

hdg-bavaria.com

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*Comfortable
heating. With wood!*

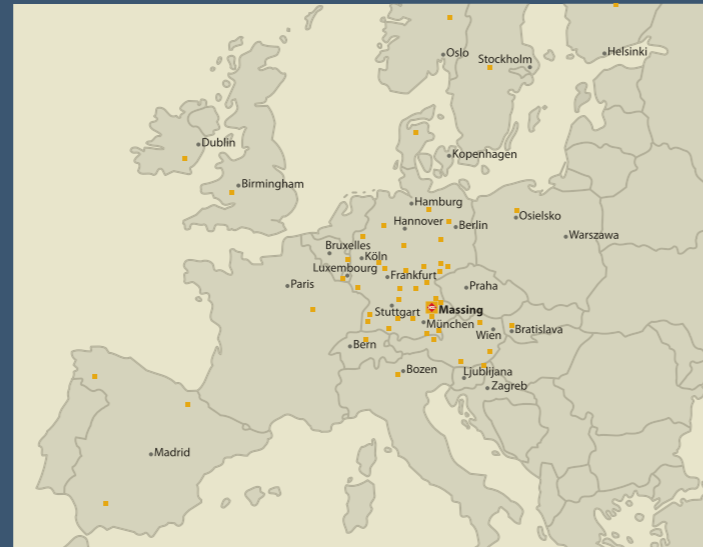


Log wood boilers

From 14.9 to 60 kW



*Comfortable
heating. With wood!*



HDG product range

The innovative developments at HDG have resulted in many prizes and awards. They also spur us on to continue our research and development work.

HDG wood boilers conform to the guidelines for combustion technology and safety engineering.

Furthermore HDG products are all subjected to voluntary quality inspections by independent institutions.

Information on current promotional programs can be found under www.hdg-bavaria.com.



HDG wood chip, shaving and pellet firings



HDG log wood boilers



HDG pellet heating systems

**We will be happy
to inform you.**



Version 05/2009
Technical modifications and errors excepted
Item.no. 9980000324

hdg-bavaria.com

“We heat with wood. It protects the environment and helps us to make reliable plans for the future.”



Birgit and Josef Hausperger, Staudach

Ecologically sound ...

Heating with wood: it makes sense for nature and mankind.

Those who consider the impact of their actions on nature are acting to help future generations. Functional natural lifecycle systems are a prerequisite for life on earth. The increasing number of storm and flooding catastrophes gives us an idea of the true cost of maltreating nature. Wood is stored solar energy and when heating with wood the same amount of CO₂ is released that the tree removed from the atmosphere while growing. Heating with wood is therefore at one with nature. Burning oil or gas on the other hand releases CO₂ reserves into the atmosphere which were formed millions of years ago.

This CO₂ is one of the causes of the greenhouse effect – a problem for which mankind must take responsibility.

Heating with wood has many other advantages

- Short transport routes
- Independence and reliable supplies
- Safe storage and unhazardous transport
- Employment and commerce in rural areas
- Harvesting and preparation requires little energy

Therefore it makes sense (both for nature and mankind) to opt for the renewable energy source wood.

... and economical.

Keep your energy costs under control with log wood.

Fossil fuel energy will inevitably become more expensive in future. The prices of fossil fuels have already increased in unpredictable leaps.

This situation is not set to improve in the medium-term, the increasing consumption in countries such as China or India will increase the demand for oil and gas.

Compared with other fossil fuels, the price of wood (and especially log wood) is very stable. With log wood, you're heating on the safe side.

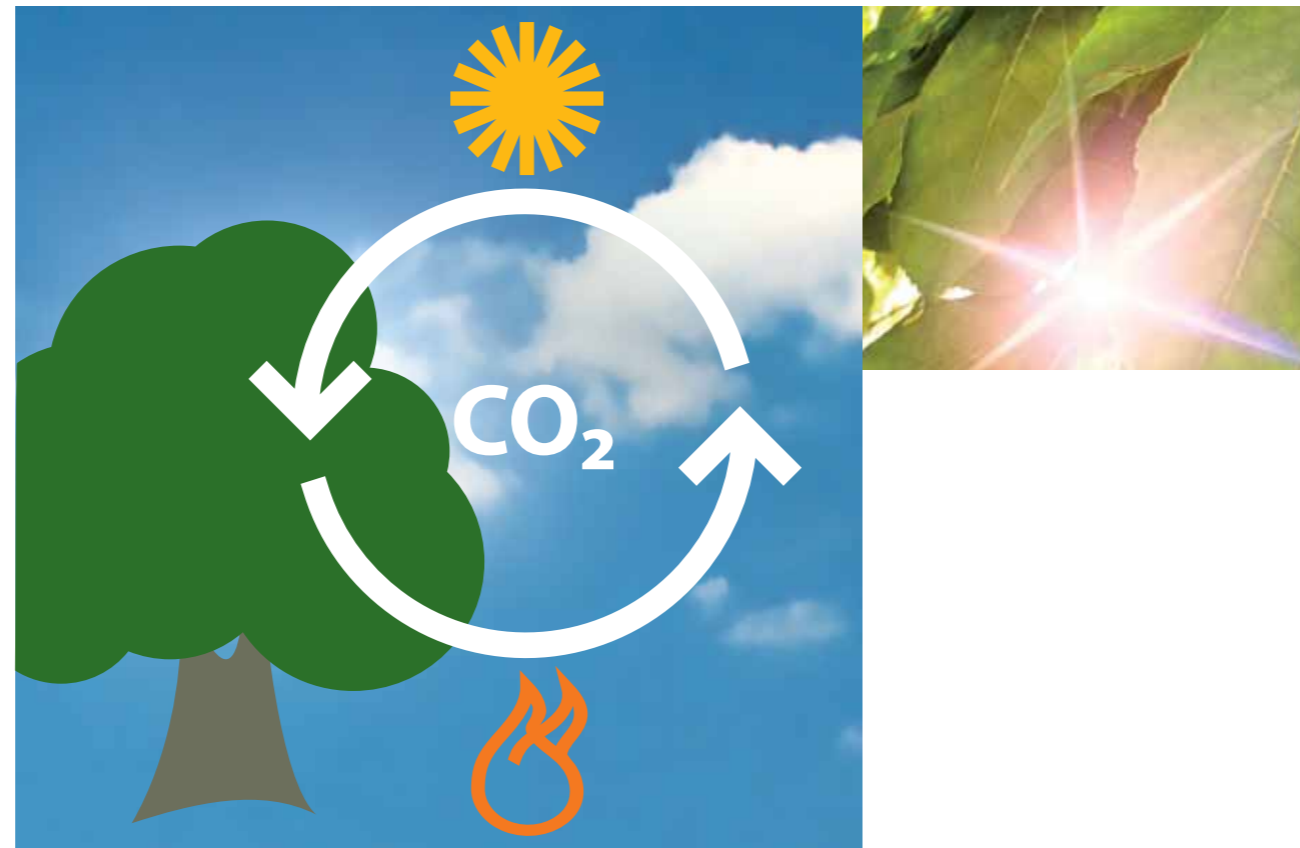
Make the most of the potential of log wood.

