Tiled stoves and thermal storage stoves



Tiled stoves and thermal storage stoves





Thermal storage heating stoves

The source of all life - Nature shows us how

From tiled stoves to flue-tested fireplace inserts or basic stoves, they all have one thing in common: the storage and optimum use of heat and energy.

Whereas 'normal' space heating stoves quickly generate heat and release it again just as quickly, thermal storage stoves are designed for a sustainable objective: they generate heat slowly, but they release it over a long period of time. And if domestic hot water is also heated as a side effect, then the result is a perfect, integrated solution

for everyone who thinks and acts ecologically at times of rising energy prices.

Spartherm is the name for design and quality at the highest level. As a European market leader in stove engineering we are constantly developing new ideas and technology for the ideal home. Our thermal storage stoves are the logical continuation of this tradition.

Find inspiration on the pages that follow:

Contents

Pages 02 - 05	Introduction to thermal storage stoves
Pages 06 - 07	S-Thermatik controller
Pages 08 - 15	Nova and Renova classic tiled stoves
Pages 16 - 19	Fireplace inserts tested with heat recovery section
Pages 20 - 21	Fireplace doors / fireboxes
Pages 22 - 25	Heat storage technology
Pages 26 - 27	Technical information







All change

Anyone building or renovating wonders what the future will bring. Rising energy prices, shrinking resources, climate change – those are just a few of the issues.

Spartherm's founder and owner, Gerhard Manfred Rokossa's motto is:

"Quality, design, innovation: a triad that produces remarkable results."

And that's exactly how we think and act at Spartherm: looking to the future, with the emphasis on sustainability and values.

Not running to keep up with our customers' requirements, but going that bit further to meet our customers' expectations – that's what we do! Spartherm customers are fire connoisseurs – Spartherm is burning with the desire to serve them.

Quality

...indicates the extent to which a product meets the existing requirements, according to the EN ISO 9000:2005 standard. That's not enough for us!

SPARTHERM quality means very well trained staff work up sophisticated designs in technologically mature production processes using top-quality materials to produce brilliant products.

Design

Form follows function. That's why here at Spartherm design is always oriented to high quality standards, including the utility value, while still ensuring plenty of freedom. That's equally true of our noble classics, our avant-garde creations or timeless elegance. We 'stage' fire, with an eye to detail and passion for the overall effect.

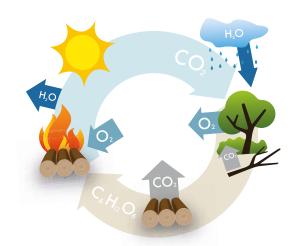
Thinking green

We are aware of our responsibility for the environment and we take it seriously. So both our development and our production processes fulfil the strictest national and international standards. That way, we set the example – you could say we light beacons! When wood is burned it only releases the same amount of CO_2 that the tree took from the atmosphere during its lifetime. That's why we focus mainly on burning wood and the associated forward–looking technologies.

Innovation

Being a pioneer means boldly going along untrodden paths. Our developers, engineers and designers are constantly working on refining and perfecting our products - and that includes modern thermal storage stoves. Changes in living conditions and political or social changes are challenges we have to face. We always regards these risks as opportunities. The energy turnaround, for instance, is a very clear indication that wood as a renewable raw material has perceptible advantages both over finite resources like coal and oil and also compared with wind and solar power.

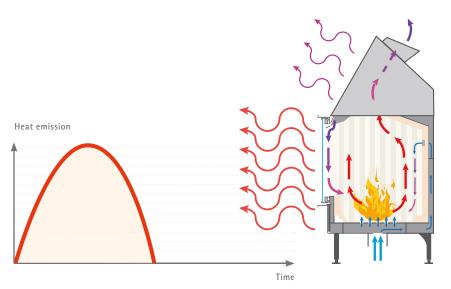
Think about this: a stove gives you independence!



Space-heating stoves

Cosy warmth, quickly available

Being able to produce cosy warmth quickly at any time, especially in the in-between seasons, for a comfortable environment – Spartherm can help with that as well. That's something our fireplace inserts do very quickly when used as space-heating stoves. The ambient air is raised to the required temperature in a very short time – and a feeling of well-being ensues. High output peaks occur while combustion is taking place, but the stove cools down again relatively quickly if no more wood is put on.

