WOOD LOG BOILERS

1/2m & 1m Gasification Boilers















Recommended by nature

 ${
m CO_2}$ neutral and environmental friendly. Hargassner – Heating technology for the future. Hargassner focuses on renewable energy and well-engineered combustion technology with the highest efficiency and the lowest emission values



Recommended by cost-conscious customers

Thousands of satisfied clients worldwide. You can easily save money with every biomass heating system. Reduce your annual heating costs

Our vision is characterised by harmony between nature and satisfied customers



Anton, Elisabeth, and their sons Anton & Markus Hargassner

Without harmony with nature, a healthy life is impossible. Hargassner has pioneered eco-friendly heating systems since the company was established in 1984. This pioneering spirit remains unabated and our aim to be the best still persists to this day.

For the sake of our environment

We are proud of 30 years of experience and of thousands of satisfied clients. This, however, is not a reason for us to sit back. Quite the opposite is the case. Customer satisfaction combined with environmental friendliness are the primary goals of our philosophy and are the main attributes, which determine the company's future direction. Lowest emissions by highest efficiency, maximum comfort and long lifetime characterise the brand HARGASSNER. Yet, we continue to improve elements of our products to launch even better products in the future. We continually invest in research and quality management.

HARGASSNER FACTS:

- ✓ Wood Chip and Pellet Gasification Boilers from 9-800 kW
- ✓ 70,000 Operating Boilers
- ✓ 8,000-10,000 Boilers per annum
- 220 qualified employees



Wood log boiler HV 20 - 60 kW

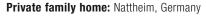
Wood log boiler MV 35 - 49 kW



Case studies

Private family home: Steyregg, Austria

As an experienced domestic plumber, Mr Huber has a good understanding of renewable energy technology including biomass heating systems. He was impressed with the innovative features of the all-new Hargassner wood log boiler, such as fully automated heat exchanger cleaning and low energy ignition systems. He is also more than happy to report annual savings in the order of 20% compared with his previous heating system.



After extensive research the Gayer family decided to specify a Hargassner 1/2m wood log boiler for their new home heating source. The boiler is connected to two accumulator tanks and, with its advanced on-board systems, provides control for all of their heating and hot water needs throughout the house. Another critical factor for them was convenience, so the fully automated cleaning and ignition systems means their intervention with the boiler is minimised. Previously Mr & Mrs Gayer used LPG to provide their heating, they are now more than satisfied that they changed to their new Hargassner boiler and now rely on a totally renewable energy heat source.





Wood \log – the environmentally-friendly and $\mathrm{CO_2}$ neutral local fuel

To produce wood logs, only wood from domestic forests is needed. Latest wood processing machinery provide a simple and cost-effective production.

Main advantages of wood logs:

- ✓ Lower costs than oil or gas
- Crises-resistant, because locally sourced
- Short transportation
- Convenient, because of long refuelling intervals using accumulator tanks

Therefore wood logs are the logical renewable technology for heating compared to fossil fuels, electricity and heat pumps.

CONTENT

HV 20 - 60 KW	Page 4 - 5
MV 35 - 49 KW	Page 6 - 7
CONTROL	Page 8 - 9
ACCUMULATORS	Page 10
TECHNICAL DATA	Page 11

Hargassner Boiler Technology

Hargassner - Latest wood log gasification technology



(16)

3

Hargassner stands for pioneering spirit and vast experience. An excellent design and high quality construction provides the best functionality and optimal performance, resulting in high customer satisfaction and a long boiler lifetime.

Back end protection

The return temperature is kept high through a fully insulated, directly mounted back end protection device.

Speed-controlled induced draught fan

Depending on the heat demand, the "Lambda-Touch-Tronic" controls the speed of the induced draught fan. This ensures optimum combustion with low flue gas temperatures and the highest efficiency. The connection of the flue pipe to the chimney can exit vertically or horizontally.

Heat exchanger gas flow design

In order to use the energy obtained to its full potential, we use turbulators to force the heated air into an elongated spiral flow path as near as possible to the heat exchanger.

Efficient insulation

The boiler is encased in a highly-effective "Overall-Insulation".

On the new gasification boiler as well as the outside frame and combustion doors being insulated, the boiler base and special design elements are now also insulated.