The operators of a wood heating system can influence the efficiency and pollution output of the system considerably.

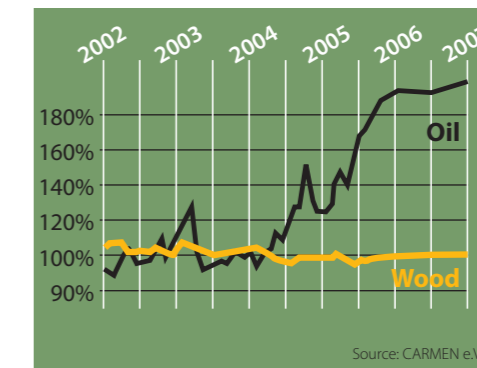
Log wood should be well dried and split. Waste wood or dirty, decaying and very wet wood requires a lot of energy to dry and can therefore only give off less heat. It also shortens the service life of the boiler. Your boiler only attains its maximum heating power – the nominal power – and minimum emissions with dry, faultless material.

From customised boilers to completely professional service – you will find everything you need for a modern log wood heating system at HDG:

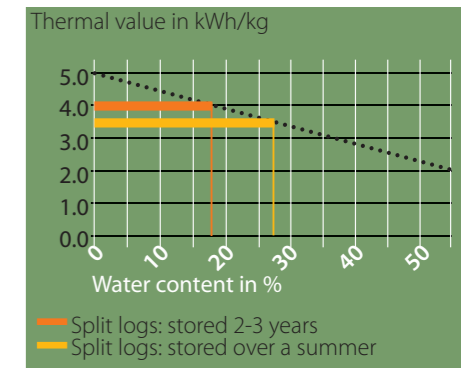
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An even balance When plant matter burns, just as when it rots, it releases exactly the same amount of CO₂ as it takes in while growing.



Energy price development from 2002 to 2007



Heat output / water content ratio

Useful information on heating with log wood

Water content and wood moisture

Water content (w)	15%	20%	25%	30%
Wood moisture (u)	18%	25%	33%	43%

Conversion factors

- 1 l heating oil gives off 2.676 kg of CO₂ during combustion
- 1 l heating oil corresponds to 2.5 kg of wood
- 1 kg wood (w = 20 %) generates 4.0 kWh/kg

Abbreviations of cubic measures:

- 1 Srm = fill volume unit, corresponds to 1 m³ wood (poured)
- 1 Rm = stacked cubic meter (stere), corresponds to 1 m³ wood (stacked)
- 1 Fm = 1 solid cubic metre (without intermediate spaces)

1000 l of heating oil yields the same energy as:

- approx. 5 - 6 Rm hardwood
- approx. 7 - 8 Rm softwood
- approx. 10 - 15 Srm wood chips

HDG: Top class log wood boilers

HDG has been developing wood boilers for around three decades and has brought many highly innovative inventions onto the market in this time. These many years of experience form the basis for our exemplary quality and the huge success of HDG products.



- HDG boilers impress customers with their**
- Excellent efficiency levels
 - Exemplary low emissions
 - Comprehensive safety technology
 - Solid manufacturing and durability
 - Low wood consumption
 - Conveniently long refuelling intervals
 - And simplicity of operation

Filled from the top
 220 l fuel chamber volume with pneumatically supported fuelling lid
 Flat-bed boiler with bottom lateral burning
 Intelligent combustion control with HDG Lambda Control 1
 Controlled combustion
 Great variety of fuels
 Optimal combustion
 Lowest emissions values

*) No painted, varnished and coated wood, plywood, chipboard, fibre-board or otherwise bonded wood including remains thereof (without organic halogen compounds, without wood protection agents)

HDG Euro*
 30 kW, 40 kW, 50 kW



> Pages 6-9

HDG Navora*
 20 kW, 25 kW, 30 kW



> Pages 10-13

HDG Turbotec*
 50 kW, 60 kW



> Pages 14-17

HDG SL*
 14.9 kW



> Pages 18-21

	HDG Euro*	HDG Navora*	HDG Turbotec*	HDG SL*
Fuel	<ul style="list-style-type: none"> ■ Log wood up to half-metre ■ Wood waste ■ Wood chips ■ Shavings ■ Pressed shaving briquettes 	<ul style="list-style-type: none"> ■ Log wood up to half-metre ■ Pressed shaving briquettes 	<ul style="list-style-type: none"> ■ Log wood up to one metre ■ Coarse wood chips 	<ul style="list-style-type: none"> ■ Log wood ■ Wood waste
Area of application	<ul style="list-style-type: none"> ■ Private households ■ Agriculture and forestry ■ Commercial businesses ■ Wood processing plants ■ Cabinet-making workshops ■ Sawmills 	<ul style="list-style-type: none"> ■ Private households ■ Agriculture and forestry ■ Commercial businesses 	<ul style="list-style-type: none"> ■ Agriculture and forestry ■ Commercial businesses 	<ul style="list-style-type: none"> ■ Private households ■ Low-energy buildings
Technology	<ul style="list-style-type: none"> ■ Filled from the top ■ 220 l fuel chamber volume with pneumatically supported fuelling lid ■ Flat-bed boiler with bottom lateral burning ■ Intelligent combustion control with HDG Lambda Control 1 ■ Controlled combustion ■ Great variety of fuels ■ Optimal combustion ■ Lowest emissions values 	<ul style="list-style-type: none"> ■ Operation and filling at the front ■ 150 l fuel chamber volume ■ Automatic cleaning ■ Integrated ash box ■ Drop-burning combustion technology ■ Intelligent combustion control 	<ul style="list-style-type: none"> ■ Filled at the front ■ With split logs up to a metre long ■ 340 l fuel chamber volume ■ Intelligent combustion control with HDG Lambda Control 1 	<ul style="list-style-type: none"> ■ Filled from the top ■ Auxiliary boiler, for supplementing existing heating systems with ecologically-sound wood heating ■ Natural ventilation boiler
Advantages	<ul style="list-style-type: none"> ■ Simple and easy to operate ■ Ideal for dry bulk goods ■ Very long reloading intervals ■ One fuelling per day is often sufficient ■ Lowest emissions ■ Also retains a long service life even with difficult fuel types thanks to optional HDG scale cladding 	<ul style="list-style-type: none"> ■ Very user-friendly and convenient ■ Very long reloading intervals ■ Lowest emissions 	<ul style="list-style-type: none"> ■ Easy operation ■ Reduced outlay for wood preparation ■ Very long reloading intervals ■ Efficient combustion ■ High degree of system efficiency 	<ul style="list-style-type: none"> ■ Easy to load fuel ■ Automatic activation of the primary heating system with proper control ■ Small dimensions allow it to fit in every home and nearly all chimneys ■ Simple to integrate in existing heating systems
Special features	<ul style="list-style-type: none"> ■ Solid burner nozzle and special combustion chamber ■ Efficiency level 90% ■ TÜV certificate and DIN registration (reg. no. 3R189/02GA) ■ Complies with European threshold values and safety regulations ■ Awarded the national prize for innovation 	<ul style="list-style-type: none"> ■ Efficiency level 91% ■ Automatic cleaning of the heat exchanger surfaces when the flue gas flap is activated ■ Complies with European threshold values and safety regulations ■ Awarded the kwf prize for innovation ■ Awarded the national prize for innovation 	<ul style="list-style-type: none"> ■ Electromagnetic door-locking mechanism (childproof) ■ Efficiency level 90% ■ TÜV certificate and DIN registration (reg. no. 3R155/2000GA) ■ Complies with European threshold values and safety regulations 	<ul style="list-style-type: none"> ■ TÜV tested ■ Fulfils the safety regulations



