

PELLETS

Pellet Storage Solutions

windhager

HEAT WITH VISION

PLAN WITH
OUR APP!

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Multiple Solutions for
Windhager Wood Pellet Boilers

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Heat with Vision

For more than 90 years, we have been keeping families and homes warm throughout Europe. After decades of experience, we are experts in creating environmentally friendly heating solutions. By providing reliable comfort for both today and tomorrow, our heating solutions prove that our knowledge is the foundation of low carbon technologies. Clients receive heating systems tailor made to suit their needs, which will provide reliable warmth in their homes for decades.

We produce our high-quality boilers exclusively in Seekirchen am Wallersee, a small town near Salzburg, Austria. Our innovative products impress not only our customers, but also independent testing institutes, who regularly document our premium quality. All Windhager pellet boilers exceed European standards.



It Couldn't Be Easier

Out with Fossil Fuels, In with Pellets

Pellets are the ideal alternative to expensive fossil fuels. Conversion to a pellet heating system requires little time and can be completed in just a few days.

Tip:

Plan your pellet store quickly and easily with the Windhager App



Fossil fuels such as oil and gas are not only costly, but also an expensive heating solution. Wood pellets are a renewable raw material that are ideal for people who want reduced heating costs. At the same time, they will contribute towards protecting the environment .

Converting to a Windhager pellet heating system is quick and easy. Structural changes are rarely necessary; existing radiators and even underfloor heating can still be used as before.

Before installing a new heating system, the chimney should be inspected by an expert. If the flue does not meet the requirements, it can easily be retrofitted with the appropriate system - i.e., a stainless-steel system.

PELLETS STORE APP

Download from the App-Stores oder read QR-Code.

Apple iOS



Android





Converting to Pellets Quickly and Easily

Our experience demonstrates that installing a pellet heating system can be completed quickly and simply.



Day 1

The installer removes the old boiler and oil tank, and replaces valves and parts of the boiler control system, as well as old pumps and pipes. Should chimney modernisation be necessary, a stainless sheet-steel chimney system can be retrofitted. The suction probes and filling pipes are fitted in the pellet storage room.

Day 2

The hydraulics and new boiler are installed. The hose system for transporting pellets is laid down and the new pellet hopper is prepared.

Day 3

The electronic components can now be connected, and the pellets blown into the storage room. A function check of the new heating system guarantees proper operation.

The Optimal Storage Room



The Classic Storage Room with Masonry Walls

The ideal pellet storage area is dry, contains sufficient room for up to a year's supply of pellets, and is located on an exterior wall.



Dry pellet store

Moisture causes pellets to swell up and degrade. Therefore, the pellet storage room must be dry.

Sealed and solid

The walls and ceiling must correspond to the respective fire-resistance classes.

No exposed cables or pipes

There must be no exposed electrical cables, fuse boxes, water pipes, or light sources in the pellet store.

Door protection

Wooden boards (which can be removed individually), must be mounted on the inside of the door so the pellets do not press against the door.

Fire protection doors

Doors and entry openings must open outwards, be securely sealed, and be configured as fire protection doors.



The Fully Automated Pellet Feed

To ensure reliable pellet supply, Windhager has developed a fully automatic feed system in which the pellets are carefully transported in an air current.

The pellet suction system, patented throughout Europe by Windhager, offers many advantages. The storage room does not need to be located directly next to the boiler room, because the hoses allow for transport distances of up to 25 metres. Pellets are carefully transported to the boiler without raising dust. Additionally, no electrical cables or motors are required in the pellet storage room. We offer three fully automatic models, each individually tailored to your pellet storage area: a single, triple, or eight-probe solution.

- Unequaled flexibility
- Completely maintenance free
- Fast and simple installation process

	8 probes	3 probes	1 probe with agitation
Recommended use	<ul style="list-style-type: none"> • Brick-walled storage room, at least 4 m² • 2 separate stores (zones) • Storage room special configurations: e.g. L-shaped 	Rectangular storage room with masonry walls, up to 6 m ²	Square storage room with masonry walls, up to 4 m ²
Inclined floor	Not usually necessary	Often a good idea	Often a good idea
Safety function	Automatic, "Purge and Change Over"	Automatic, "Purge and Change Over"	Automatic, agitation
Reliable suction distance	Up to 25 m	Up to 25 m	Up to 25 m
Storage dimensions	Heat load ¹⁾ in kW x 0.75 = storage room volume in m ³	Heat load ¹⁾ in kW x 0.75 = storage room volume in m ³	Heat load ¹⁾ in kW x 0.75 = storage room volume in m ³

¹⁾ The heat load indicates how much energy must be generated so that on the coldest day of the year, a constant inside temperature of 20 °C can be maintained. This is the boiler output.

