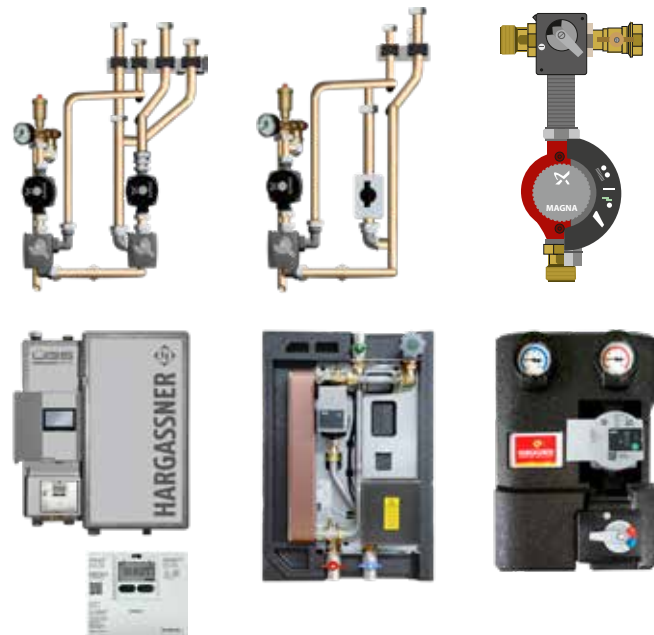
Stainless Steel Flue Pipes Ø 100/130 RLU / RLA or Ø 150 mm

Hargassner offers special stainless steel flue pipes for pellet boilers. In the connection cable set Ø 100 mm resp. 130 mm, all necessary components such as bends, pipes, boiler braid and seals are integrated. There are two versions - RLA with integrated chimney draft regulator (Ex) and RLU without chimney draft regulator available. The connecting cable set Ø 150 mm integrates all bends, tubes, boiler brackets and clamping straps. Again, there are the two versions with integrated chimney draft regulator (Ex) and with on-site chimney draft regulator in the chimney.

OekoTube-Inside

Electrostatic Finedust filter OekoTube-Inside, as an official approved method to reduce finedust. It can be used for all Hargassner Wood Chip-Pellet-Wood Log boilers up to 100 kW. It is integrated in the connection pipe between boiler and chimney.

WITH SEALING

WITH SEALING

NEU

eo. Stainless Steel Flue Pipe Ø100/130 mm RLU
(Air connection independant)

eo. Stainless Steel Flue Pipe Ø100/130 mm RLA
(Air connection dependant)

Layered Accumulator P, SP, HSP or Solar SW 1+2 from 500 – 4000 Liter

This layered accumulator is perfectly designed for Hargassner control and hydraulic schemes. Through the integrated return spreading sheet, efficient accumulator usage is guaranteed. Integrated sensor strips enable easy and flexible installation and therefore optimize the hydraulic loading and unloading processes.

Furthermore, all Hargassner accumulators with 2 x 90 ° staggered connection rows of 4 each connection sleeves (with socket insulation)can be connected parallel connected Outside is an effective fiber fleece insulation with 120/140 mm and the visually appealing gray hard coat with aluminum hook strip.

- Return spread sheet for optimum buffer utilization
- Sensor strip for easy and flexible installation
- Fiber fleece insulation, hard sheath and socket insulation
- Minimum space requirement
- Special top entry for sensor cables

> **NEW:**
> **Accumulator P**
> **without return-flow spread sheet**

| Accumulator P | Layered accu-mulator SP | Hygienic-layered Accumulator HSP | Solar-layered Accumulator SP SW 1/2 | Solar-hygienic-lay-ered Accumulator HSP SW 1/2 |

Hot water tank
NANO WS 210

This hot water storage from Hargassner stands out through its optimized-sized heating surfaces and was specially designed for combination with the pellet boiler Nano-PK developed. He captivates on the one hand by his perfectly coordinated look and on the other hand by his fast assembly time. Through the connection set he can be mounted and put into operation in shortest time. It convinces with short heat-up time and high continuous power.