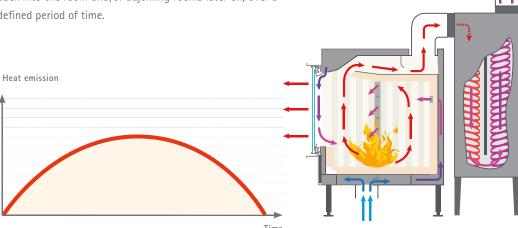


Tiled stoves

Comfortable warmth with a loyalty factor

Just because it's called a tiled stove, it doesn't have to have tiles. In the past it was the tiles (ceramic sheets) that stored the heat and released it again in the form of radiant heat. That was before heat exchangers or other storage media came into use. The functional principle has hardly changed since those days; the only difference is that the stove is not necessarily clad with visible tiles.

Wood is burned as economically and efficiently as possible in a fireplace insert. The radiant heat produced is radiated into the room via the viewing glass and the stove surface. The flue gases resulting from combustion are not sent directly to the chimney. Instead, more heat is extracted from them with the aid of in-line heat recovery sections and storage media. The energy thus recovered is held in intermediate storage in the storage media before being released back into the room and/or adjoining rooms later on, over a defined period of time.

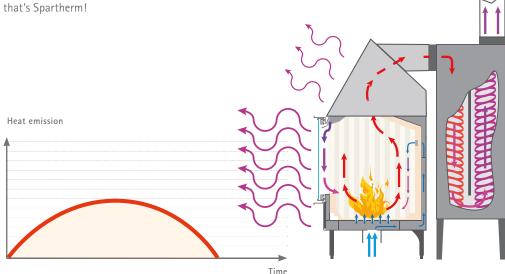


Fireplace inserts with in-line flues

Creating pleasant warmth and enjoying it for a long time

Various Spartherm fireplace inserts, such as the Mini Z1, have also been tested for use with heat recovery sections. The thermal energy is stored in the heat recovery sections and then released in a controlled way via the surfaces.

Linear by Spartherm – straightforward! The design is reduction to the maximum, the technology is supreme perfection. Linear is elegant understatement for the sake of fire. The aim is to show off the dancing flames to best effect. Maximum functionality blended with timeless elegance – that's Spartherm!

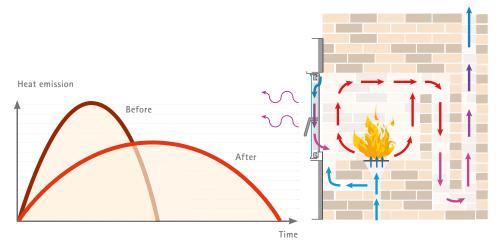


Basic stove doors

Producing comfortable warmth and enjoying it for much longer

We have a wide range of basic stove doors. The door plays an important role in sealing off a ceramic or stone fireplace so that nothing but healthy, cosy radiant heat is released over a period of several hours.

This is where Spartherm has a big advantage: our in-house research, development and production makes us extremely flexible and capable. We are able to meet almost any special requirement. Especially when it's a matter of fitting existing or new fireplaces with individual material surfaces, we rise to the challenge. After all, anyone can turn out a standard product – we can do better!





Good planning is simply better

Until quite recently, home heating systems were simple to plan and it was just a matter of choosing a fuel and a burner. Nowadays though, due to rising energy prices and increasing environmental awareness, single solutions are rarely considered. Very often now you have a combination of different heating systems, always individually matched to your particular circumstances, the location of the building and the architectural style.

Depending on whether your boiler fireplace insert, your Aquabox or your tiled stove insert is used for heating water or as backup heating only, different heat generation and distribution solutions have to be considered. The actual calorific demand of the building is also an important factor.

You should set out your requirements and ideas clearly to the stove fitter and the heating installer. The specialists will then put together a solution for you that exactly matches your habits and lifestyle.

It may be necessary to determine your home's calorific demand

 You need to know your home's heat demand at peak times as well as on average in order to decide exactly what you require. In Germany, this is done by working out the heat demand according to EN 12831 on the basis of the living area. The required quantities of wood per day and per year can be calculated from this value.

