

**KOOLFUEL**<sup>®</sup>  
*energy for a future*



Hoval AgroLyt<sup>®</sup>  
Gasifying log boiler  
20 - 50kW



**Hoval**

Even our earliest ancestors knew the value of obtaining heating energy from wood. But now? Isn't heating with wood old-fashioned, out-of-date? Not at all! As a locally produced, CO<sub>2</sub> neutral and constantly renewable energy source, wood is more relevant than ever and as a source of energy, it is more economical now than it has ever been.

Thanks to Hoval innovations.

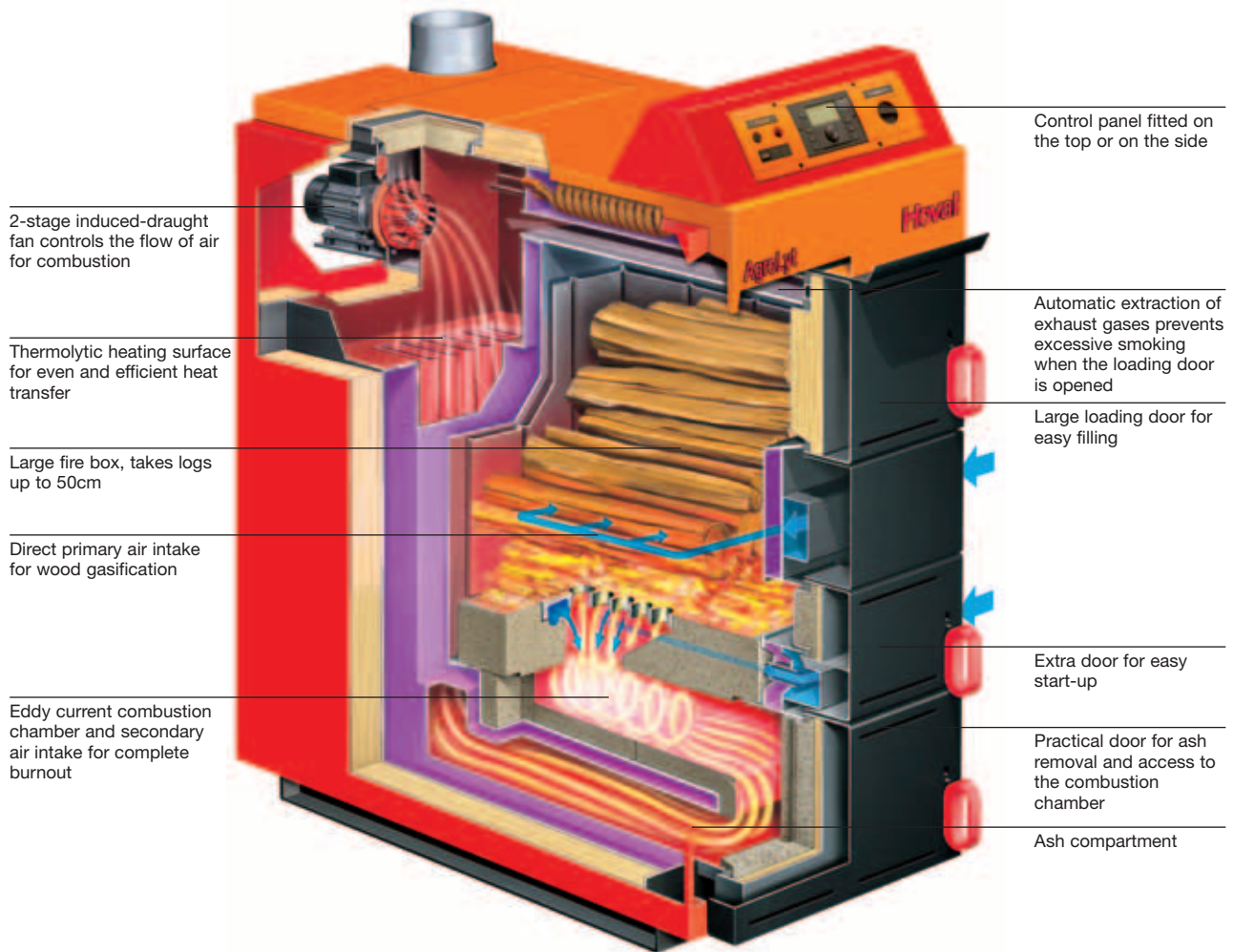


- Quick and easy to install
- Sophisticated wood gasification technology
- Proven design and long-life
- Easy ash removal and cleaning
- Easy to operate
- Ultra-efficient 3-stage combustion

**KOOLFUEL**®  
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The latest wood heating technology,  
based on sound experience

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*energy for a future*



**The combustion principle: three-stage efficiency.**

The key feature of the Hoval AgroLyt® boiler is its sophisticated 3-stage combustion process. In the first stage, the wood in the fire box is dried out, releasing all the combustible gases. To further optimise the degassing process, fresh air is blown directly onto the firebed at a controlled rate. In the second stage, the energy-rich wood gas is enriched with pre-heated air in exactly the right quantity to ensure excellent combustion. Finally in the third stage, the wood gas/air mixture is fed through a nozzle into the combustion chamber. Here, counter-rotating gas eddies are created. Because of the intensive mixing in the eddy combustion chamber, gradually all the un-burnt products are fed into the heart of the flames. Temperatures of up to 1000°C ensure complete combustion with extremely low emissions. Finally, the clean, hot exhaust gases carry the heat across the heating surfaces to the water for the heating system.



**Various control options – including with lambda probe**

In addition to the tried and tested basic control system, the AgroLyt® can on request be fitted with the TopTronic lambda combustion controller. A lambda probe is used for continuous monitoring of the residual oxygen in the exhaust gas, so that the flow of combustion air can be precisely adjusted to suit the