Hot water tank WS 300 & 500 & Solar tank WS 300-S & 500-S

The Hargassner Hot Water Stroages WS 300 and WS 500 have perfectly dimensioned heat exchanger surfaces and are specially designed for the combination with Hargassner biomass boilers. The hot water solar storage WS 300-S and WS 500-S are equipped with an additional smooth pipe heat exchanger for solar.

- enamelled steel
- incl. Magnesium protection anode
- Cleaning Flange DN 110 for ribbed pipe heat exchanger or immersion heater
- additional sleeve 6/4" for a threaded electric immersion heater
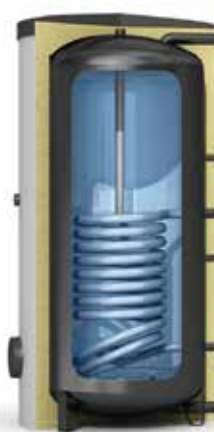
Cross section
Hot water storage
WS 300.2 + 500.2

Nano-PK 6 – 15

Efficiency class

A++   zB. Nano-PK Plus 15 Verbundlabel inkl. Regelung

Summary test report			
Nano-PK 15		**Nominal heat output**	**Partial load**
Power range	kW	15	4,5
Boiler temperature	°C	70	70
Efficiency	%	95,2	90,7
Carbon monoxide	mg/MJ	23	8
Dust	mg/MJ	9	8

Nano-PK 20 – 32

Energieeffizienzklasse

A++   zB. Nano-PK Plus 32 Verbundlabel inkl. Regelung

Summary test report			
Nano-PK 32		**Nominal heat output**	**Partial load**
Power range	kW	32	6
Boiler temperature	°C	70	70
Efficiency	%	94,7	95
Carbon monoxide	mg/MJ	10	41
Dust	mg/MJ	10	8

Smart-PK 17 – 32

Efficiency class

A+

NEW

Also availabel as a Combi-Boiler

Summary test report			
Smart-PK 32		**Nominal heat output**	**Partial load**
Power range	kW	32	6
Boiler temperature	°C	70	70
Efficiency	%	94,7	95
Carbon monoxide	mg/MJ	10	41
Dust	mg/MJ	10	8

Classic 12 – 60

Efficiency class

A+

Summary test report			
Classic 22		**Nominal heat output**	**Partial load**
Power range	kW	22	6,5
Boiler temperature	°C	70	70
Efficiency	%	93,2	91,4
Carbon monoxide	mg/MJ	3	5
Dust	mg/MJ	6,4	3,4

Eco-PK 70 – 330

Efficiency class

A+   zB. Eco-PK 70 Verbundlabel inkl. Regelung

Summary test report			
Eco-PK 70		**Nominal heat output**	**Partial load**
Power range	kW	70	21
Boiler temperature	°C	70	70
Efficiency	%	94,6	95,2
Carbon monoxide	mg/MJ	4	38
Dust	mg/MJ	10	13

Nano-PK 6–15 kW

Accumulator/Boiler VL/RL Boiler 1"
Heat circuit VL/RL HK 5/4"
95
Ø100
84
RL 1"
VL 1"
1600 / 1350
1165 / 715
107
1150
780
405
580
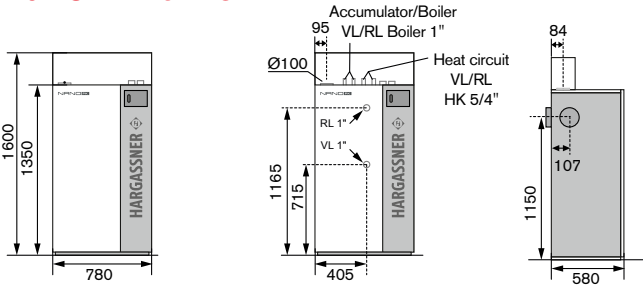
Efficiency class
A⁺