Which appliance is best for you?

 Again, it's a personal decision, as it depends on the building material and dimensions as well as on your daily routines and lifestyle. To get exactly the right solution for your particular requirements it's essential to have a wide and varied choice when balancing up the space heating to hot water ratio, and that's what Spartherm provides.

Regulation and control to help protect the environment?

- The higher the calorific demand, the more important it is to have electronic combustion control. An electronic controller boosts efficiency, permits sustainable combustion economy and increases the convenience by saving time on stoking.
- Saves fuel

Combustion control

S-Thermatik or Thermatik Pro combustion controller: Simple, intelligent and easy to operate

The controller which regulates the air flow for the combustion process and thus guarantees clean combustion and a perfect fire. Available as an option for any boiler fireplace insert.

Special features of the S-Thermatik

- The air supply is controlled automatically by the integral air regulator in the fireplace insert.
- Intelligent primary and secondary air distribution to the firebox - not simply restricting the total combustion air flow via a damper in the air intake.
- Specific combustion parameters are programmed for the fireplace insert. One-off selection of the fireplace insert when programming the device guarantees pinpoint air adjustment for combustion.
- If there is a power failure, the air controller can be operated manually by means of the air adjustment lever.
- Access to all the control components via the firebox. Simple, clear, large display with just 3 function keys. S-Thermatik Pro: graphic display with touch screen and a number of additional functions.

Automatic operation

 Automatic detection of ignition status or end of combustion via the integrated flue gas temperature sensor and door contact.

Manual operation

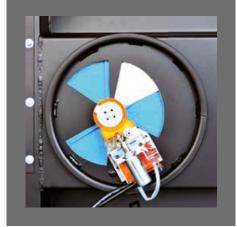
• In manual mode the air can be adjusted via the touch keys on the display.

Hand operation

 Control of primary and secondary air by hand ('cold hand').



Combustion air regulator open



Combustion air regulator closed

S-Thermatik displays



S-Thermatik Pro VA curved

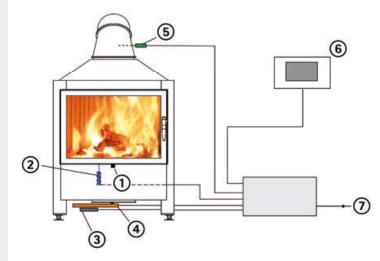




S-Thermatik Pro VA



S-Thermatik Pro SW



S-Thermatik Pro connection diagram

1) Air adjustment lever 2) Door contact switch 3) Magnetic coupling 4) Servomotor 5) Temperature sensor 6) Control unit with display 7) 230 V AC mains connection distribution box



Small footprint, big output for hot water!

We are following new avenues with our CLASSIC tiled stove range. In a departure from traditional use of shapes and materials, we have gone for linear, elegant timelessness aimed at today's consumers. Technically, too, we have taken a new direction by using the latest steel alloys instead of cast iron.

Renova A $\rm H_2O$ With RA 2.0 front panel Gutbrod ceramic cover Technical information on page 26



Classic

NOVQ F-Air Minimal dimensions

The Nova F-Air tiled stove heating insert is designed for installation of a new thermal storage stove. In our fireplace inserts the radiant heat produced by combustion emitted via the viewing panel is perceptibly reduced by double glazing with an infrared coating. The result is high firebox temperatures, clean burning and more heat is transmitted to the thermal storage system.

In combination with modern front panels it shrugs off the traditional, somewhat conventional look of tiled stove heating inserts. The thermal storage stove thus becomes an expressive centrepiece of your home.



renova# 6-Air Minimal dimensions

The Renova B-Air's name suggests 'renovation' and that's intentional. This is a replacement unit for existing tiled stove inserts. Renova B-Air heating inserts are designed according to the latest regulations and design standards, but are dimensioned to fit existing built-in firebox doors or recess frames. Advantage: that shortens the installation time and considerably cuts down the dirt in the room.