operating conditions and the fuel that is being used. The resulting further reduction in emissions and yet more improved efficiency only add to the benefits of 3-stage combustion. Control over heat output, start-up and burnout optimisation, heat retention, residual heat recovery and backflow prevention are among the other advantages of this top-of-the-range AgroLyt®.

**System components to complete your AgroLyt® installation**

Hoval buffer storage tanks in various sizes and the high-performance Hoval water heaters turn the log-burning boiler into a convenient heat-generating system. As part of the tried and tested Hoval system engineering, providing “Everything for your heating system” including the stainless steel chimney, these well-

established system components make for a reliable overall solution.

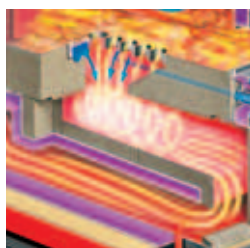
A particularly advantageous solution is to combine the AgroLyt® Hoval wood gasification system with Hoval solar equipment, not only for heating warm water but also to give an extra boost to the heating.



**Fire box: designed for long life**

Every aspect of the Hoval AgroLyt® is designed for a long service life. The double-sided construction of the fire box prevents the formation of layers of tar and protects the boiler from wear. The floor of the fire box, which is subject to the greatest thermal stress,

is made of refractory bricks which can easily be replaced, a self-supporting construction guaranteeing maximum stability. This floor structure ensures that the firebed is evenly spread, contributing to optimum wood gasification.



**Combustion chamber: easy operation guaranteed**

A core element of the combustion chamber is the welded water jacket. This reduces losses during heat transfer and at the same time cools the refractory bricks which rest on it. Like the floor of the fire box, the combustion chamber also consists of individual replaceable bricks.

The width of the combustion chamber means that the gas/air mixture is retained for longer, guaranteeing complete, low-emission burnout. Special attention was also paid to making the boiler easy to handle and clean. The ash can be easily removed from the front at a convenient height. The flat bottom of the ash compartment makes it easier to remove the ash.

