

+ WOOD PELLET BOILER



SINCE 1921
windhager
HEAT WITH VISION
TOMORROW'S ENERGY TODAY.

4,3 to 33kW / 15 to 111 kBTU/hr

BIO WIN 2



HIGHLY EFFICIENT AND
COMPACT

UL / CSA / EPA

W I N



D H A

G E R

+ HEATING SINCE 1921

For 100 years, Windhager have been renowned for innovative technical solutions, making heating convenient, safe and cost-effective. Strong demand for our products has allowed us to grow constantly and develop numerous innovations in the heating market. We are now one of Europe's leading manufacturers of boilers for renewable energies.

Award-winning "made in Austria" quality

The secret to our success? First-class products which satisfy the most demanding of requirements and deliver durability and reliability. We produce our boilers to strict criteria and use only high-quality materials. Our products are only manufactured in Austria, at our company headquarters in Seekirchen, near Salzburg. Independent test institutes regularly recognise our premium quality.

We always focus on the needs of our customers. We don't deliver run-of-the-mill solutions, but instead a heating system tailored to your needs.


4

THE PELLET BOILER

The BioWIN2 from Windhager is THE wood pellet boiler for long-term, carefree heating. It embodies the know-how and experience gained from three generations of Windhager wood pellet boilers, that have already completed more than one billion hours of service. Every component of the BioWIN2 is carefully designed and state-of-the-art, making heating with wood pellets even more convenient, economical and reliable.

Easy to set up and to install
due to split delivery

Intuitive touch and
swipe operation



The large mobile ash box
only needs to be emptied
on average once or
twice a year

See the video!



A⁺



BioWIN 2

BIO/WIN2
111-111 kW / 15-18-111 kW

+ CONVINCING DETAILS

The BioWIN2 makes heating with pellets particularly easy and convenient. Its innovative cleaning systems ensure that you hardly need to worry about a thing, because the BioWIN2 burns the wood pellets with great efficiency and very little ash is produced.

Reduces maintenance costs

An ash-sliding grate that runs in opposing directions means that no residue is left in the pellet burner. This significantly increases operating safety and makes the boiler resistant to any fluctuation in the wood pellet quality. The BioWIN2 has fully automated cleaning functions, which ensures clean, efficient combustion and reduced maintenance costs.

Small foot print

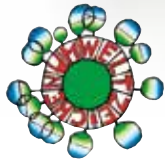
Including all minimum clearances, the BioWIN2 takes up less than 1,5 square metres / 16,2 square feet, making it by far one of the most compact wood pellet heating solution in its class. The flue pipe can be turned so the BioWIN2 can be connected at the rear or the top of the appliance. As the boiler is supplied in individual sections, it can be easily carried into the building and installed at speed thanks to its assembly-friendly design.



