HDG M300-400

Heating Systems for wood chips, shavings and pellets 300 kW, 350 kW, 400 kW

Comfortable heating. With wood!

hdg-bavaria.com

Green lungs – an advantage for all

In harmony with nature

Anyone who looks at nature, at the blossoming fields, lush meadows and thick forests, recognises how important the long-term preservation of our environment is. Particularly the forest should be of vital importance to us. On the one hand as natural lungs, on the other as the source of that durable material wood, which is used for construction, manufacturing as well as for fuel and is constantly in the service of man. Managed in a sustainable manner, we continue profiting from the forest, its trees and its wood.

Let the spark ignite

Wood is extremely popular as a fuel. Although there are now numerous means of generating heat in private, commercial and public areas, none of the alternatives - whether fossil, nuclear or regenerative energy - is as attractive as the ever renewable fuel that wood constitutes.

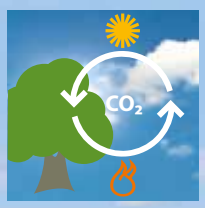
Let the spark of enthusiasm ignite and profit from the personal, economic and ecological advantages of heating with wood!

Heating on the safe side

Opt for the safe side by choosing the renewable energy source wood - because, as everybody knows, eventually the fossil energy sources will run out. Potential perils lurk in nuclear energy sources. And none of the regenerative energy sources offers the advantages that the wood has to offer.

In the interest of combating climate change

Make your mark in combating climate change – because wood is stored solar energy and burns leaving a CO_2 neutral footprint. This means that in the combustion of wood only the amount of carbon dioxide is released that the tree removed from the atmosphere while it was growing.



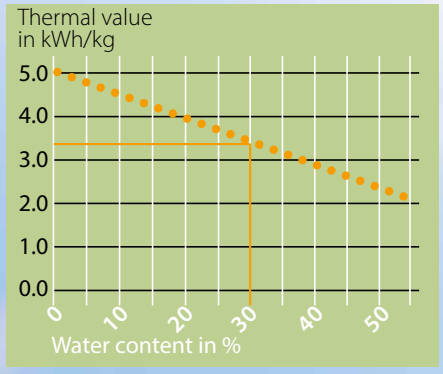
An even balance: when plant matter burns or rots, exactly the same amount of CO_2 is released that the plant matter absorbed while growing.

Economically convincing

Profit from stable prices - because the cost of wood chips and pellets have remained at the same low level for years. Lowering your heating costs in the long term.

Comparison of water content and wood moisture

Water content (w)	50%	40%	30%	20%
Wood moisture (u)	100%	65%	45%	25%



Thermal value of wood in kWh/kg which depends on the water content

Learn to appreciate independence

Free yourself from being dependent on expensive and uncertain fuel imports from abroad - because nothing makes you as self-sufficient as generating heat with resources that are regionally available.

Keeping the region in mind

Strengthen your region and use short transport routes - because wood is usually used locally and, accordingly, does not need to be transported over long distances. The net product thereby remains in the region, and the transport costs as well as the transport emissions are kept as low as possible.

Work towards a clean and reliable future - for which heating with wood offers you the best prospect.

Comfortable heating. With wood!

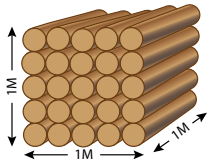
Useful information at a glance: Heating with wood chips, shavings and pellets

Wood chips: wood chips are usually natural pieces of chopped up wood from wood choppers (using blades, not blunt tools)

Pellets: pellets are compressed wood in a standardised cylindrical form that are manufactured from untreated scrap wood (shavings, offcuts, etc.) without using chemical binding agents. In comparison to log wood and wood chips, pellets have the greater thermal value.

Shavings: shavings are generated in wood-processing plants (e.g. sawmills, joineries) as by-products and waste products in the processing of wood.

Explanations and abbreviations of cubic measures:



1 Srm = fill volume unit, corresponds to 1 m^3 wood (poured)
1 Rm = stacked cubic meter (stere), corresponds to 1 m^3 wood (stacked)
1 Fm = 1 solid cubic metre (without intermediate spaces)
1 Fm (logs) corresponds to 1.2 Rm (stere) which corresponds to 2.5 Srm wood chips

Demand:

Log wood	Wood chips	Pellets	Natural gas	Heating oil
10 kWh	10 kWh	10 kWh	10 kWh	10 kWh
2.5 kg*	2.5 kg*	2.0 kg*	0.84 kg*	0.86 kg
5 litres*	12.5 litres*	3 litres*	1000 litres*	1 litre
Percentage of energy consumption for supplying fuel compared to the total energy				
1.2 %	2.3 %	2.7 %	14.5 %	12 %

With 10 kWh of energy one could, for example, heat 860 litres of water by about 10° C. The annual demand in respect of heating energy for a new house with a living area of approx. 150 m^2 amounts to about 15,000 kWh. For which one requires about 1,500 litres of heating oil. The same energy is contained in 3 tonnes of pellets or in approx. 8 stere of hardwood or 10 stere of softwood with a water content of 15%. (Source: LWF Bayern + W. Jensch: Vergleich von Energieversorgungssysteme unterschiedlicher Zentralisierung, Munich, Technischer Verlag Resch KG, 1988, DI J. Bergmair: Gesamtenergieaufwand bei der Herstellung von Hackgut bzw. Pellets, Graz University of Technology, May 1996.)

* Amount required instead of 1 litre of heating oil.

The rise of energy price between 2005 - 2013

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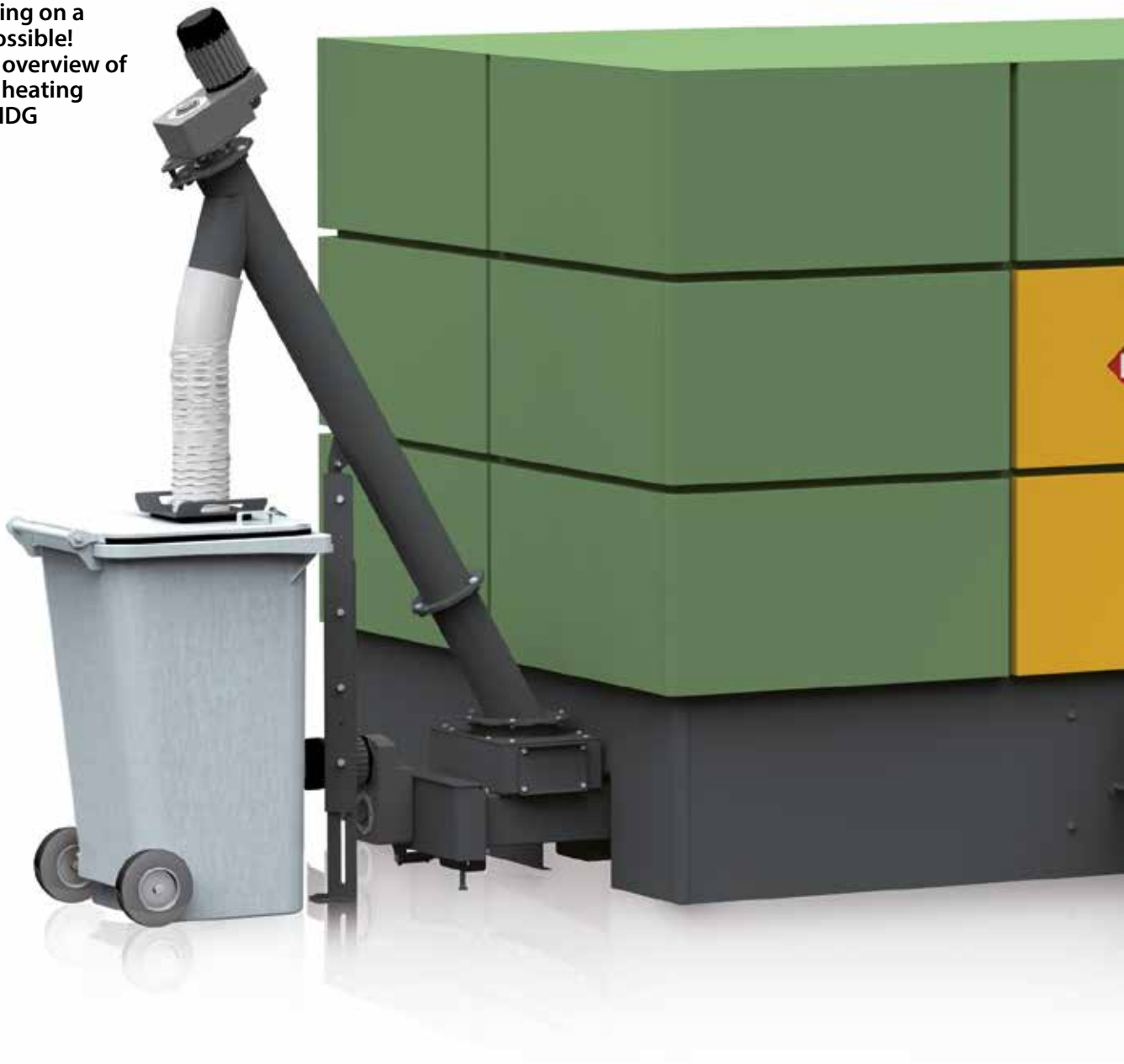
HDG M300-400