Nano-PK 6–15 kW PLUS
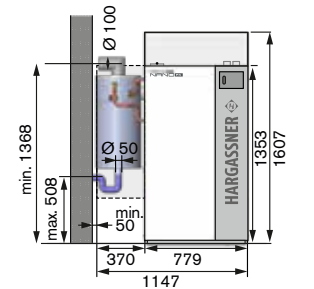
Ø 100
min. 1368
max. 508
Ø 50
min. 50
1353 / 1607
370 / 779
1147

Efficiency class
A⁺⁺

Nano-PK 20–32 kW

Accumulator/Boiler VL/RL Boiler 5/4"
Heat circuit VL/RL HK 6/4"
76
1755 / 1550
1524 / 1294
142
1294
980
132
700

Efficiency class
A⁺

Nano-PK 20–32 kW PLUS

Ø 100
min. 1588
max. 545
Ø 50
min. 50
1550 / 1755
370 / 980
1350
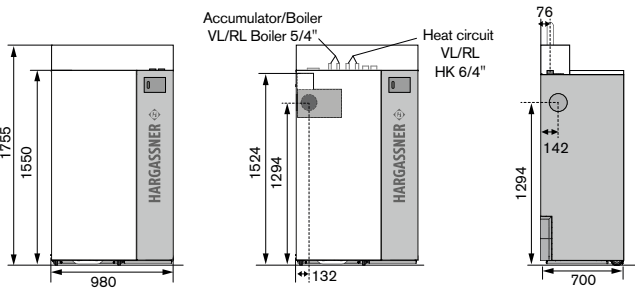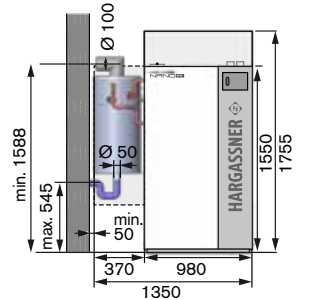
Efficiency class
A⁺⁺

Smart-PK 17–32 kW

1520
1270
1080
650
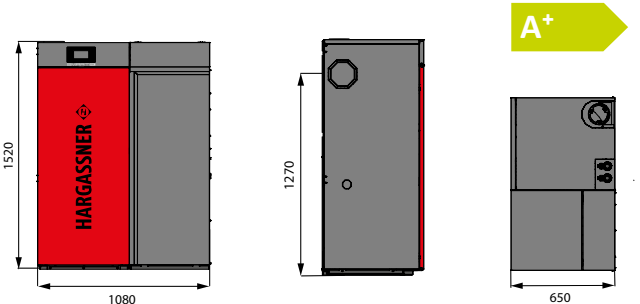
Efficiency class
A⁺

Smart-Combi 17–32 kW

2060
1290
1520
1520
1000
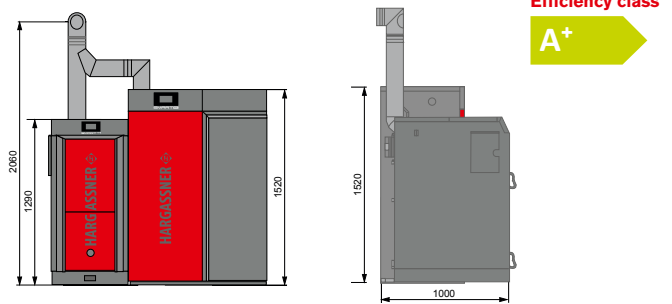
Efficiency class
A⁺

