

**+** HEATING FOR PELLETS

SINCE 1921  
**windhager**  
HEAT WITH VISION

10 to 60 kW, Cascade up to 240 kW

# BIO WIN XL



FOR MULTI-DWELLING HOMES  
OR COMMERCIAL PROPERTIES

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# + HEATING SINCE 1921

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For almost 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 and have suitable heating systems for every fuel and solar energy.

## **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.



# THE COMPACT PELLET LARGE- SCALE BOILER

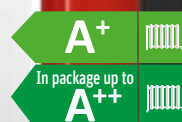
The BioWIN XL from Windhager ensures long-term, carefree heating. Every component of the pellet boiler is carefully designed and state-of-the-art. Thanks to its compact construction, it can be readily transported into the basement. The BioWIN XL requires a footprint of only 1.12 square metres, despite heat exchanger, 105 kg pellet supply container and large, integrated ash box.

Even larger buildings such as multi-dwelling houses or commercial buildings with heating requirements of up to 240 kW can be heated with the BioWIN XL. Up to four boilers are connected in a cascade for this purpose. Thanks to the flexible pellet feed, with up to eight probes per boiler, space in the storage room can be put to optimum use.

Minimal space requirements for single boilers and on cascade

No need to empty the box regularly, as it can hold the ash of 8 tonnes of pellets

The wear free double ignition element is durable and maintenance free



BioWIN XL

10 to 60 kW, cascade up to 240 kW

# + CONVINCING DETAILS

The BioWIN XL makes heating with pellets particularly easy and convenient. Its innovative cleaning mechanisms save on lots of work. The heating surfaces are cleaned automatically and a patented, reverse sliding grate ensures a clean burner pot. Since the burner floor opens up, larger pieces of residue left from combustion may be reliably removed as well.

## **Safe and silent ignition**

The Windhager double ignition element is extremely durable and maintenance-free. And that's not all! The patented ignition device is, in comparison to conventional manufacturers, not a wearing part, but is included in the five-year guarantee. Additional benefit: The ignition is absolutely silent.

Flexible pellet transport thanks  
to patented suction system

Fully automatic  
heating surface  
cleaning and ash  
removal

The durable stainless  
steel burner burns  
particularly efficiently  
and cleanly