HDG Euro

**Very versatile.
Especially cost-effective**

The HDG Euro can burn widely differing types of wood heating material and is particularly suitable for agriculture and forestry, businesses and larger private households.

Wood processing companies such as cabinet makers or carpentry workshops can burn their waste wood with the HDG Euro 50.



- Fuel:**
- Log wood up to half-metre
 - Wood waste
 - Wood chips
 - Shavings and pressed wood briquettes

Output:
30 kW, 40 kW und 50 kW

- ✓ **Easy to fill with log wood and bulk material thanks to the pneumatically supported fuel chamber lid**
- ✓ **With optimum system dimensions, heating just once per day is often sufficient**
- ✓ **Long maintenance intervals thanks to large ash containing spaces**
- ✓ **Highest levels of efficiency and lowest emissions values thanks to innovative control system HDG Lambda Control 1)**



Over three decades of experience of wood heating systems have gone into the design and production of each HDG heating boiler. And this is in addition to the pride the developers take in improving already excellent products.

Awarded

German national prize for innovation



TÜV quality certificate



DIN registered (reg. no. 3R189/02GA)



"By switching to wood we have been able to save up to 3000 litres of oil per year."



The Schuder family heats with an HDG Euro with 40 kW and 3000 l accumulator.



The sophisticated combustion technology means the HDG Euro is a reliable and robust boiler.

The grate firing with bottom lateral burning of the HDG Euro allows it to burn a wide variety of fuels.

The innovative construction and ruggedly manufactured burner nozzles ensure - together with the special combustion chamber - optimal post-combustion of the flue gases. At the end of the burning process, the air flaps close and the blower switches off, meaning the flue vent of the boiler cannot cool down. The remaining charcoal makes it easier for refilled fuel to ignite.



The innovative output and combustion regulation ensures constant performance and the lowest emissions values.

The servo motors for primary and secondary air transport the required combustion air exactly into the gasification and post-combustion zone. The primary air is responsible for constant output while the secondary air ensures the lowest emissions throughout the entire burning process.

Functional, well designed details make heating with the HDG Euro as convenient as possible.

Log wood and even bulk material can be simply loaded in the spacious, conical fuel chamber. The filling chamber lid is easy to open due to the integrated pneumatic support.

The large spaces for ash in the boiler mean it has long maintenance intervals. The maintenance doors on the long sides allow for a small floor space requirements.

Optional equipment:

Scale liner

If you wish to increase the fantastic durability of the HDG Euro, we can supply optional scale cladding: small metal panels are welded in the fuel chamber and act as an additional protective layer.



Recommended for higher loads due to wood chips, shavings or primarily burning oak logs: the optional scale liner for the HDG Euro.

Intelligent combustion control with HDG Lambda Control 1

Flue gas temperature sensor

Lambda probe

Suction fan

Safety heat exchanger

Ash removal doors on both sides

Fuel chamber lid (pneumatically supported when opening)

220 l fuel chamber volume

Primary and secondary air control unit
2 servo motors for primary and secondary air (integrated in the front cladding) provide the combustion zone with the correct air quantity

Cleaning hatch



The fuel chamber is made of 10 mm thick high-quality sheet steel: durable due to sturdy construction.



The extremely solid cast-iron grate with practical cleaning opening.

Control system

The HDG Euro can be equipped with the innovative HDG controllers.



HDG Lambda Control 1
Combustion control with the lambda sensor, including return flow increase and residual heat usage.

You can find more detailed information on this on pages 22-23.

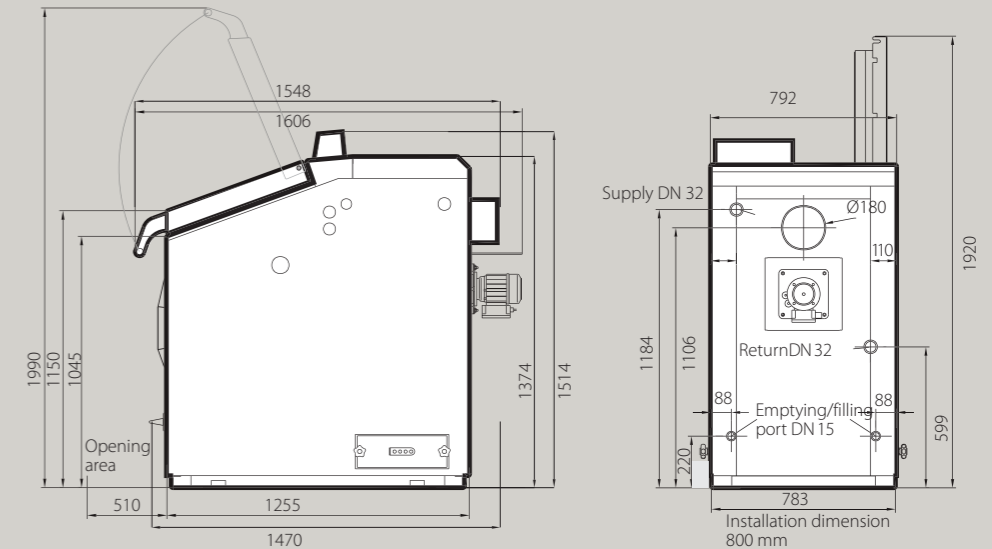
Safety and environment

The HDG Euro remains under the legally allowed emission values and fulfils all safety regulations of European countries (as of: 07/07).

Delivered ready for connection

The HDG Euro is supplied with mounted cladding and is ready for electrical connection. This enables quick and easy putting into operation.