Fully refractory-lined high performance combustion chamber

Refractory has proven itself as the best material available in terms of heat storage, function and durability. As a result, even with partial loads, the boiler provides an optimal combustion process at high combustion temperatures. In addition the boiler includes a simple-to-use manual ignition after longer refilling intervals. Our commitment to high-quality materials ensures the long life-cycle of the refractory bricks.

Perfect combustion

Perfect post-combustion, and hence a complete combustion at full or partial load is assured using pre-heated secondary air in combination with high density bricks. This leads to high efficiency values through lowest post-combustion emissions.

Lambda sensor with fuel-quality detection

It doesn't matter which fuel type you have stored – softwood or hardwood logs, briquettes etc - the control unit uses the Lambda sensor to detect the relevant calorific value. Your system is always working to produce the required heat output at optimum combustion values. This is the latest way to control your boiler - constant manual adjustment of the system to the fuel is a thing of the past.

Easy cleaning

All maintenance parts are accessible from the front side. Easy ash removal from the front into the ash tray below.





Large refill door

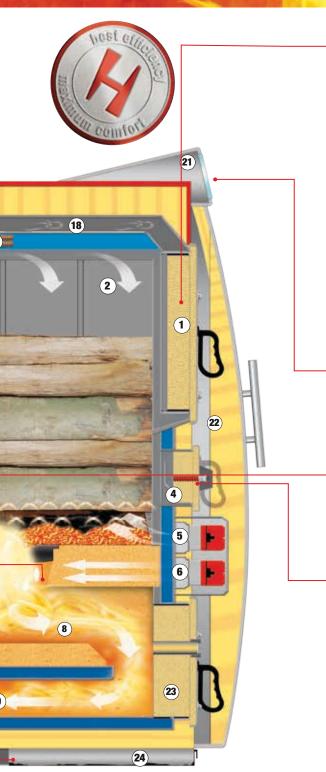
13)

(10)

- Large log-filling volume for 1/2m logs
- Hot steel lining prevents tar creation Lighting door with auto ignition
- Primary air motor
- Secondary air motor
- Refractory-lined combustion chamber High temperature post-combustion zone
- Ash separating zone
- Turbulators
- Heat exchanger



Gasification Boiler HV - 1/2m



Easy refill with 1/2m logs

The large filling door (382 x 346mm) ensures easy refilling of the large log-filling volume (166 / 222 litres). Log lengths up to 600mm can be inserted.

A steel lining in the filling chamber ensures an efficient combustion without tar creation. During active refill, when the boiler is running, an overhead smolder, as vent sucks the flue gas back into the flue pipe.

Clean and efficient!



MAXIMUM CONVENIENCE



"Lambda-Touch-Tronic"

Unique boiler control with touch-screen for increased ease of use. This system controls the complete combustion process, the back end protection and the loading of the accumulator. Furthermore, all heating circuits and hot water circuits are regulated on an outside temperature basis.



Fully automatic boiler cleaning system

Gone are the days when you had to clean the boiler! The all new patented automatic boiler cleaning system manages the heat exchanger cleaning. As a result you enjoy more convenience and the boiler runs more efficiently!



Unique automatic ignition

The lighting door is equipped with an automatic ignition for summer or transitional periods. Yust fill up the boiler with wood logs and small start-up material. Insert a sheet of paper into the lighting door; then, depending on your heat demand, the boiler ignites fully automatically. This is the future! During winter the boiler is able to maintain the firebed for hours (sleep mode). This makes refilling easy, after longer hours of operation.



Туре	Output kW
HV 20	12-24
HV 30	16-32
HV 40	20-40
HV 50	22-49
HV 60	22-58
Weight	650kg (760kg)
Voltage	230V
Dimensions: HxBxD mm	1630x644x1335 (1690x744x1335)
Values in bracket	s for HV40-60

Excerpt - Test report						
HV 50 Full load Partial load						
Output	kW	49	22			
Efficiency	%	92,4	94,9			
Carbon dioxide	%	16,2	15,6			
Carbon monoxide	mg/MJ	127	67			
Dust	mg/MJ	9	5			











13 High-quality insulation
14 Automatic boiler cleaning system
15 Induced draught fan
16 Flue gas sensor

Lambda-Touch-Tronic

Flue pipe vertically, left or right
Smolder gas vent
Back end protection with mixing valve
Calorifiers for thermal discharge safety device

Hargassner Boiler Technology

Hargassner - Latest wood log gasification technology

Hargassner stands for pioneering spirit and vast experience. An excellent design and high quality construction provides the best functionality and optimal performance, resulting in high customer satisfaction and a long boiler lifetime.