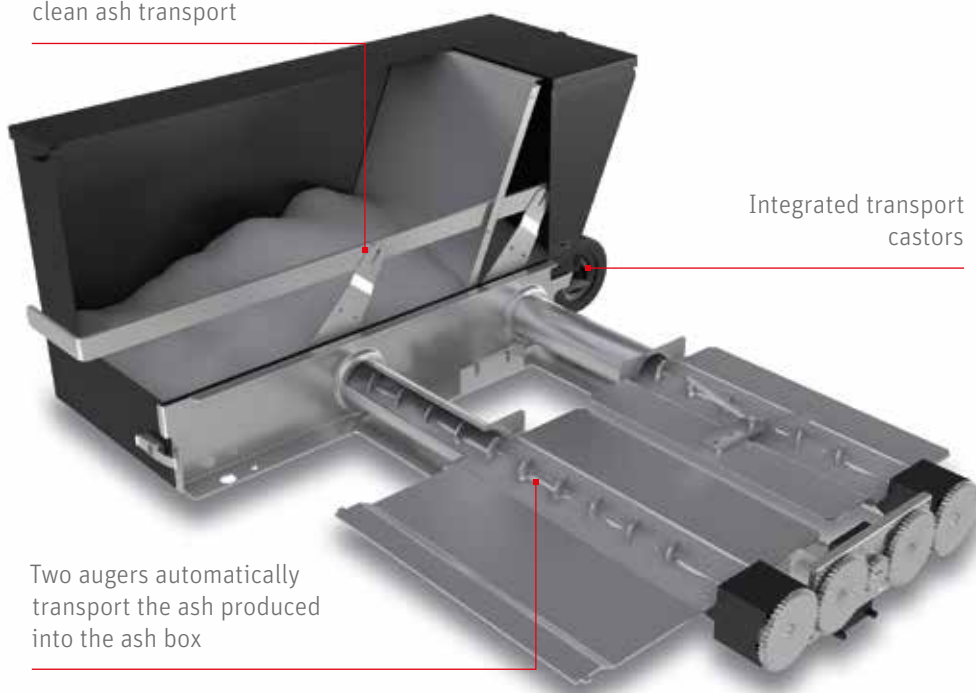
# + EMPTY ASH LESS FREQUENTLY

Because the BioWIN XL burns the pellets with great efficiency, very little ash is produced. It only has to be emptied one to three times a year, as the large, closed ash box that is integrated in the boiler can hold the ash of up to 8 tonnes of pellets. You will find this level of convenience with no other pellet heating system in this class.

Transport and locking  
lever for convenient and  
clean ash transport

Integrated transport  
castors

Two augers automatically  
transport the ash produced  
into the ash box





# + COMBINING AND OPERATING OUR PRODUCTS

A total system solution that is simple and uncomplicated. With Windhager you get all system components from one source: Innovative heating solutions and integrated system components. Thanks to the Windhager system technology, you can combine all our products easily. The Energy is used efficiently, since MES<sup>PLUS</sup> ensures that all components interact optimally.



# + 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 XL pellet boiler in only a matter of days and integrates into existing heating systems seamlessly.

## **The optimum pellet storage room**

The ideal pellet storage room should be dry and large enough to hold up to a year's supply of 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 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

