

+ WOOD PELLET BOILER

windhager
BEST HEATING TECHNOLOGY

BIO WIN²



3 to 256 kW

DOMESTIC AND COMMERCIAL HEATING SOLUTIONS



The traditional Windhager brand – the pioneer in sustainable heating for over 100 years – is there for you as a partner company of BWT.

BEST HEATING TECHNOLOGY MEETS BEST WATER TECHNOLOGY

Ecologically valuable premium products, services and services related to heat and water “Made in Austria” help to keep our planet livable for future generations. Windhager's innovative and economical heating systems in combination with low-salt BWT heating water without additives bring the energy of tomorrow into the present.

The heat transfer medium water plays an essential role in the energy-efficient operation of any heating system and at the same time protects it from deposits and corrosion. With a perfectly coordinated and optimized heating system, sustainable, comfortable heat reaches every home.



JUST LIKE NATURE:
**ALWAYS ONE
STEP AHEAD.**



PELLETS

ARE CARBON NEUTRAL
AND SUSTAINABLE

YOUR SPECIALIST FOR INNOVATIVE HEATING SOLUTIONS

WITH THE ENERGY OF TOMORROW

The Austrian family-owned company Windhager has stood for high-quality heating appliances and reliable service for over 100 years. Our many innovative technologies have had a profound impact on the market in the past and we remain committed to continuously improving the power, efficiency and sustainability of our products. Our pellet, wood and wood chip boilers as well as our heat pumps meet the highest quality and environmental standards of tomorrow today. We will be consistently expanding our leading edge products so that you can continue to enjoy sustainable heat with your Windhager heating system in the future – permanently, cost-efficiently and comfortably.

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PELLETS

ENVIRONMENTAL PROTECTION AT THE PUSH OF A BUTTON

When you choose a Windhager pellet heating system, you are choosing a sustainable fuel with a future. This is because pellets are made exclusively of natural wood that is ground without any additives and pressed using high pressure into uniform cylindrical 6 mm pellets. Only about 1% of the amount of energy contained in the fuel is needed during production, making pellets the fuel with the best energy balance.

PELLETS ARE
CARBON NEUTRAL
AND SUSTAINABLE



When the pellets are burning in the boiler, only as much CO₂ is released as the tree was able to store from the air while it was growing. That is why pellets are a CO₂-neutral fuel and the guaranteed right choice for anyone who wants to heat their home in an environmentally friendly, safe and economical way.

MAKE SURE THEY ARE GOOD-QUALITY PELLETS

The better the pellet quality, the cleaner the combustion and better the heating power. For that reason, please be sure to only order pellets that comply with the quality regulations of EN ISO 17225-2 A1.

You can recognise high-quality pellets by the following:

- **Shiny, smooth surface**
- **Even pellet size**
- **Very little dust**
- **Quick quality test: Throw the wood pellets into a glass of water, good quality pellets will instantly sink to the bottom.**

BIOWIN 2

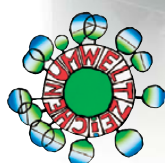
QUALITY & INNOVATION



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

Every BioWIN 2 Touch has automatic heating surface cleaning as standard.

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



OUR BIOWIN PELLET BOILERS

PRODUCED IN AUSTRIA,
SUCCESSFUL WORLDWIDE

We have been setting industry-wide standards with our products ever since we developed the first Windhager pellet boiler in 1999. Innovations such as the first fully automatic pellet boiler for the living room or micro burner technology for especially small and powerful pellet heating systems have made Windhager one of the world's leading manufacturers in this sector.

Our BioWIN2 pellet boilers combine the expertise and experience of over 25 years of research, development and operation. Every component is carefully designed and state-of-the-art. The production at our factory in Seekirchen is carried out under the highest quality standards and continuous quality control, which is why we also offer extensive guarantees on our products. *(terms apply)

BIOWIN2

The most popular pellet boiler from 3 to 33 kW

Easy to place
and assemble
due to split delivery

Fully automatic cleaning
of heat exchanger and
burner bowl

Generous ash box only
needs to be emptied
1-2 times/year on average



BIOWIN2 38 - 63 kW

COMPACT AND POWERFUL

Installation area of 1.12m² and very little space required due to flush wall installation

Efficient and clean combustion thanks to durable stainless steel burner



Robust and maintenance-free thanks to wear-free double ignition element

BIOWIN2 PURE

Low-emission pellet boilers from 3 to 63 kW

Dust emissions <2.5 mg/m³ due to innovative fine dust filter

Pellet boiler with automatic pellet loading or manual pellet loading (fuel hopper 107 or 200 kg)