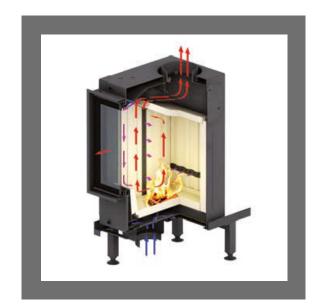
With RB 2.0 front panel Technical information on page 26







- Efficiency > 88%
- Very low emissions
- Double glazing with IR coating
- Door height 51 cm and 57 cm
- Door swing reversible even after installation
- Tested with external fuel-door in accordance with DIN EN 13229
- Max. wood feed 8 kg / 10 kg
- Nova F log length 50 cm
- Flue length 3 7.2 m for downstream smoke flues
- Eboris 1300 cast fireclay
- S-Thermatik Pro combustion controller compatible (can also be retrofitted)
- light (< 100 kg)
- rugged construction using austenitic steel





Classic

The best of both worlds.

The Renova C-Air is an innovative heating insert for low-emission burning of split logs and lignite briquettes. It offers the option of connection to in-line flues or heat recovery units. Behind the solid, refractory front panel the Renova C-Air has a removable ash pan with a lid. The excellent sealing of the door closing system "Smart Close,, offer more safety.



Renova C-Air
Technical information on page 26

Product benefits:

- Easy to switch between logs and lignite briquettes
- Single lever system for easy regulation of the air supply
- Removable ash pan with lid for ash disposal without dust
- Large firebox door for maximum view of the fire
- Eboris 1300 fireclay lining can be fitted and removed via the firebox door
- Smart Close door closing system for a really tight seal
- Tested quality for energy-efficient, low-emission heating
- Exchange of existing equipment is possible



Ash pan
with removable cover



Air adjustment leverFor easy switching between logs and

lignite briquettes



Smart Close door closer

Door mechanism makes a very
tight seal



Riddling lever
Easy to operate from front of unit



Nova E H₂O
With S-Thermatik Pro
Ganz Baukeramik cover
Technical information on page 26



Classic

Imagine...

... imagine your hot water coming from the stove...

Impossible, you may think. Not with Spartherm!

Because a large part of our daily water consumption is used in the form of heated water, we make good use of the stove as a resource. We use advanced technology to make our water-heating fireplace inserts much more than just an additional energy source. Whether it's a hot bath, a warm shower or perhaps the homely warmth of underfloor heating, you can always produce the hot water you need with Spartherm water-heating fireplace inserts. At times like this when raw materials are becoming scarcer, it's vital to make the best possible use of available energy sources.











Renova A H₂O

With S-Thermatik Pro Sommerhuber ceramic cover Technical information on page 26

Classic

Modern tradition

Water-heating storage marvel Nova/Renova

It's not necessarily all in the name. Until a few years ago tiled stoves always involved tiles. The name also described the storage medium. Tiles, or stove tiles to give them their correct name, use their thermal capacity* to store thermal energy and thus heat the surrounding space, even for some time after the fire has gone out.

Today, 'tiled stove' is a generic term both for traditional tiled stoves and also for various further developments that work on the same principle, with an efficient fireplace insert, higher capacity storage media and more complex energy utilisation.

* The thermal capacity shows how much thermal energy a body can store in relation to the temperature change.

Benefits to you:

- Water heating contributions 51-64%
- Renovation of old space heating tiled stoves with modern alternatives that fit exactly
- Variable system between an accumulator and water in in-line flues/ceramics
- Modern home heating systems with the look of a bygone classic

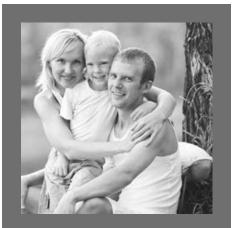






NOVQ■ E H₂0 renova:





Mini Z1
Gutbrod ceramic cover
Technical information on page 27

Mini Z1

Gutbrod ceramic cover
Technical information on page 27





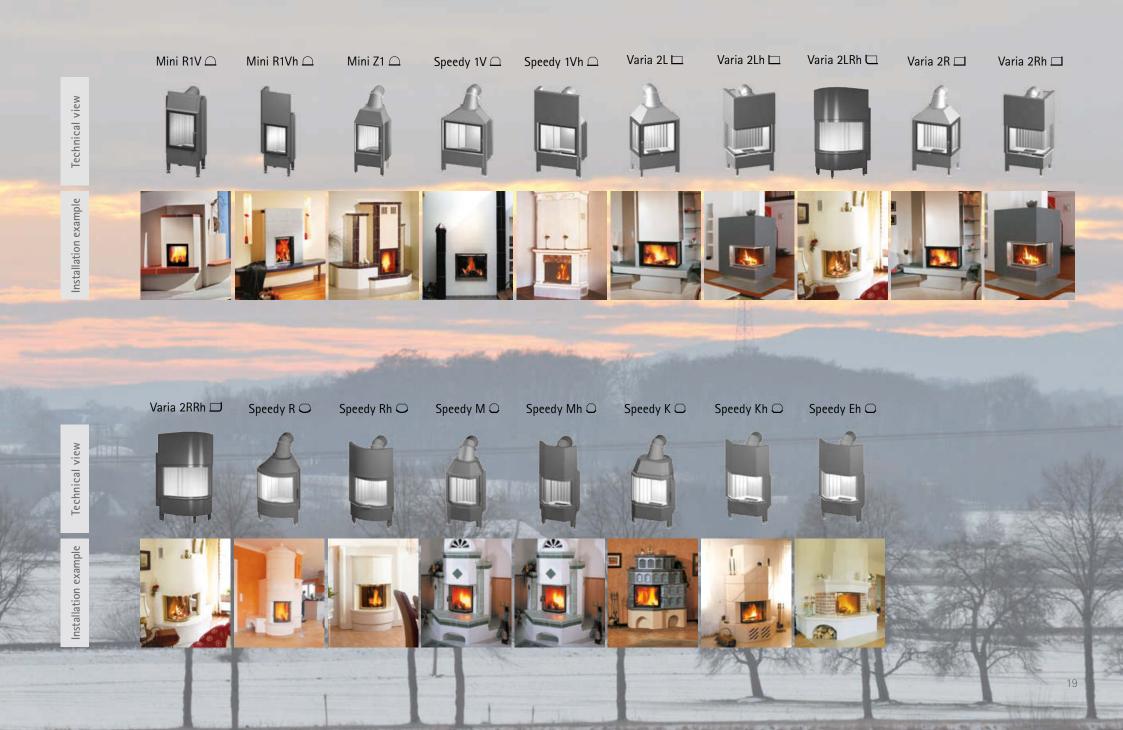
Mini Z1

MEZ ceramic cover
Technical information on page 27



Speedy 1V Gutbrod ceramic cover Technical information on page 27





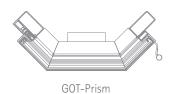


fireplace doors



Variants of fireplace doors:





GOT-Straight



	Shape	Round	Prism	L-Form
Door height	510 mm	510 mm	510 mm	455 mm
Door frame width	570 mm	582 mm	561 mm	766/301 mm
	C			

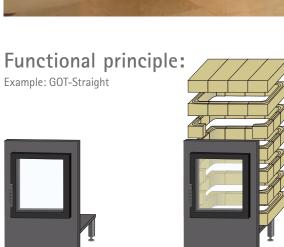


GOT 1V-3

Arcadia Fire Company cover

The right firebox:

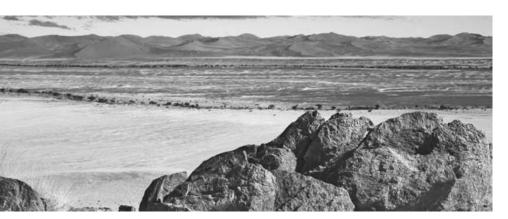
You have chosen a beautiful basic stove door from our range. We recommend combining it with a BRULA firebox.



... and firebox by BRULA ...

A basic stove door by Spartherm...

... make the perfect unit.





Filling the Thermobox with Magnetherm granulate materials.



Thermal storage technology

... imagine your fireplace being able to retain heat ...

We all love having a warm home. But rising energy costs are hitting people's wallets harder all the time, and so we need to play our part by maximizing the benefit to you from a reasonable outlay.

Upgrade your fireplace by adding an innovative Spartherm thermal storage system. Thermobox, Helix and Magnetherm heat storage stones offer optimum flexibility of use combined with maximum benefit.