Modern, exemplary and masterful

With the HDG M300-400 we make heating on a grand scale possible! Here is a brief overview of what the new heating system from HDG comprises of.



Areas of application for the HDG M300-400

- Public institutions
- Municipal bodies
- Commercial businesses
- Housing associations
- Contracting companies
- Agricultural enterprises
- Hotel and wellness sector
- Wood processing businesses

Comfortable heating. With wood!

Highlights of the HDG M300-400

Exemplary combustion

The movable stepping grate with two combustion zones, the controlled addition of combustion air in three different sections as well as the cleverly designed combustion chamber – therein lies the secret of the extremely clean combustion of the HDG M300-400. The combustion is so optimal that the heating system easily meets the very strict German emission values even without any flue gas after-treatment. Simply exemplary!

Modern control and monitoring technology

The best heating system is only able to function if it is equipped with a clever control system. HDG therefore relies on combustion chamber temperature sensors and lambda sensors, as well as a combustion air control system with vacuum sensors and speed-controlled fans. So that the HDG M300-400 is fully monitored by state-of-the-art technology!

The HDG M300-400 does not only distinguish itself through its exemplary combustion. The heating system is also superior in respect of its monitoring and convenience.

Excellent convenience

In terms of convenience and flexibility, the HDG M300-400 excels to satisfy your every wish:

Firstly, the system is designed for three fuels – wood chips, shavings or pellets – and can accordingly be used in a variety of areas.
Secondly, the boiler's size presents no great installation challenges as the heating system can be disassembled into its individual parts (combustion unit and heat exchanger) and easily transported.
Thirdly, the heat exchanger cleaning system as well as the ash removal of the system run completely automatically. The large ash container extends the maintenance intervals. Convenience has clearly been given priority here!

Fuel

- Wood chips (up to 65% moisture content, medium wood chips of 3-5 cm = max. P45)
- Pellets
- Untreated shavings

Ingenious heating system with high output

Are you looking for a reliable wood heating system with a medium to large output that will not unduly burden your budget in the long term and will supply the (public) facilities of your community or town with heating?

Would you like to be able to offer your tenants or hotel guests a comfortably warm atmosphere at low additional costs?

Would you like to heat your commercial or agricultural business with regenerative energy and save money whilst doing so?

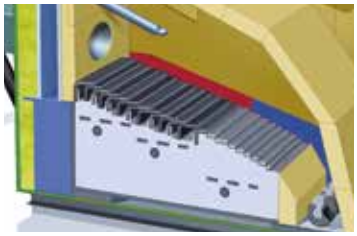
Then the HGD M300-400 is exactly what you are looking for. An ingenious heating system that combines the proven HDG technologies with innovative improvements. Together with the HDG accessories that are ideally adapted for the boiler, such as the delivery system, back burn protection as well as the control and monitoring technology, the HDG M300-400 constitutes an automatic heating system with an output of up to 400 kW that leaves nothing to be desired.

Planning and fuel storage

HDG will support you in planning your heating system individually and efficiently as well as with the proper choice of the best supply and delivery system.
See pages 16-17

The HDG M300-400 and its combustion technology

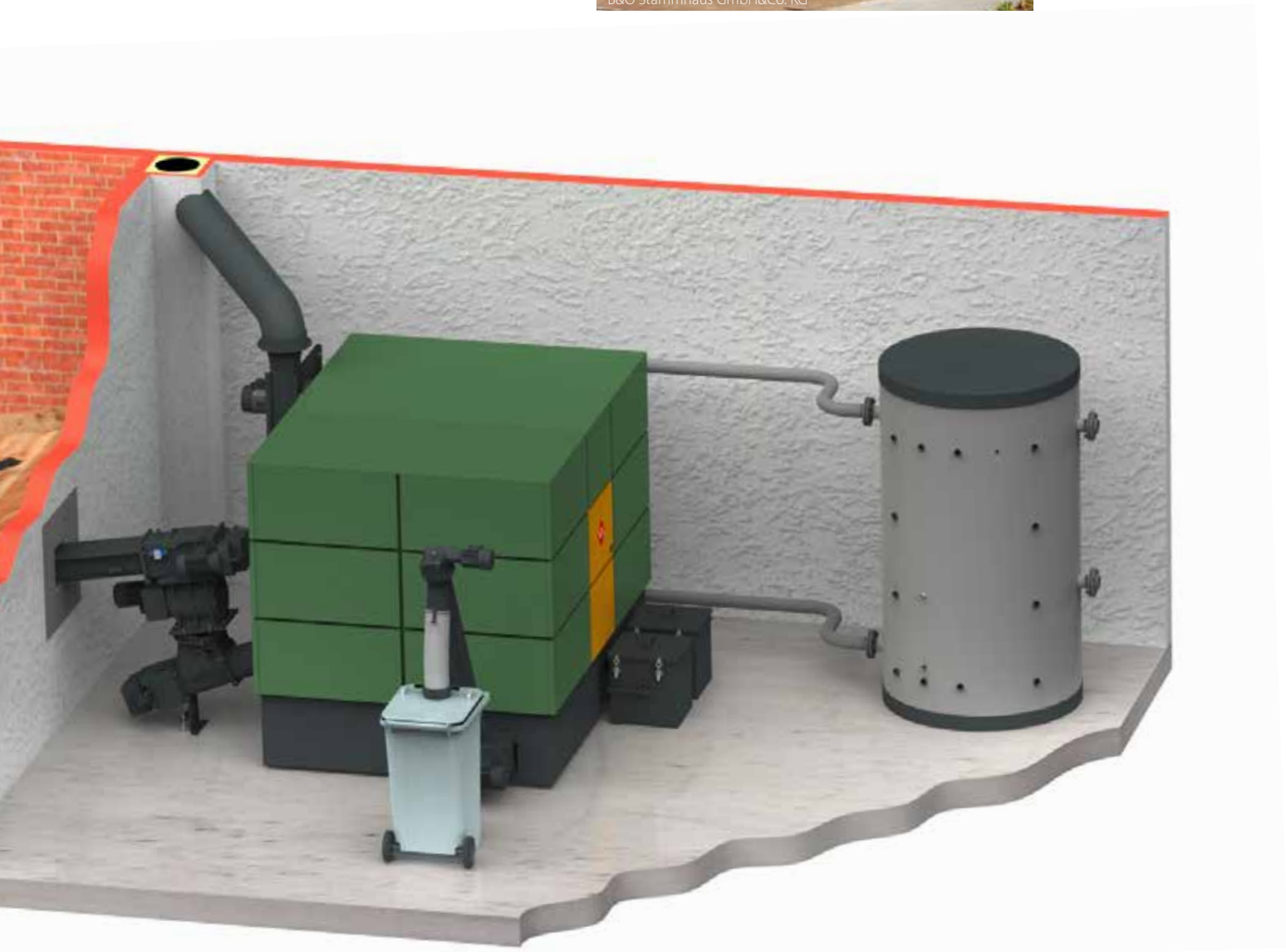
Powerful, reliable, economical and ecologically sound. This is how the HDG M300-400 heating system and its combustion technology can be characterised in just a few words.
See pages 8-11