Technical data



HDG Euro		30	40	50
Nominal thermal power	kW	30	40	50
Minimum thermal output	kW	-	29	29
Fuel chamber volume	l	220	220	220
Fuel chamber width	mm	560	560	560
Fuel chamber depth	mm	407	407	407
Water content	l	178	178	178
Flue connection	mm	180	180	180
Flue draught requirement	Pa	20	20	20
Operating pressure	bar	3	3	3
Max. supply temperature	°C	95	95	95
Boiler weight	kg	979	979	979



HDG Navora

Convenient and compact

The HDG Navora has an impressive array of operating features. With its space-saving construction – narrow width and small floor space requirements – it can be used in small rooms, and thus is ideal for detached and semi-detached houses.

Fuel:

- Log wood up to half-metre
- Pressed shaving briquettes

Output:

20 kW, 25 kW and 30 kW



- ✓ Space-saving dimensions
- ✓ Operated, filled, adjusted and cleaned at the front
- ✓ Large, wide-opening fuelling and cleaning doors for convenient operation
- ✓ Flue gases are sucked away during fuelling via the flue gas flap
- ✓ Heat exchangers cleaned at a single stroke



HDG supports research and development in the field of renewable energy with its projects in this area and with its test benches especially developed for this purpose.

Awarded

kwf innovation prize 2006



German national prize for innovation 2007

“Thanks to the expert advice from the HDG team, we were able to fit the HDG Navora perfectly in our small heating room.”



The Moser family heats with a HDG Euro with 30 kW and 2000 l accumulator.

Exemplary user-friendliness

The operation of the HDG Navora is performed entirely from the front. In this area you will find the fuel chamber doors, control elements and the lever for activating the flue gas flap. The large fuelling chamber – comprising nearly 150 l – allows long intervals between refillings. During refuelling, the flue gases are sucked away via the flue gas flap.

An ingenious solution: cleaning the heat exchangers at one stroke

When activating the flue gas flap, the cleaning turbulators are also moved, thereby cleaning the heat exchanger surfaces. This cleaning system permanently ensures optimum heat transfer.

Quick and easy to clean

All cleaning openings are large and easy to access. The combustion chamber of the HDG Navora consists of eight identically large, highly fireproof elements. The level surfaces can easily be cleaned from the front. The cleaning utensil is included in the scope of delivery.

Quality For a long service life

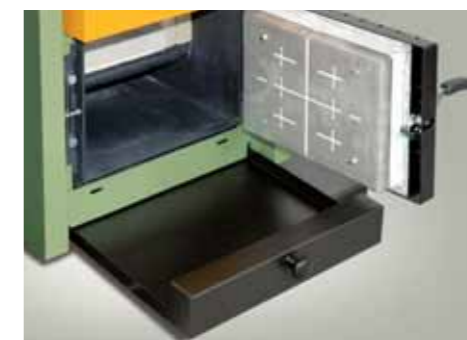
The defining feature of HDG heating systems is their durability. The HDG Navora is completely fitted with exchangeable panels in the fuel chamber. These panels protect the metal of the boiler from high combustion temperatures and also from dirt, thereby ensuring that the boiler has a long service life.



All operational processes, whether, fuelling, activating the flue gas flap and thereby cleaning the heat exchangers, are conducted from the front.



The large filling and cleaning doors with an opening angle of over 100 degrees make the unit easier to handle.



The boiler has an integrated ash pan. This eases ash removal and can be simply pushed into the lower boiler cladding.

Intelligent combustion control

Safety heat exchanger

Cleaning hatch

Suction fan

Lambda probe

Flue gas temperature sensor

150 l fuel chamber volume

Lever for activating the flue gas flap

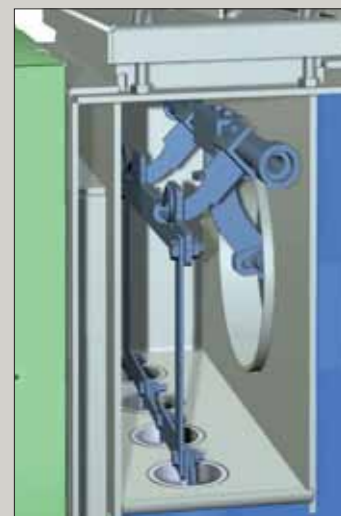
Front-loading

Primary and secondary air control unit

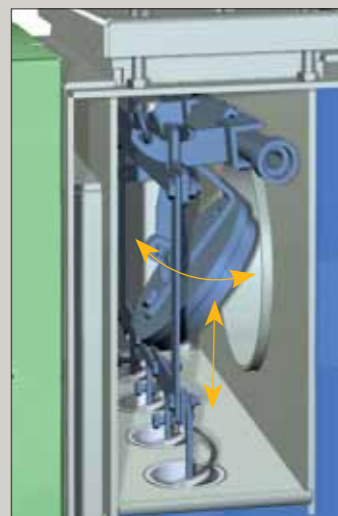
Ash pan

Cleaning hatch

Automatic cleaning of the heat exchanger surfaces with activation of the flue gas flap



Flue gas flap closed



Flue gas flap open and turbulators in motion



The ventilation from the rear for the fuelling and cleaning doors ensures low temperatures on the exterior of the boiler are low and therefore the heat stays where it belongs – in your heating circuit.

The doors can be optionally attached on the left or right.

Control system

The HDG Navora can be equipped with the innovative HDG controllers.

HDG Basic Control

Simple regulation to control the suction blower and the return feed consistency



HDG Lambda Control 1

Combustion control using the lambda sensor, included return flow increase and residual heat usage

You can find more detailed information on this on pages 22-23.

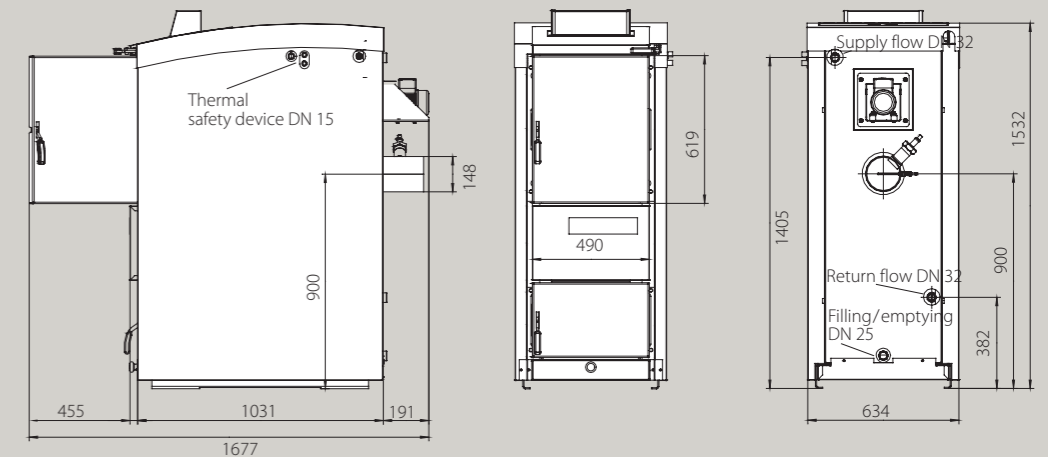
Safety and environment

The HDG Euro remains under the legally allowed emission values and fulfils all safety regulations of European countries (as of: 07/07).