BIOWIN2

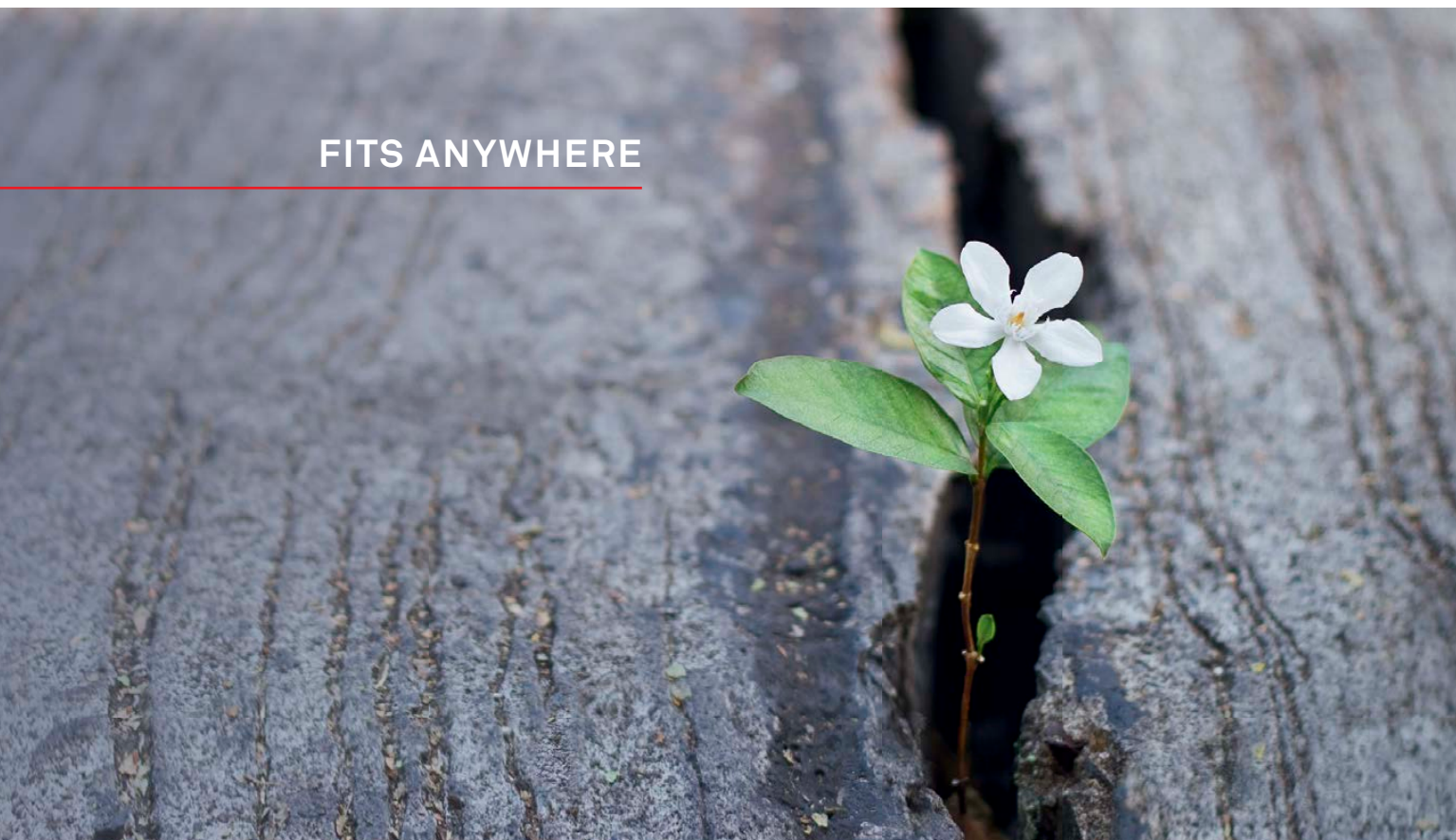
EFFICIENT AND CONVENIENT

Our Windhager BioWIN2 pellet boilers contain the accumulated experience of three generations of boilers and over one billion operating hours. This expertise is unique and has made BioWIN2 one of the most successful pellet boilers in the world. The uncompromising quality workmanship, the unrivalled heat generation efficiency, the innovative LowDust technology for low emissions and the high level of comfort in the operation and maintenance of the appliances will also impress you.

EASY TO PLACE AND ASSEMBLE DUE TO SPLIT DELIVERY

There is enough space for our BioWIN2 pellet boilers anywhere, as the split delivery makes them easy to install in buildings and their intelligent design means they can be assembled quickly and precisely wherever they are intended to be installed. In total, the space requirement including all minimum distances is only 1.5 m².

FITS ANYWHERE



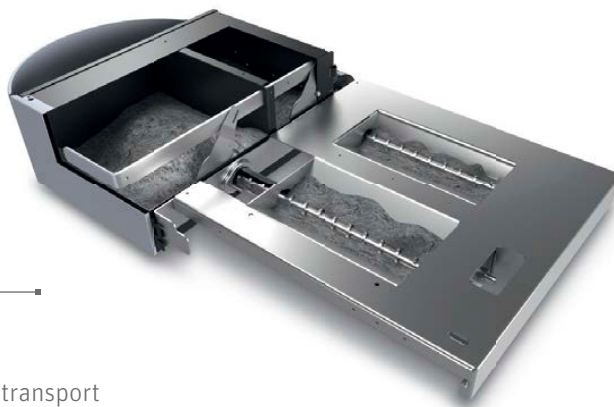
LARGE CAPACITY ASH BOX

The high level of comfort of a Windhager pellet heating system can be felt not only in the warmth it provides, but also in its convenience. Our generously dimensioned ash box can hold the ashes from an entire heating season* and is easy to transport and empty thanks to the integrated castors.