Classic 12–22 kW

395
Ø130
775
VL 1"
RL 1"
1470
1272 / 1152 / 1082
1165
675
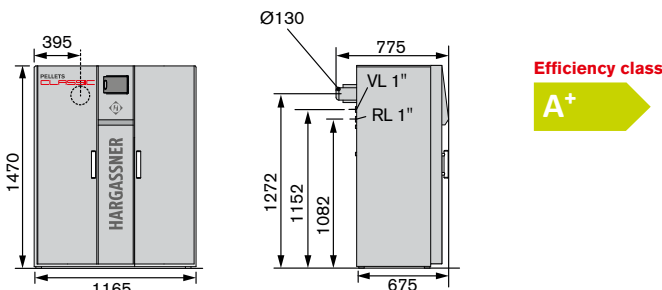
Efficiency class
A⁺

Classic Lambda 40–60 kW

240
Ø 150 at 40-60kW
310
980
VL 5/4"
1480
1470 / 1310
545
RL 5/4"
1210
780
150
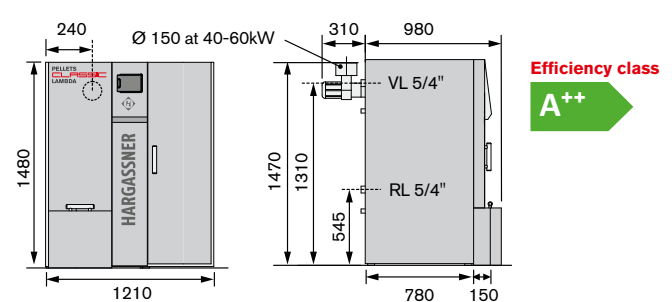
Efficiency class
A⁺⁺

Eco-PK 70–120 kW

Ø 180
Ø 575
particle separator eCleaner opt.
440
min. 610 opt. 800
200
340
800
1610
1860
1553
1235
630
745
400
1430

Room height min. 2200

Eco-PK 130–220 kW

Ø 200 (250)
Ø 655
particle separator eCleaner opt.
440
330 (365)
min. 640 opt. 800
200
340
1810 (1970)
1765 (1915)
623 (675)
1740 (1905)
1330 (1440)
1805
716
875 (945)
455
780

Dimensions in brackets apply to ECO-PK 200/220
Room height min. 2200 (2400) opt. 3000

Eco-PK 250–330 kW NEW

1950
1155
2015
2140 / 2290

Room height min. 2600 opt. 3000
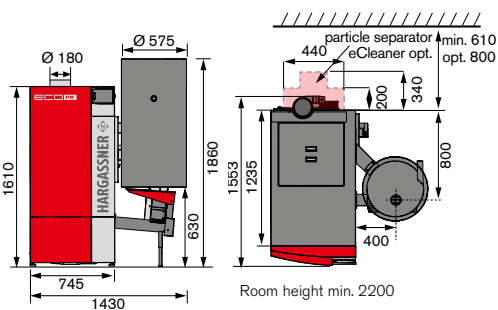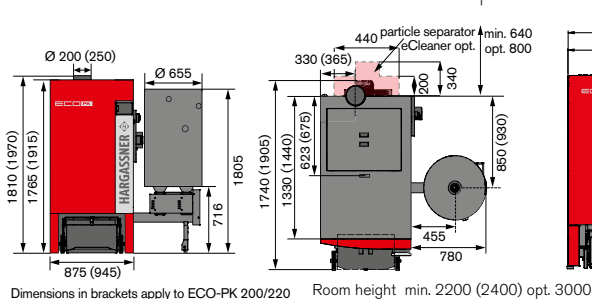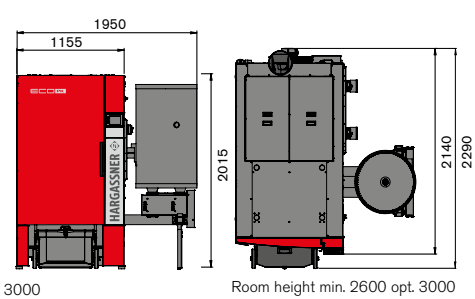
Nano-PK 6–15 kW