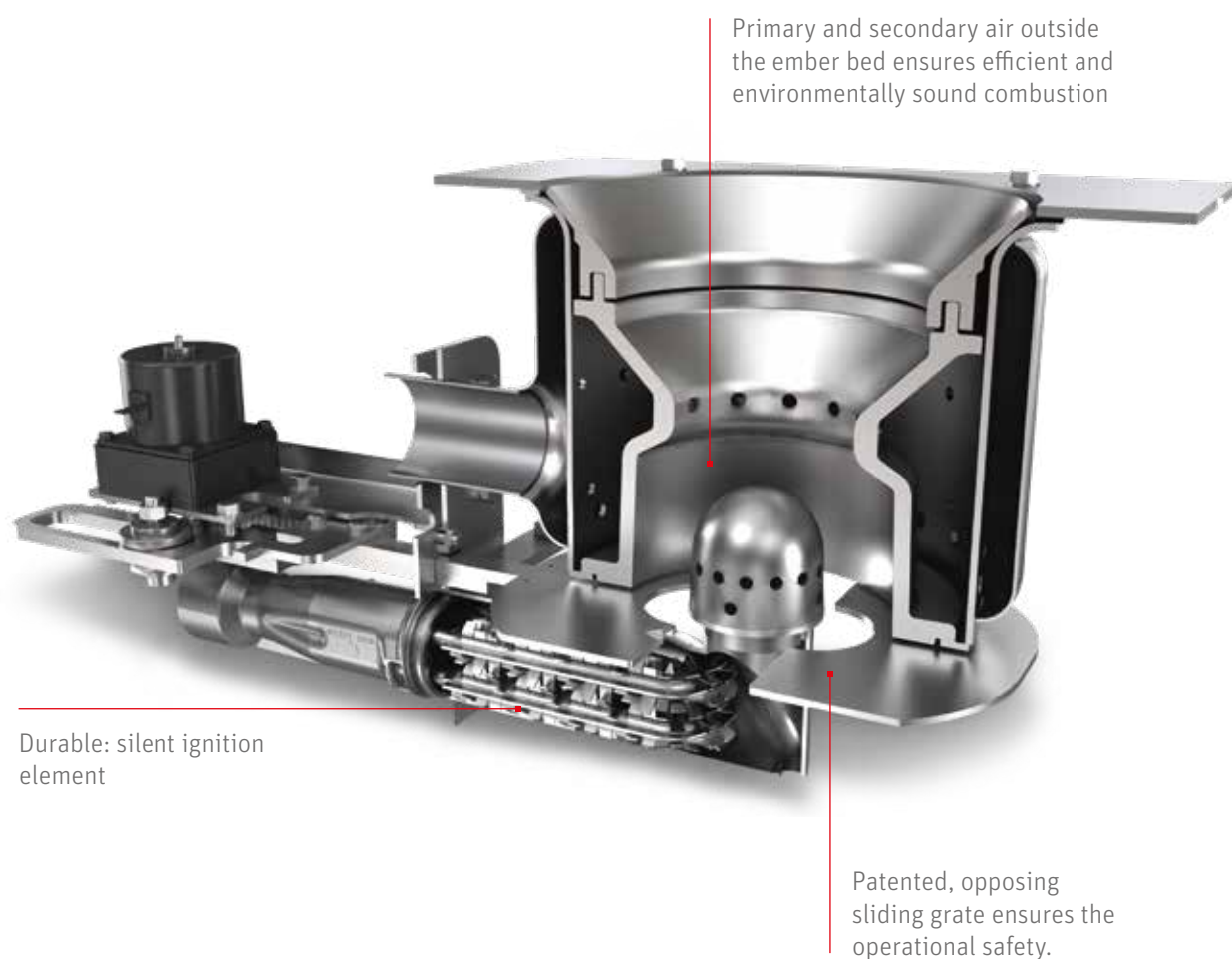
Intuitive touch and swipe operation of the boiler display. It can be accessed by smartphone too.

Every BioWIN 2 has automatic heating surface cleaning as standard.

The zero-wear ignition element runs silently, is robust and requires no maintenance.



+ CLEAN LOWDUST TECHNOLOGY



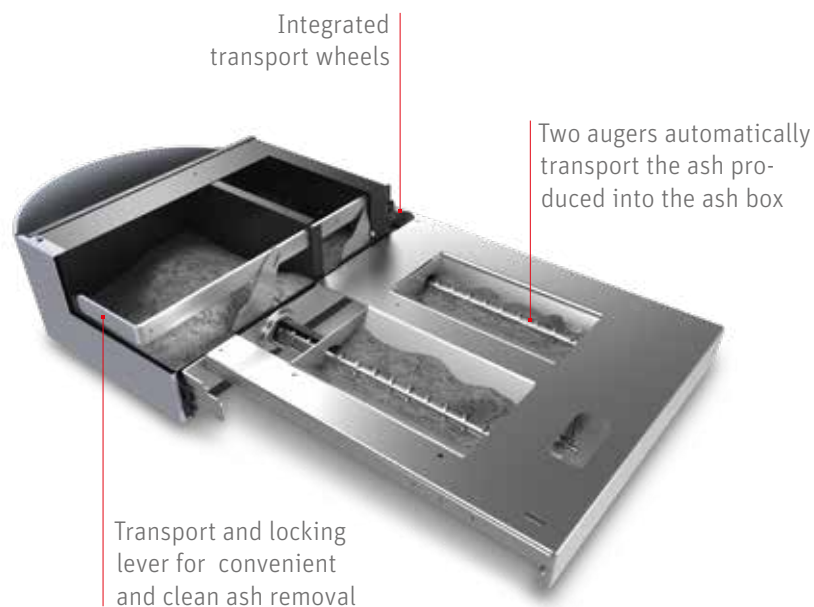
The high quality stainless steel burner with LowDust Technology ensures even in the partial load range minimal emissions are achieved. The high degree of controllability and its modulating output ensures that a buffer tank is not required – this saves space and costs.