In Bad Aibling, an HDG M400 heats an eight-storey building, amongst others, with wood. The system is also connected to an extensive district heating network. In keeping with the building, the heating system has been housed an architecturally attractive heating icon.


B&O Stammhaus GmbH&Co. KG

Comfortable heating. With wood!



Heat transfer and ash removal

Excellent efficiency and exceptional convenience are essential for a heating system that is user-friendly. The HDG M300-400 offers both and does so whilst producing low emissions.
See pages 12-13

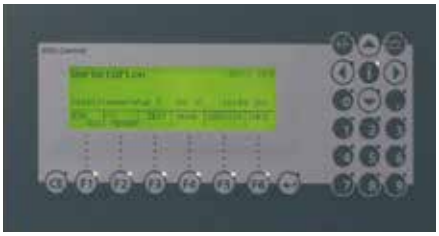
Control technology

Ideally configured and controlled, the HDG M300-400 delivers the best combustion values. Using the HDG Web Visualisation this - and a great deal more - can be observed even at a distance.
See pages 14-15

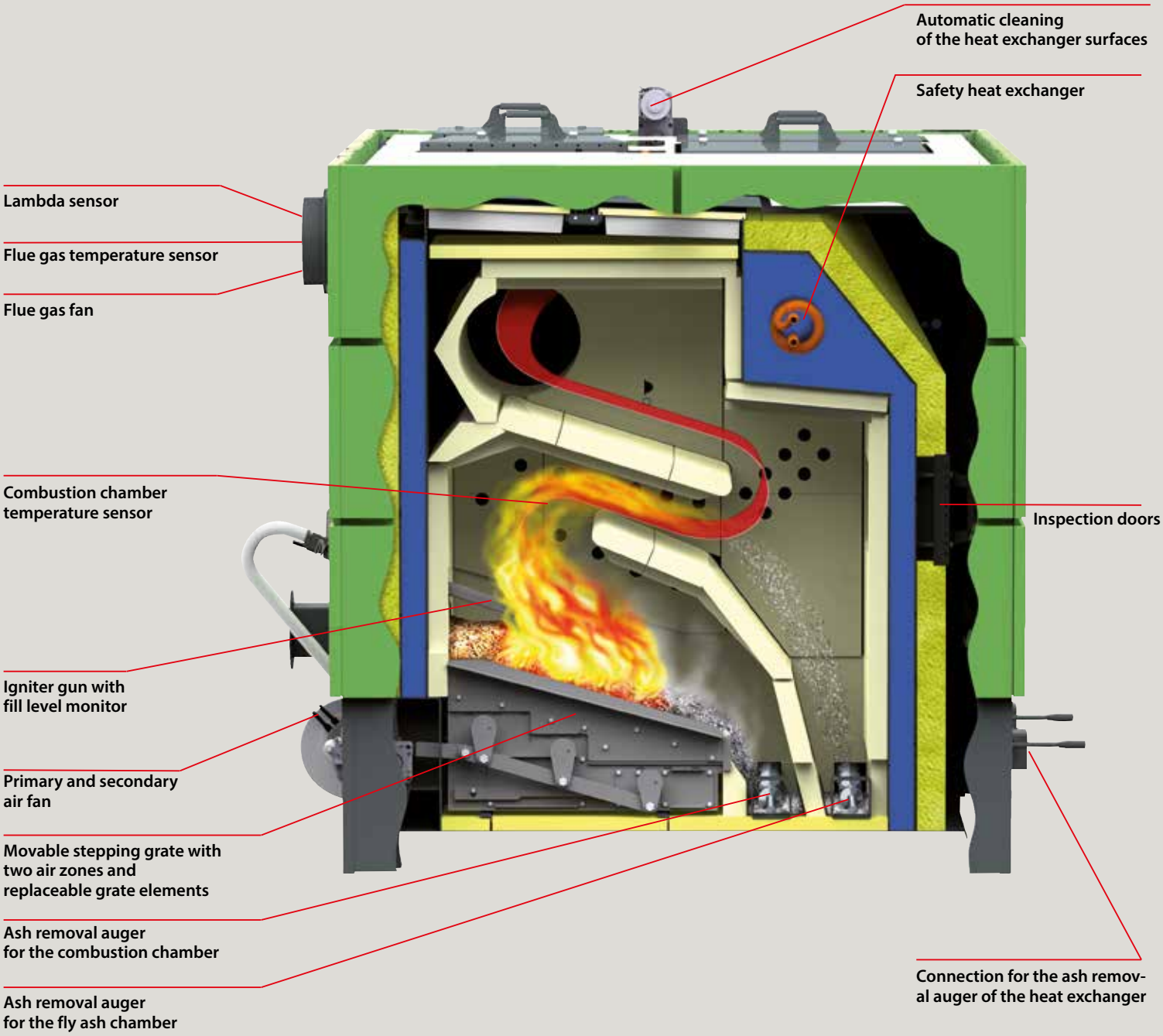
Energy and thermal management

Due to the HDG system components, such as the accumulator, the valuable heating energy is always at the right place at the right time.