Speed-controlled induced draught fan

Depending on the heat demand, the "Lambda-Touch-Tronic" controls the speed of the induced draught fan. This ensures optimum combustion with low flue gas temperatures and the highest efficiency. The connection of the flue pipe to the chimney can exit vertically or horizontally.

Lambda sensor with fuel-quality detection

It doesn't matter which fuel type you have stored – softwood logs, hardwood logs, briquettes etc - the control unit uses the Lambda sensor to detect the relevant calorific value. Your system is always working to produce the required output at optimum combustion values. This is the latest way to control your boiler - constant manual adjustment of the system to the fuel is a thing of the past.

Back end protection

The return temperature is kept high through a fully insulated, directly mounted back end protection device.

Heat exchanger gas flow design.

In order to use the energy obtained to its full potential, we use the turbulators to force the heated air into an elongated spiral flow path as near as possible to the heat exchanger.

Refractory-lined high performance combustion chamber

Through the combustion comb with injector nozzle (patented), the combustion gas is mixed with secondary air. As a result, an efficient and complete combustion process takes place. The subsequent refractory-lined combustion chamber guarantees high combstion temperatures, through its special heat storage effect,. This leads to high efficiency values through lowest post-combustion emissi-

Efficient insulation

The boiler is incased in a highly-efficient "Overall-Insulation".

On the new gasification boiler, as well as outside-frame and combustion-doors, the boiler base and special design elements are insulated.



- Front refill door
- Large lateral refill doors (optional right or left)

(19)

- Large filling volume for 1m logs De-ash door

7

NEW

(10

(13)

(16)

- Primary air motor Secondary air motor
- Patented combustion comb with injector nozzle High-temperature post-combustion zone
- Cast stainless steel grate
- Lambda sensor
- Turbulators
- Heat exchanger

Gasification Boiler MV - 1m









(21)

18

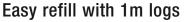
1

23)

"Lambda-Touch-Tronic"

Unique boiler control with touch-display for ease of use. This system controls the complete combustion process, the back end protection and the loading of the accumulator. Furthermore, all heating circuits and hot water circuits are regulated on an outside-temperature basis.





The large filling door (500 x 320mm) enables the convenient refilling of the large log-filling volume (380 littes). Log lengths up to 1050mm can be inserted.

During active refill, when the boiler is running, an overhead smolder gas vent sucks the flue gas back into the flue pipe. Clean and efficient!

Lateral refill door (optional left or right hinged)

The large lateral refill door (1050 x 280mm) allowes easy and convenient refilling with 1m wood logs, wood waste materials, wood chips or briquettes from the side.



Easy cleaning

All maintenance parts are accessible from the front. Easy ash removal from the front into the ash tray below.

- 13 High-quality insulation14 Cleaning door
- Induced draught fan Flue gas sensor

- Flue gas sensor Flue pipe vertically, left or right Smolder gas vent Back end protection with mixing valve Calorifiers for thermal discharge safety device
- Lambda-Touch-Tronic
- Easy cleaning from the front Ash tray

Туре	Output kW
MV 35	39
MV 35 SR od. SL	39
MV 49	39-47
MV 49 SR od. SL	39-47
Weight	1160kg (1310kg)
Voltage	230V
Dimensions: HxBxD mm	1620x730x1820 (1620x1070x1820)
Values in brackets for	r lateral refill door

Excerpt - Test report						
MV 49		Full load	Partial load			
Output	kW	47	39			
Efficiency	%	90	92,6			
Carbon dioxide	%	13,7	13,5			
Carbon monoxide	mg/MJ	125	109			
Dust	mg/MJ	8	15			



Hargassner Control Unit Lambda-Touch-Tronic

Lambda-sensor with fuel quality detection

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

The Lambda-Touch-Tronic 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!

One display - one finger - one Touch!

The all new Lambda-Touch-Tronic leaves nothing to be desired. Simple, intuitive and visually pleasing, a new era of heating controls has been created.

The Hargassner Touch-Tronic can easily be operated through finger pressure. Due to the modern design, the display is self-explanatory. You immediately recognize the current status of your boiler, the accumulator tank, the hot water storage or the heating circuit. If you wish to change something....no problem! Simply press on the desired image and change the setting.