Delivered ready for connection

The HDG Navora is delivered ready for electrical connection and with mounted cladding. This enables quick and easy putting into operation.

Technical data



HDG Navora		20	25	30
Nominal thermal power	kW	20	25	30
Minimum thermal output	kW	18	18	18
Fuel chamber volume	l	150	150	150
Fuel chamber depth	mm	560	560	560
Fuel chamber width	mm	330	330	330
Water content	l	168	168	168
Flue connection	mm	150	150	150
Flue draught	Pa	15	15	15
Max. operating pressure	bar	3	3	3
Max. supply temperature	°C	95	95	95
Boiler weight	kg	680	680	680



HDG Turbotec

Fuel:

- Log wood in split logs of up to 1 m
- Coarse wood chips

Output:

50 kW and 60 kW

Easy and safe

The HDG Turbotec is the ideal wood boiler for businesses, agriculture and forestry. Its enormous fuel chamber has a capacity of 340 litres and can be loaded with logs up to 1 m in length. The high efficiency level ensures a high degree of economy with relatively low ash.



- ✓ 340 l fuel chamber
- ✓ Log wood in split logs of up to 1 m
- ✓ Extremely economic due to high efficiency level
- ✓ Low ash residue



At HDG we place particular emphasis on processing the materials and boilers used and adhering to high quality standards.

Awarded

DIN registered
(reg. no. 3R155/2000GA)



“Especially in spring/autumn, it is often the case that my Turbotec only needs one filling per day.”



The Krinner family heats with an HDG Turbotec with a 5000 l accumulator.



Robust and reliable

The HDG Turbotec is perfectly suited for burning logs of up to 1 m in length. This saves time and effort in preparing wood for burning and in operating the heating system. This makes it the idea wood boiler for use in agriculture and forestry and also for commercial operations.

Highly efficient and easy to use: the combustion technology of the HDG Turbotec

The combustion chamber is fitted with highly fire-resistant concrete panels. After every complete burning process the air flaps close and the blower unit switches off automatically meaning that the flue vent cannot cool down, thereby increasing efficiency. The remaining charcoal makes it easier for refilled fuel to ignite.

The innovative output and combustion regulation ensures constant performance and the lowest emissions values.

The servo motors for primary and secondary air transport the required combustion air exactly into the gasification and post-combustion zone. The primary air is responsible for constant output while the secondary air ensures the lowest emissions throughout the entire burning process.

Optional equipment:

Additional loading door

On request we can equip the HDG Turbotec with an additional top fuelling door enabling wood chips to be filled with ease.



The fuel chamber door is equipped with an electromagnetic safety door lock.



HDG Turbotec with optional top loading door



340 l fuel chamber volume

Cleaning hatch

Lambda sensor and flue gas temperature sensor

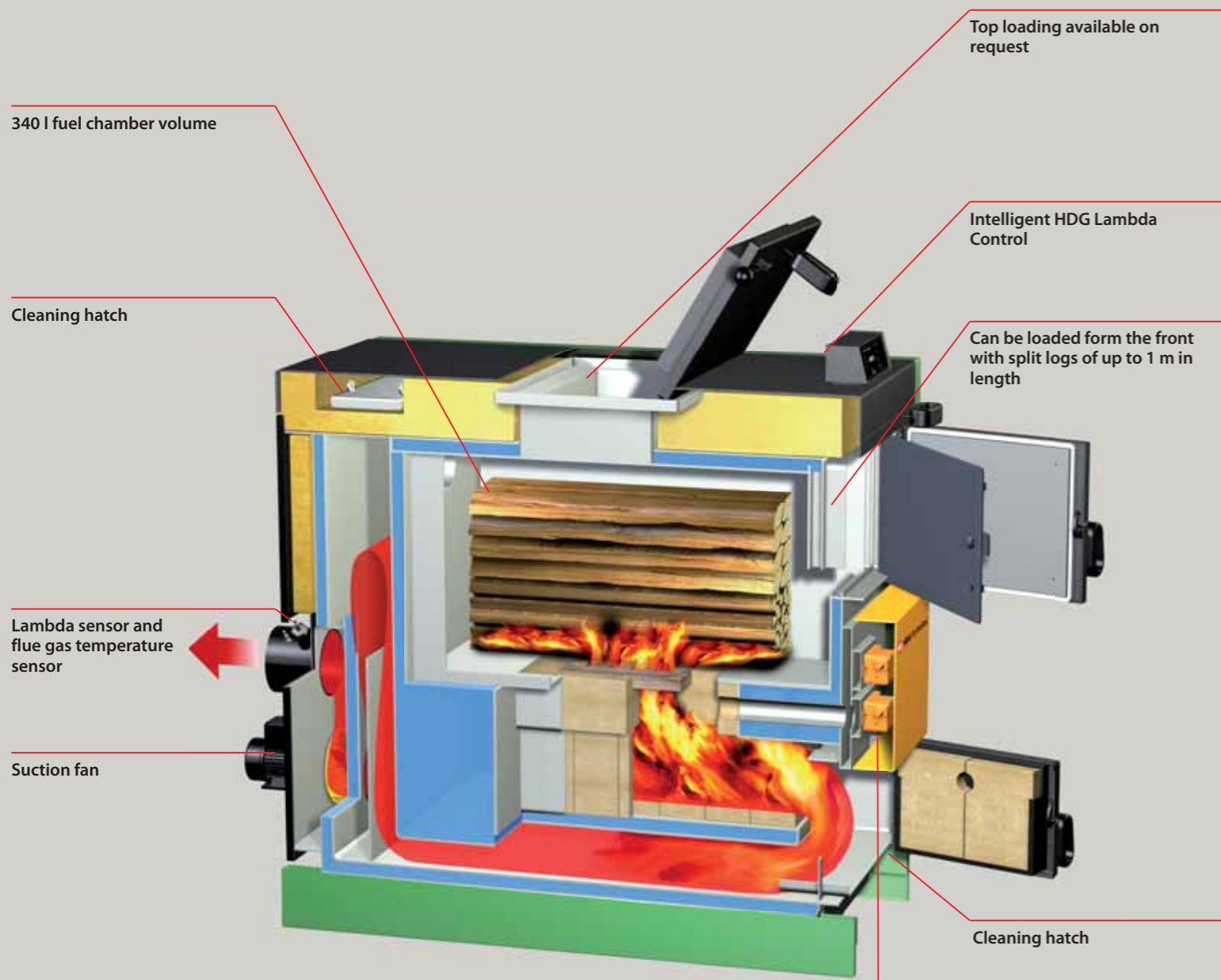
Suction fan

Top loading available on request

Intelligent HDG Lambda Control

Can be loaded from the front with split logs of up to 1 m in length

Cleaning hatch



Primary and secondary air control unit

2 servo motors for primary and secondary air (integrated in the front cladding) provide the combustion zone with the correct air quantity

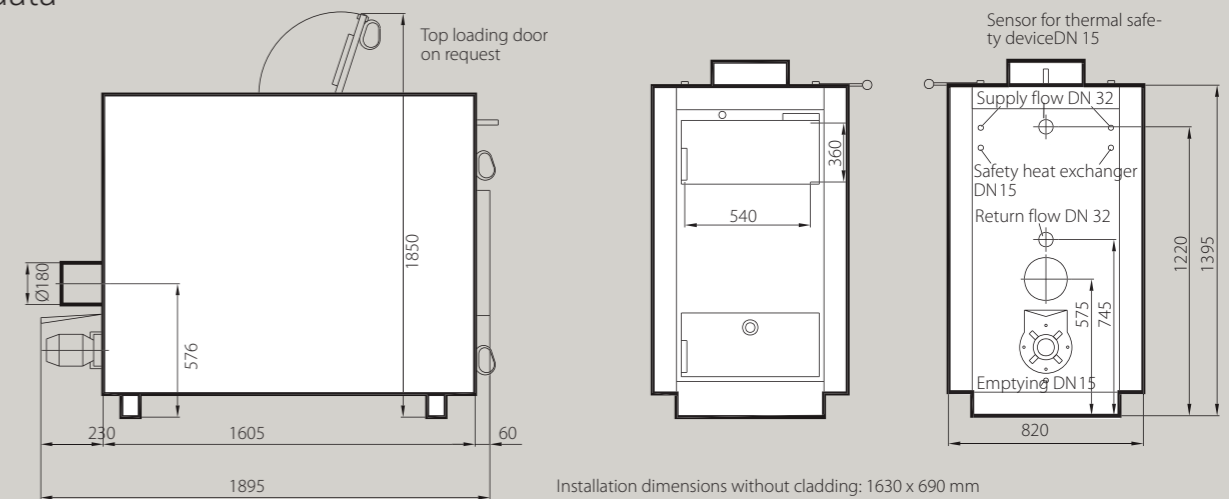


The HDG Turbotec is equipped with the innovative **HDG Lambda Control 1**

You can find more detailed information on this on pages 22-23.

The emissions of the HDG Turbotec are less than the threshold values enforced by the emission control regulations of all European countries. It meets all applicable safety regulations with ease.

Technical data



HDG Turbotec		50 L	60 L
Nominal thermal power	kW	50	60
Fuel chamber volume	l	340	340
Fuel chamber depth	mm	1100	1100
Fuel chamber width	mm	540	540
Water content	l	370	370
Flue connection	mm	180	180
Flue draught	PA	15	15
Operating pressure	bar	3	3
Max. supply temperature	°C	95	95
Boiler weight	kg	940	940



HDG SL

Fuel:
 ■ Log wood
 ■ Wood waste

Output:
 14.9 kW

Independent and flexible

The HDG SL has a very compact construction and is therefore highly suitable if the available space is very limited.

The HDG SL is suited for use as an auxiliary boiler for existing oil or gas boilers. The HDG SL can also be used in combination with heat pumps and solar energy systems, yielding benefits in terms of efficiency and additional safety.

- ✓ **Compact construction**
- ✓ **Economical and safe enhancement for oil and gas boilers, heat pumps and solar energy systems**
- ✓ **Ideal for integrating in existing systems**
- ✓ **As a natural ventilation boiler it can be connected to a flue with other existing connections**



"We heat our entire detached house with the HDG SL. In the meantime we have cancelled our gas connection."

The Petermeier family heats with an HDG SL with 14.9 kW and a 1000-l accumulator.



Flexible in many areas

The HDG SL particularly distinguishes itself through its flexible application options. It can thus be optimally integrated to support existing systems. Due to its compact size it can be set up nearly anywhere where a wood boiler is desired.

As a natural ventilation boiler it can also be connected to a chimney with other existing connections, such as a tiled stove (on consultation with the responsible chimney sweep).

The HDG SL makes operation and maintenance simple.

The HDG SL is a natural ventilation boiler filled from the top. The ergonomically designed height of the infeed edge facilitates fuelling.

The pull-out grate enables easy ash removal. The integrated ash container allows ash to be simply and quickly removed.



The HDG SL works very well as an auxiliary boiler. Shown here next to an HDG Pelletmaster.

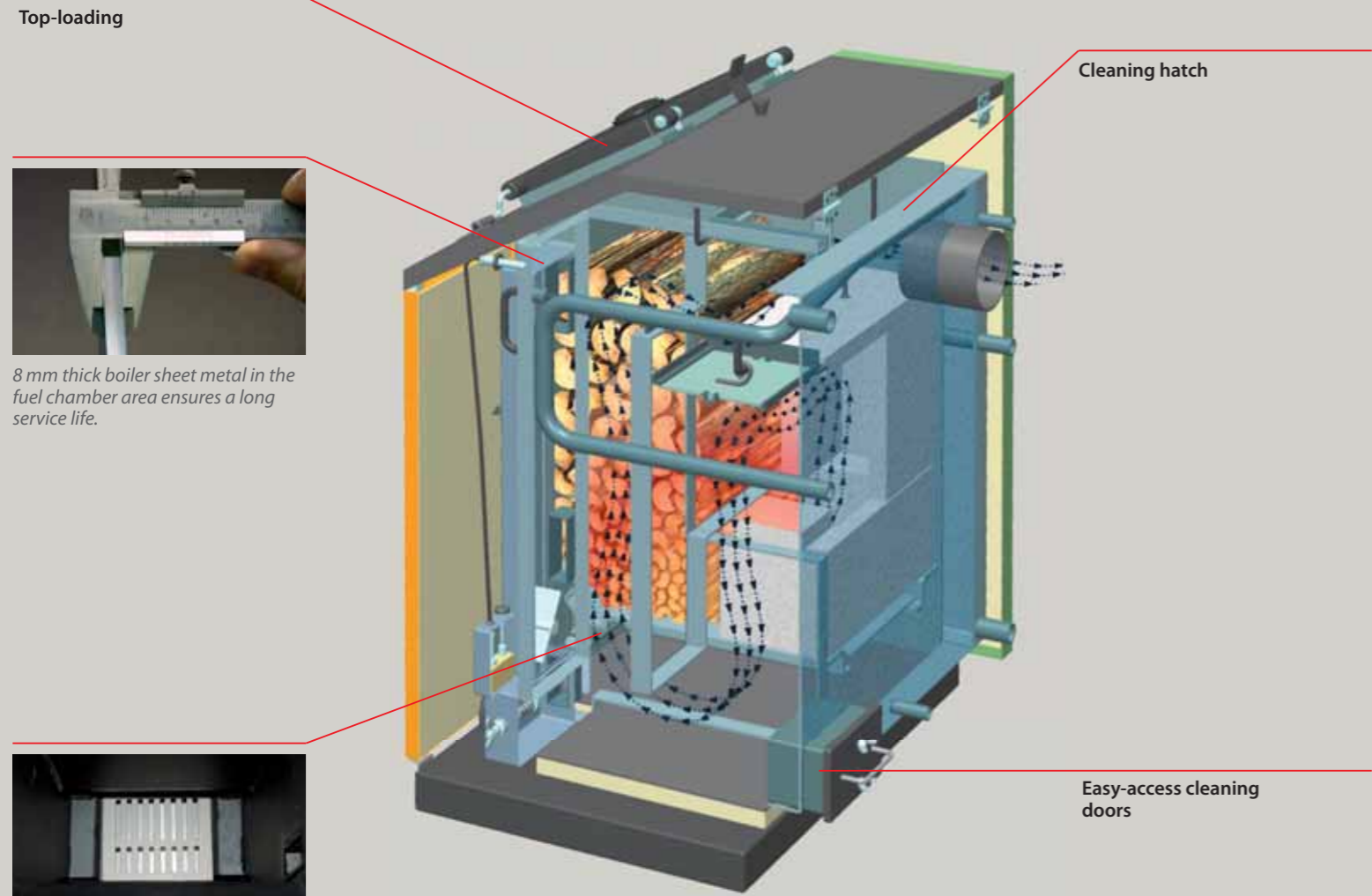
Optional equipment:

HDG Flue Gas Blower

The HDG SL natural ventilation boiler can also be additionally equipped with a flue gas blower on request. This simplifies heating up, fuelling, cleaning and ash removal by increasing the suction of flue gases into the flue pipe.



Shake and done! The grate of the HDG SL enables easy ash removal.

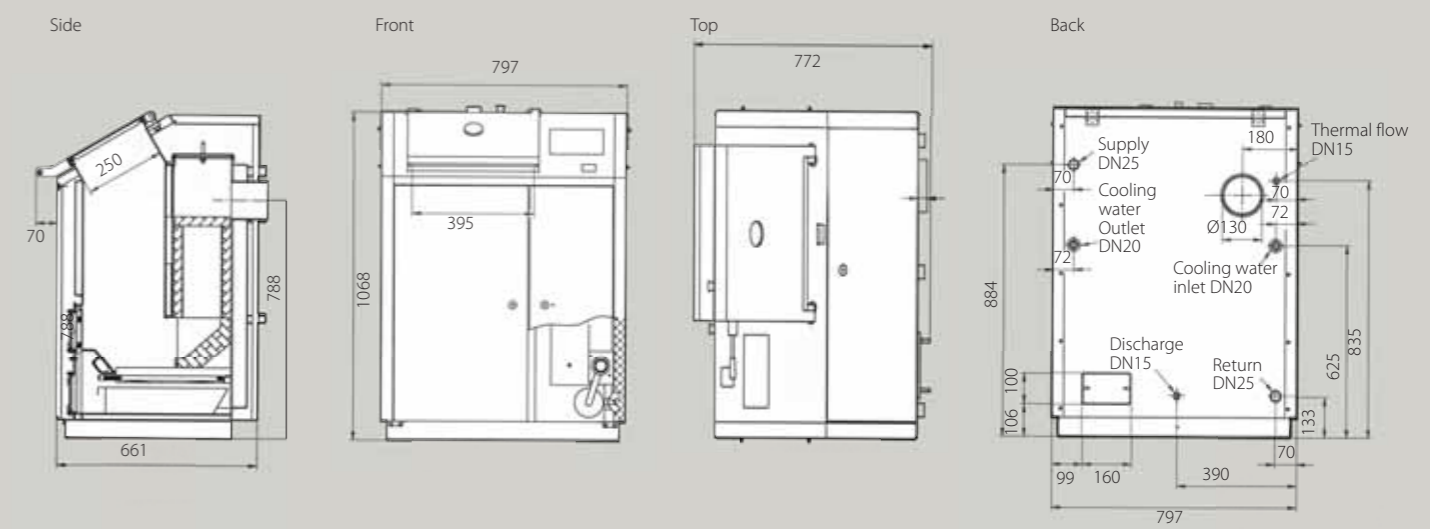


8 mm thick boiler sheet metal in the fuel chamber area ensures a long service life.



Grate can be pulled out for easy ash removal

Technical data



HDG SL		14
Nominal thermal power	kW	14.9
Fuel chamber volume	l	70
Fuel chamber width	mm	400
Water content	l	58
Operating pressure	bar	2.5
Flue connection	mm	130
Conveying pressure	PA	18
Max. supply temperature	°C	95
Boiler weight	kg	300

High-tech for optimal values

HDG control systems employ the most modern electronics in order to achieve the lowest emissions, high performance and an impressive operating efficiency for the entire heating system.

HDG supplies two high quality control systems:
 - HDG Basic Control and
 - HDG Lambda Control 1

HDG Basic Control

Intelligent energy management

- The integrated return flow temperature maintenance prevents damage from corrosion.
- The accumulator bypass enables priority supply to heating and hot water.

Simple and safe operation

- During the filling of the fuel and when cleaning the boiler, the fuelling chamber is automatically pre-ventilated. During this process, the flue gases are suctioned out by means of suction fans.
- An easy-to-perform safety test is integrated in the system.

Protection program

Once every week – even in summer-time operation – the controller automatically starts the protection program, which prevents corrosion by ventilating the boiler and chimney. In addition, the motors start up and the 3 way valves are opened and closed – jamming of moving parts is prevented in this way.

Functions

- Return flow temperature maintenance
- Suction fan control
- Accumulator bypass
- Protection program

Available for:
HDG Navora 25 kW

HDG Lambda Control 1

Intelligent emissions management

In the HDG Lambda Control 1, the following parameters are continually measured and also shown on the display:

- The residual oxygen in the flue gas (with the aid of the oxygen probe), in order to achieve optimal combustion
- The exhaust air temperature (with the aid of the flue gas temperature sensor), in order to achieve a constant degree of efficiency
- The temperatures of the boiler and accumulator, in order to determine their operating statuses.

The HDG Lambda Control 1 continuously adapts the measured values automatically to the preset optimal values. Even with varying types of fuel, a constant burning quality is achieved.