Storage Room with Masonry Walls

8-Probe Suction Solution

We recommend the 8-probe solution for pellet storage rooms with no inclined floors and an area between 4 and 8 m². Inclined floors are only required in storage rooms with areas greater than 8 m². Storage rooms may cover a maximum area of 24 m², which corresponds to a volume of approximately 26 tonnes of pellets.

Advantages:

- Save costs and time associated with installing inclined floors in the storage room.
- 30% more pellet storage space.
- The pellet storage room location is independent of the boiler room location.
- Up to 8 suction probes create an incredibly reliable system.
- Patented, maintenance free system.
- Reliable suction power up to 25 metres.
- Possibility of employing two separate storage rooms.
- Additional "Purging" safety function prevents blockages.



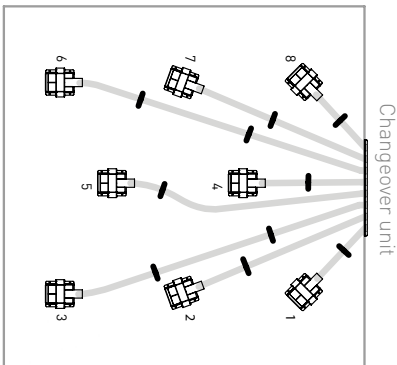
SPACE USAGE
FLEXIBILITY
STORAGE ROOM SIZE



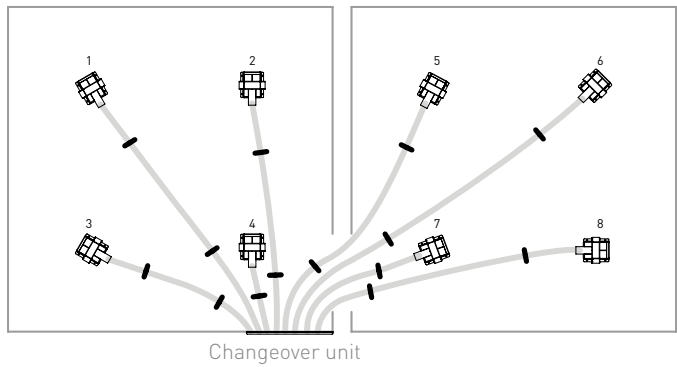


Storage Room Options

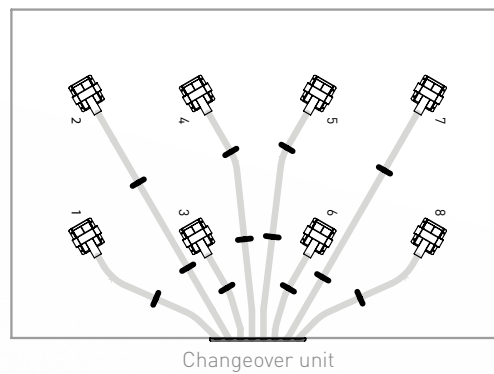
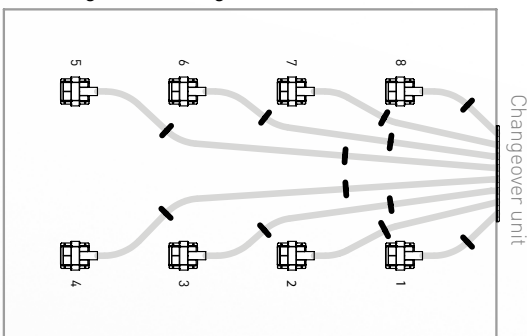
Square storage room