See page 18



HDG M300-400 Cross section

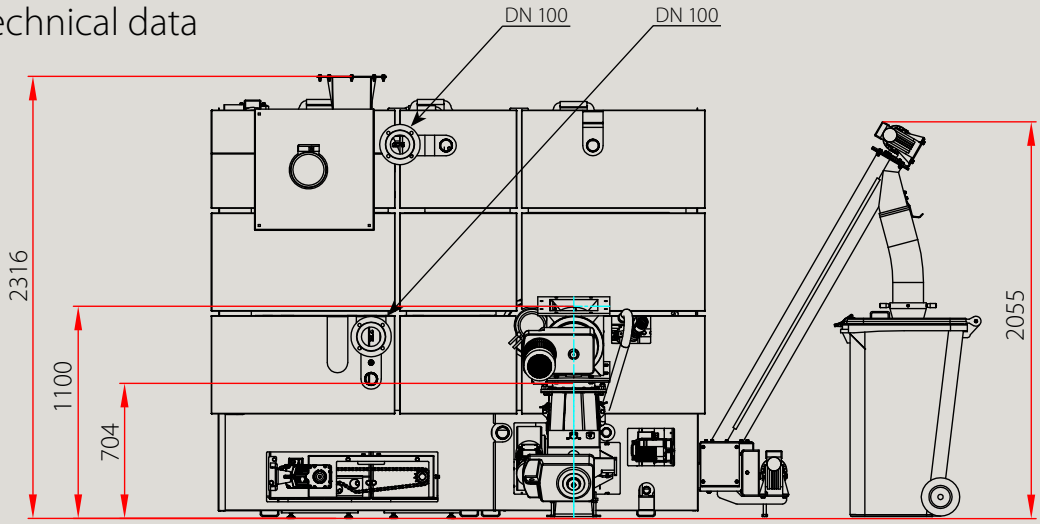


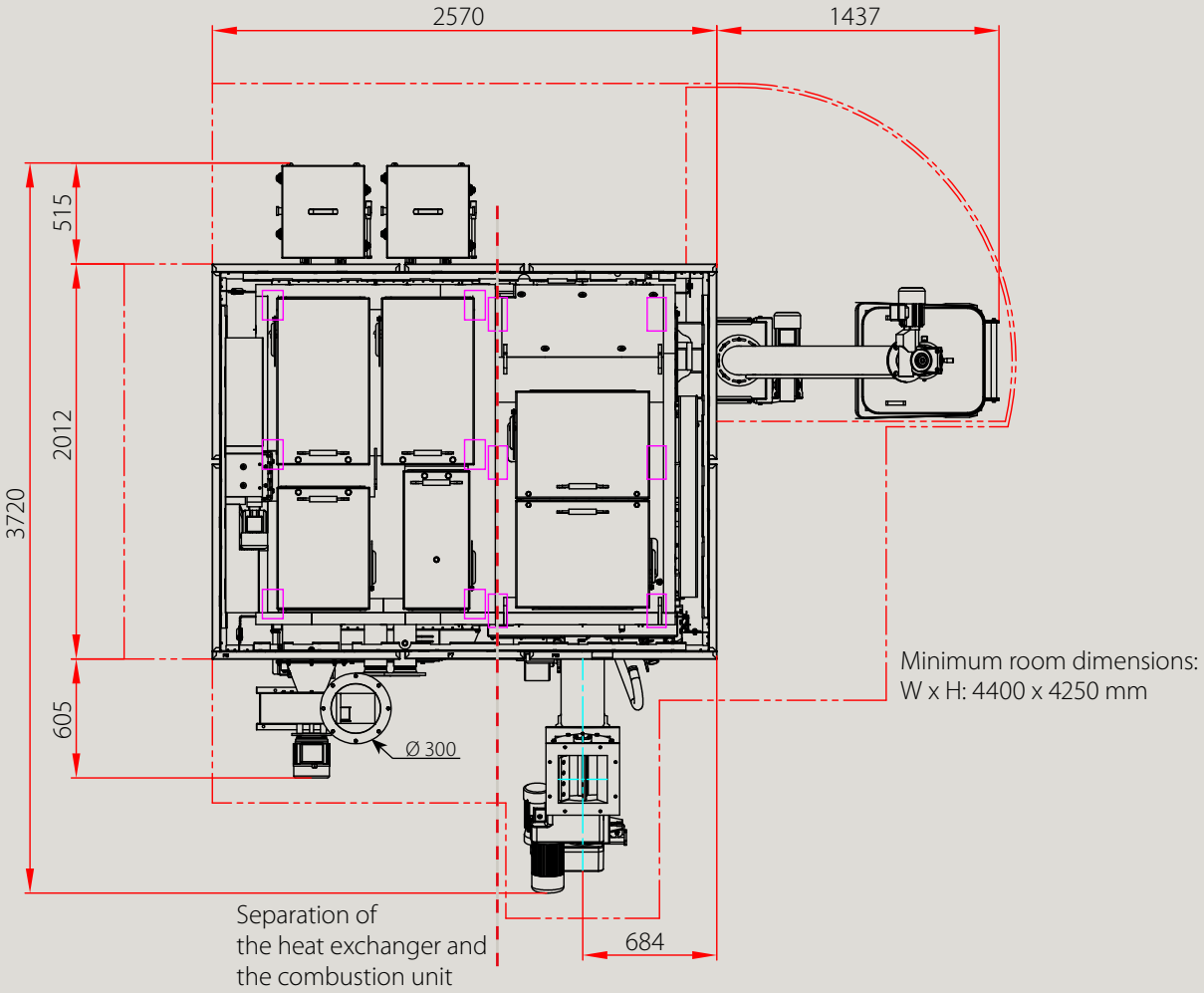
	Unit	HDG M300 Wood chips	HDG M350 Wood chips / pellets	HDG M400 Wood chips / pellets
Nominal thermal power	kW	300	350 / 375	400 / 400
Minimum thermal power	kW	90	105 / 112.5	120 / 120
Flue gas temperature (Tw) at nominal load	°C	150	160	170
Flue gas mass flow at nominal load	kg/s	0.185	0.221 / 0.229	0.257 / 0.245
Water content	l	3060		
Operating pressure	bar	3		
Flue draught requirement (Pw)	PA	10		
Max. supply temperature	°C	95		
Weight	kg	5,500	5,600	5,650

Dual heating

Two HGD M300-400s can also be combined to increase of the output. It is also possible to couple an HDG M300-400 with a heating system of the HDG Compact series. The advantages of such cascade solutions are obvious: higher output, highest operational safety, demand-oriented supply of heating particularly with a fluctuating energy demand, easy and precise output control, very cost-efficient operation and boiler maintenance without interrupting the heating, even ideal for the phased expansion of the heat transfer capacity.