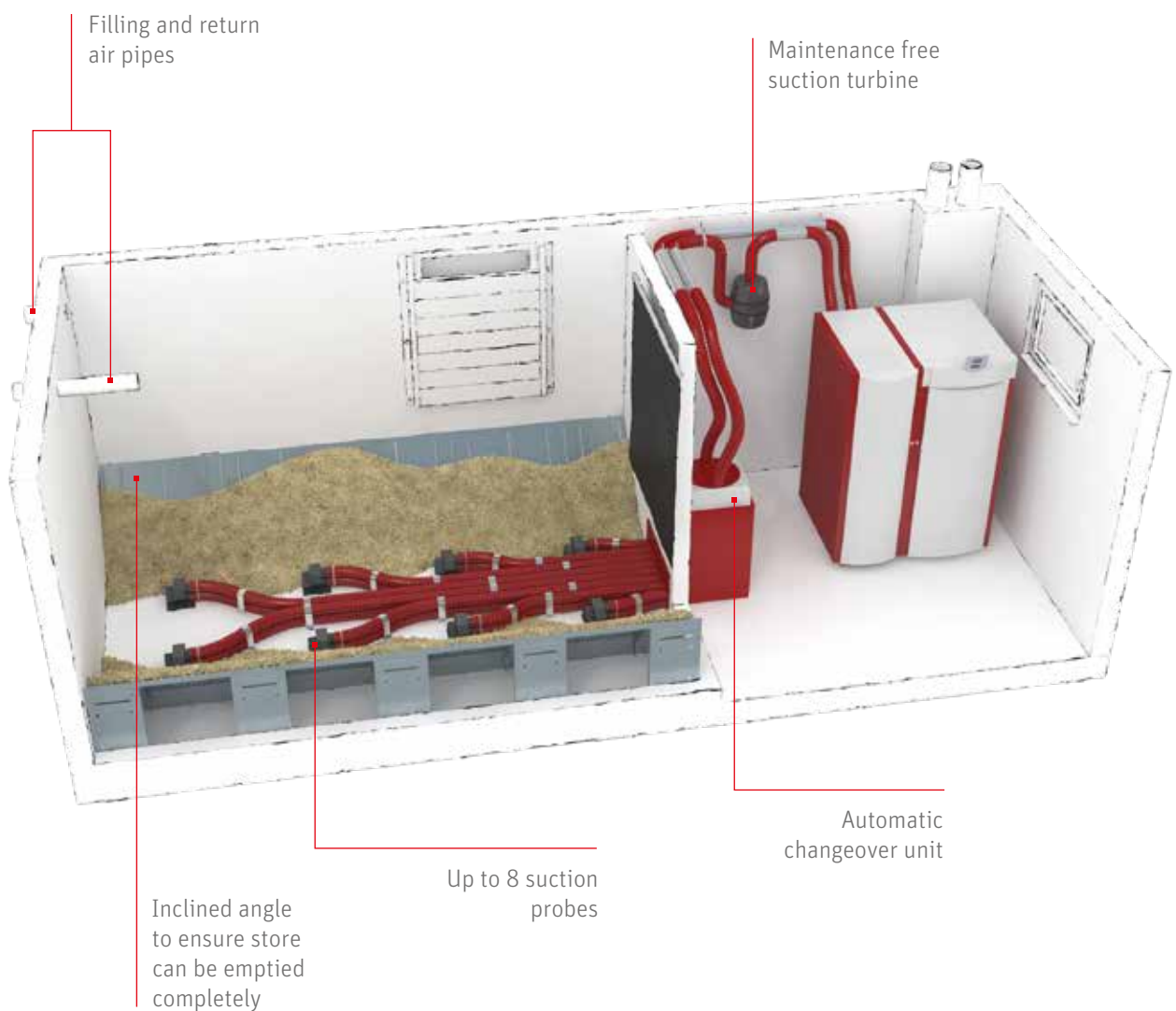


Android



### Design a pellet storage room in a flash

When constructing your 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.



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+ YOUR PELLET STORAGE

No matter whether you have a special room for your 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 pellet storage room, you can choose from a one, three or eight probe solution.

	8 probes	3 probes
Recommended use	Blockbuilt storage room, at least 4 m², 2 seperate stores (zones), storage room	Rechteckiger gemauerter Lagerraum bis 6 m²
Inclined floor	Useful for pellet hoppers from 8m²	often a good idea
Function	automatic, 'Purge and Change Over'	automatic, 'Purge and Change Over'
Reliable suction distance	25 m	25 m
Storage room dimensions	Heat load <sup>1)</sup> in kW x 0,75 <sup>2)</sup> = storage room volume in m³	Heat load <sup>1)</sup> in kW x 0,75 <sup>2)</sup> = storage room volume in m³

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 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**

Steelheet 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.