Technical Data Hoval AgroLyt®	20	25	35	45	50
Nominal heat output (kW)	20	25	35	45	50
Fire box (L)	140	160	160	220	220
Log length (m)	1/2	1/2	1/2	1/2	1/2
Water capacity (L)	195	195	190	220	220
Weight without/with cladding (kg)	680/750	680/750	690/760	745/835	745/835
Length (mm)	1415	1415	1415	1415	1415
Width without/with control panel (mm)	690/860	690/860	690/860	690/860	690/860
Height without/with control panel (mm)	1455/1625	1455/1625	1455/1625	1675/1845	1675/1845

## Hoval AgroLyt®

Use wood, the ecological fuel, more conveniently and more economically.



**The Hoval AgroLyt® is the latest creation to emerge from the development labs of Hoval's biomass experts. Thanks to a whole range of technical and design innovations, the AgroLyt® now makes using wood, the ecological fuel, more convenient and more economical than ever before.**

**Sophisticated wood gasification technology for better energy extraction.** In the AgroLyt®, a three-stage combustion process guarantees efficient combustion, with every bit of stored energy being extracted from the wood. This gives an impressive efficiency of over 90%; compare this to the less than 20% you get from an open fire! So you get more valuable heat for your house out of every log, and can enjoy lower running costs.

**Designed for convenience in every detail.** When we were developing the AgroLyt®, our top priorities were not only economy but, above all, convenience. Our many years of experience and feedback from our customers contributed to the design process. The result: practical details which make using the AgroLyt® every day a pleasure, and which save time too. The roomy fire box means the boiler burns for longer, so it doesn't need filling so often. The big door built into the top section of the boiler makes it easy to load in the wood. A multi-stage fan controls the temperature of the boiler and adjusts the air supply to generate the required amount of heat. With the TopTronic control system it's child's play to regulate the heat output precisely to meet your every heating need.

**An investment for the future.** Have you noticed big price fluctuations in the energy market? With the AgroLyt®, and wood as your heat source, you can just laugh it off! Because with wood, a locally-produced fuel, you are immune from such price variations. And wood isn't just a smart choice because it makes you independent. Wood also has unique ecological qualities: firstly, wood is a renewable and readily always available fuel. Secondly, heating with wood is CO<sub>2</sub> neutral, so you are making an important contribution to reducing the greenhouse effect. The highly efficient combustion process reduces emissions still further. So you have a clear conscience, knowing that your heating easily complies with even the strictest European regulations. Not just today, but for years to come.



Hoval AgroLyt®: available on request with Hoval TopTronic combustion controller

Because of the AgroLyt's® environmental credentials it qualifies for grants, lower VAT and other financial incentives.

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# Special accessories to choose from. Special features to enjoy.



**Comfort and improved performance at the touch of a button.** One degree warmer... two degrees cooler... switch to economy mode or turn off the heating – with the TopTronic room sensors you can do it at the touch of a button without moving from the living-room. The small additional cost of room control increases your comfort and soon pays for itself. By controlling the temperature you want you can cut your energy costs.



**Hoval AgroLyt® with Hoval buffer storage tank: even more convenient and more economical.** To run a modern log boiler efficiently, it is essential to have a properly sized, state-of-the-art buffer tank to store heat. What does that mean for you? It's pleasantly warm in the morning, without having to refill at night or relight the boiler. Fuel consumption is reduced leading to lower emissions and the Hoval AgroLyt® always burns cleanly, stays clean and lasts longer.



**Hoval AgroLyt® and Hoval SolKit combined: complete independence.** The AgroLyt® combined with the Hoval SolKit to generate hot water make a real dream team, both ecologically and economically. The Hoval SolKit converts solar energy with extraordinary efficiency into hot water and efficiently and solar energy is free!

For even more convenience but similar environmental benefits take a look at Hoval's wood pellet boiler range.



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By Appointment to  
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# Hoval

Conservation of energy - protection of the environment

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