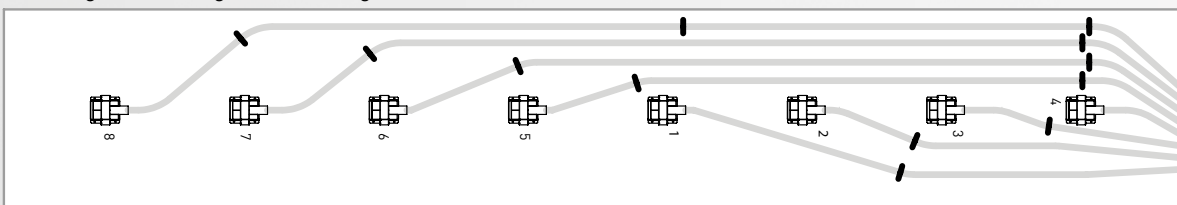
2 separate storage rooms



Rectangular storage room (double row)



Rectangular storage room (single row)



Storage Room with Masonry Walls

3-Probe Suction Solution with Inclined Floors

We recommend the 3-probe solution for rectangular storage rooms with areas of 2.5 m² or more. The maximum area is 6 m², corresponding to a volume of approximately 7 tonnes of pellets.

Advantages:

- The pellet storage room location is independent of the boiler room location.
- Reliability is ensured by three pellet suction systems.
- Patented, maintenance free system.
- Reliable suction power up to 25 metres.
- Additional "Purging" safety function prevents blockages.



SPACE USAGE
FLEXIBILITY
STORAGE ROOM SIZE





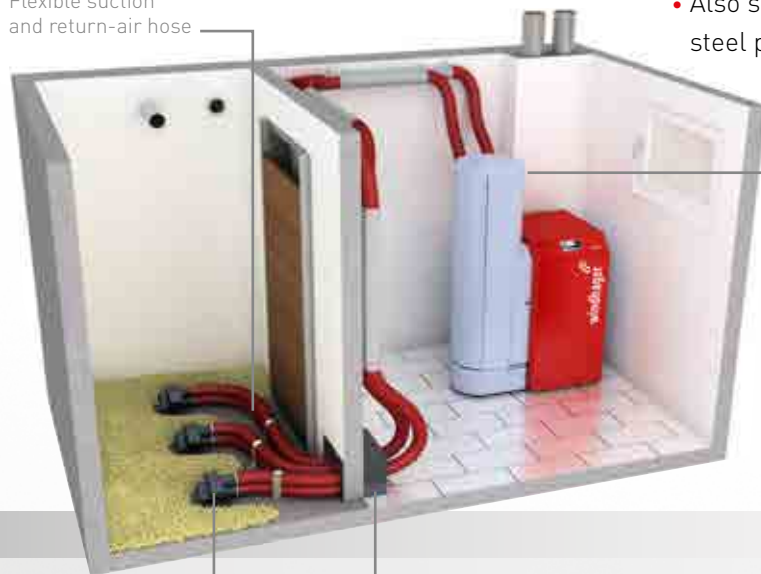
3-Probe Suction Solution without Inclined Floors

We recommend the 3-probe solution without inclined floors for rectangular pellet storage rooms with areas of 1.5 m² or more. Without inclined floors, the storage room should have a maximum area of 3 m², corresponding to approximately 4 tonnes of pellets.

Advantages:

- Save costs and time associated with installing inclined floors in the storage room.
- The pellet storage room location is independent of the boiler room location.
- Reliability is ensured by three pellet suction systems.
- Patented, maintenance free system.
- Reliable suction power up to 25 metres.
- Additional "Purging" safety function prevents blockages.
- Also suitable for use with Windhager's range of sheet steel pellet hoppers.


Flexible suction and return-air hose



Suction turbine (e.g. BioWIN 2)

Suction probe

Fully automatic changeover unit for 3 suction probes

	SPACE USAGE	
	FLEXIBILITY	
	STORAGE ROOM SIZE	

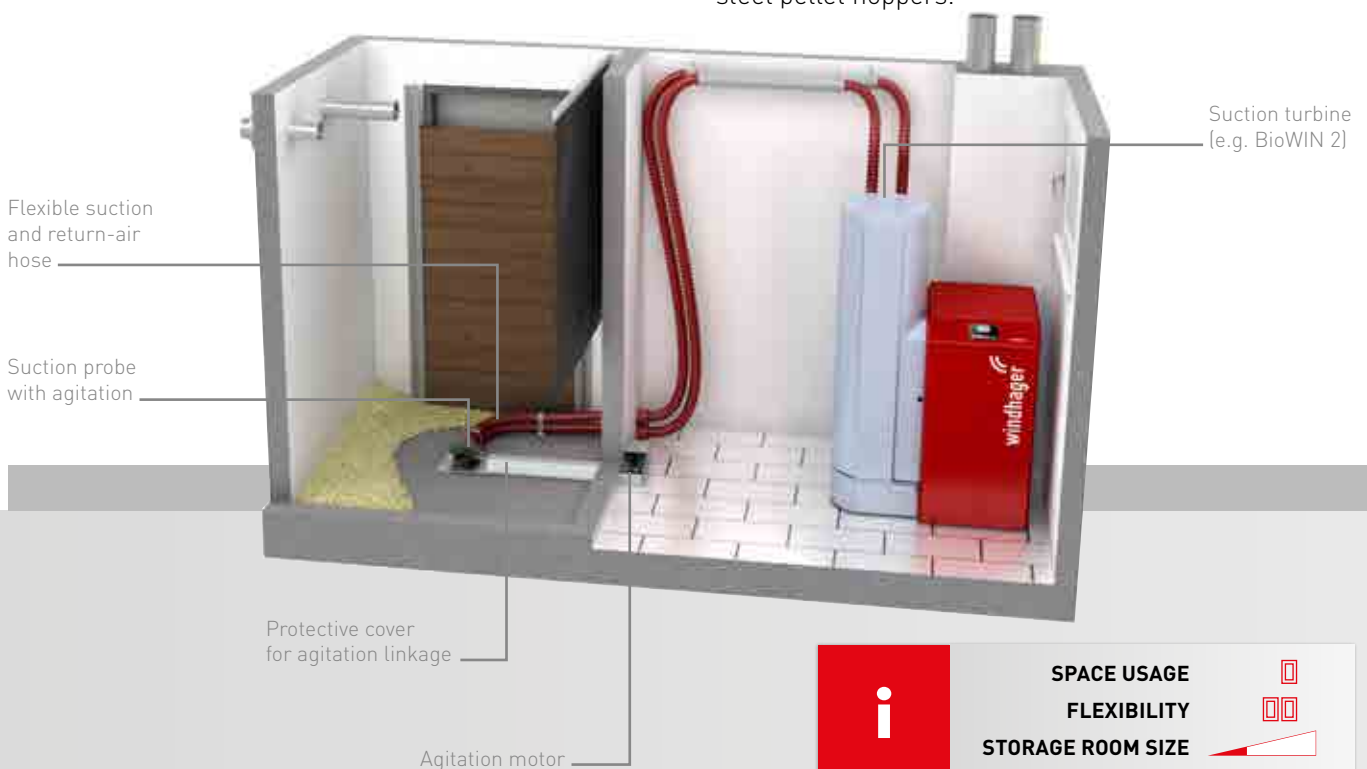
Storage for New Buildings

1-Probe Suction Solution

We recommend the 1-probe suction solution for small pellet storage requirements. The floor of the pellet storage room should ideally be square with an area of no more than 4 m² (approx. 4.5 tonnes of pellets). If the area is less than 2 m², no inclined floors are necessary.

Advantages:

- Ideal for small pellet storage requirements and new buildings.
- Economical starter solution for fully automatic pellet transport.
- The pellet storage room location is independent of the boiler room location.
- Patented, maintenance free system.
- Reliable suction power up to 25 metres.
- Also suitable for use with Windhager's range of sheet steel pellet hoppers.



SPACE USAGE
FLEXIBILITY
STORAGE ROOM SIZE



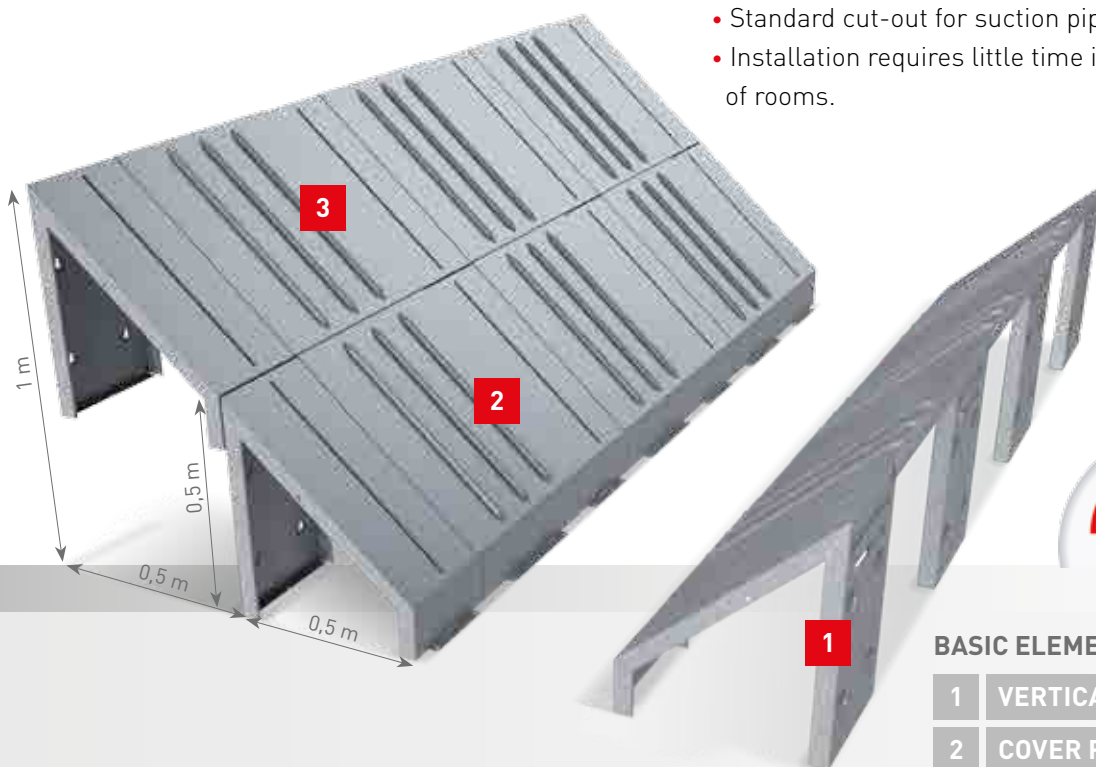


Modular Steel Sheet Inclined Floor

An important question when setting up a pellet store is how to erect an ideal storage room easily and economically. Often, an inclined floor must be built, for which we have developed a modular, economical, and stable solution.

Advantages:

- Easy installation – just position and screw into place
- Custom-fit solution for all storage room sizes.
- Simple, self-explanatory construction with only three basic elements.
- Galvanised steel sheet has a long service life and ensures easy pellet movement.
- Tested stability up to a room height of 3 meters.
- Standard cut-out for suction pipe feed-through.
- Installation requires little time in even the most varied of rooms.



BASIC ELEMENTS:

- | | |
|---|--|
| 1 | VERTICAL SUPPORT 0.5M |
| 2 | COVER PLATE 0.5M |
| 3 | COVER PLATE FOR EXTENSION TO 1M SLOPING SURFACES |

Optional: Front cover plates 0.5 m and 1 m

Storage Alternatives



Sheet-Steel Pellet Hopper

A sheet-steel pellet hopper is an alternative to constructing a pellet storage room. The hopper can be installed directly in the boiler room.

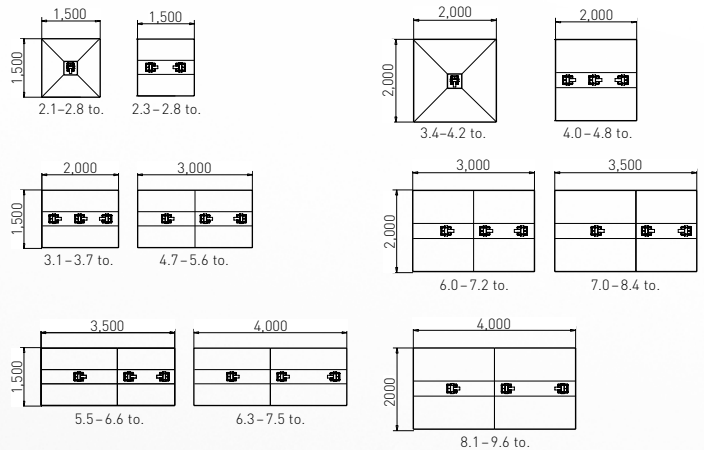
Advantages:

- Flexible adaption to site conditions* (22 types and up to approximately 10 tonnes).
- Can be installed directly in the boiler room.
- High stability and mechanical strength.
- Ideal store solution for damp installation rooms.
- Reliable suction up to 25 metres.



Suction probe with agitation or multiple probes with change-over unit

Flexible suction and return-air hose



* Available in 1.9- and 2.2-metre heights

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SPACE USAGE

FLEXIBILITY

STORAGE ROOM SIZE



Fabric Pellet Hopper

A fabric hopper is another alternative solution for the storage of pellets. Like the sheet-steel pellet hopper, the fabric tank can be installed directly in the boiler room.

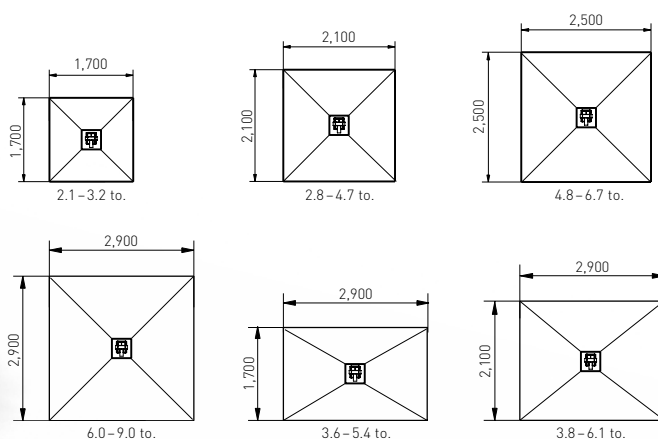
Advantages:

- Flexible height adjustment from 1.8 to 2.5 m.
- Available in 6 sizes (up to 9 tonnes in volume).
- Can be installed directly in the boiler room (must maintain legal specifications and distances).
- Long service life, due to galvanised frame construction and durable, anti-static plastic fabric.
- Reliable suction up to 25 metres.



Suction probe with agitation

Flexible suction and return-air hose



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SPACE USAGE

FLEXIBILITY

STORAGE ROOM SIZE

Storage Alternatives

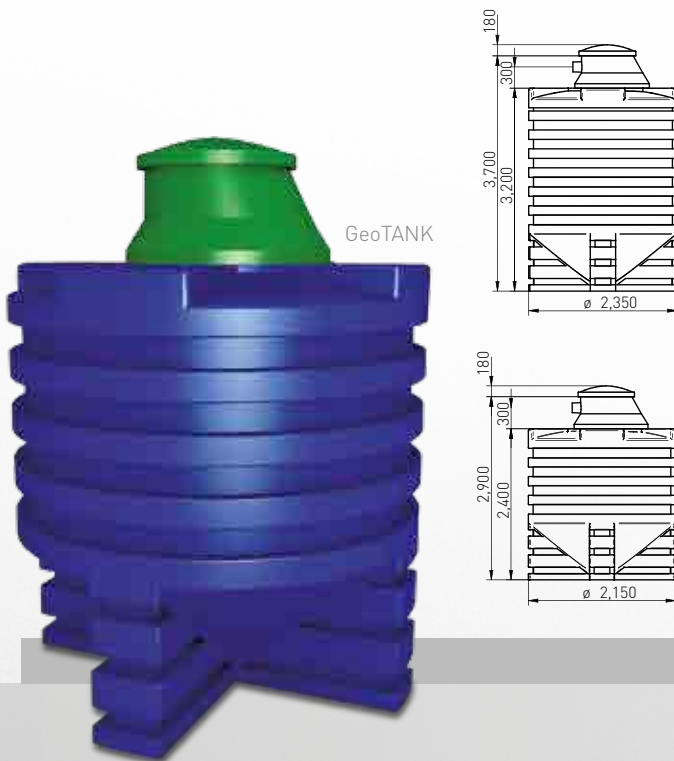


Buried and Outdoor Tanks


Insufficient room for a pellet storage area in either your house or basement? A buried or outdoor tank is the perfect solution for you.