O1. Sheet steel hopper



O2. Fabric hopper



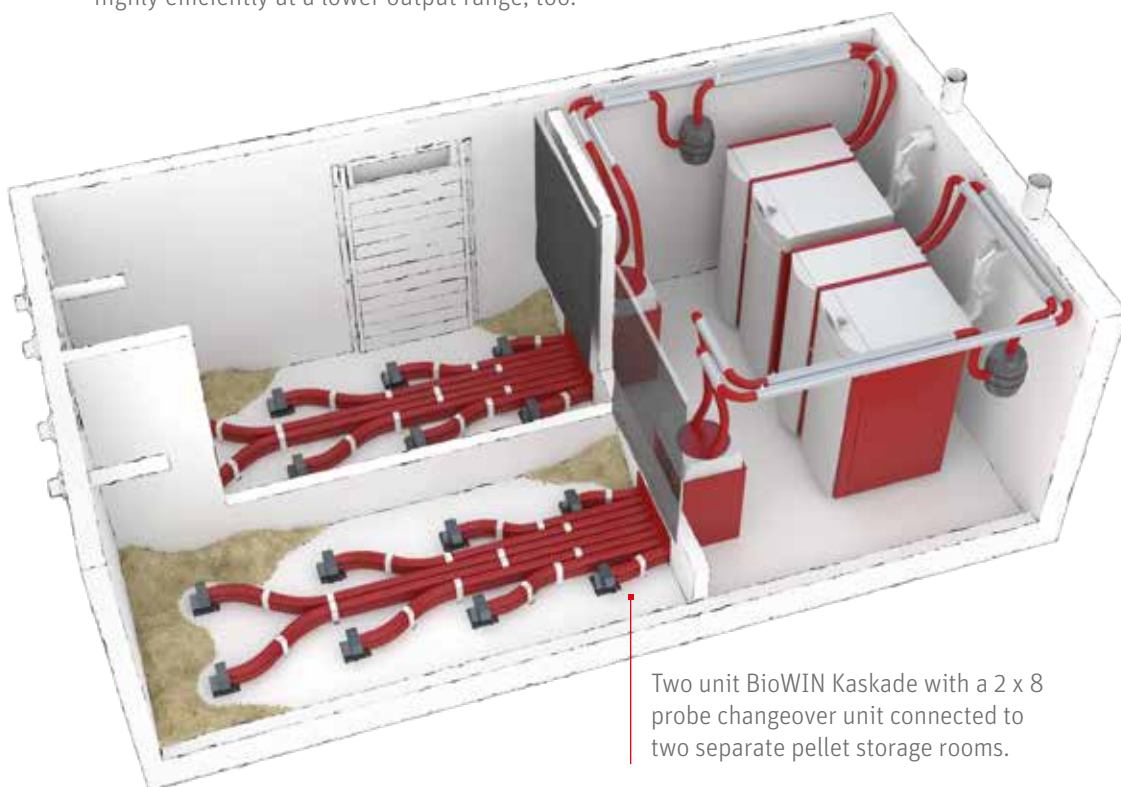
O3. Buried hopper

# + BIOWIN XL CASCADE

## Excellent output with pellets

The BioWIN XL can be connected to two-unit, three-unit and four-unit cascade systems, covering heating requirements up to 240 kW. In addition, a gas-fired peak load or back-up boiler can be incorporated, for example.