This is how it works: highly compacted, fired heat storage material is installed in your fireplace insert as a heat storage medium. This stores heat while the fire is burning and slowly releases it again to the room via the fireplace insert after the fire has gone out.

That way, you can noticeably reduce your energy bills as well as protect the environment.

Thermoboxes

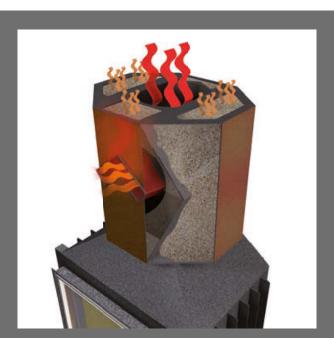
The affordable way to utilize heat

Thermoboxes are available in two sizes, depending on your fireplace insert. Thermoboxes are top-mounted units filled with Magnetherm granulate that absorb heat from the rising hot flue gases and gradually release that heat again.

Because of their compact size they do not take up much room, they are quick to install and they offer an affordable alternative to thermal storage rings.

Benefits to you:

- can be used with a variety of fireplace inserts
- up to 7.5 hours of heat storage
- lower energy costs
- environmentally friendly
- affordable
- quick to install





Helix (Greek = coil, spiral) is probably the most individual heat storage solution ever offered for our fireplace inserts. The hot flue gases flow through the helix, generating excellent heat transfer to the storage medium and thus long-lasting, even release of heat to the surrounding room.

Anything is possible – from 4 standardised sets to custom design of the flue length and thus of the storage system.





Helix special features:

- compatibility with various fireplace inserts
- lower energy costs
- flue length defined individually
- cleaning via the firebox
- low resistance during lighting up. The hot gases are routed entirely through the storage system
- stress-free heat transfer
- quick assembly
- environmentally friendly

Individual design options:

construction height

from 56.5 cm - to 94 cm

• thermal storage masses

from 117 kg - to 203 kg

• Flue gas temperature reductions

from ø 200°C - to 300°C

• choice of top or side outlet

Magnetherm thermal storage stones

Convenient use of heat



the thermal storage mass surrounding your fireplace insert, the more heat can be stored. The stones are available in two sizes, N1 and N2, and characterised by their high density and mass of 2.8 kg/dm³ – making them similar to soapstone.

The precision tongue and groove system enables the Magnetherm stones to be combined as desired to create all sorts of angles and curves on the fireplace body.

Applications for Magnetherm N1 and N2 thermal storage stones include hot-air systems, combined storage/hot-air systems, hypocaust systems and enclosed systems.

Benefits to you:

- up to 10 hours of heat storage
- lower energy costs
- environmentally friendly
- affordable

E akku EBORIO

Storage elements for fireplace inserts

More heat - greater comfort

The Eboris akku storage stones can store heat for up to 10 hours. Made from high quality storage medium, these elements are designed as optional add-ons for room-heating fireplace inserts with a straight body surface (not for use with round body fireplace inserts or H_2O units).

They are designed to be suspended from the side and rear cooling fins of the fireplace inserts, enabling fireplaces to be fitted with storage medium for prolonged heat radiation easily and without a great deal of work.

The Eboris akku storage stones absorb heat and release it again, slowly and evenly. Heat is therefore emitted over a longer period for greater comfort while at the same time saving heating costs and reducing emissions.

Benefits to you:

- Up to 10 hours stored heat
- Pleasant, even heat
- Less heating up
- No overheating
- Reduced wood consumption
- Quick and easy to install

Versions

The storage elements are available in two different widths and are simply suspended from the cooling fins on the fireplace insert with the aid of integrally cast mountings. From 1 January 2013 all compatible fireplace inserts are supplied already prepared for this purpose. The small and large versions differ in width and weight.