Advantages:


- Storage solution for use outside buildings.
- Dry and secure pellet storage, regardless of weather.
- Buried tanks with 4 to 6 tonnes capacity (on request).
- Outdoor tank with 1.7 tonnes capacity.




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SPACE USAGE 


FLEXIBILITY 

STORAGE ROOM SIZE 

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SPACE USAGE 

FLEXIBILITY 

STORAGE ROOM SIZE 



Manual Filling

Single bags or bulk bags? Storage rooms with masonry walls can also be used to manually fill your Windhager pellet boiler. Should you later desire to install an automatic feeding boiler, our suction system can be retrofitted at any time.

Advantages:

- Unique: all Windhager pellet boilers can also be filled manually.
- Daily / weekly use hopper supplied as standard.
- Heating system can be operated before the store is completed.
- Suction/feed system can be retrofitted at anytime.

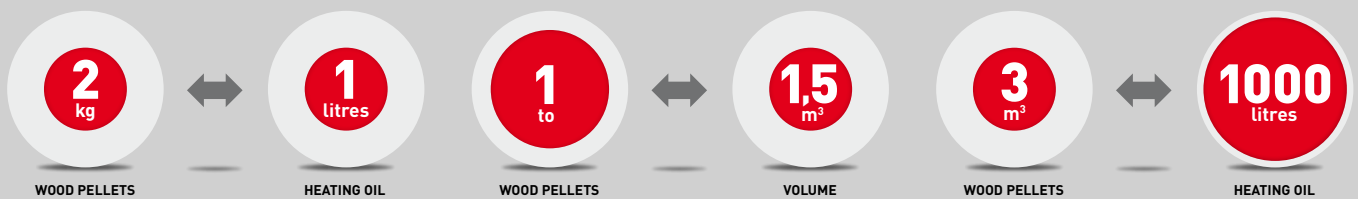
Cheaper fuel costs
No carrying bagged material
Reduced space requirements



Planning Aids



Conversion Formulas



Fuel consumption¹⁾ and storage room design

Building heat load (kW)	Annual consumption (kg)	Annual volume required (m ³)	1 probe without inclined floors	1 probe with inclined floors	3 probe without inclined floors	3 probe with inclined floors	8 probe without inclined floors	8 probe with inclined floors
3	1,200	1.8	Green					
5	2,000	3.1	Light Green	Green	Green			
8	3,200	4.9	Orange	Light Green	Light Green	Green		
10	4,000	6.2	Red	Yellow	Light Green	Light Green		
12	4,800	7.4		Orange	Orange	Light Green	Green	
15	6,000	9.2		Red	Orange	Orange	Light Green	
20	8,000	12.3			Red	Orange	Light Green	Green
25	10,000	15.4				Red	Orange	Light Green
35	14,000	21.5					Orange	Light Green
45	18,000	27.7					Red	Yellow-Green
60	24,000	36.9						Yellow

1) Approximation, without taking hot-water requirements into consideration

Energy use of stored pellet volume greater than 90 %

Energy use of stored pellet volume less than 70 %



Pellet Heating Solutions from Windhager

From pellet boilers installed in the basement to central heating in the living area, we have the right solution for every situation.



BioWIN 2

Safe, clean, and economical
3.0 – 25.9 kW

- Compact - minimal space requirements
- Highly efficient with LowDust Technology
- Available in four output ranges



BioWIN Excel

The future of pellets
10 – 60 kW

- Suitable for large domestic and commercial applications
- Available in three power levels up to 60 kW
- Pellet feed system with up to eight probes



VarioWIN XS

Perfect for small heating requirements
1.7 – 6 kW

- Ideal for passive and minimum energy buildings
- Pellet central heating for the entire floor
- Compact and space conscious



VarioWIN

Technology creates possibility
3.6 – 12 kW

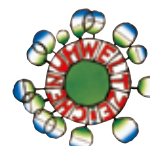
- Pellet central heating for the entire floor
- With options of three fuel feeding systems
- Compact and space conscious



FireWIN

Central heating with style
4.7 – 12 kW

- Pellet central heating for the living area
- Fully automatic pellet feed available
- Available in three colours



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Publication details

Media owner, issuer and publisher:
Windhager Zentralheizung GmbH,
Anton-Windhager-Straße 20
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Photos: iStockphoto

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