Specially developed by Windhager, the cascade 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 run times. Thanks to its considerable modulation depth, the BioWIN XL cascade operates highly efficiently at a lower output range, too.



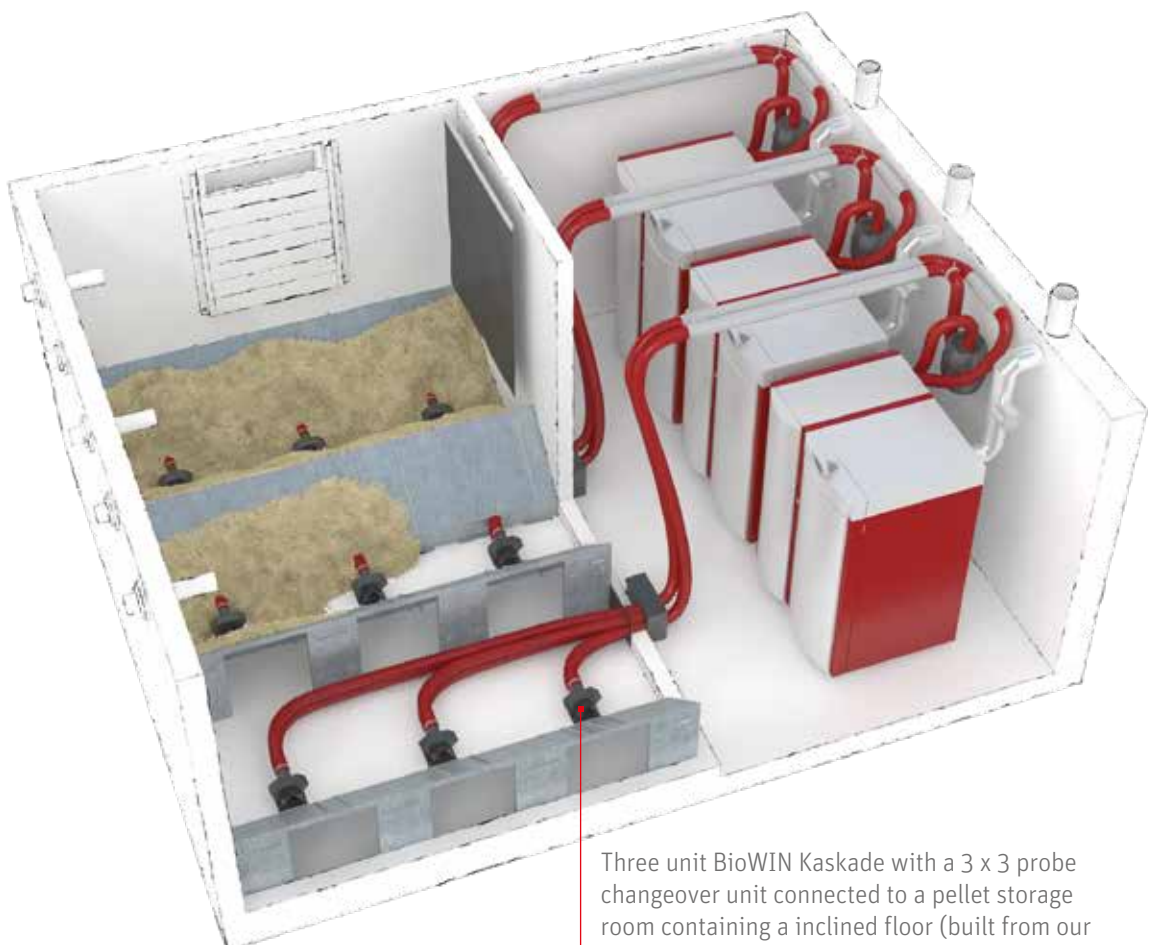
Two unit BioWIN Kaskade with a 2 x 8 probe changeover unit connected to two separate pellet storage rooms.