		Nano-PK 6	Nano-PK 9	Nano-PK 12	Nano-PK 15
Power range	kW	1,6 - 6,1	2,7 - 9	3,6 - 12	4,5 - 15
Efficiency (at nominal heat output)	%	93,6 / 91,3	93,6 / 91,3	93,7 / 91,3	95,2 / 90,7
Nominal heat output	kW	6,4	9,6	12,8	15,8
Flue pipe diameter	mm	100	100	100	100
Amount of water in heat exchanger	Liter	24	24	24	24
Boiler temperature range	°C	(38) 48 - 78	(38) 48 - 78	(38) 48 - 78	(38) 48 - 78
Back end protection temperature		lt. Heizungsschema	lt. Heizungsschema	lt. Heizungsschema	lt. Heizungsschema
Water-side resistance ΔT 10 / 20 [K]	mbar	2,9 / 1,9	7,0 / 2,4	11,0 / 2,9	16,8 / 6,0
Flow / Return flow	inch	1"	1"	1"	1"
Weight	kg	220	220	220	220
Dimensions H x W x D	mm	1350 x 780 x 580	1350 x 780 x 580	1350 x 780 x 580	1350 x 780 x 580
Transporting dimensions H x B x T	mm	1380 x 780 x 580	1380 x 780 x 580	1380 x 780 x 580	1380 x 780 x 580
Boiler-Label	Class	A+	A+	A+	A+
Boiler inspection label incl. control	Class	A+	A+	A+	A+

CONDENSING BOILER PLUS

Width: 370 mm
Water content: 9 Liter
Weight: 17 kg
Condensate drain: DN40 mm
Cold water connection: 3/4" AG inch max. 15 ° dH

Condensate / hour			
Nano-PK 6	Nano-PK 9	Nano-PK 12	Nano-PK 15
0,6 Liter	0,9 Liter	1,2 Liter	1,5 Liter

Max. operating temperature: 95 °C, Max. operating pressure: 3 bar, Electrical supply: 230 V AC, 50 Hz, 13 A

Nano-PK 20–32 kW

		Nano-PK 20	Nano-PK 25	Nano-PK 32
Power range	kW	6 - 20	7,5 - 25	9,6 - 32
Efficiency (at nominal heat output)	%	95	94,9	94,7
Nominal heat output	kW	21,2	26,3	33,7
Flue pipe diameter	mm	130	130	130
Central air Connection	mm	75	75	75
Amount of water in heat exchanger	Liter	42	42	42
Boiler temperature range	°C	(38) 48 - 78	(38) 48 - 78	(38) 48 - 78
Back end protection temperature		lt. Heizungsschema	lt. Heizungsschema	lt. Heizungsschema
Water-side resistance ΔT 10 / 20 [K]	mbar	22 / 9	33 / 12	45 / 16
Flow / Return flow	inch	5 / 4 "	5 / 4 "	5 / 4 "
Weight	kg	360	365	370
Dimensions H x W x D	mm	1550 x 980 x 700	1550 x 980 x 700	1550 x 980 x 700
Transporting dimensions H x B x T	mm	1552 x 980 x 700 (zerlegt: 1550 x 575 x 540)		
Boiler-Label	Class	A+	A+	A+
Boiler inspection label incl. control	Class	A+	A+	A+

CONDENSING BOILER PLUS

Width: 370 mm
Water content: 9 Liter
Weight: 17 kg
Condensate drain: DN40 mm
Cold water connection: 3/4" AG inch max. 15 ° dH

Condensate / hour		
Nano-PK 20	Nano-PK 25	Nano-PK 32
2,0 Liter	2,5 Liter	3,2 Liter

Max. operating temperature: 95 °C, Max. operating pressure: 3 bar, Electrical supply: 230 V AC, 50 Hz, 13 A fuse