Progressive and efficient –

a fireplace insert combined with thermal storage







Nova F-Air ☐ Renova B-Air ☐ Nova E H₂O ☐ Renova A H₂O ☐ Renova C-Air ☐











	- 1	- 1	1		*
Nominal output	10.1 kW	8.8 kW	14.0 kW	13.4 kW	8.5 kW ¹ / 7.8 kW ²
	-	-	(9.0 kW water output)	(6.9 water output)	-
Thermal output range	7.1 - 13.1 kW	6.2 - 11.4 kW	9.8 - 18.2 kW	9.4 - 17.4 kW	6.0-11.0 kW ¹ / 5.5-10.1 kW ²
Efficiency	89.0 %	> 88.0 %	89.6 %	89.3 %	> 80%
Wood consumption Nominal output/maximum output	3.7 kg / 70 min	2.7 kg / 70 min	4.6 kg / 70 min	4.2 kg / 70 min	Wood, lignite / 2-3 kg/h
Flue outlet	ø 150/180 mm	ø 150/180 mm	ø 180 mm	ø 200 mm	ø 160 mm (optionally ø 150/145)
Door frame width	445 mm	380 mm	445 mm	670 mm	410 mm
Door closure	hinged	hinged	hinged	hinged	hinged
CO content	< 1250mg/Nm ³	< 1250mg/Nm³	< 1250mg/Nm ³	< 1250mg/Nm³	< 1250mg/Nm³
Dust content	< 40mg/Nm³	< 40mg/Nm ³	< 40mg/Nm ³	< 40mg/Nm³	< 40mg/Nm³
Compliance with standards	1 st + 2 nd level BlmSchV	1 st + 2 nd level BImSchV	1 st + 2 nd level BImSchV	1 st + 2 nd level BlmSchV	DIN 13229, DIN plus, 15a, 1 st + 2 nd level BlmSchV