Technical data



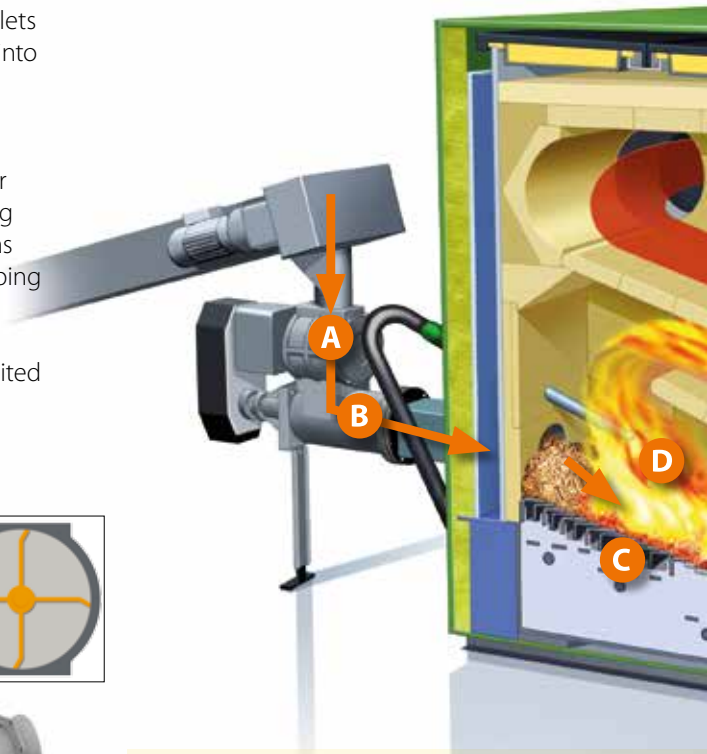


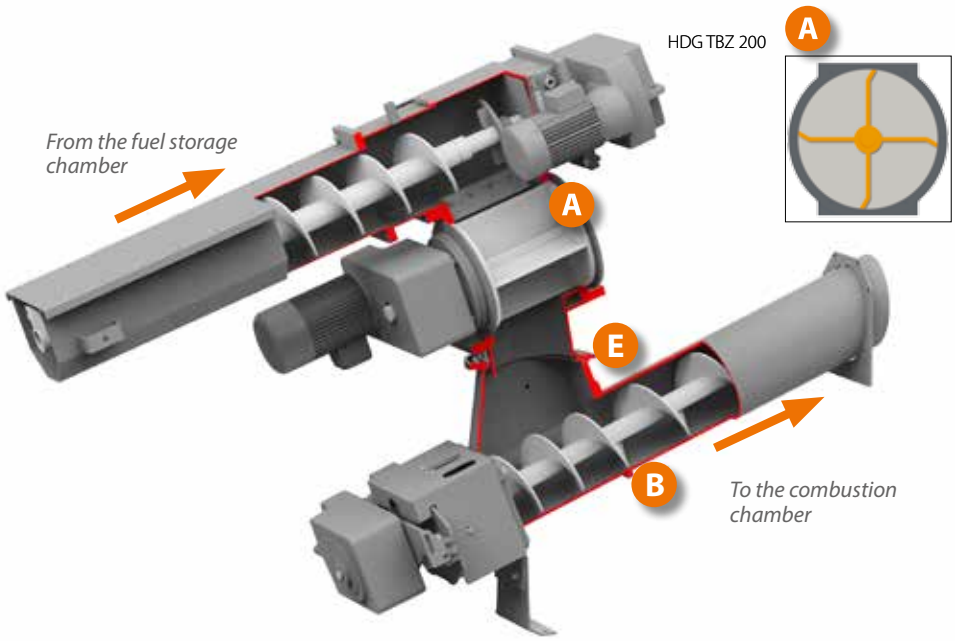
From fuel to heating

The feeding system, combustion unit, heat exchanger, ash removal system, control and (remote) monitoring systems are undoubtedly amongst the crucial components and accessories that enable the HDG M300-400 to provide heat reliably, cleanly and economically. The extremely high boiler efficiency of 94% shows that the interaction of all the components in the HDG M300-400 is excellent.

The path of the fuel

The wood chips, shavings or pellets supplied by delivery system fall into one of the four chambers of the rotary feeder A.
This rotates continuously and conveys the fuel on to the stoker auger B. From there the heating material is pushed steadily and as required on to the moving stepping grate C in the combustion chamber D, where the wood chips, shavings or pellets are ignited automatically.





The highest degree of safety

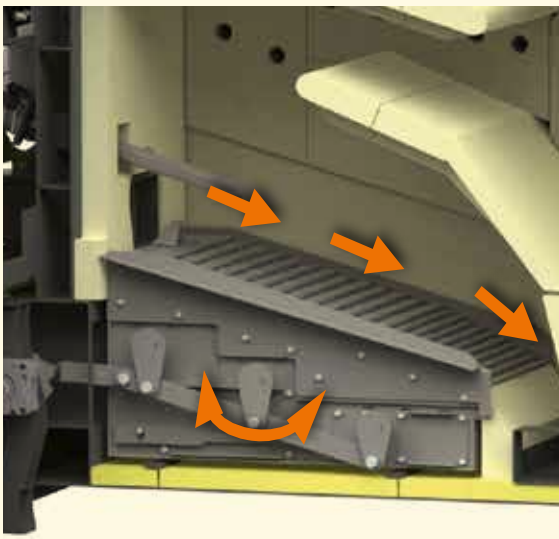
Together with the HDG M300-400, the feeding system HDG TBZ 200 is used for wood chips. The system consists of a rotary feeder and stoker auger designed for very large amounts of fuel. The delivery system used is directly connected to the sturdy rotary wheel (250 mm diameter) A, which ensures the best possible material transition. The large 4-chamber rotary feeder A is equipped with a replaceable counter-cutter, so that trouble-free heating is ensured even with coarse-grained fuels.

The transition to the stoker auger features an angle that can be flexibly adjusted E. The stoker auger provides for precise metering of fuel. A fill level indicator between the rotary wheel and stoker auger B ensures requirements-based and uniform material metering. In this way the heating system is supplied with exactly the amount of fuel necessary for optimum combustion.

The HDG TBZ 200 also operates on an extremely energy-efficient basis. Due to the fuel metering using the stoker auger, its efficient motor, and non-cyclic operation of the delivery, the feeding system reliably ensures low energy costs.

The advantage is in the stepped grate

The stepping grate, amongst others, is crucial for a perfect combustion that is consequently clean - even with varying fuel properties. The combustion air is introduced from underneath it. On the one hand, this cools the grate elements and protects them from overheating. On the other hand, this has the effect of heating



Irrespective of whether the location is in a town or in the country, in a hotel or a residential building: the HDG M300-400, due to its state-of-the-art technology, reliably provides heating for that sense of well-being - as for instance at the Arterhof in Bad Birnbach.

Comfortable heating. With wood!

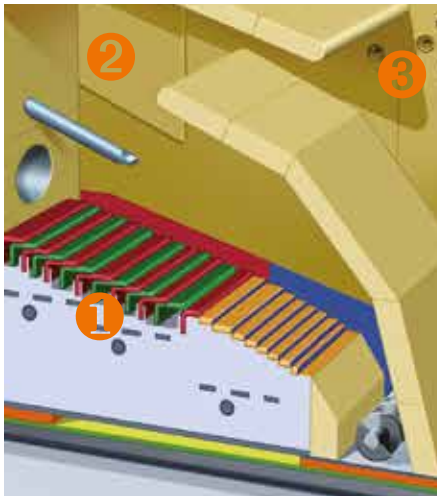
Combustion in three zones

During combustion of the heating material in the HDG M300-400, targeted air is added by the speed-controlled combustion air fan as well as the controlled airflow cross-sections. There are three different air zones:

Zone 1 (primary air): This serves to cool the grate, dries the heating material in the upper area of the grate in advance, provides for the outgassing of the material and constitutes the main air for the combustion.

Zone 2 (secondary air): Here air is specifically added to ensure that the combustion is clean and complete. The combustion gases and combustion air are carefully mixed by being redirected in the combustion chamber.

Zone 3 (tertiary air): In the last zone, the combustion gases and the pre-heated air are remixed. A very clean combustion with extremely high levels of efficiency is achieved due to the different air zones and the lengthy time that the gases are retained in the combustion chamber.