Residual heat utilisation

The use of residual heat enables an optimal utilisation of fuel and thereby results in longer intervals between refuelling.

Functions

- Return flow temperature maintenance
- Suction fan control
- Accumulator bypass
- Protection program
- Residual heat utilisation
- Refill signal and oil/gas boiler release
- Combustion control by means of lambda sensor as well as primary and secondary air control

Available for:
HDG Euro
HDG Navora
HDG Turbotec



The **refill signal** on the display of the control system of the living area station indicates, for example, that the accumulator temperature has fallen below 40 degrees. Fuel can now be loaded, since the accumulator is again able to absorb the generated energy.

The control system is very simple to operate. For regular operation, only the **refill button** is required.

The HDG Lambda Control

The performance of wood heating systems can be continually improved through the most modern electronics. HDG puts this technology to use. The HDG Lambda Control can attain

- A very high degree of system efficiency
- Particularly low heating material consumption and
- Extremely low emission values

Expanded protection program

With the HDG Lambda Control system, the lambda sensor is automatically rinsed with oxygen and heated. In addition, the servo motors for the primary and secondary air flaps are activated at regular intervals.

Combustion control

The HDG Lambda Control 1 is able to control combustion in an extremely sophisticated manner. Using the values determined by the oxygen probe and the exhaust air sensor, the primary and secondary air flaps can be precisely controlled so that optimal values can always be achieved, even under changing conditions.



The lambda sensor
 Optimal placement within the HDG boilers ensures a very long service life.



Components for a perfect complete system



The economical and ecological performance of a heating system is decisively influenced by the quality and functional condition of the supplementary components. HDG therefore devotes the greatest attention to these modules. HDG components have been proven over the years and are constantly being developed further and fit perfectly into HDG's well thought-out overall systems.

Our HDG plant representatives and their highly trained heating installation experts will support you in planning the perfect heating system with these components (accumulator, controllers, pumps and much more) – a system that is ideally suited to your building and tailored to your personal wishes.

The HDG accumulator system: energy delivered as needed

The HDG accumulator system takes up heat and releases this energy as required. In summer, hot water sufficient for several days usage can be generated by heating the boiler up once. No valuable energy is lost. Very long maintenance intervals can be attained with an accumulator suitable for the heating system. An accumulator increases convenience levels, economy and helps to conserve the environment.

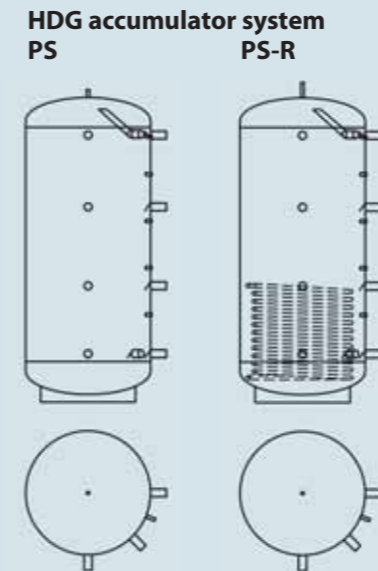
The various models:

The basic model of the HDG accumulator is the **PS model**.

The **PS-R model** has an built-in, smooth-pipe heat exchanger (e.g. for using solar energy). The combination of log wood boiler with accumulator and solar energy system ideally fulfils the requirements for a modern heating circuit.

Its numerous connection options mean it can be flexibly integrated in the corresponding HDG hydraulic system without problems.

The required volume for the accumulator is calculated by taking into account the boiler output, fuel chamber volume and the building's thermal load as well as your personal needs.



Type approx. litres	Height with insulation approx. mm	Tilt height approx. mm	Width without insulation approx. mm	Width with insulation approx. mm	Weight approx. kg PS / PS-R	Heating surface (model PS-R only) m ²
500	1650	1665	650	850	108 / 123	1,8
800	1740	1780	790	990	160 / 175	2,4
1000	2090	2140	790	990	175 / 190	3,0
1250	2070	2140	950	1150	190 / 207	3,0
1500	2190	2250	1000	1200	205 / 223	3,6
2000	2450	2510	1100	1300	230 / 249	4,2
2500	2500	2570	1200	1400	300 / 319	4,2
3000	2730	2920	1250	1450	330 / 352	4,2
3150	2430	2420	1400	1600	340 / 365	5,0
4000	2900	3100	1400	1600	380 / 405	5,0
5000	2930	3140	1600	1800	570 / 595	6,0
6000	3460	3460	1600	1800	655 / 680	6,0

“In addition to its first-rate employees, HDG also has a long tradition in building boilers. This means you are guaranteed comprehensive expert advice and sophisticated products.”



Max Wohlmannstetter,
CEO HDG Bavaria GmbH



HDG: specialist for heating with wood

HDG – a Bavarian company making products for the whole world

The company headquarters of HDG are located in Massing, Lower Bavaria Germany. The surrounding natural and agricultural landscape is characterised by hills, forests and meadows and, not least of all, by the people who have helped shape them. These are the people who have always made it a

point to conserve their resources and use them profitably. HDG plays its part in this tradition by making modern products which use wood as a raw material wood, thereby utilising a source of energy which is responsible, ecological and economical and very much in keeping with our age.



Experience creates great products ...

HDG offers a product line that is designed to meet the most varied demands: from log wood boilers to wood chips systems and pellet boilers. With a nominal output of 4.5 kW for private households and up to 380 kW for commercial large-scale plants. This wide variety reflects the established professional experience of the company. And that is the result of orientating our products to the needs of our customers.

... Quality creates trust.

With its broad range of products and services, HDG has managed to gain the trust of users in the agricultural and forestry sectors as well as in commercial businesses and private households. More than 35,000 satisfied customers heat with HDG products - a fact that speaks for itself!

Innovators in the field of wood heating

From the very beginning, HDG has helped to shape the development of wood heating systems and has been a driving force behind this progress with its innovative efforts. Besides the optimisation of combustion technology, the development team also concentrates on improving ease of use. The many awards that HDG has received for its innovations underscore the significance of the HDG developments in advancing heating technology.

Development and production

HDG develops, designs and produces its products at the highest level of quality. Quality assurance starts early in the development phase and is supported by a sophisticated quality management system at all production levels all the way to final assembly. Furthermore, independent testing institutes are charged with performing regular inspections of the HDG products in accordance with the most stringent standards of quality.

Helping to change

Right from its beginning HDG has concentrated on heating systems using wood. Increasing concerns about the environment means that this field is growing in importance.

As in the past, HDG will consistently harness the latest advances in heating technology fuels processing and environmental protection for your benefit. An example of our forward thinking: HDG has been actively involved in a test field for renewable energy plants and for the provision of sustainable energy since 2005.

The management team and over 180 employees who stand behind the HDG name are dedicated to this goal.