Control of the heating circuits

- The Lambda-Touch-Tronic 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.

Hot-water storage

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.

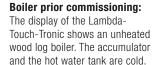
The minimum temperature control for the hot water system is a useful feature. The Lambda-Touch-Tronic reacts immediately when the temperature of the hot water drops below the minimum temperature outside the programmed heating time. Advantage for you: hot water 24 hours a day.

The hot water system is heated according to prioritsation rules: traditionally, there is only one type of hot water system regulation: the domestic hot water system is cold, the heating circuit is switched off. On the contrary Hargassner will never leave you out in the cold. If the water is cold, the heating is only reduced temporarily and the heating elements remain warm; there is no reduction in room temperature.



OPERATING CONDITIONS OF THE BOILER:







Boiler full load: The display shows a boiler in operation. The accumulator and the hot water tank are being loaded and are already increasing temperature. The heating circuit pumps are on.



Boiler partial load: The boiler runs on half of its nominal heating output. The accumulator and hot water tank are completely loaded. The heating circuit pumps are on.

Ease of operation through Touch-Tronic

ACCESSORIES

Accumulator Control Option (PSP)

During start up, the control sends the heat through a fast loading valve directly to the heating demand areas. As soon as the boiler starts stroing the energy into the accumulator tank, the operation mode changes to partial load. As a result, the combustion time is extended and the heating comfort is increased.

Solar: To combine wood logs with solar, Hargassner developed a handy function for the Touch-Tronic => an automatic ignition. First the hot water stored in the tank from solar-energy is used, before the biomass boiler fires up using automatic ignition.



Extension module HKM:

This unit is used to add 2 additional heating circuits and 1 additional hot water tank (including circulation pump). Inclusion of 2 or more modules results in 4 additional heating circuits and 2 additional hot water systems



NEW

Extension module HKM with Touch and CAN-BUS-System

This module is used to add 2 additional heating circuits and 1 additional hot water tank (including circulation pump), controlled via touch display. Additionally an external heating circuit or a centralised accumulator and 1 HKM may be installed.



Controlling External Boilers

If desired, an additional external boiler, e.g. pellet boiler, oil or gas boiler, may be integrated. The change over between the two boilers occurs fully automatically.



Heating circuit controller HKR with Touch and CAN-BUS-System

Control unit based on atmospheric conditions with Touch control for 2 mixing valve-controlled heating circuits and 1 hot water tank circuit with circulation pump;

1 accumulator or external boiler, 1 external heating circuit, 1 long-distance heating or accumulator pump. Extension with max. 2 HKM (max. 8 HKR). SD-card Slot and data logging.



Remote Controls

- Analog FR25: This remote control measures the actual internal temperature, and can also apply corrections to the control unit. You can use the temperature controller to adjust the room temperature up or down. If you press the switch to SUN, the heating switches on even during the reduced temperature period or following a switch-off threshold. In the MOON position the reduced temperature program is activated; and in the CLOCK position, the heating system runs according to the defined Lambda-Hatronic program. A warning light is integrated to inform the client about the status of the heating system.
- Remote control FR 35 with LCD-Display: This controller may be used for setting the room temperature.
 With or without room-temperature dependence. Radio transmission optional.



Radio version option for LCD FR 35

- Touch remote control FR 40: set the room temperature, change heating status, change heating-temperatures and times. All functions of the boiler are controllable from your living room.
- SMS: With this special tool you can have your heating under control even when you are not at home. Faults are automatically sent to your mobile and you can issue commands to the controller, e.g. switch the heating circuits on or off or set new temperatures, all from your mobile with complete reliability.





10 08

The Lambda-Touch-Tronic at a glance:

- Heating Circuits (increases living comfort)
 - 2 separate heating circuits, regulated by external conditions, and mixers
 - Possibility to extend with Hargassner's extension module (HKM)
 - Communications bus system with control modules
 - Efficient use of residual heat
 - Staggered pump starting logic
- Screed dry-out program

Hot water tanks

- Possibility to extend with several hot water tanks
- Performance-related automatic hot water tank prioritisation
- Boiler Minimum Controlling
- Legionalla protection program, domestic hot water circulation possible
- Speed-regulated back end protection
- Optimum back end protection system
- Control of a district heat circuit for a second building
- Control of fast loading valve
- Large Touch display