Smart-PK 17–32 kW

		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 (at nominal heat output)	%	95,1 - 93	95 - 96,4	95,1 - 96,2	95,3 - 95,8
Nominal heat output	kW	17,9	22,8	26,3	33,6
Flue pipe diameter	mm	130			
Day hopper	kg	174			
Amount of water in heat exchanger	l	42			
Water-side resistance ΔT 10 / 20 [K]	mbar	21 - 8	27 - 10	28 - 13	29 - 16
Flow / Return flow	inch	5/4			
Dimensions H x W x D	mm	1520 x 1080 x 650			
Weight	kg	290			
Transporting dimensions H x B x T	mm	1520 x 573 x 575			
Transporting weight	kg	180			
Chimney connection height / opt.	mm	1295 / 2000			
Boiler inspection label incl. control	Class	A+	A+	A+	A++

Smart-Combi

		Smart-PK 17-32 / Smart-HV 17-23
Nominal heating output	kW	17 – 32
Height	mm	1290 / 1520
Width	mm	650 / 1080
Depth	mm	975 / 650
Transporting dimensions H x B x T	mm	600 / 930
Flue pipe diameter	mm	130 / 130
Flow / Return flow	inch	6/4" / 5/4
Amount of water in heat exchanger	Liter	72 / 42
Weight	kg	400 / 290
Chimney connection height top/behind	mm	2060 / 1530
Boiler-Label	Class	A+ / A+
Boiler inspection label incl. control	Class	A+

Max. operating temperature: 95 °C, Max. operating pressure: 3 bar, Electrical supply: 230 V AC, 50 Hz, 13 A fuse

Classic 12–22 kW

		Classic 12	Classic 14	Classic 15	Classic 22	Classic 40	Classic 49	Classic 60
Power range	kW	3,5-12	4-14,9	4,5-16,8	6,5-22	12-42	14-48	17-58
Efficiency (at nominal heat output)	%	93,6 / 90,4	93,1 / 91,9	92,7 / 92,4	91,5 / 93,3	94,3 / 94,3	94,3 / 94,3	94,6 / 93,8
Nominal heat output	kW	12,8	16,0	18,1	23,9	44,5	50,9	61,3
Flue pipe diameter	mm	130	130	130	130	150	150	150
Amount of water in heat exchanger	Liter	38	38	38	38	124	124	124
Boiler temperature range	°C	72-75	72-75	72-75	72-75	69-85	69-85	69-85
Back end protection temperature		integriert	integriert	integriert	integriert	58	58	58
Water-side resistance ΔT 10 / 20 [K]	mbar	6,2 / 2,2	7,2 / 2,3	7,7 / 2,5	18,3 / 3,8	24 / 6,4	32 / 8,6	56,4 / 14,4
Flow / Return flow	inch	1"	1"	1"	1"	5/4"	5/4"	5/4"
Weight	kg	300	300	300	300	480	480	480
H x W Suction (RAD) x D	mm	1470 x 1165 (1065) x 775				1480 x 1210 (1110) x 920		
Transporting dimensions H x B x T	mm	1470 x 1165 x 775 (zerlegt: 1470 x 730 x 670)				1480 x 1210 x 1295 (zerlegt: 1480 x 760 x 800)		
Boiler-Label	Class	A+	A+	A+	A+	A+	A+	A+
Boiler inspection label incl. control	Class	A+	A+	A+	A+	A++	A++	A++

Max. operating temperature: 95 °C, Max. operating pressure: 3 bar, Electrical supply: 230 V AC, 50 Hz, 13 A