+ INFREQUENT ASH REMOVAL

If you heat your home with the BioWIN 2 , you hardly need to worry about a thing. You simply have to empty the ash box from time to time. With the BioWIN2Exklusiv, you only need to do this on average once or twice a year ¹⁾. The ash box is extra large so offers plenty of capacity and this, coupled with the efficient boiler combustion, ensures long intervals between emptying. The box is integrated into the boiler to save space and has wheels so once full it is easy to transport.

The ash removal system of the BioWIN2 also includes the patented ash removal plates. These work in opposing directions ensuring that no residue remains in the pellet burner. So even if the fuel quality fluctuates, operational reliability remains high.

1) Depending on boiler output and ash content of pellets.



The ash box is so large that you only need to empty it on average once or twice a year. Even when the box is full, it is easy to transport thanks to the integrated wheels.

+ COMFORT WHEN NEEDED

We have adapted the BioWIN 2 to suit different individual needs. You decide whether your BioWIN2 is filled automatically or by hand. All of our models are available in different versions, with the BioWIN2 Exklusiv providing maximum comfort.



	EXKLUSIV	KLASSIK-L
Pellet feed	fully automatic	manual (200kg / 441lb hopper)
Heating surface cleaning	fully automatic	fully automatic
Ash removal	fully automatic (ash box)	fully automatic (ash pan)
Pellet refill interval ¹⁾	< 1x per year	< 10 days

¹⁾ The actual interval depends on the operating method of the boiler capacity/type and the pellets used. Please refer to the operating instructions for details.

+ EASY TO USE EVEN WITHOUT STORAGE

There are good reasons why it is well worth installing a BioWIN 2 with manual filling. Since it doesn't require a bulk pellet store, this solution takes minimal space. Convenience isn't compromised with the BioWIN 2 with weekly use integrated hand feed hopper. Depending on heat output, you can heat your home for up to one week or longer with one fill. And should you want to switch to an automatic supply later on, a pellet suction system can be retrofitted at any time.



+ CONVERT FROM FOSSIL FUELS TO PELLETS

Our experience shows that it is possible to convert a heating system fuelled by fossil fuels to a BioWIN2 pellet boiler in only a matter of days and integrates into existing heating systems seamlessly.

The optimum pellet storage room

The ideal wood pellet storage room should be dry and large enough to hold up to a year's supply of wood pellets. The lorries that deliver your pellets can blow them into your storage room from a distance of up to 20 metres. So it's good if the storage room is on an exterior wall. It's important that the store is fitted with a fire protection door and that there are no exposed electrical cables or water pipes within the pellet storage room.

App-based planning

The Windhager storage room app makes planning your wood pellet storage room incredibly simple. You simply have to enter the length, width and height of the space available and you receive a tailored, scaled 2D view (view from front and above) in an instant. It also includes all important dimensions and technical data. The plans can be converted into PDF files at the touch of a button and can then be emailed or printed out. The app can be downloaded for free from app stores.