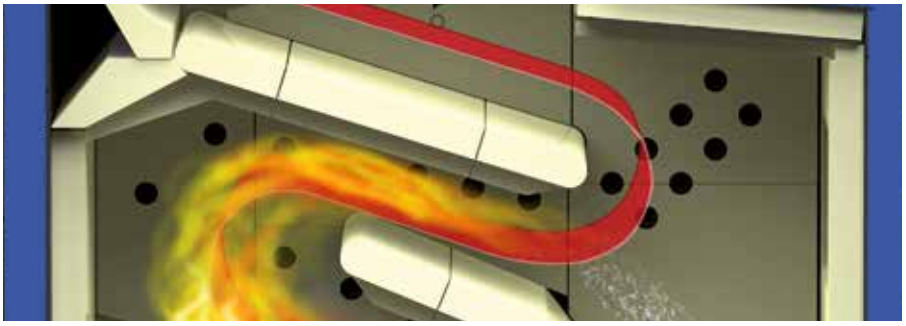


the combustion air that in turn influences the combustion positively.

The stepping grate is split into two primary zones so that a sufficient output modulation can be achieved using different fuels while retaining the same high rate of efficiency. The continuous to and fro movement of the stepping grate results in the fuel or combustion residue constantly being pushed "downstairs" in the direction of the ash removal system. They thereby facilitate a continuous burning cycle and a stable, homogeneous firebed. Even ash that is produced by material that is difficult, very dry or with a very high cinder content is reliably removed because of the skilful combination of the different zones and the moving grate.

The heat-resistant stepping grate thereby ensures that the heating system operates without interruption, which makes the boiler extremely attractive particularly in respect of the base load operation.

Geometrically ingenious



The modular structure of the HDG M300-400 combustion chamber consists of extremely fire-resistant concrete and is accordingly very robust. Its geometric design contributes to the retention time and the turbulence of the combustion gases in the combustion chamber being very high. The combustion gases are thereby completely burned off so that their emissions are reduced by as much as possible. Even when operating under partial load, the "hot combustion chamber" provides the necessary combustion temperatures and, thereby, for the lowest emissions. Moreover, the combustion chamber stones store thermal energy. The water-cooled casing of the furnace chamber acts as an insulator and minimises the losses of heat radiation. This has the following positive effects: If the boiler is quickly heated up again, the combustion chamber is still warm Consequently, the heating installation does not need as long to reach the ideal operating temperature. If the boiler is only reactivated after a longer time, the combustion chamber acts like an accumulator that can deliver the energy to the heating system later by means of residual heat utilisation.

Excellent heating guaranteed

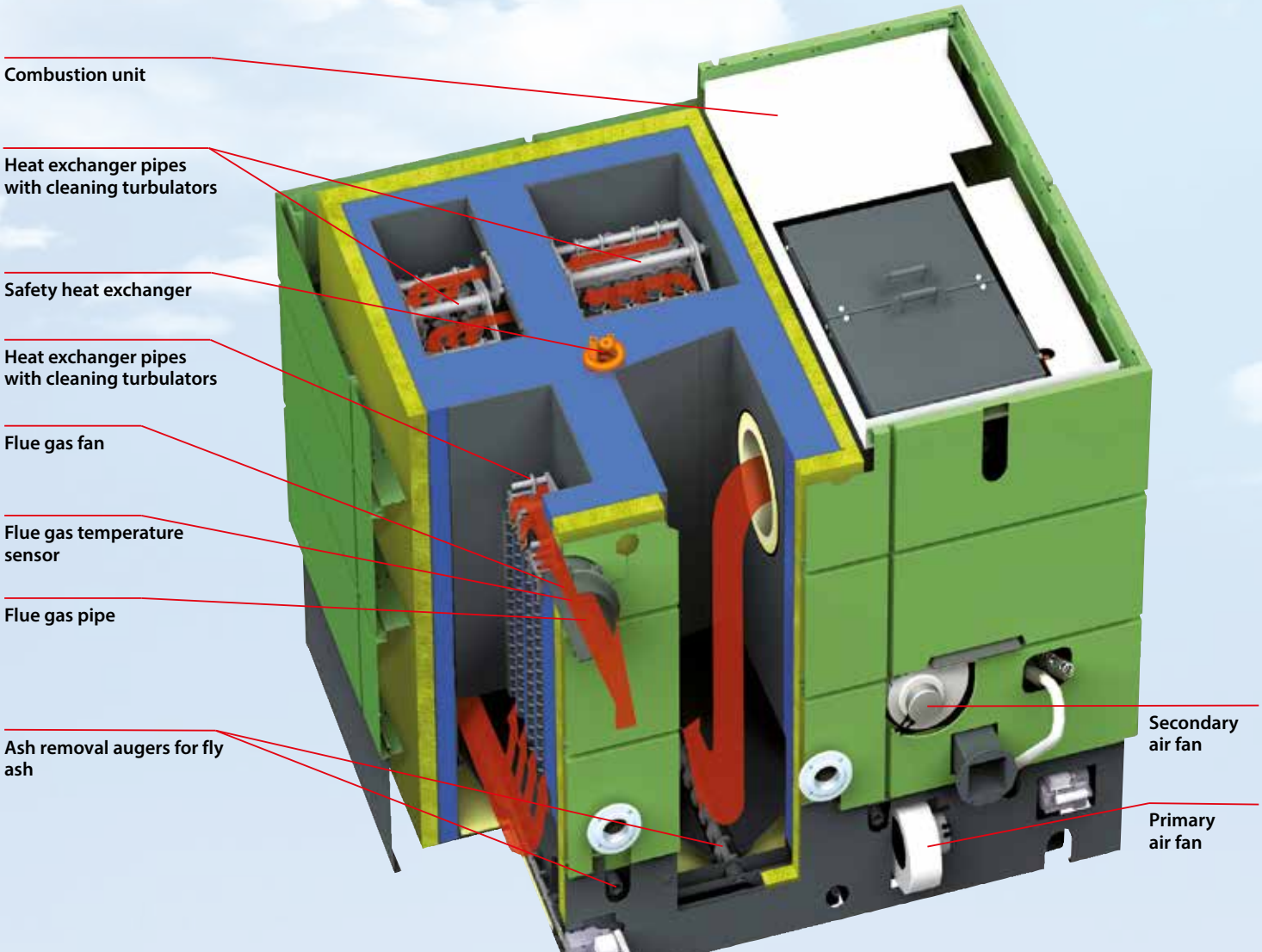
The most frequently asked questions in connection with wood heating systems are in respect of ash removal and cleaning the boiler. In addition, the focus in wood heating is on perfect heat transfer, efficiency and the least possible emissions. Due to state-of-the-art and ingenious technology, these aspects have been solved in the HDG M300-400 in an exemplary manner while paying attention to the greatest convenience.

Clean heat transfer

The second part of the HDG M300-400 – the four-section heat exchanger – is connected directly to the combustion chamber and is responsible for the optimum heat transfer. It consists of four sections that are each equipped with vertical heat exchanger pipes. The hot flue gases pass through these and deliver their heat to the heating water.

The cleaning turbulators, which are fitted as standard, ensure that an ideal heat transfer takes place constantly. These clear the vertical heat exchanger pipes at regular intervals of part of the fly ash by automatically moving up and down. Moreover, they create further turbulence of the flue gases through their form and thereby for a further improvement of the heat transfer as well as a consistently high degree of efficiency. The ash scraped off by the turbulators falls towards the bottom of the boiler and is automatically transported by ash removal augers into the external fly ash containers. To increase the emptying intervals for as long as possible, the resulting fly ash is compressed in the containers that are fastened to the boiler with simple latch locks.

The central ash removal system as well as the containers for fly ash are located outside the thermally stressed areas of the wood heating system. The drives of the augers are accordingly under no great stress and their life expectancy promises to be long.



Well planned and ideally configured, the HDG M300-400 gives the assurance of attaining the best combustion values. And is entirely consistent with the concept of clean heating with wood!

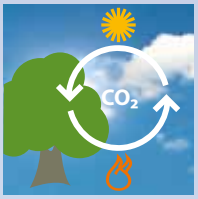
Comfortable heating. With wood!

Out of the boiler – into the bin

The ash produced in the HDG M300-400 is constantly being pushed by the moving stepping grate towards the ash removal auger. The ash is automatically conveyed into the 240-litre ash bin of the HDG central ash removal system via the ash removal auger and an ascending auger. A second ash removal auger conveys the major part of the fly ash – also automatically – to the central ash removal system. In order to empty the ash bin the locking mechanism is opened and the wheeled bin replaced.

This large, independently functioning HDG central ash removal system represents ease of use on the one hand. On the other hand, it extends the service and maintenance intervals, even over extended operating hours, of the HDG M300-400 considerably and, accordingly, offers exceptional heating convenience. Further ash removal systems as well as ash containers can be added to the system because of its excellent flexibility. Ascending augers with special lengths are also available to overcome different storeys in a building.

Nothing but clean air



Due to wood-heated boilers leaving a CO_2 neutral footprint, they are generally accepted as being a heating option that is extremely environmentally friendly. The tests regularly performed by the TÜV testing agency have established that this is also applies in respect of all emissions that are relevant to the environment. HDG relies on an optimised combustion technology to reduce the emissions of the systems even further, while always keeping these below the legal requirements. The combustion within the HDG M300-400 is accordingly so efficient that the heating system easily meets the very strict German emission values even without any flue gas after-treatment.

The ash removal augers automatically forward most of the ash and fly ash into the large ash bin of the central ash removal system.

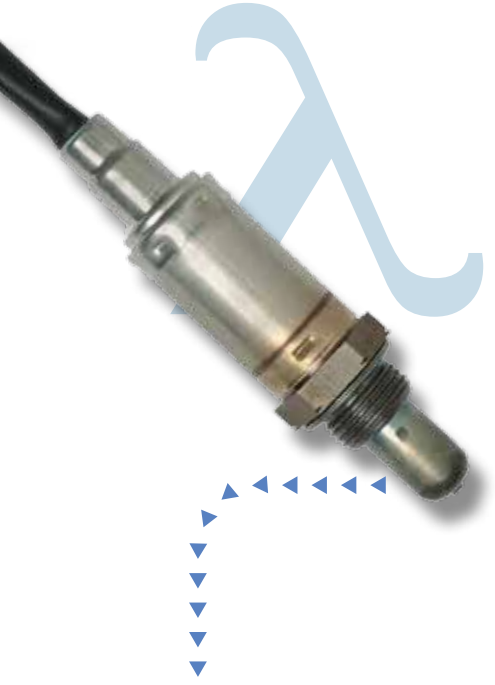
The fly ash from the heat exchangers is also automatically transported into the two smaller fly ash containers.

Everything under control

Every wood-heated boiler can only fulfil its purpose – the economical and ecological generation of natural heat – if its core feature, the control system, functions. This also applies to the HDG M300-400, in which state-of-the-art HDG control technologies that are simultaneously easy to operate have been reliably combined. Here all the components of the system are monitored and controlled by the electronic PLC controller from the control cabinet.

Focusing on fire

The automatic combustion control system contributes towards achieving highly efficient combustion. A lambda sensor combined with an ingenious vacuum pressure control system determine what the necessary amounts of secondary and tertiary air in every operating status are and regulate these quantities accordingly, so that the fire in the boiler is always supplied with an optimum amount of oxygen. The quantity of fuel to be introduced is derived from the temperature in the combustion chamber. This measurement also contributes towards the continuous supply of thermal energy in accordance with the output.



Appropriate and efficient

The precise output control system enables the continuous adjustment of the boiler output from 30 to 100%. The heating system always works to meet the demand.
As the fuel type can also be set, the system can easily meet its basic operating requirements and the generation of energy is even more efficient.
In combination, the innovative HDG combustion and output control systems achieve optimum emission values and an excellent boiler efficiency (94%), which were confirmed by the tests conducted by the TÜV testing agency.

Combustion chamber under pressure

To guarantee a consistent combustion quality, a constant vacuum pressure must exist in the combustion chamber. This is constantly monitored by a pressure gauge and is readjusted by changing the speed of the flue gas fan. Specifically, in respect of fluctuating fuel qualities or unfavourable flue conditions, this vacuum pressure control system is invaluable. Moreover, this control system also acts as an additional safety device because it ensures that flue gases cannot escape from the combustion chamber.

The right temperature for every season and at any time of the day or night – the intelligent HDG control system achieves this at the Angerhof Sport and Spa Hotel in St. Englmar, which is heated by an HDG M300.

Comfortable heating. With wood!

Managing energy matters

HDG furthermore relies on the proven HDG Hydronic Plus to control the entire heating system – up to six weather-controlled heating circuits, heating domestic hot water, accumulator management, transfer of district heating, connection to a second boiler and a solar-powered system for domestic hot water (DHW) and to support the heating system – of the HDG M300-400. This heating control system with its numerous program functions has everything that is expected of an intelligent energy manager.

As the heating circuit regulator has its own operating display, it is particularly convenient when the heating circuit control system and the boiler room are in separate rooms and several items need to be controlled.

Ready for expansion

In modern building technology, it is essential that the individual components are able to communicate with one another. The PLC controller of the HDG M300-400 is therefore compatible with multiple interface protocols. It can be connected with higher level controllers via Mod-Bus RTU, Profibus at DP Slave or Active-X. A connected fault indicator is furthermore able to send messages per Fax, SMS or E-Mail.

Heating in the age of the Internet

If you would like to have control of your heating system at all times and at any place, this can easily be put into practice thanks to the Internet. A glance at the computer screen or the mobile phone suffices, and one knows what is happening in the boiler room. Moreover, the heating system can be controlled comfortably from a distance: This is what state-of-the-art wood heating with the HDG Web Visualisation looks like.

The HDG Hydronic Plus system regulator reliably handles the energy management of the heating system.

Your heating system is available to you on your screen by simply clicking your mouse with HDG Web Visualisation.

For example, with a few mouse clicks the operating statuses, temperatures and other parameters can be checked as well as changed in part; furthermore, fault messages can also be seen. A secure connection from the heating system to the heating engineer or the factory customer service is available for easy remote control and maintenance. Moreover, the HDG Web Visualisation has further options that may be of interest if a precise system evaluation (data logger) is required or a comprehensive fault management (version with the GSM module) is necessary. In the field of building automation, the system data can also be provided to higher level controllers via Modbus over TCP.

Everything according to plan

What would a wood chip, shaving or pellet heating system be without the appropriate fuel storage, the appropriate supply system and the appropriate delivery system? In this regard, the key premise is: well planned is already half the battle won!

On-site overview

We will gladly advise you on site and obtain an overview of your current heating situation, your wishes and your requirements. After an in-depth analysis of the operating conditions, we will present our proposed solutions: from the fuel supply, the transportation of the heating material to the heating system, the heating boiler right up to the ash removal - and individually adapted to the requirements of your building.

Solutions for all requirements

With the expert assistance of the HDG heating consultants or HDG partner companies, you can be certain that your entire heating system will be attuned to your needs and meet your requirements.

Irrespective of whether the space is located in a cellar, on the ground floor or even on upper floors, whether for square or rectangular rooms, whether the heating requirement for the building is large or small, whether the location in the building is easily accessible or not – we have the right solution for you in our portfolio – from fuel supply systems to ash removal.

We make it possible

Due to our extensive experience, our comprehensive know-how and our excellent product range we are able to offer diverse supply and delivery options:

There are diverse options to supply the fuel storage chamber with fuel. Horizontal supply augers are used in particular to transport wood chips and shavings into underground fuel storage chambers ❶.

In fuel storage chambers at ground level, which are often more difficult to access, supply augers with a filling trough and a long ascending auger are often used ❷ ❸ ❹.

The wood chips are transported by means of augers and as required in the direction of the heating system. In this regard, the perfect planning of the complete system plays an important role.

HDG

Comfortable heating. With wood!

So that the fuel is delivered to the boiler from the storage chamber, a special delivery system may be required – depending on the fuel.

Wood chips, shavings, pellets and pressed wood briquettes can be conveyed in the direction of the boiler by a spring-core delivery system as well as a hinged arm delivery system - provided that the fuel storage chamber is square. Even lengthy distances can be covered in this manner A B.

If large amounts of fuel are required, a walking floor delivery system may make sense. This option represents an ideal solution for large rectangular fuel storage chambers C.

Pellet delivery systems are used solely for pellets. These are regarded as very flexible because the pellets can be drawn in over wide distances D.

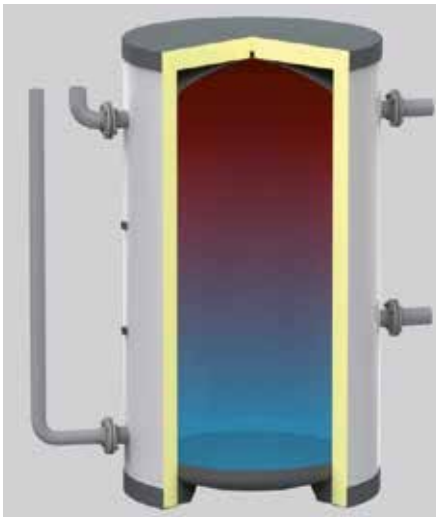
Accumulator & Co

It not only the control system that contributes towards efficient energy and thermal management in heating systems. Components such as accumulators make as an important a contribution towards the ideal functioning of a complete wood heating system. If the heating system is then connected by a qualified technician and individually adjusted in respect of the fuel and the requirements, there is nothing in the way of efficient heating.

Systematic heating

Once heated up, heating systems work in the highest output range (the nominal load range), because ideal combustion conditions exist here. Nevertheless, the amount of heat produced in doing so frequently deviates from the momentary demand of the heating grid.
This is where the accumulator comes into play: it compensates for an increased as well as a reduced demand for heat energy from the heating grid, by storing excess energy and delivering it to the system when it is required. If the energy consumption of the heating grid remains below the nominal thermal power of the boiler in the long term, the HDG accumulator management recognises this and reduces the output of the heating system. The uneconomical heating-up and cooling-down phases of the system are thereby avoided and reduced to a minimum.

The M300-400 is often equipped with an accumulator in practice. The speed-regulated accumulator heating pump provides for a particularly effective output and delivers the appropriate flow volume in the complete output range.



An accumulator works like a battery. It collects the water heated up in the heating system and then redelivers it to the heating system when required.

Although not legally required in respect of all heating systems, we strongly recommend combining all wood heating systems with an accumulator that is sufficiently large to be able to take full advantage the energy in wood. And that is not all, the use of accumulators has many other advantages:

- A higher system efficiency
- Lower emissions
- Lower fuel consumption
- Increased heating convenience
- Reduced wear of the heating system
- Less demand for auxiliary energy

Our heating consultants will gladly advise you on the HDG accumulator models and sizes that are suitable for your heating system and would be most beneficial for you.

**HDG has a long tradition in building boilers and first-rate employees.
This means that you receive comprehensive advice and products that have been tried and tested.**

Heating with HDG

Heat conveniently with wood! At HDG, we have been working on this very successfully for what has now been over 35 years. Our know-how and our innovations mean that HDG boilers make very good economic and ecological sense. The common aspiration to make sustainable use of the energy supplies connects our company with our customers from all branches and from all over the world. Consequently, our log wood boilers, wood chip boilers and pellet boilers are used with pleasure in agricultural and forestry enterprises, in industry, at hotels, in commercial and municipal facilities as well as in private households.

The highest quality and maximum benefit

Decades of experience in the construction and distribution of wood boilers go into every HDG product. Accordingly, only materials are used that are able to withstand the high demands. Everything that is part of a state-of-the-art heating system is designed for functionality and maximum benefit: the reliable delivery of fuel, a boiler configured for highest efficiency and control technology that connects all components ideally. Awards such as the German Federal innovation prizes and KWF innovation prizes speak for themselves. They confirm the value of HDG boilers in the progress made in heating technology.
However, our family business delivers much more than state-of-the-art boilers.

Service that is enthusiastic

For HDG, next to perfect products, the commitment to service comes first. In addition to the classic services, such as advice, assistance in planning, punctual delivery with own trucks and commissioning by HDG trained specialist staff, we accordingly also offer numerous other service highlights: On the one hand, long-term customer care through our partners in respect of all questions relating to your heating system and the subject of heating with wood as well as the extensive availability of our service personnel. On the other hand, we are enthusiastic about wood as a fuel and the certainly that with HDG the right choice has been made.

Intelligent supply solutions, sensible storage chamber constructions, efficient delivery systems, accumulators in all sizes and further, useful accessories are all part of our product range.

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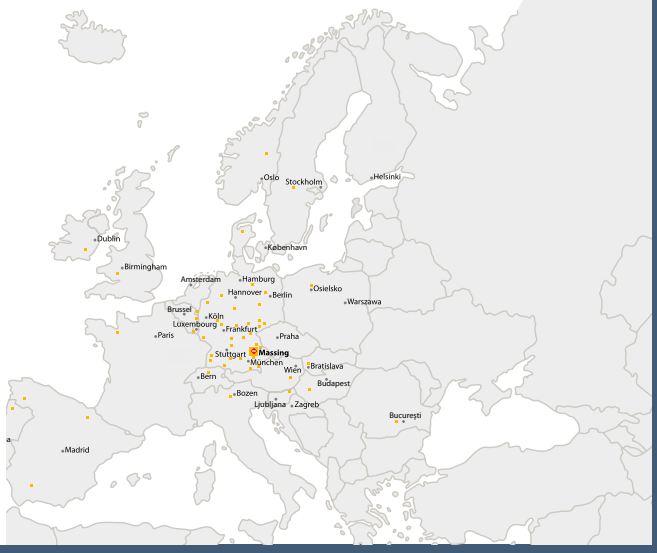

Prices and indications are the result of innovative developments by HDG. At the same time you are providing us the incentive to carry on driving our research and development operation.

HDG log wood boilers fulfil the requirements of the burning and safety technology regulations.

Furthermore, HDG products undergo voluntary quality testing by independent institutions.

For information about the current support programs, see www.decc.gov.uk

HDG product range

HDG wood chip, pellet and shaving heating boilers

HDG log wood boilers

HDG pellet heating boilers

We are happy to provide information to you.

To protect our environment, we only use paints that do not contain mineral oils.
Subject to technical changes and corrections.
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