Eco-PK 70–330 kW

		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 250	Eco-PK 300	Eco-PK 330
Power range	kW	21-70	27-90	30-99	33-110	36-120	39-130	44-149	49-166	59-199	59-216	75-250	90-300	99-330
Efficiency Full load / Partial load	%	94,6/95,3	94,1/95,3	93,8/95,4	93,6-95,4	93,3/95,4	93,5/95,7	93,4/93,1	94,2/93,7	94,7/97,4	94,7/97,4	94,5 / 97,2	94,4 / 96,9	94,3 / 96,8
Fuel heat output - full load	kW	74,5	95,4	105	116,6	127,2	138,7	159,5	176,2	213,7	228,3	266	317	349,9
Flue pipe diameter	mm	180						200		250		250		
Water content	Liter	180						253		360		570		
Boiler temp. range	°C	75-78	75-78	75-78	75-78	75-78	75-78	75-78	75-78	75-78	75-78	75-78	75-78	75-78
BEP necessary	°C	58	58	58	58	58	58	58	58	58	58	58	58	58
Water-side resistance ΔT 10 / 20 [K]	mbar	57/14,6	91,4/23,2	112,9/28,9	139,1/35,5	160,7/40,9	160/42,7	184,6/49,0	209,21/55,5	227/63	250/69	228	296	356
Flow/Return	inch	6/4"	6/4"	6/4"	6/4"	6/4"	2" / 2"		2,5" / "		2,5"	2,5"	2,5"	
Weight / Day hopper	kg	865 / 100	865 / 100	890 / 100	890 / 100	890 / 100	1190 / 150		1320 / 150		2150 / 200	2150 / 200	2150 / 200	
H / W / D	mm	1610 x 745 x 1553		1610 x 745 x 1553			1765x875x1740		1915x945x1905		2005 x 1155 x 2138			
Transport dimensions H / W / D	mm	1670 x 745 x 1335		1670 x 745 x 1335			1810x875x1435		1970x945x1595		2065 x 1150 x 1970			
Boiler label	Class	A+	-	-	-	-	-	-	-	-	-	-	-	-
Composite label incl. control	Class	A+	-	-	-	-	-	-	-	-	-	-	-	-

Max. operating temperature: 95 °C, Max. operating pressure: 3 bar, Electrical supply: 230 V AC, 50 Hz, 13 A

TECHNICAL DATA

Eco-Box

ECO-BOX				
Type	**ECO-BOX 550**	**ECO-BOX 600**	**ECO-BOX 700**	**ECO-BOX 750**
Lenght	550 cm	600 cm	700 cm	750 cm
Width	298 cm	298 cm	298 cm	298 cm
Height outside	271 cm	271 cm	271 cm	271 cm
Height inside	232 cm	232 cm	232 cm	232 cm
Weight	ca. 15 t	ca. 16,5 t	ca. 18,5 t	ca. 20 t

Containers

CONTAINERS						
Type		**BC 400**	**BC 500**	**BC 600**	**BC 700**	**BC 800**
Lenght	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
Height outside	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	ca. 15 t	ca. 20 t	ca. 25 t	ca. 30 t	ca. 35 t
Type		**DC 600**	**BC 700**	**BC 800**	**BC 700-ÜB**	**BC 800-ÜB**
Lenght	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
Height outside	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	ca. 24 t + ca. 16 t	ca. 30 t	ca. 35 t	ca. 32 t	ca. 37 t

In Detail
Reinforced concrete prefabricated walls reinforced REI 90, wall thickness approx. 13 cm, floor high-grade epoxy resin Coating, inside wipe resistant dispersion paint, outside fine spray 2-3 mm Grain white. Heating modules include all cut-outs for auger, ventilation and exhaust, chimney, Long-distance pipeline as well as inlet nozzle etc. Filling with wood chips, Pellets or elephant grass.

Accessoires
Roof Cover, Steel doors, Fire protection door EI 90, Additional Cut-outs, Lader, Chimney.

