WOOD PELLET BOILER



3 bis 26 kW



HIGHLY EFFICIENT AND COMPACT



+ 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-ofthe-mill solutions, but instead a heating system tailored to your needs.

BIOWIN ALPHA MOVING UP TO THE PREMIUM RANGE

The BioWIN Alpha is the ideal pellet heating solution to make your home feel cosy and comfortable. This compact boiler impresses by combining Windhager's extensively tried-and-tested pellet technology with an unbeatable price/performance ratio. Its fully automatic cleaning mechanisms make pellet heating really convenient. Dust-free ash transport into the compact ash box which has capacity for ash from up to 1500 kg of pellets is another very convenient feature.

TIP: For even more convenience and comfort, the BioWIN2 Touch pellet boiler is the ideal choice – and it only needs to be serviced every 2 years. (The BioWIN Alpha requires annual maintenance.)

You can rely on the BioWIN Alpha 100%. Its core component, the robust and extensively tried-and-tested stainless steel burner, delivers both reliability and durability for safe heating. Thanks to innovative LowDust technology, the BioWIN Alpha is also very environmentally friendly.

It is even fitted with the maintenance-free suction turbine as standard, a very gentle and flexible solution for pellet transport over distances of up to 15 metres from store to boiler.



+ CONVINCING DETAILS

The BioWIN Alpha makes heating with pellets particularly easy and convenient. Its innovative cleaning systems ensure that you hardly need to worry about a thing, because the BioWIN 2 Touch burns the wood pellets with great efficiency and very little ash is produced.

Patentierte Entaschung

Ein gegenläufiger Ascheschieberost sorgt dafür, dass keine Rückstände im Pelletsbrenner bleiben. Das erhöht die Betriebssicherheit deutlich und macht den Kessel unempfindlich gegenüber schwankender Pelletsqualität.

Small foot print

Including all minimum clearances, the BioWIN Alpha takes up less than 1.5 square metres. Therefore, together with the BioWIN2 Touch, it is the most compact pellet heating solution in its class. The flue pipe can be turned so the BioWIN Alpha 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.



You choose: tried-and-tested LCD controller or intuitive touch screen (optional accessory).

Every BioWIN Alpha features automatic heating surface cleaning as standard.

The small amount of ash produced is automatically transported to the sealed compact ash box..

TIP: our BioWIN2 Touch takes comfort and convenience to the next level.







+ CLEAN LOWDUST TECHNOLOGY

The BioWIN Alpha is impressive in several respects, including the fact that it is very environmental friendly to run. The innovative stainless steel burner with LowDust technology is so clean and efficient that the BioWIN Alpha is several times better than even the strictest statutory emission limit values. This has been confirmed both on the test rig and through comprehensive practical testing by a renowned test institute. Because the burner is made from high-grade stainless steel, it is also extremely robust and durable.

Wear-free ignition element

The patented ignition element of the BioWIN Alpha is just as robust as the stainless steel burner. Comprised of two U-shaped elements, it transfers the heat with great efficiency and speed. So, unlike the case with standard pellet boilers, the ignition element can be installed outside the combustion chamber. This protects against thermal loading and extends the service life.

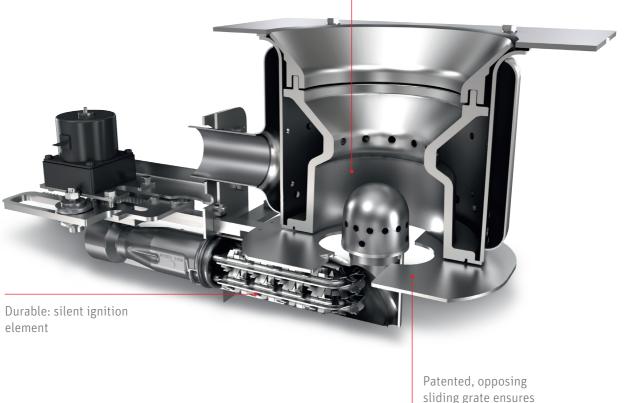
Neither the ignition element nor the stainless steel burner are wearing parts, but are covered by the Windhager guarantee.

DUST EMISSION - LIMITS

Data in mg/Nm³ (at 13 % 0,)



Primary and secondary air outside the ember bed ensures efficient and environmentally sound combustion



Patented, opposing sliding grate ensures the operational safety.

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

+ CONVERT FROM FOSSIL FUELS TO PELLETS

Our experience shows that it is possible to convert a heating system fuelled by fossil fuels to a BioWIN Alpha 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 shoud 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