### Reliable heating

In comparison to a large boiler system, the cascade system is extremely reliable: if one unit fails to heat, you can continue heating normally with the second unit. And service work can be carried out without having to switch off the heating.

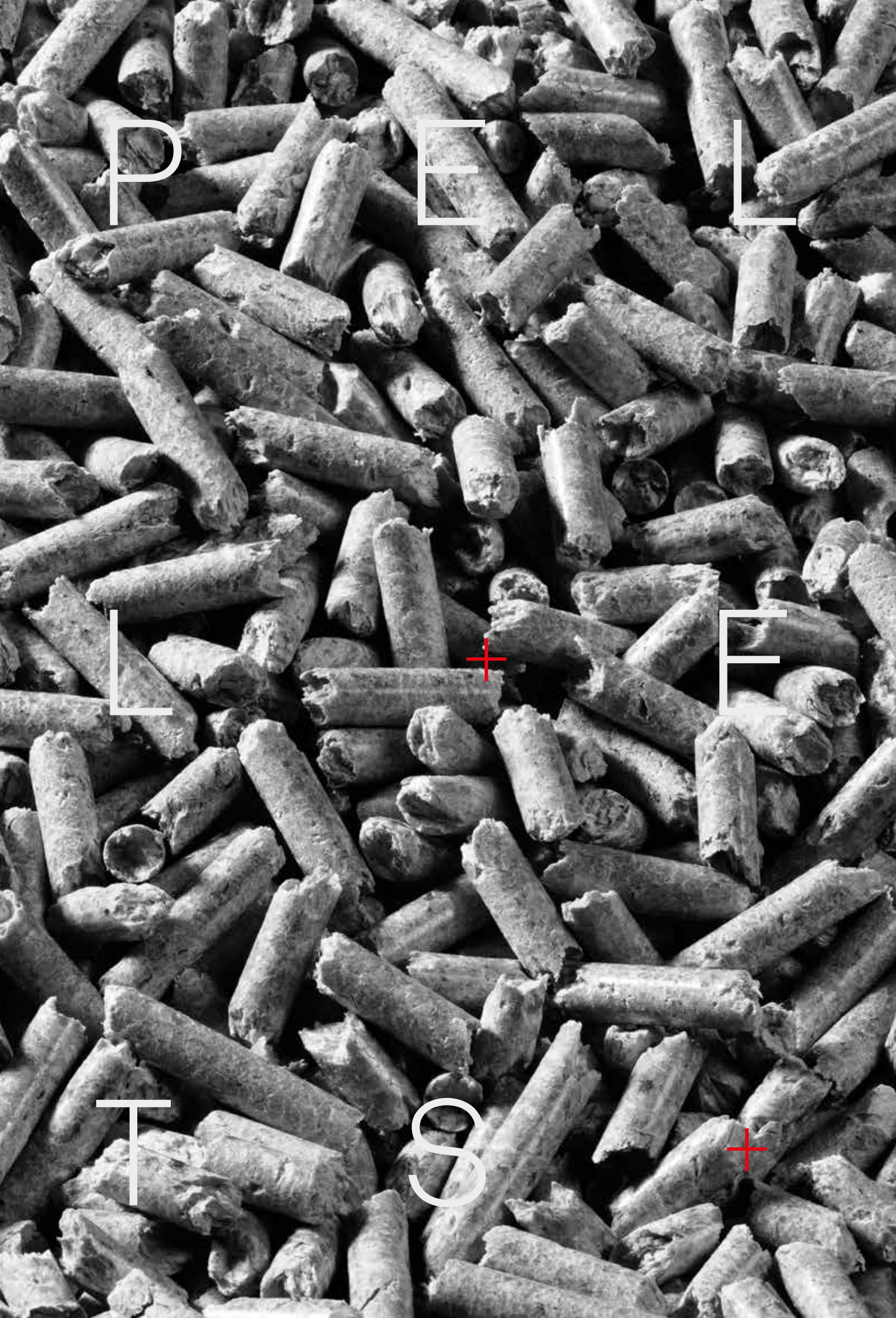
### Space-saving and flexible

Even when space is tight, the BioWIN XL cascade is easily accommodated thanks to its special intermediate frame. The two-unit cascade, for example, requires just 6.8 square metres of space. The boilers can be arranged up to a distance of twelve centimetres. With a choice of a three or eight suction probe system per boiler, the cascade is also flexible in terms of pellet storage.



Three unit BioWIN Kaskade with a 3 x 3 probe changeover unit connected to a pellet storage room containing a inclined floor (built from our quick modular sheet-steel inclined floor).





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# + THE FUEL WITH A FUTURE

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Heating with pellets helps reduce the greenhouse effect and CO<sub>2</sub> emissions. The compacted wood pellets contain low levels of sulfur 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.

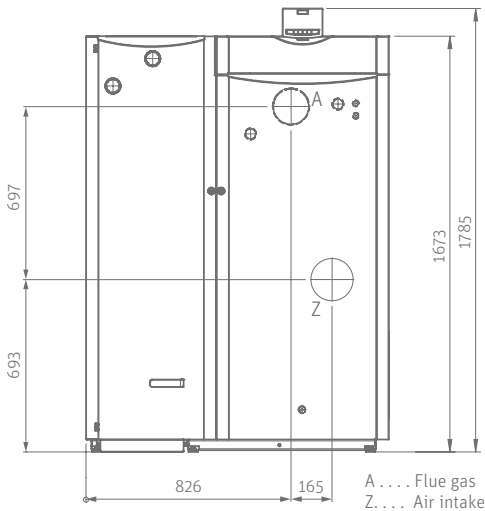
Environmentally friendly  
Renewable and sustainable  
Good value and price stability

# + TECHNICAL DATA

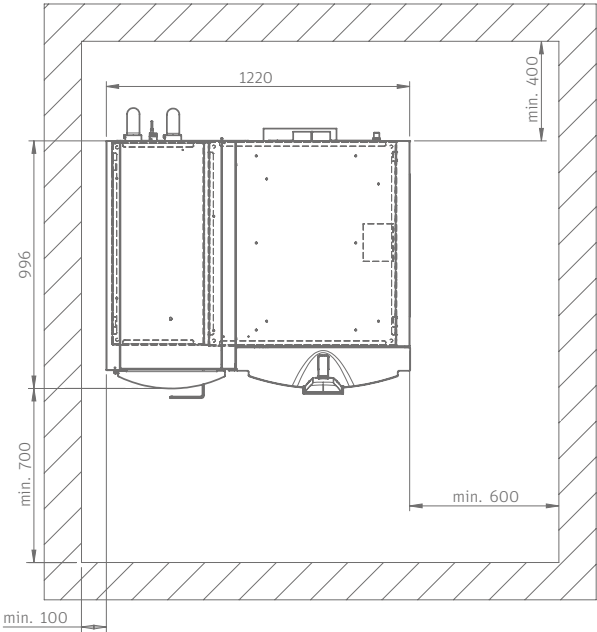
**BioWIN XL**

All measurements in mm. Minimum room height: 1889 mm

Front view:



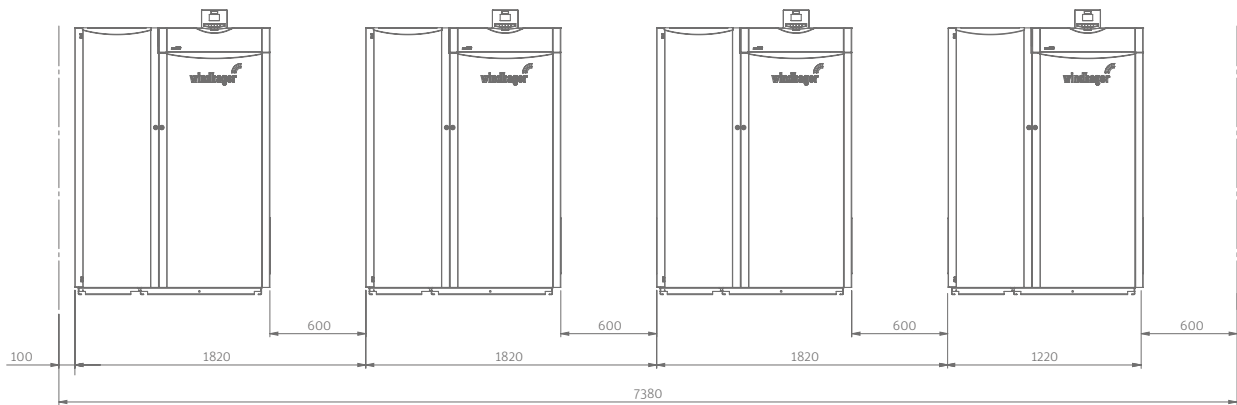
View from above:



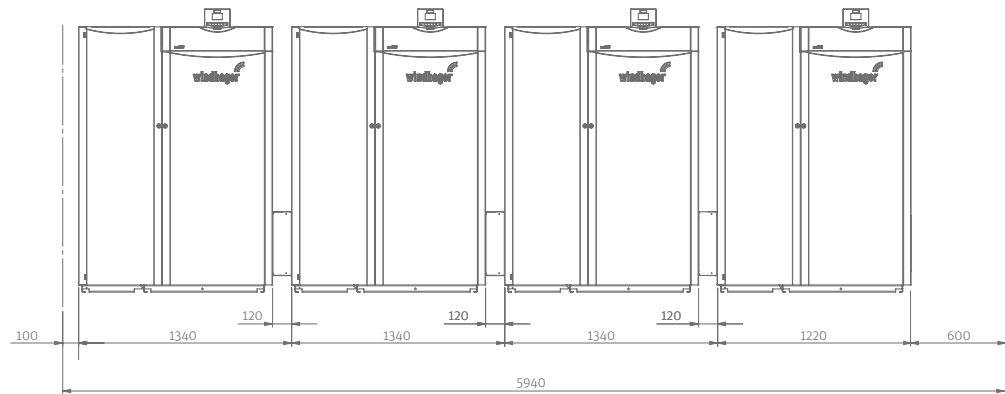
BioWIN XL	Unit	BioWIN XL 350	BioWIN XL 450	BioWIN XL 600
Rated thermal output range	kW	10 – 35	13,5 – 45	18 – 60
Boiler efficiency at nominal load	%	91,2	90,7	90,1
Pellet fuel hopper	kg	105		
Boiler weight – completely mounted	kg	700		
Boiler part transport weight	kg	480		
Installation dimensions W x D x H	mm	780 x 975 x 1790		
Flue gas connection diameter	mm	150		
Power consumption at part load / nominal load	W	43 / 103	53 / 122	63 / 156
Energy efficiency category		A+		

BioWIN XL KASKADE

Lateral minimum clearances and space requirements  
standard



with BIO 120 intermediate frame



# + 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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Your expert PARTNER

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