Integrated
transport castors

Two augers automatically
transport the ash produced
into the ash box

Transport and locking lever
for convenient and clean ash transport



*Depending on boiler
output and pellet quality

MINIMAL MAINTENANCE

With the BioWIN2 10 – 33 kW, ash removal may be required only once a year, this could coincide with an annual service. For the BioWIN2 38 – 63 kW range, we recommend an annual service or after 3000 operating hours. The sliding grate prevents residue from being left in the pellet burner. This increases operating safety and makes the boiler resistant to any fluctuations in pellet quality.

The intuitive control of the BioWIN 2 will automatically prompt when ash removal and service intervals are due.

LOW-DUST TECHNOLOGY

Sustainability and climate protection are important parameters for Windhager when developing our appliances. The innovative stainless steel burner with LowDust technology is so clean and efficient that the BioWIN2 pellet boiler is several times better than even the strictest statutory emission limit values.



DURABLE IGNITION ELEMENT

The patented ignition elements, which consist of two U-shaped heating elements, are just as robust as the stainless steel burners. This special shape allows the heat to be transferred quickly and efficiently, which means that the ignition element, unlike in conventional pellet boilers, is installed outside the combustion chamber, thereby serving as protection from thermal overload.

INTUITIVE TOUCH AND SWIPE OPERATION WITH CONNECTION TO THE INTERNET & APP OPERATION

The resistant and scratch-proof glass displays of BioWIN2 Touch pellet boilers offer high-resolution graphics and brilliant colours. They can be operated easily and intuitively via simple menu navigation, without the need for lengthy training.



MYCOMFORT - CONTROL-APP

SIMPLE

- Clear user interface
- Easy to use, even for less experienced smartphone and tablet users
- Intuitive touch and swipe movements

MOBILE

- Change temperature and operating mode and set heating programmes from anywhere

INNOVATIVE

- New user-friendly displays
- High-resolution graphics
- Fastest responses in real time

SECURE

- Communication via what is currently the most secure connection type, which is above the eBanking standard



BIOWIN2

COMPACT & POWERFUL
38 TO 63 KW

With its large pellet container, integrated suction turbine and ash box, the BIOWIN2 in the 38 to 63 kW performance classes ensures long-lasting and carefree heating. The total required space including all the minimum distances is only 2.07 m².

Flexible pellet transport thanks to its patented suction system



Robust and maintenance-free thanks to wear-free double ignition element



Efficient and clean combustion thanks to durable stainless steel burner

Installation area of 1.12m² and very little space required due to flushwall installation

POWER AND EQUIPMENT VARIANTS

BIOWIN2 – COMFORT WHEN YOU NEED IT

The options offered by our BioWIN2 pellet boilers are as varied as the individual preferences of our customers – from maximum heating output to the type of pellet loading and the choice of ash containers. That is comfort at the highest level.



BioWIN2

Nominal output kW	10–33 kW	38–63 kW	10–33 kW		10–33 kW	
Pellet feed- automatic	✓	✓				
Pellet feed - manual			200 kg	200 kg	107 kg	107 kg
Auto heating surface cleaning	✓	✓	✓	✓	✓	✓
Auto ash removal	✓	✓	✓		✓	
Manual ash removal				✓		✓

BIOWIN2 PURE – CLEAN AND EFFICIENT

Pellet heating, simple and clean. Thanks to the additional fine dust filter, the BioWIN2 Pure achieves a fine dust emission of less than 2.5mg/m³. This means that the BioWIN2 Pure is an especially low-emission boiler.

DESIGNS

The BioWIN2 Pure is offered in the 10 to 63 kW power ranges. Depending on the design, automatic pellet loading or manual pellet loading is possible. The fuel hopper has a capacity of 107 or 200 kg.



BioWIN2 Pure	102Te	152Te	212Te	262Te	332Te	382Te	452Te	502Te	630Te
Nominal output kW	3,2 – 10,5	4,3 – 15,0	6,0 – 21,0	7,6 – 25,9	10,0 – 32,5	10,8 – 38,0	13,5 – 45,0	14,9 – 49,9	18,2 – 63,0
Pellet feed									
automatic	✓	✓	✓	✓	✓				
manual (107/200kg)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Auto heating surface cleaning	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fine dust filter	✓	✓	✓	✓	✓	✓	✓	✓	✓
Auto ash removal	✓	✓	✓	✓	✓	✓	✓	✓	✓