Apple iOS

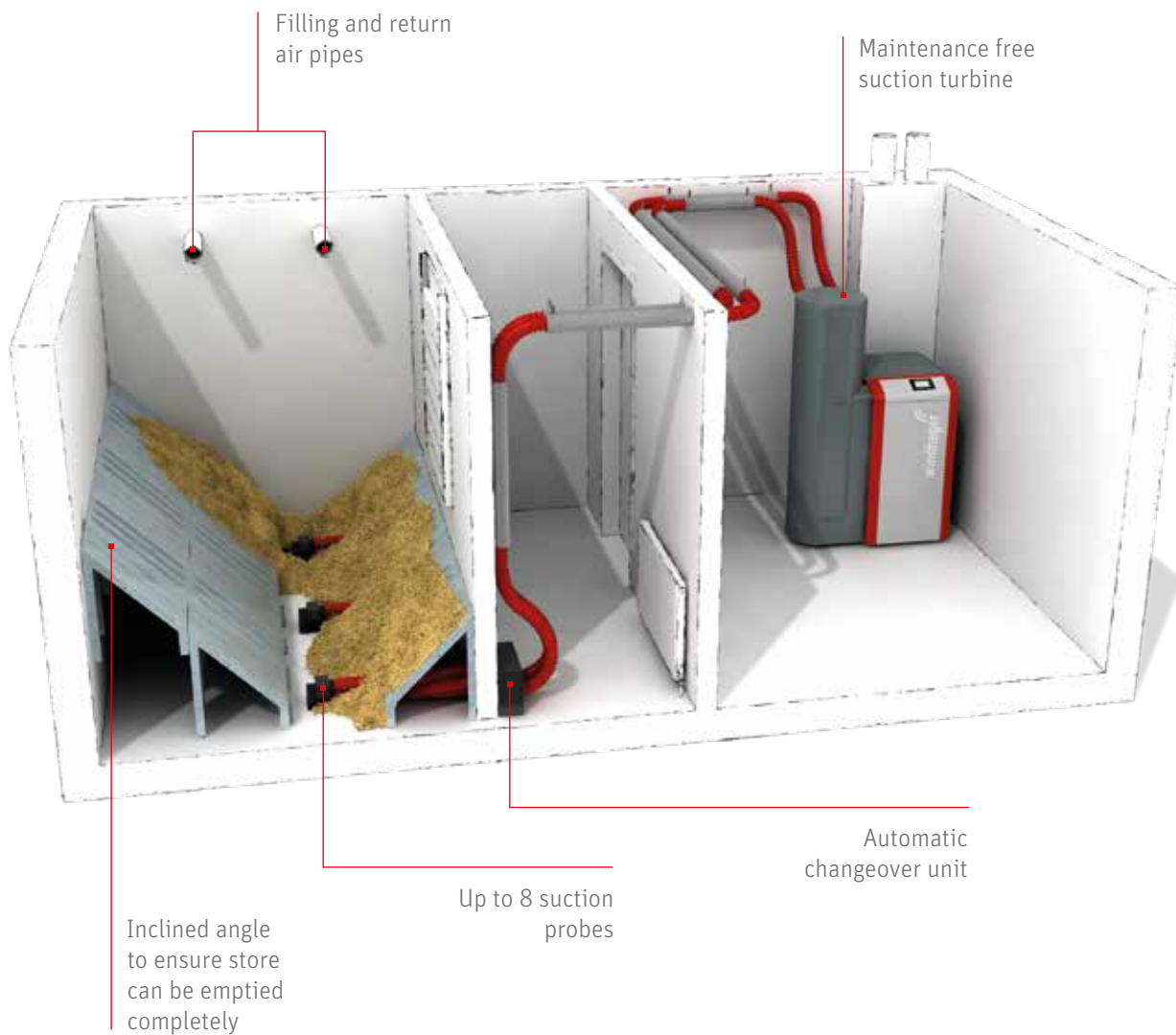


Android



Design a pellet storage room in a flash

When constructing your wood pellet storage room, it is important to make sure that virtually all the pellets can be removed from it. This often requires side slopes to be fitted, which can be done quickly and easily with the modular quick assembly kit for sloping floors from Windhager. Sloping floors to suit a whole number of different pellet store situations can be produced from just three basic elements: a vertical support and two different cover plates.



+ YOUR PELLET STORAGE

No matter whether you have a special room for your wood pellets or a hopper, we have the suitable suction system for every kind of store, which transports your pellets gently in an air current. Your storage room does not need to be located next to the boiler room, transport distances of up to 25 metres and 7 metres in height can be catered for. Individually matched to your wood pellet storage room, you can choose from a one, three or eight probe solution.

	8 probes	3 probes	1 probe with agitation
Recommended use	Blockbuilt storage room, at least 4 m ² / 43 ft ² , 2 separate stores (zones), storage room	Rectangular storage room with block walls, up to 6 m ² / 65 ft ²	Square storage room with block walls, up to 4 m ² / 43 ft ²
Inclined floor	not usually necessary	often a good idea	often a good idea
Function	automatic, 'Purge and Change Over'	automatic, 'Purge and Change Over'	automatic, agitation
Reliable suction distance	15 m / 49 ft or 25 m / 82 ft	15 m / 49 ft or 25 m / 82 ft	15 m / 49 ft or 25 m / 82 ft
Storage room dimensions	Heat load ¹⁾ in kW / kBTU / hr x 0,75 ²⁾ = storage room volume in m ³ / ft ³	Heat load ¹⁾ in kW / kBTU / hr x 0,75 ²⁾ = storage room volume in m ³ / ft ³	Heat load ¹⁾ in kW / kBTU / hr x 0,75 ²⁾ = storage room volume in m ³ / ft ³

- 1) The heat load refers to the amount of energy required to keep the interior of a building at a constant level of 20°C / 68°F on the coldest day of the year.
 2) Excl. sloping-floor factor of 0,75, incl. sloping-floor factor of 0,9.