Bag silo

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 200 x 200	3,6 - 5,0 t	208 cm	208 cm	195 - 240 cm
GWT-MAX 160 x 250	3,6 - 5,0 t	168 cm	258 cm	195 - 240 cm
GWT-MAX 200 x 250	4,4 - 6,0 t	208 cm	258 cm	195 - 240 cm
GWT-MAX 250 x 250	5,6 - 7,6 t	258 cm	258 cm	195 - 240 cm

PET

PET		
Types PET	**8 m³**	**10 m³**
Filling weight	5,2 t	6,5 t
Diameter	250 cm	268 cm
Weight	280 kg	330 kg
Hole measurements		
Diameter (min.)	3,50 m	3,75 m
Height (min.)	3,60 m	3,85 m
Filling material	19 m³	22 m³

Please find further information in the accumulator-brochure

Accumulators NEW

		P	SP	HSP	SP SW1+2	HSP SW1+2
		Pufferspeicher	Schichtpuffer	Hygiene-Schichtpuffer	Solar-Schichtpuffer	Solar-Hygiene-Schichtpuffer
Accumulator volume	Liter	825 - 1500	825 - 5000	500 - 2000	825 - 2000	500 - 1500
Diameter with insulation	mm	950 - 990	950 - 1840	850 - 1340	950 - 1340	850 - 1250
Height with insulation	mm	1910 - 2020	1980 - 2330	1700 - 2320	1980 - 2320	1700 - 2160
Weight (without insulation)	kg	105 - 164	103 - 437	141 - 292	128 - 317	163 - 324
Efficiency class	Cl.	C	C	C	C	C

For all types of HARGASSNER pellet boilers usable

HARGASSNER

Your expert for **PELLET-** | **WOOD LOG-** | **WOOD CHIP**-HEATING

Hargassner product range:

Pellet Boilers, Wood Chip Boilers, Wood Log Boilers, Combi Boilers, Accumulators, Industrial Boilers 130-330 kW, Heating modules, Filling Auger, Heat & Power from wood KWK, Hot Air heating module Powerbox & Hydraulic Accessories
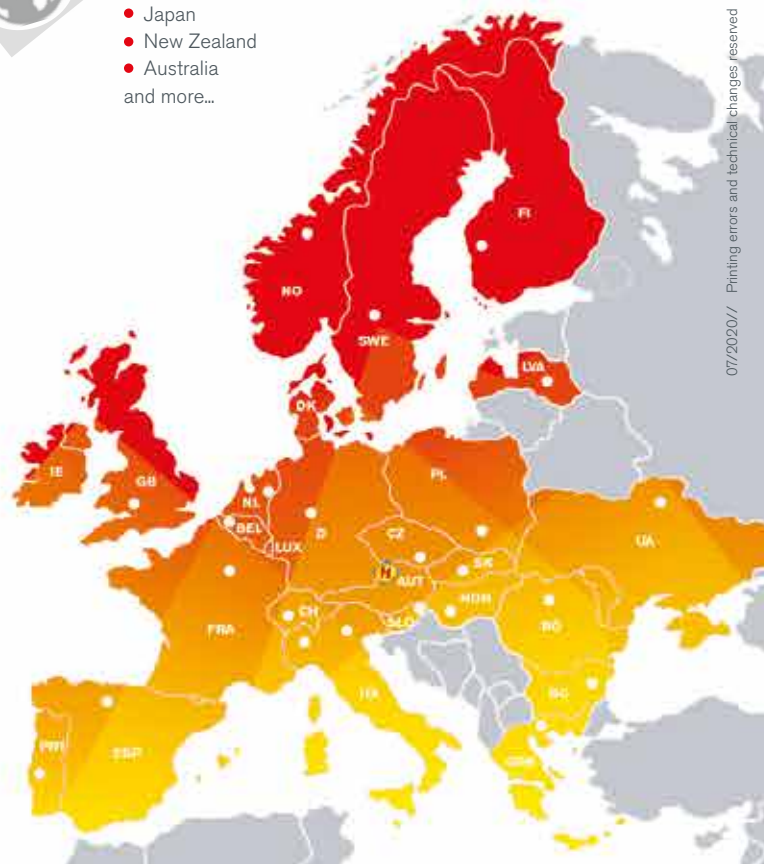
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