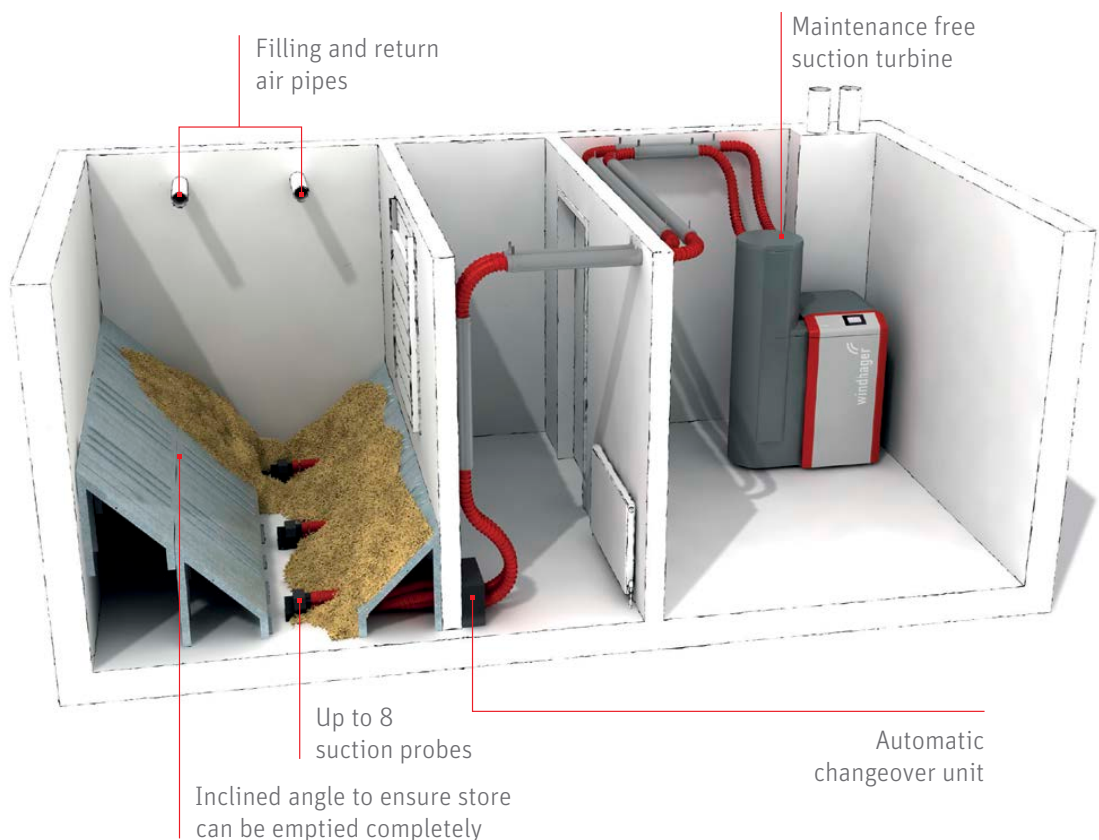
THE PERFECT PELLET STORAGE ROOM

If you want to enjoy the absolute comfort of a pellet heating system, you should consider the option of a separate storage room. Ideally, this storage room holds the entire pellet supply for up to a year and ensures that the burner is filled regularly and fully automatically. To be able to blow in the pellets from the tanker easily, the storage room should have at least one outer wall. In the case of new buildings, a pellet storage room can usually be planned very efficiently. In the case of a renovation of a former oil heating system, the existing oil tank room can usually be adjusted easily and cost-effectively.

REQUIREMENTS

- Bricked room, 100% dry
- Optional sheet steel, fabric or buried tank possible, space for a year's supply
- Has an outer wall for easily blowing in pellets
- Fire door inside
- No electrical or water services

Windhager also supply a range of prefabricated pellet hoppers. See Pellet Storage Solution brochure.



EASY TO HEAT EVEN WITHOUT STORAGE

Many customers deliberately choose not to have a separate storage room for their pellet heating system, for example due to space or cost reasons. That doesn't mean that you have to forego on comfort when filling your BioWIN2 pellet heating system manually. Our 107 and 200kg integral hoppers hold pellets for up to a complete week of heating or longer. If desired, these hoppers can be retrofitted at any time later with an automatic pellet suction system.

If filled by hand, you can choose between a 107 or 200kg hopper.