Unique: eight-probe suction solution for pellets

The eight-probe suction solution is particularly flexible. As you can position the probes anywhere, it fits into every kind of storage room. You can even store the pellets in two rooms.



The right storage solution for every home

Fabric storage hoppers is a convenient alternative to a block built pellet storage room. It can be installed as a standalone unit, making it perfect for homes with damp basement walls or exposed piping.



Fabric hopper



P

E

L

L

+

E

T

S

+

+ THE FUEL WITH A FUTURE

17

Heating with wood pellets helps reduce the greenhouse effect and CO₂ emissions. The compacted wood pellets contain low levels of sulphur dioxide and are carbon neutral when burned. Unlike fossil fuels, such as gas or oil, wood pellets do not exacerbate the greenhouse effect. Wood is a renewable raw material and readily available. The fuel quality must be consistent. For this reason, pellets are required to conform to strict international criteria.

Wood pellets do have another benefit, they are economic and have enjoyed price stability for many years. This is why pellets are the perfect alternative to fossil fuels.

Environmentally friendly
Renewable and sustainable
Good value and price stability

TECHNICAL DATA

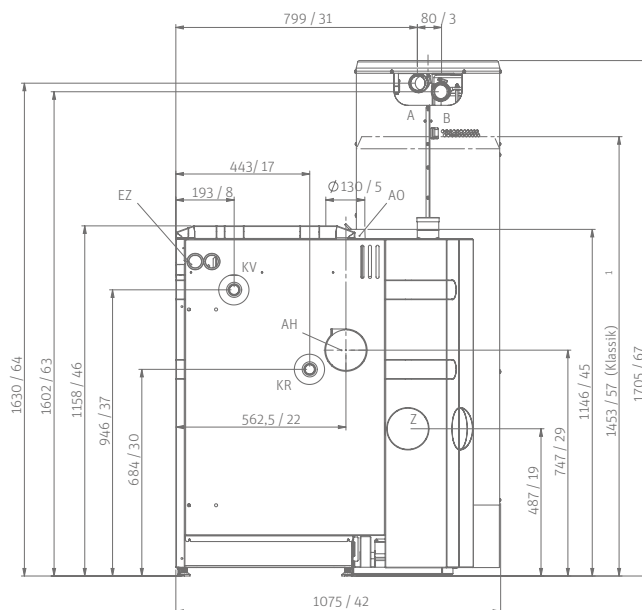
BIOWIN 2

KV Boiler flow (1" pipe)
 KR Boiler return (1" pipe)
 E Boiler drain
 A Pellet suction pipe (Ø 50 mm / 2 in pipe)
 B Pellet suction pipe (Ø 50 mm / 2 in pipe)
 AH.... Rear flue connection (Ø 130 mm / 5 in pipe)
 AO.... Top flue connection (Ø 130 mm / 5 in pipe)
 KT Boiler temperature sensor
 EZ Electric connection
 Z..... External combustion air (Ø 100 mm / 4 in)

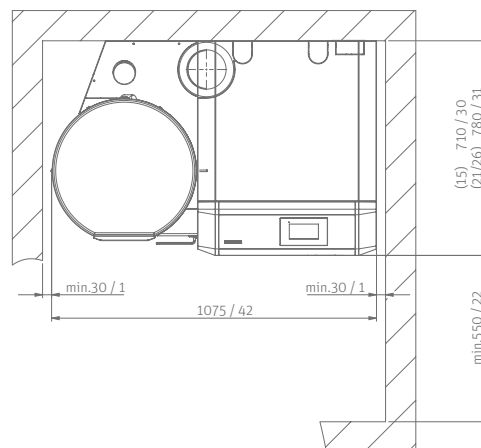
BioWIN 2 Exklusiv

All measurements in mm / in. Minimum room height Exklusiv: 1750 mm / 69 in

Rear view:



Plan view, Minimum clearances:
(top flue correction*)



*Minimum clearance with rear vertical flue pipe connection upwards is 350 mm / 14 in.