Accessories Wood Log Boilers



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

Layered Accumulator SP		SP 825	SP 1000	SP 1500	SP 2000	SP 2600
Accumulator volume	litre	825	1000	1500	2000	2600
Diameter ø without insulation	mm	750	790	1000	1100	1250
Diameter ø with insulation	mm	950	990	1200	1300	1490
Height with insulation	mm	1980	2080	2180	2310	2440



Hygienic-layered Accumulator HSP

Through the integrated return spreading sheet, the variable sensor positioning and the hygienic drinking water heating process, this accumulator guarantees efficient usage. A stainless steel pipe enables hygienic and legionella-safe drinking water heating with a high hot water output. A regular movement of the stainless steel pipes provides best protection against scaling.

Hygienic-layered Accumulator HSP		HSP 825	HSP 1000	HSP 1500	HSP 2000
Accumulator volume	litre	825	1000	1500	2000
Diameter ø without insulation	mm	750	790	1000	1100
Diameter ø with insulation	mm	950	990	1200	1300
Height with insulation	mm	1950	2055	2175	2310
Stainless steel pipe - Water vol.	Litre	38	38	46	46



Solar-layered SP-SW and Solar-hygienic-layered Accumulator HSP-SW

This solar-layered accumulator is perfectly designed for Hargassner control and hydraulic schemes. Besides the integrated return spreading sheet and a variable sensor positoning, the accumulator carries a highly-efficient solar heat exchanger(s). Optionally the accumulator is available with bottom (SW1) or bottom and top (SW2) solar heat exchanger.

Solar-layered Accumulator SP		SP 825	SP 1000	SP 1500	SP 2000
Accumulator volume	litre	825	1000	1500	2000
Diameter ø without insulation	mm	750	790	1000	1100
Diameter ø with insulation	mm	950	990	1200	1300
Height with insulation	mm	1980	2080	2180	2310
Solar heat exchanger bottom SW1 5/4" F	m ²	2	3	3	4
Solar heat exchanger bottom/top SW2 5/4" F	m ²	2/2	2/3	3/3	4/4



Hygienic Solar-layered Accumulator HSP	HSP-SW 825	HSP-SW 1000	HSP-SW 1500	
Accumulator volume	litre	825	1000	1500
Diameter ø without insulation	mm	750	790	1010
Diameter ø with insulation	mm	950	990	1200
Height without insulation	mm	1910	2010	2110
Height with insulation	mm	1980	2080	2180
Connection 8pcs. F	inch	5/4"	5/4"	5/4"
Stainless steel corrugated pipe - water content	litre	38	38	46
Stainless steel corrugated pipe 5/4" M	m ²	7	7	8,6
Weight SW1	kg	196	209	-
Heat exchanger bottom SW1 5/4" F	m ²	2	3	_
Weight SW2	kg	226	252	365
Heat exchanger top/bottom SW2 5/4" F	m ²	2/2	2/3	3/3
Max. operating pressure	3 bar, max.	operating temperatu	re 95°C, max. tap wa	ater pressure 6 bar

ACCESSORIES

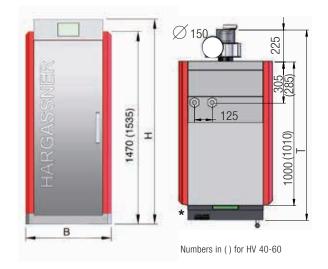


Back end protection Type RAG 30 / RAG 60
Serves as an automatic back end protection whilst simultaneously charging of the accumulator. The pre-assembled and fully insulated back end protection device, which incorporates the return temperature mixing valve with motor and accumulator loading pump is quickly and easily mounted.

Fast loading valve 1" / 5/4"
During the startup of the wood log boiler, the accumulator volume is reduced through the fast loading valve. As a result, rooms are heated up faster.

Hargassner product range

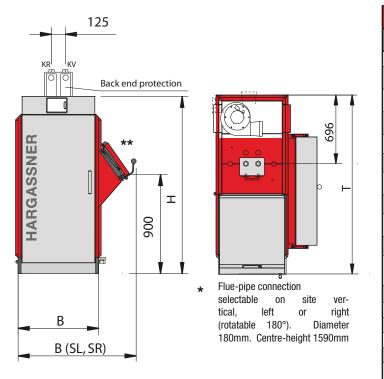
HV 20 - 60 kW



Technical data:			HV 1/2m						
		Dimensions	HV 20	HV 30	HV 40	HV 50	HV 60		
Output		kW	12,3-24,7	16-32	20-40	22-49	22-58		
Efficiency Full Load/Partial Load		%	91,5 / 95,7	91,8 / 95,4	92,1 / 95,1	92,4 / 94,9	90,1 / 94,9		
Full load thermal output		kW	27	34,9	43,4	53	64,4		
Flue pipe diameter		mm	150	150	150	150	150		
Filling volume		litre	166	166	222	222	222		
Filling depth		mm	600	600	600	600	600		
Refill door H x B		mm	402x356	402x356	402x356	402x356	402x356		
Water content		litre	137	137	166	166	166		
Max. Operating Temperature		°C	95	95	95	95	95		
Max. operating pres- sure:		bar	3	3	3	3	3		
Water-side resistance ΔT 10 / 20 [K]		mbar	20,5 / 5,4	36 / 9,3	80 / 23,4	90,9 / 23,4	100 / 23,4		
Flow/Return connection:		inch	1"	1"	5/4"	5/4"	5/4"		
Weight		kg	650	650	760	760	760		
Height		H mm	1630	1630	1690	1690	1690		
Breadth		B mm	644	644	744	744	744		
Depth		T mm	1335	1335	1335	1335	1335		
Transport Dimensions	В	mm	644	644	744	744	744		
(disassembled)	Т	mm	1135	1135	1135	1135	1135		
Electrical supply:				230 V	AC, 50 Hz, fuse	ed 13 A			

^{*} A left-hand hinged door is standard, but the door is reversible

MV 35 - 49 kW



Technical da	ata:		MV				
		Dimensions	MV 35	MV 35 SR or SL	MV 49	MV 49 SR or SL	
Output		kW	39	39	39-47	39-47	ĺ
Efficiency Full Load/Partial Load		%	92,6/-	92,6/-	90 / 92,6	90 / 92,6	
Full load thermal output		kW	42,1	42,1	52,2	52,2	
Flue pipe diameter		mm	180	180	180	180	
Filling volume		Litre	340	380	340	380	
Filling depth		mm	1100	1100	1100	1100	
Refill door H x B	НхВ	mm	310x500 (-)	402x356 (1045x280)	310x500 (-)	402x356 (1045x280)	
Water amount		Litre	210	210	210	210	l
Max. Operating Temperature		°C	95	95	95	95	
Max. operating pressure:		bar	3	3	3	3	ľ
Water-side resi- stance ∆T 10 / 20 [K]		mbar	50,4 / 15	50,4 / 15	68,6 / 19,7	68,6 / 19,7	
Flow/Return connection:		Zoll	5/4"	5/4"	5/4"	5/4"	
Weight		kg	1160	1310	1160	1310	1
Height		H mm	1620	1620	1620	1620] .
Breadth		B mm	730	1070	730	1070]
Depth		T mm	1820	1820	1820	1820	l
Transporting	В	mm	735	960	735	960	
Dimensions (disas- sembled)	T	mm	1800	1800	1800	1800	
Electrical supply:			23	0 V AC, 50 Hz,	13 A Absicher	ung	

 $^{^{\}star}$ A left-hand hinged door is standard, but the door is subsequently reversible.

 $^{^{\}star\star} \ Lateral \ refill \ door \ SR=right \ (left-hand \ hinged \ door), \ SL=left \ (right-hand \ hinged \ door)$

International success!













Energy Genie 2007 and 2013 award at the Energy Saving Fair in Wels/Austria 1st prize at the International Innovation competition for Wood Energy in France 2000, 2007, 2008, 2009 and 2010 2011 awarded with the AUSTRIAN ECO-LABEL

2011 & 2012 the austrian economy prize PEGASUS in Gold.

Best Business Award 2012

"Der Innviertler" in gold 2013!



HEADQUARTER:

Hargassner Ges.mbH

A-4952 Weng, OÖ. Anton Hargassner Straße 1 Telefon +43 (0) 77 23 / 52 74 Fax +43 (0) 77 23 / 52 74-5 office@hargassner.at

www.hargassner.com



Your local dealer:





Hargassner Products: Pellet Boilers, Wood Chip Boilers, Wood Log Boilers, Accumulators
Industrial Boilers 150-200 kW, Multi-fuel Boilers, Containers, Wood Chip Transportation Systems
More information: www.hargassner.com