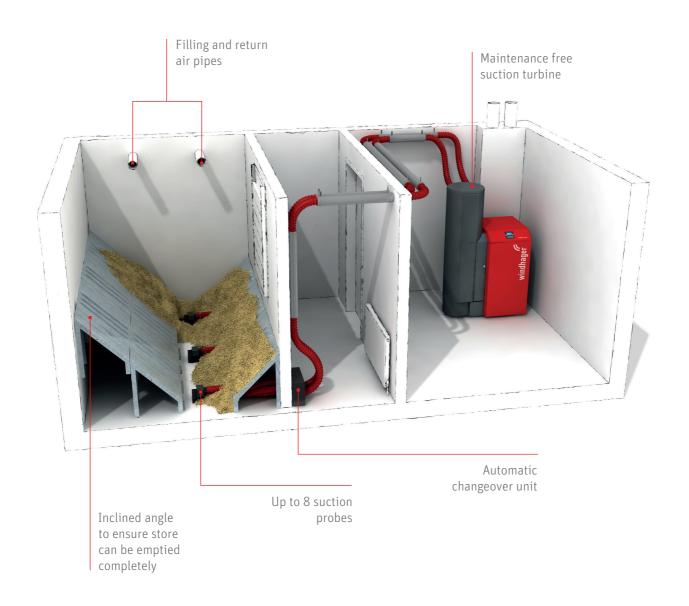
The Windhager storage room app makes planning your wood pellet storage room incredibly simple. You simply have to enter the length, width and height of the space available and you receive a tailored, scaled 2D view (view from front and above) in an instant. It also includes all important dimensions and 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.





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 m², 2 seperate stores (zones), storage room	Rectangular storage room with block walls, up to 6 m ²	Square storage room with block walls, up to 4 m 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 1)	15 or 25 m	15 or 25 m	15 or 25 m	
Storage room dimensions	Heat load ²⁾ in kW x 0,75 ³⁾ = storage room volume in m ³	Heat load ²⁾ in kW x 0,75 ³⁾ = storage room volume in m ³	Heat load ²⁾ in kW x 0,75 ³⁾ = storage room volume in m ³	

¹⁾ Standard 15 m. Optional suction turbine for over 15 m up to 25 m.

²⁾ The heat load refers to the amount of energy required to keep the interior of a building at a constant level of 20°C on the coldest day oft the year.

³⁾ 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

Sheet steal or fabric storage hoppers (see O1 and O2) are convenient alternatives to a block built pellet storage room. They can be installed as a standalone unit, making them perfect for homes with damp basement walls or exposed piping. Insufficient room for a pellet storage area in either your house or basement? A buried or outdoor hopper (see O3) is the perfect solution for you.



01. Sheet steel hopper



02. Fabric hopper



03. Buried hopper



+ THE FUEL WITH A FUTURE

Heating with wood pellets helps reduce the greenhouse effect and CO_2 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 consistant. 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

COMBINING AND OPERATING OUR PRODUCTS

Why complicate things, when it's so easy? With us you get everything from one source: innovative heating solutions and perfectly fitting heating components. Thanks to the Windhager system technology, you can combine all our products easily. The Energy is used efficiently, since MES INFINITY ensures that all components interact optimally.



With its clearly legible backlit display, the integrated InfoWIN Plus boiler operating unit makes it easy to control your entire heating system. An intuitive touch controller featuring a web server which also supports remote access via the myComfort app is available as an optional upgrade.

TIP: the BioWIN2 Touch features the touch display as standard.



+ TECHNICAL DATA BIOWIN ALPHA

KV Boiler flow (1" pipe)

KR.... Boiler return (1" pipe)

E Boiler drain

A Pellet suction pipe (Ø 50 mm pipe)

B Pellet suction pipe (Ø 50 mm pipe)

AH.... Rear flue connection (Ø 130 mm) AO.... Top flue connection (Ø 130 mm)

KT Boiler temperature sensor

EA Electric connection

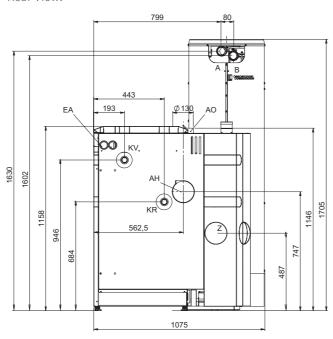
Z...... External combustion air (Ø 100 mm)

BioWIN Alpha

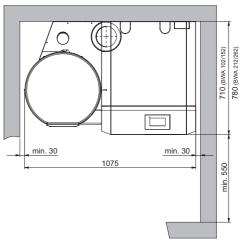
All measurements in mm. Minimum room height: 1750 mm

Gerätehöhe: 1705 mm

Rear view:



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



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

BioWIN Alpha		BWA 102	BWA 152	BWA 212	BWA 262
Rated thermal output range		3,0-9,9	4,3 - 15	6,3 – 21	7,6 - 25,9
Boiler efficiency at nominal load		94,4	93,8	93,9 ²⁾	93,9
Pellet fuel hopper		107			
Main boiler body with transport frame W x D x H	mm	767 x 812 x 1286			
Delivery dimension main boiler body W x D x H	mm	714 x 650 x 1146 714 x 720 x 1146			
Pellet hopper with transport frame W x D x H		660 x 612 x 1611			
Delivery dimension pellet hopper W x D x H	mm	584 x 592 x 1471			
Total weight	kg	286 308		808	
Weight of heat generator	kg	200		221	
Minimum weight of main boiler body	kg	170		191	
Flue gas connection diameter	mm	130			
Power consumption part load / nominal load		16 / 28	18 / 33	19,6 / 41,2 ¹⁾	21 / 48
Energy efficiency category		A+			

¹⁾ Interpolated from two values

. 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.

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