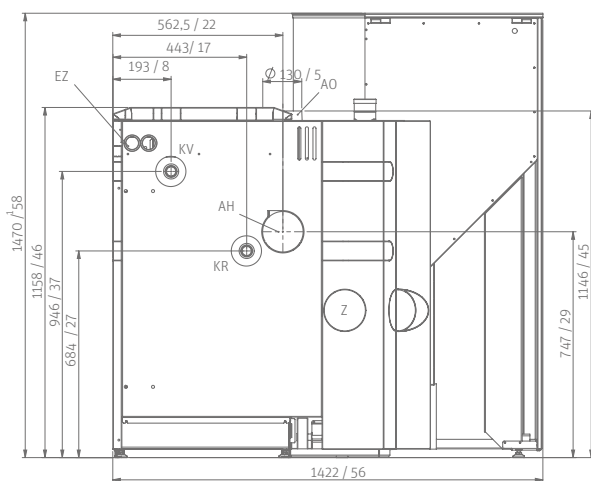
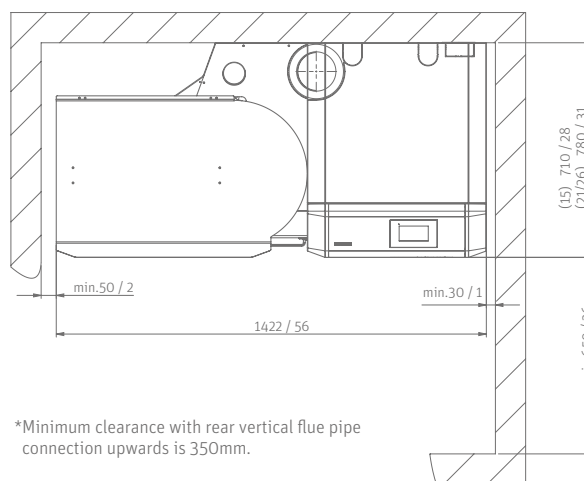
BioWIN 2	Unit	BW 152	BW 212	BW 262	BW 332
Rated thermal output range	kW kBTU /hr	4,3 – 15 15 – 51	6,0 – 21 21 – 72	7,6 – 25,9 26 – 88	9,8 – 32,5 33,5 – 111
Boiler efficiency at nominal load	%	93,3	93,6	93,3	92,8
Pellet fuel hopper	kg lb	107 / 200 236 / 441			
Main boiler body with transport frame, W x D x H	mm in	767 x 812 x 1286 30,2 x 32 x 50,6			
Delivery dimension main boiler body, W x D x H	mm in	714 x 650 x 1146 28,1 x 25,6 x 57	714 x 720 x 1146 28,1 x 28,3 x 57		
Total weight ¹⁾	kg / lb	286 / 631	308 / 679		
Weight of heat generator ¹⁾	kg / lb	200 / 441	221 / 487		
Minimum weight of main boiler body ¹⁾	kg / lb	170 / 375	191 / 421		
Flue gas connection diameter	mm / in	130 / 5,1			
Power consumption part load / nominal load	W	20 / 39	23 / 47	26 / 53	29 / 64
Energy efficiency category		A+			

1) Exklusiv-model

BioWIN 2, Klassik-L with 200 kg / 441 lb hopper

All measurements in mm. Minimum room height: 1850 mm / 72 in

Rear view:

Plan view, Minimum clearances:
(top flue correction*)*Minimum clearance with rear vertical flue pipe
connection upwards is 350mm.

+ THE WINDHAGER PRINCIPLE

Accurate advice from our expert PARTNERS

Our expert PARTNERS are on hand to answer any questions you may have about our products. These experienced heating specialists work closely with us to ensure you receive the best possible service.

Quick and professional customer service

The heating professionals working in our extensive customer service network provide rapid, expert and solutions-based support day in, day out.

AUSTRIA

Windhager Zentralheizung Technik GmbH
Anton-Windhager-Strasse 20
A-5201 Seekirchen near Salzburg
T +43 6212 2341 0
F +43 6212 4228
info@at.windhager.com

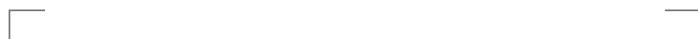
Windhager Zentralheizung Technik GmbH
Carlberggasse 39
A-1230 Wien

USA / CANADA

CALUWE Inc.

9 Wheatland Street
Burlington, MA 01803
M +1 781 308 85 83
info@woodchipboilersr.us
www.woodchipboilersr.us

windhager.com



Your expert PARTNER

LEGAL NOTICE

Media owner, issuer and publisher: Windhager Zentralheizung Technik GmbH, Anton-Windhager-Straße 20, 5201 Seekirchen am Wallersee, Austria, T +43 6212 2341 0, F +43 6212 4228, info@at.windhager.com, Images: Windhager; Subject to amendments, printing and layout errors. 08/2021, 036493

windhager
SINCE 1921
HEAT WITH VISION
TOMORROW'S ENERGY TODAY.