PELLET STORAGE ROOM - APP EASY PLANNING VIA THE APP

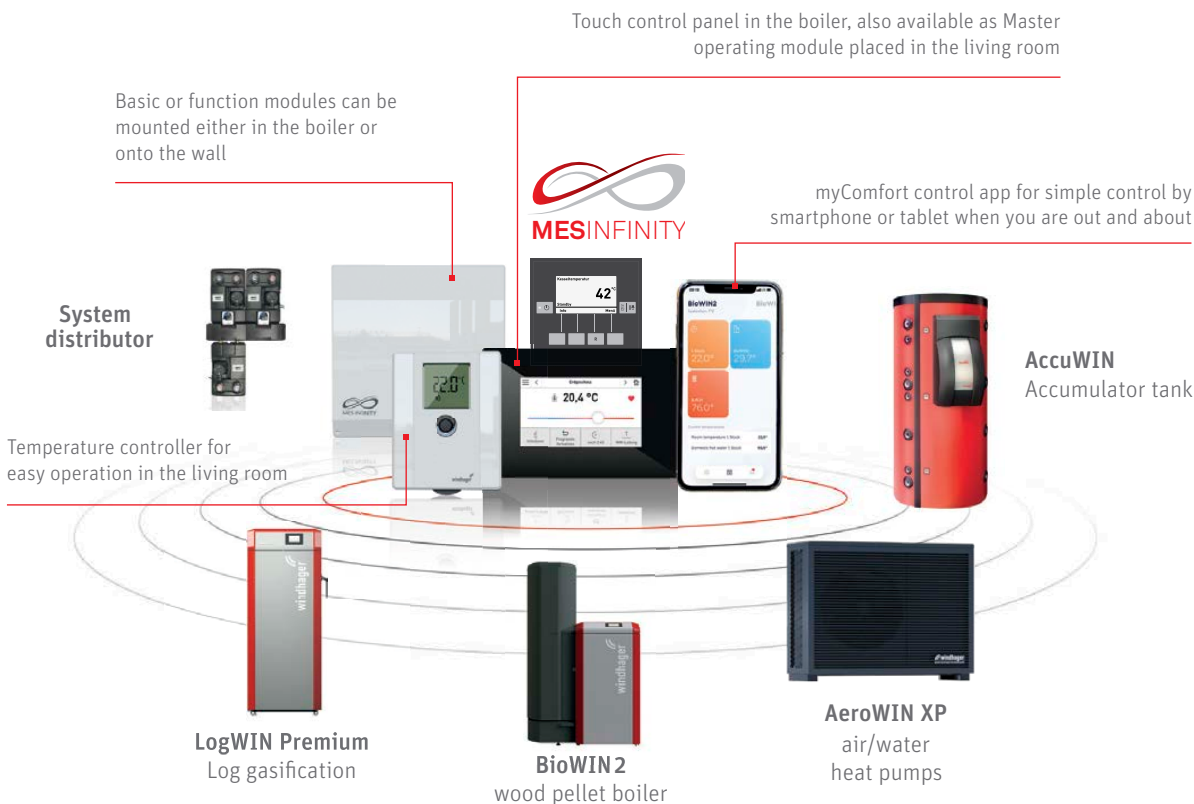
The Windhager storage room app makes planning your pellet storage room very easy. You simply have to enter the length, width and height of the chosen room and you instantly receive a customised solution in a true-to-scale 2D view (view from front and above), including measurements and technical data. You can convert the plans into PDF files at the touch of a button and send them via e-mail.



SIMPLE APPROACH TO COMBINING AND OPERATING OUR PRODUCTS

When you choose a Windhager heating system, you are deciding for the highest quality and maximum comfort. This is because we offer you the ideal matching heating components for all of our innovative heating solutions, which can be combined without any limits. MES INFINITY, our intelligent heating control system, ensures that all the components work together perfectly.

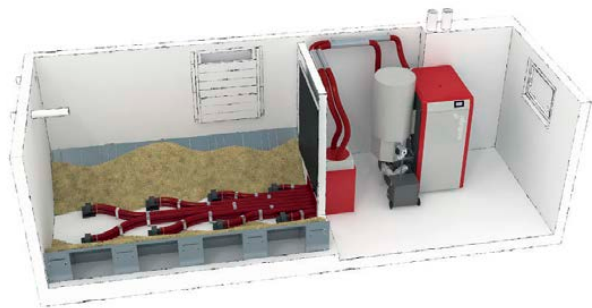
You can optimise the control settings at any time using the high-quality touch display on the master control element in the living room or directly on the boiler. And if you are not home, the web server integrated as standard and the Windhager myComfort control app allow you to access the system remotely via your smartphone or tablet.



ADDITIONAL HEATING SOLUTIONS IN THE PELLETS RANGE:

THE PUROWIN PELLETT

PuroWIN pellets combine the patented gasification boiler technology and the easy handling of the fuel pellets. Output range of 30 - 400 kW. See our PuroWIN Pellet brochure for more information.

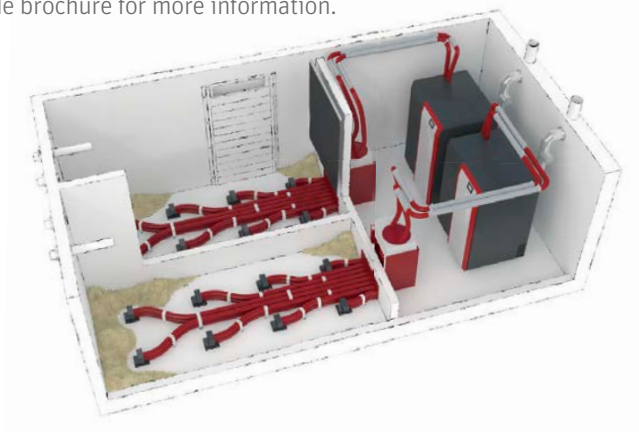


BIOWIN KASKADE

EXCELLENT POWER WITH PELLETS

The BioWIN 38-63kW and PuroWIN Pellet can be connected to two-unit, three-unit and four-unit Kaskade systems, covering heating requirements up to 400kW. In addition, a peak load or back-up boiler can be incorporated. Specially developed by Windhager, the Kaskade regulation system constantly checks how many boilers as well as which ones need to be in operation to provide the required amount of heat. Balanced utilisation of the system is also ensured by checking the operating times. Thanks to its wide modulation range, Kaskade operates highly efficiently at a lower output range and adjusts seamlessly according to seasonal variations and heat demand.

See our Kaskade brochure for more information.





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TECHNICAL DATA

BIOWIN2

3–33 kW

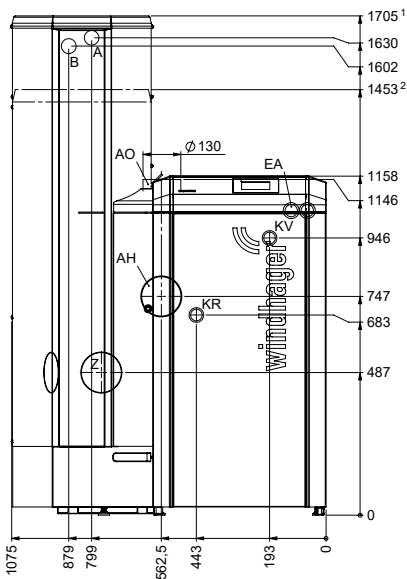
BioWIN2		BW 102T	BW 152T	BW 212T	BW 262T	BW 332T
Nominal output	kW	3,0–10,5	4,3–15	6,0–21	7,6–25,9	9,8–32,5
Boiler efficiency at nominal load	%	93,2	93,3	93,6	93,3	92,8
Pellet fuel hopper Suction feed system/daily/weekly hopper	kg	71 / 107 / 200				
Installation dimensions, boiler body (WxDxH)	mm	767 x 812 x 1286		767 x 882 x 1286		
Installation dimensions, fuel hopper suction feed system/ 107 kg/200 kg (WxDxH)	mm	584 x 592 x 1471 / 584 x 592 x 1231 / 680 x 936 x 1473				
Total weight	kg	286		308		
Weight, boiler body	kg	200		221		
Flue gas connection diameter	mm	130				
Electrical consumption (partial load/nominal load)	W	18/34	20/39	23/47	26/53	29/64
Energy efficiency category		A+				

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

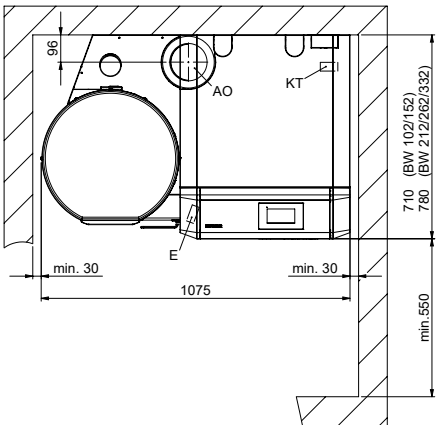
BIOWIN2 WITH 107KG AND AUTO FEED HOPPER

All measurements in mm. Minimum room height manual feed (107kg): 1800 mm
Minimum room height auto feed: 1750 mm

Front view:



View from the top, minimum distances:
(Flue gas pipe facing upwards*)

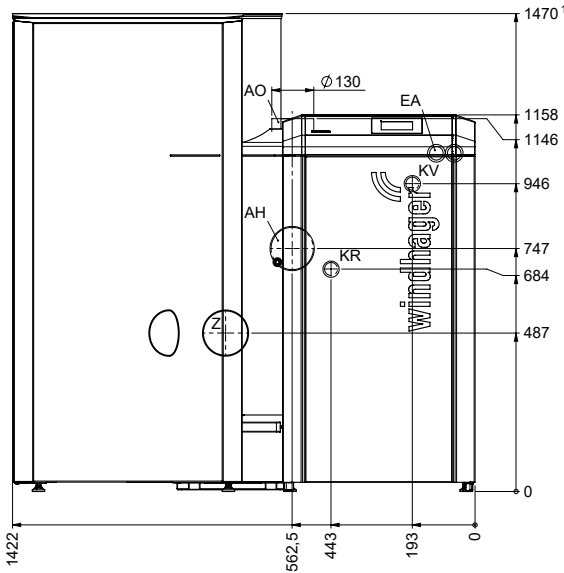


*Minimum distance of boiler to rear wall with flue gas connection to the rear at least 350 mm.

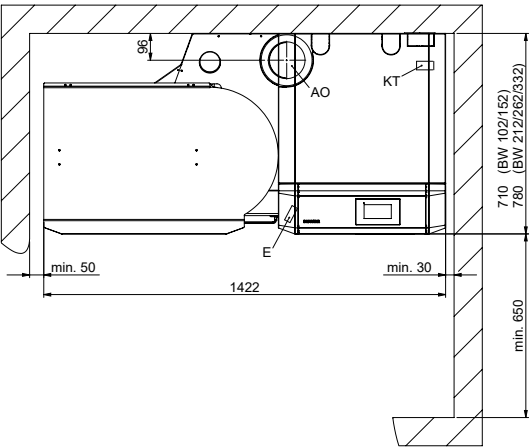
BIOWIN2 WITH 200KG HOPPER

All measurements in mm. Minimum room height: 1850 mm

Front view:



View from the top, minimum distances:
(Flue gas pipe facing upwards*)



*Minimum distance of boiler to rear wall with flue gas connection to the rear at least 350 mm.

TECHNICAL DATA

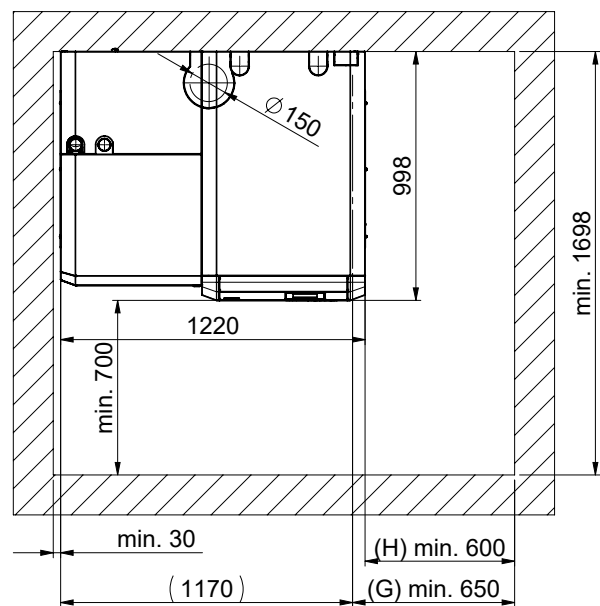
BIOWIN2

38–63 KW

BioWIN2		BWE 382T	BWE 502T	BWE 452T	BWE 632T
Nominal output	kW	10,8–38	14,9–49,9	13,5–45	18,2–63
Boiler efficiency at nominal load	%	92,3	92,9	92,6	93,6
Pellet fuel hopper	kg	111			
Installation dimensions, boiler body (WxDxH)	mm	790 x 975 x 1665			
Installation dimensions (BxTxH)	mm	1221 x 624 x 506			
Total weight	kg	700			
Weight, boiler body	kg	480			
Flue gas connection diameter	mm	150			
Electrical consumption (partial load/nominal load)	W	31/75	40/85	40/84	48/98
Energy efficiency category		A+			

A Pellet suction pipe (Ø 50 mm Pipe)	E Boiler drain (not specified)
B Return air (Ø 50 mm Pipe)	G Distance from edge of base
KT Boiler temperature sensor	H Distance from edge of cladding
ZL Supply air for operation independent of room air	¹ For rear flue connection
KV Boiler flow (1 1/4"-Pipe)	² for a room height below 2100, increased maintenance and repair costs must be planned for. Attention: it must not be lower than 1900!
KR Boiler return (1 1/4"-Pipe)	³ if the room height is below 2000, set 504051-DU0006 is required. Otherwise, the minimum radius for the pellet hose is not reached.
AO Top flue connection (Ø 150 mm)	
AH Rear flue connection (Ø 150 mm)	

Flue pipe, top:



Technical drawing of the Ecoline 1698 desk, showing dimensions and components. The drawing includes a side view and a top view. The side view shows a desk with a height of 998 mm and a width of 1220 mm. The top view shows a desk with a width of 1220 mm and a depth of 700 mm. The desk has a circular top with a diameter of 150 mm and a height of 55 mm. The desk is shown with a hatched background, indicating it is a technical drawing. The dimensions are labeled as follows:

- Top view: 1220 (width), 700 (depth), min. 30 (clearance), (1170) (total width including clearance).
- Side view: 998 (height), 1220 (width), min. 700 (depth), min. 1698 (total height including clearance).
- Top view details: $\varnothing 150$ (circular top diameter), 55 (circular top height).
- Side view details: (H) min. 600 (height to top of desk), (G) min. 650 (height to bottom of desk).

Technical drawing of the Windhager W 1000 cabinet. The drawing shows the front view of the cabinet with a door on the right side. The door is labeled "windhager" and features a handle and a lock. The cabinet is shown with a top section and a bottom section. Dimensions are indicated: a total height of 2000 mm, a cabinet height of 1665 mm, and a minimum depth of 1900 mm (noted as min. 2100 mm). A side view of the cabinet is also shown, indicating a depth of 1000 mm. The drawing includes a top section and a bottom section, with a dashed line indicating the internal structure. A note at the bottom right states "min. 2100 mm".

TECHNICAL DATA

BIOWIN2 PURE

10-33 KW

BioWIN2 Pure		BW 102Te	BW 152Te	BW 212Te	BW 262Te	BW 332Te
Nominal output	kW	3,0 – 10,5	4,3 – 15	6,0 – 21	7,6 – 25,9	9,8 – 32,5
Boiler efficiency at nominal load	%	93,2	93,3	93,6	93,3	92,8
Pellet fuel hopper	kg	71 / 107 / 200				
Installation dimensions, fuel hopper suction feed system/ 107 kg/200 kg (WxDxH)	mm	584 x 592 x 1471 / 584 x 592 x 1231 / 680 x 936 x 1473				
Installation dimensions, boiler body (WxDxH)	mm	767 x 812 x 1286		767 x 882 x 1286		
Total weight	kg	297 / 283 / 336		319 / 306 / 359		
Minimum weight, boiler body	mm	170		191		
Flue gas connection diameter	mm	130				
Electrical consumption (partial load/nominal load)	W	16 / 34	20 / 39	23 / 47	26 / 53	29 / 64
Energy efficiency category		A+				

- KV Boiler flow (1"-Pipe)

KR Boiler return (1"-Pipe)

E Boiler drain

A Pellet suction pipe (Ø 50 mm Pipe)

B Return air (Ø 50 mm Pipe)
- AO Top flue connection (Ø 130 mm)

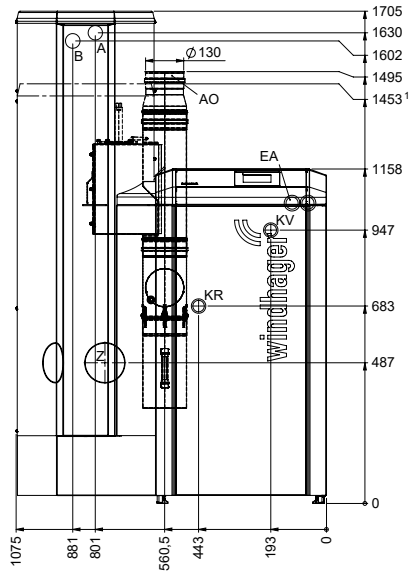
KT Boiler temperature sensor

EA Electric connection

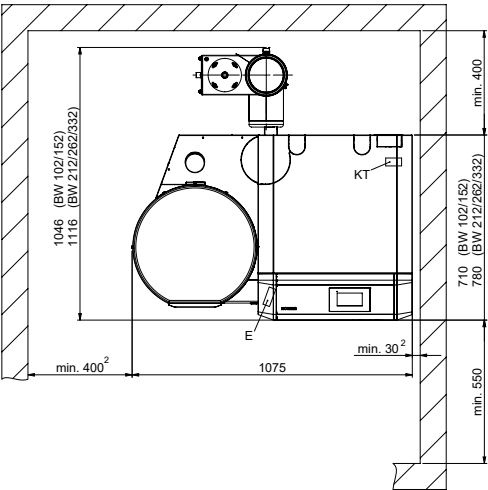
Z External combustion air (Ø 100 mm)

All measurements in mm. Minimum room height: 1850 mm

Front view:



View from the top, minimum distances:
(Flue gas pipe facing upwards*)





Best Water Technology meets Best Heating Technology

BWT HEATING WATER –
THE GUARANTEE FOR SUSTAINABLE,
ENERGY EFFICIENT OPERATION OF
YOUR HEATING SYSTEM

The transfer medium water plays an essential role in the energy efficiency of every heating system and saves you money. In addition, the low-salt, natural BWT heating water without any additives increases feel good moments and comfortable living in your home.



EFFICIENCY IN THE HEATING SYSTEM IS ALREADY BASED ON THE FILLING WITH THE CORRECT HEATING WATER:

In addition to its primary function - transporting warmth from the boiler to the living space - heating water must also have other properties: it must offer protection against deposits and corrosion and, when used as a hot water source, must not contaminate the drinking water.

When it comes to heating water, we rely on the innovative heating protection program from the BWT water experts – for the benefit of our facilities and for your utmost satisfaction..

1 INITIAL FILLING

Low-salt heating water
without additives

AQA Therm
Move Power*



3 RENOVATION

Purification and desalination
of water from operating
heating systems

AQA Therm
HRA VE*



2 REFILLING

Heating water group for perfect
salt reduced replenishment

AQA Therm
HWG Premium*



4 MONITORING

Early warning system for detection
of corrosion processes

AQA Therm
HSS Korrosionsmonitor*



* Purchased from BWT providing installer



A HEART FOR THE UNITED KINGDOM.

Windhager – pioneering the energy of tomorrow since 1921.

HEADQUARTER

BHT – BEST HEATING TECHNOLOGY – GMBH
Anton-Windhager-Straße 20
A-5201 Seekirchen bei Salzburg
T +43 6212 2341 0
F +43 6212 4228
info@at.windhager.com

UNITED KINGDOM

Windhager UK Ltd
Tormarton Road
Marshfield
South Gloucestershire, SN14 8SR
T +44 1225 8922 11
info@windhager.co.uk

Your expert PARTNER

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