¹ Logs (beech)
² Lignite briquettes

Nova and Renova front screen



N 1.0 or R 1.0



N 1.1 or R 1.1



N 1.2 or R 1.2



Nova N 2.0 or R 2.0



Nova NF 3.0 or RB 3.0



1st + 2nd level BImSchV

 $1^{st} + 2^{nd}$ level BImSchV

1st + 2nd level BlmSchV





CERT

	Mini R1V △	Mini R1Vh △	Mini Z1 □	Speedy 1V \Box	Speedy 1Vh \Box	Varia 2L □	Varia 2Lh □	Varia 2LRh □	Varia 2R □	Varia 2Rh □
Nominal output with heat recovery section	door height 51 = 6.2 kW	-	10.0 kW	10.0 kW	10.0 kW	12.0 kW	12.0 kW	12.0 kW	12.0 kW	12.0 kW
recovery section	door height 57 = 6.0 kW	door height 57 = 6.0 kW	-	-	-	-	_	-	-	_
Thermal output range	51 height – 4.5–8.1 kW 57 height – 4.5–7.8 kW	4.5 - 7.8 kW	7.0 - 13.0 kW	7.0 - 13.0 kW	7.0 - 13.0 kW	8.4-15.6 kW	8.4-15.6 kW	8.4 - 15.6 kW	8.4 - 15.6 kW	8.4 - 15.6 kW
Efficiency	> 80 %	> 80 %	87.3 %	82.0 %	82.0 %	80.0 %	80.0 %	80.0 %	80.0 %	80.0 %
Flue outlet	ø 160 mm	ø 160 mm	ø 180 mm	ø 200 mm	ø 200 mm	ø 200 mm	ø 200 mm	ø 200 mm	ø 200 mm	ø 200 mm
Door frame width	450 mm	435 mm	445 mm	670 mm	665 mm	670/450 mm	685/465 mm	675/455 mm	670/450 mm	685/465 mm
Door closure	hinged	elevating	hinged	hinged	elevating	hinged	elevating	elevating	hinged	elevating
CO content	< 1250mg/Nm ³	< 1250mg/Nm ³	< 1250mg/Nm ³	< 1250mg/Nm³	< 1250mg/Nm ³	< 1250mg/Nm ³	< 1250mg/Nm³	< 1250mg/Nm³	< 1250mg/Nm³	< 1250mg/Nm³
Dust content	< 40mg/Nm³	< 40mg/Nm³	< 40mg/Nm ³	< 40mg/Nm³	< 40mg/Nm³	< 40mg/Nm ³	< 40mg/Nm³	< 40mg/Nm³	< 40mg/Nm ³	< 40mg/Nm³
Compliance with standards	1st + 2nd level BlmSchV	1st + 2nd level BImSchV	1st + 2nd level BlmSchV	1st + 2nd level BlmSchV	1st + 2nd level BlmSchV	1st + 2nd level BImSchV	1st + 2nd level BlmSchV	1st + 2 nd level BlmSchV	1st + 2nd level BlmSchV	1st + 2nd level BlmSchV
	Varia 2RRh □	Speedy R 🔾	Speedy Rh 🔾	Speedy M 🔾	Speedy Mh 🔾	Speedy K 🔾	Speedy Kh 🔾	Speedy Eh 🔾		
	Varia 2RRh □	Speedy R O	Speedy Rh O	Speedy M 🔾	Speedy Mh 🔾	Speedy K 🗅	Speedy Kh	Speedy Eh		
Nominal output with heat recovery section	Varia 2RRh □	Speedy R O	Speedy Rh O	Speedy M O	Speedy Mh O	Speedy K C	Speedy Kh 10.0 kW	Speedy Eh 11.0 kW		
recovery section	12.0 kW	10.0 kW	10.0 kW	9.0 kW	9.0 kW	10.0 kW	10.0 kW	11.0 kW		
Thermal output range	12.0 kW 8.4 - 15.6 kW	10.0 kW	10.0 kW 7.0 - 13.0 kW	9.0 kW	9.0 kW	10.0 kW	10.0 kW 7.0 - 13.0 kW	11.0 kW		
Thermal output range	12.0 kW - 8.4 - 15.6 kW 80.0 %	10.0 kW - 7.0 - 13.0 kW 82.0 %	10.0 kW - 7.0 - 13.0 kW 82.0 %	9,0 kW - 6.3 - 11.7 kW 82.8 %	9.0 kW - 6.3 - 11.7 kW 82.8 %	10.0 kW - 7.0 - 13.0 kW 82.0 %	10.0 kW 7.0 - 13.0 kW 82.0 %	11.0 kW -7.7 - 14.3 kW 84.8 %		
Thermal output range Efficiency Flue outlet	12.0 kW - 8.4 - 15.6 kW 80.0 % ø 200 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % ø 200 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % ø 200 mm	9.0 kW - 6.3 - 11.7 kW 82.8 % ø 180 mm	9.0 kW - 6.3 - 11.7 kW 82.8 % ø 180 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % ø 200 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % ø 200 mm	11.0 kW - 7.7 - 14.3 kW 84.8 % ø 200 mm		
Thermal output range Efficiency Flue outlet Door frame width	12.0 kW - 8.4 - 15.6 kW 80.0 % ø 200 mm 675/455 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % ø 200 mm 671 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % © 200 mm 678 mm	9.0 kW 6.3 - 11.7 kW 82.8 % ø 180 mm 547 mm	9.0 kW 6.3 - 11.7 kW 82.8 % ø 180 mm 554 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % © 200 mm 677 mm	10.0 kW - 7.0 - 13.0 kW 82.0 % Ø 200 mm 683 mm	11.0 kW - 7.7 - 14.3 kW 84.8 % Ø 200 mm 761 mm		
Thermal output range Efficiency Flue outlet Door frame width Door closure	12.0 kW 8.4 - 15.6 kW 80.0 % 0 200 mm 675/455 mm elevating	10.0 kW - 7.0 - 13.0 kW 82.0 % Ø 200 mm 671 mm hinged	10.0 kW - 7.0 - 13.0 kW 82.0 % Ø 200 mm 678 mm elevating	9.0 kW 6.3 - 11.7 kW 82.8 % Ø 180 mm 547 mm elevating	9.0 kW 6.3 - 11.7 kW 82.8 % 6 180 mm 554 mm elevating	10.0 kW - 7.0 - 13.0 kW 82.0 % Ø 200 mm 677 mm hinged	10.0 kW -7.0 - 13.0 kW 82.0 % Ø 200 mm 683 mm elevating	11.0 kW 7.7 - 14.3 kW 84.8 % Ø 200 mm 761 mm elevating		

 $1^{st} + 2^{nd}$ level BImSchV $1^{st} + 2^{nd}$ level BImSchV

Compliance with standards 1st + 2nd level BlmSchV

1st + 2nd level BlmSchV

1st + 2nd level BlmSchV





Your specialist dealer:



