



BIOWIN 2 TOUCH

FOR USE IN CANADA / USA







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IMPORTANT INFORMATION FOR SYSTEM OPERATORS

Dear Heating System Owner,

We would like to congratulate you on your new environmentally friendly heating system. With the purchase of this highquality product by Windhager, you have selected a system that provides more comfort and optimised fuel consumption while utilising an environmentally friendly means of saving resources. Your boiler was manufactured under strict ISO 9001-certified standards, was subjected to extensive tests and all the components are recyclable.

We have provided specific information and important tips regarding systems operation, unit functions and cleaning.

This manual contains data with US units. The units in the original manual are European units. If there is a data conflict between these units, the data with European units is always valid.

The original manual is written in German – this is an English translation. In case of conflicts, the German version is always valid.



Note.

Operation of the boiler together with the InfoWIN Touch display and operating unit is described in a separate InfoWIN Touch operating manual. Please pay close attention to these instructions. Familiarity with the material in this document will allow you to enjoy long-term operation of the boiler. We wish you all the best with your Windhager boiler.

1. General information

As required by the United States Department of Environmental Protection the following information is given for the: BioWIN 2 Touch wood pellet fired central heating boilers. Manufactured by Windhager Zentralheizung Technik Gmbh, Anton Windhager Strasse 20, Seekirchen 5201, Austria

The BioWIN 2 Touch boilers have the following nominal output levels and comply with EPA 2020 requirements:

- BioWIN 152 51.2 kBTU/hr (15 kW)
- BioWIN 212 71.7 kBTU/hr (21kW)
- BioWIN 262 88.4 kBTU/hr (25.9 kW)
- BioWIN 332 110.9 kBTU/hr (32.5 kW)

The BioWIN 2 Touch system efficiency and the nominal output was measured by a test laboratory using the HHV of the fuel.

- BioWIN 152: 64.7 % (119 gal thermal storage included)
- BioWIN 212: 57.6 % (238 gal thermal storage included)
- BioWIN 262: 70.7 % (238 gal thermal storage included)
- BioWIN 332: 70.6 % (238 gal thermal storage included)

The system efficiency was determined during performance testing using the IDC protocol. Further technical data can be found in the Installation manual.

Your BioWIN2 Touch boiler has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

Your BioWIN 2 Touch boiler is equipped with automatic fuel loading. There are no further loading instructions. Solely PFI Premium 100% wood pellets shall be used.

Materials such as trash, plastics, gasoline, rubber, naphtha, household garbage, material treated with petroleum products such as particleboard, railroad ties, and pressure treated wood.

Burning these materials may result in release of toxic fumes or render the heater ineffective and cause smoke.

Your BioWIN 2 Touch is equipped with an automatic ignition and starts itself when required by building load. Thus, no further ignition procedures are to be followed.

Important information for system operators

There are no user adjustments for the air controls required.

It is important to have BioWIN2 Touch boiler serviced by a trained professional who is aware of the importance to ensure that:

- there are no inlet air restrictions in or around your boiler's combustion blower
- the air passages within your boiler are free of debris(ash, creosote, etc.)
- the Flue pipe and chimney are clean and free of debris / restrictions
- combustion chamber door (when closed and secured) and the ash box seal are airtight.

Ash removal is completely automatic. Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.

A person or persons responsible for the operation of a hydronic heater must comply with all applicable laws or requirements, such as State laws or regulations as well as local ordinances.

A person or persons operating a hydronic heater should be aware that they are responsible for operation in such a manner that does not create a public or private nuisance condition.

The manufacturer's distance and stack height recommendations and the requirements in any applicable laws or other requirements may not always be adequate to prevent nuisance conditions due to terrain or other factors.

Your BioWIN 2 Touch should be installed with a minimum stack height of 16 feet. Providing correct draft as given in the Installation manual.

Draft is the force, which moves air from the appliance up through the chimney. The amount of draft depends on the length of the chimney, local geography nearby obstructions and other factors.

Too much draft may cause excessive temperatures in the appliance and may damage parts in the catalytic combustor. Inadequate draft may cause backpuffing into the room and 'plugging' of the chimney, or the catalyst.

Inadequate draft will cause the appliance to leak smoke into the room through appliance and chimney connector joints.

Your BioWIN 2 Touch is not a catalytic type burner.

You should never use a combustion appliance in your home without an installed smoke and CO detector. Your local fire department usually has good advice on placement of these detectors and how many your home needs for complete coverage.

Complete important installation information is found in the installation manual.

The chapters "Important information for system operators" and "Operation" are intended for both users and qualified contractors.



Note.

This wood heating appliance needs periodic inspection and repair for proper operation. It is against federal law to operate this wood heating appliance in a manner inconsistent with operating instructions in the manual.



Note.

Read these instructions carefully before using the appliance and retain them for future reference. Pass on the instructions to a new user if required.

1.1 Relevant documents

- Operating manual InfoWIN Touch, installation instructions BioWIN 2 Touch
- Operating and installation instructions for system components

1.2 Safety instructions and other symbols in this documentation

1.2.1 Structure of safety instructions



KEYWORD Type of risk

Here, possible consequences are listed that may result from failure to observe the safety instructions.
▶ Steps to prevent the risk are listed.

1.2.2 Symbols, type of risk or meaning

Symbol	Type of risk or meaning	Symbol	Type of risk or meaning
	Injury		Risk of burns
	Electrocution		Risk of crushing
!	Material losses (appliance damage, consequential losses and environmental pollution)		Appliance disposal This symbol means that the parts indica- ted must not be disposed of with domestic waste.
	Information or tips		This symbol indicates that you have to do something. The action you need to take is described step by step.

1.2.3 Keywords

KEYWORD	Meaning
DANGER	Ignoring the warnings identified by this symbol can lead to serious injuries or death.
WARNING	Ignoring the warnings identified by this symbol can lead to injury .
CAUTION	Ignoring the warnings identified by this symbol can lead to malfunction of or damage to the boiler or heating system .
Information or tips	The blocks of text identified by this symbol provide information and tips for operation. ► Read these texts carefully.

1.3 Liability exclusion

All work should be performed exclusively by trained personnel. Local safety regulations must be complied with in all cases; in the event of a conflict and/or contradiction between these regulations and the working instructions in this document (e.g., impairment), then the local regulations should be adhered to in any event and the working instruction should not be carried out; WINDHAGER ZENTRALHEIZUNG GMBH, ÖSTERREICH and WINDHAGER ZENTRALHEIZUNG TECHNIK GmbH, ÖSTERREICH do not accept any liability for any injury to persons or damage to property caused by incorrectly following the instructions and/or violating the local safety regulations! Subject to modifications. No liability is accepted for errors in translation.

1.4 Spare parts

For spare parts, please contact the Customer Service partner.

1.5 Data plate

The data plate bears important specifications relating to the unit, such as its type, factory number and year of manufacture. If you need a spare part or have to contact Windhager Customer Service or your customer service partner due to a malfunction, please first make a note of this data from the data plate. The data plate is located on the front of the equipment, behind the cladding door below the control panel – Fig. 2.



1..... Data plate

Fig. 2 Data plate

2. Safety

The boiler together with its accessories complies with the latest state of the art as well as the relevant safety regulations, and is operated with electric current (110 V AC). Improper installation or repair can pose the danger of life-threatening electric shock. Installation may be performed only by appropriately qualified technicians.

2.1 Manufacturer's obligations

Our products are manufactured in accordance with the essential requirements of the various applicable guidelines. They therefore carry the $\boldsymbol{\zeta} \in \boldsymbol{\xi}$ label and are supplied with all the required documentation.

Technical details subject to change.

We as the manufacturer cannot be held liable in the following cases:

- Incorrect use of the unit.
- Failure to perform proper full service on the unit.
- Incorrect installation of the unit.

2.2 Installer's obligations

The installer is the person responsible for installing the unit. The installer must comply with the following instructions:

- ▶ Read and follow all instructions supplied with the unit.
- ► Carry out installation in accordance with the applicable standards and specifications.
- Explain to the operator how the system works.
- Make the operator aware of his obligation to inspect and maintain the unit.
- ► Hand over all operating manuals to the operator.

2.3 Operator's obligations

To ensure that the unit operates at optimum performance, the operator must follow these instructions:

- Only adults who have received instruction from Windhager Customer Service or a heating technician may operate the system.
- ▶ The operator must have read and understood the instructions contained in the documentation.
- ► Installation and initial start-up must be performed by appropriately qualified technicians.
- Make sure the installer explains how the system works.
- ▶ Perform all the necessary checks and full service.
- ▶ Keep the instructions in good condition and store them near the boiler.



DANGER Injury

This unit is not intended for use by persons (including children) who have physical or mental disabilities or sensory impairment or who have no experience or knowledge of the correct use of the unit, unless supervised or trained by a person responsible for their safety. Children should be supervised to ensure they do not play with the unit.

2.4 General safety information



DANGER Injury

Please follow the safety instructions (symbols) on the appliance!

Please refer to the instructions in chapter 7. Safety instructions on side 13!



DANGER Electrocution

Turning off the on/off button on the InfoWIN Touch does not mean the boiler and its accessories are completely without power.

▶ Therefore, you must de-energise the boiler (e.g. by unplugging the main power plug) when carrying out cleaning or repair work.



WARNING Risk of crushing from rotating auger

▶ If you have to touch these parts, always de-energise the boiler.



WARNING Risk of burns

▶ Before touching these surfaces, you must switch off the boiler and let it cool.

2.5 Sources of danger

2.5.1 Power failure (or if the induced draught fan is not running)



WARNING Risk of explosive combustion.

Do not open the combustion chamber door, there is an increased risk of explosive combustion when opening the combustion chamber door. A self-test is performed following a power failure during combustion and then operation is continued automatically.

2.5.2 Burner bowl



WARNING Risk of explosive combustion.

Never fill the burner bowl with pellets by hand. Excessive combustion material in the burner bowl means that the pellets will not be ignited optimally. Too much low-temperature carburisation gas will be generated and this can lead to explosive combustion.

2.5.3 Entering the pellet storage room, storage container

All energy sources are subject to safety regulations, which must be observed when working with fuels, heating systems, and storage rooms. This also applies to pellet storage.

After the storage room is filled, odorless carbon monoxide (CO) may be produced, and there may be insufficient oxygen present. For this reason, do not enter the pellet storage room for 6 weeks after it has been filled. Only persons trained for working in confined spaces may enter the storage room for the purpose of measuring gas levels before any work is carried out.

Please also follow the instructions on the pellet storage room safety notice:

- No access to unauthorised persons, keep children away from the pellet store.
- Ensure sufficient ventilation before entering. Keep the door open while inside.
- Only enter the storage room under the supervision of a second person standing outside. .
- No smoking, flames or other sources of ignition are permitted.
- Risk of injury from moving parts.
- Pellet boilers must be switched off at least 15 minutes before filling.
- Fill in accordance with the instructions of the boiler and pellet suppliers.
- Protect pellets from damp.

If you feel unwell, leave the storage room immediately and seek medical advice.



DANGER Attention, risk of suffocation.

Do not attempt to enter an unventilated storage room.

2.5.4 Combustion air

Never seal openings that have been provided for ventilation.

3. Fuel

The boilers/heaters are designed to burn the following fuels:

Pellets according to EN ISO 17225-2 A1, DIN-Plus or UZ38, or Super Premium Wood Pellets listed in the Pellets Fuel Institute (PFI) Standard.

Significant criteria based on the standards are as follows:

Diameter 0.25 in / 6 mm	Length: 5-40 mm / 0.20-1.6 in.
Smooth surface	Bulk density: 600-700 kg/m³ (37.5-43.7 lb/ft³)
Residual moisture content max. 10 %	Energy content 16,3 – 19 MJ/kg = 4,6 – 5,3 kWh/kg
Ash content max. 0.7 % (with 1022 °C)	Abraded particles max. 2.5 %
Chemical/synthetic binding agents are strictly prohibited	No impurities from varnish or paint residues, etc.

This boiler/heater is equipped for the following type of fuel only and must not be used with any fuel other than listed below:

- Super Premium Wood Pellets listed in the Pellets Fuel Institute (PFI) Standard.
- Wood Pellets listed in the EN ISO 17225-2 A1 standard.
- Wood Pellets listed in the DIN-Plus or UZ38 standard.

These pellets must fulfill following requirements:

Fuel Property	General requirements		
Device specific - Mandatory			
Heating Value Ash Fusion Diameter	7737 – 8511 BTU/lb 2192 °F 0.25 inches	5.0 – 5.5 kWh/kg 1200 °C 6 mm	
Fuel Property	PFI Super Premium		
Normative Information			
Bulk Density, lb./cubic foot Pellet Durability Index Fines, % (at the mill gate) Inorganic Ash, % Length, % greater than 1.50 inches / 38.1 mm Moisture, %	40.0 - 46.0 ≥ 96.5 ≤ 0.50 ≤ 0.05 ≤ 1 ≤ 8.0		

Store pellets in a dry, safe place. Follow local and building codes when storing pellets.

The use of lower quality pellets will lead to malfunctions, increasing the need for service. It will also lead to the loss of warranty.

The use of any fuel other than listed above may result in fire and explosion!

Consequences of quality fluctuations:

Pellets are 100% unprocessed wood, so minor fluctuations in fuel quality are normal and reflect the natural origins of the material. These quality fluctuations affect the level of dirt, the ash content and therefore the cleaning intervals. A reduction in cleaning intervals due to fluctuations in pellet quality cannot be remedied as part of a repair under guarantee!

The use of lower quality pellets will lead to malfunctions, increasing the need for service. It will also lead to the loss of warranty. Make your pellet supplier aware of these quality requirements before ordering and seek confirmation upon delivery.

4. Commissioning and operation

A Windhager representative or one of its partners must commission your new Windhager boiler system. Our representatives will ensure that all systems are thoroughly checked and can provide additional information at the time of commissioning. Installation and routine maintenance performed by a qualified Windhager representative will ensure the optimal performance and service life of your boiler system. This will also ensure that this technologically advanced system provides the benefits of safe, environmentally friendly, and energy-saving operation.

The following preconditions must be met before the commissioning:

- The boiler is installed and connected properly.
- System fully wired up electrically.
- System flushed, filled and vented heat load must be available.
- Hot water tank connected to domestic water and filled.
- Sufficient quantity of fuel available.
- The customer must be present during commissioning.

The commissioning cannot be carried out if any of these points are not complete. The customer may be charged for any unnecessary costs arising as a result of incorrect start-up.

Commissioning by Windhager Customer Service or a heating technician are part of the warranty requirements.



Note.

During the first few weeks after start-up, condensation can occur in the combustion chamber, ash pan and on the heating surfaces. This has no effect on the function and service life of the boiler.

5. Safety device and function checks

Check the function of all safety devices (such as Pressure Relief Valve and Low Water Cut-off, and others if required and installed) annually, according to the manufacturers' recommendations.



DANGER Injury

To prevent burns and other injuries resulting from contact with hot water, test all safety devices only when unit is turned off and has cooled completely.

If you have an annual maintenance contract with a certified Windhager partner, these tests will be completed during their routine maintenance work.

It is required that the function of the system and related safety equipment be checked and certified yearly by a qualified technician (installer, heating system contractor).

At two-year intervals, the heating water condition must be checked by a heating expert (see BioWIN 2 Touch installation instructions – heating water); this is to prevent corrosion and sediment accumulation in the heating system and boiler/ heater. For systems using more than 1,500 liters (396.3 gallons) of water (e.g., systems with accumulator tanks), this inspection is required on an annual basis.

In the event of repair work requiring a change of water in the heating system, the heating water is to be checked within 4 to 6 weeks after the repair work.

Corrosion and sediment resulting from improper heating water are not covered by the guarantee and warranty.

6. Filling the pellet store (bulk fill)

DANGER Attention, risk of burn-back.

- The pellet boiler must be switched off correctly at least 15 minutes prior to filling. Press the ON/OFF button Fig. 3. Never switch off using the emergency OFF switch.
- Turn off the boiler with the ON/OFF button on the InfoWIN Touch (Fig. 3– see also the InfoWIN Touch operating manual) and wait until burnout mode has finished (display is blank).

During filling, negative pressure is created in the pellet store and this can cause burn-back in the pellet boiler. Therefore, the boiler must be stopped from operating during the filling procedure.

CAUTION Material losses

► To prevent negative pressure arising in the pellet boiler, open the combustion chamber door (Fig. 4 – see also section "8. Opening the cladding door") and leave open during the filling process.





Fig. 3 Turn off the BioWIN 2 Touch

Fig. 4 Open the combustion chamber door during the filling process

Every time the storage room is filled, the date and volume should be recorded on the "Storage room filled" sticker

Note.

Fuel delivery should be performed in accordance with Super Premium Wood Pellets listed in the Pellets Fuel Institute (PFI) Standard with the delivery driver adequately trained to deliver biomass wood pellets.



Fig. 5 "Storage room filled" sticker on storage room door

6.1 Entering the pellet storage room, storage container

All energy sources are subject to safety regulations, which must be observed when working with fuels, heating systems, and storage rooms. This also applies to pellet storage.

After the storage room is filled, odorless carbon monoxide (CO) may be produced, and there may be insufficient oxygen present. For this reason, do not enter the pellet storage room for 6 weeks after it has been filled. Only persons trained for working in confined spaces may enter the storage room for the purpose of measuring gas levels before any work is carried out.

Please also follow the instructions on the pellet storage room safety notice:

- No access to unauthorised persons, keep children away from the pellet store.
- Ensure sufficient ventilation before entering. Keep the door open while inside.
- Only enter the storage room under the supervision of a second person standing outside. .
- No smoking, flames or other sources of ignition are permitted.
- Risk of injury from moving parts.
- Pellet boilers must be switched off at least 15 minutes before filling.
- Fill in accordance with the instructions of the boiler and pellet suppliers.
- Protect pellets from damp.

If you feel unwell, leave the storage room immediately and seek medical advice.

DANGER Attention, risk of suffocation.

Do not attempt to enter an unventilated storage room.

7. Safety instructions



DANGER Risk of fire or explosion.

Do not use chemicals or fluids to start the fire.



CAUTION Health and environmental hazard.

Do not burn garbage, gasoline, naphtha, engine oil, or other inappropriate materials.



WARNING Opening heating chamber door can crush and cut.

When opening door, never insert hands between the door and frame on the hinge side of the heating chamber.



WARNING Opening heating chamber door can crush and cut.

When closing door, never insert hands between the door and frame of the heating chamber. Be aware of other people, especially children.



WARNING Entanglement hazard.

Do not open cover of auger conveyor when heating. Handle with care when servicing charging screw.



WARNING Ash tray can crush and cut.

Never insert hands between ash tray and frame. Never insert hands into closing bracket. Never insert hands between ash tray and closing bracket.



WARNING Cover plate for pellet chamber can crush and cut.

Use caution when opening the cover plate. Only authorized personnel are allowed to open cover plate.



WARNING Closing pellet chamber door can crush and cut.

Never insert hands between door and frame, or between door and closing bracket of the pellet chamber when closing the door. Never insert hands into the hinge area when opening door.



WARNING Opening pellet chamber door can crush and cut.

Never insert hands between door and frame on the hinge side of the pellet chamber when opening door. Never insert hands between door and closing bracket.



WARNING Removing the ash tray can crush and cut.

Never insert hands between frame of boiler/heater and ash tray when removing the ash tray.



WARNING Mounting the ash tray can crush and cut.

Never insert hands between frame of boiler/heater and ash tray when removing the ash tray.



WARNING Displacing the ash tray can crush and cut.

When moving the ash tray, never insert hands between floor of the heating boiler and ash tray.



WARNING Pinch point hazard.

Never insert hands between the cover plate and housing of heating chamber when opening or closing.



DANGER Smoke gas.

Ensure adequate ventilation in the boiler room. Smoke gas may cause poisoning.



WARNING Hot water and hot steam. Injury hazard.

Safety devices (such as the relief valve) will open automatically and release hot water or hot steam. Keep away from safety devices. Do not operate safety devices manually when system water is hot or when device is in operation.



DANGER Attention. Risk of fire.

Lack of water can lead to fire in pellet hopper. Do not operate this device when water level in water container is below minimum! Do not use fluids other than pure water. Monitor the water level monthly and refill to minimum level when necessary. Always keep water container closed with original lid.- Art. no. 007073 - grip plug. See BioWIN 2 Touch operating manual for monitoring and refill procedures.



DANGER Risk of fire or explosion.

Exposure may result in severe injury or death.

Do not fill with garbage, waste oil, gasoline, other flammable liquids, or any fuel other than those listed on the rating plate.

Do not use chemicals to ignite fuel.

Do not use chemicals, sprays, or flammable substances to clean combustion room or any other burner component.



Do not manually fill or light burner.

Do not smoke! Do not expose to open flame.

Do not expose to ignition sources.

Do not open combustion chamber door during operation, power failure, or alarms.



WARNING Fall hazard.

Do not sit, stand, or walk on machine. Keep children away.



DANGER Attention. Risk of fire.

Do not vacuum hot ash - may cause fire in vacuum cleaner. Prior to vacuuming ash or dirt, wait until unit has shut down completely and has cooled for at least 2 hours.



WARNING Machine starts automatically.



Moving parts can crush and cut. Do not remove guarding. Do not touch rotating parts. Keep children away. Keep pets away.





DANGER Hazardous voltage.

Do not remove cover. Keep away from electric components. Disconnect power before servicing or cleaning.



WARNING Burn hazard – hot surface.

Do not touch frame, cover, or inside of heating chamber during heating. Allow heating chamber to cool completely before cleaning and servicing. Keep children and pets away from heating chamber. Do not touch backside, chimney, or any other pipework during operation. Maximum draft marked on nameplate.



WARNING Injury hazard.

All components/surfaces remain hot for a long period of time after turning off unit!

Before cleaning or touching combustion chamber or any other components, turn off unit completely and allow to cool for at least 2 hours

Use heat-resistant gloves. Use tools provided.



WARNING Health hazard.

Combustion particulates may contain harmful substances. Use a fine-dust face mask during cleaning.



WARNING Rotating parts can crush and dismember.

Keep hands out of feed opening. Do not remove cover during normal operation.



WARNING Hand crush hazard.

Automatic start-up if safety switch is activated.

Do not push safety switch.

Moving parts behind the combustion chamber door may start automatically, which can lead to loss of fingers or other serious bodily injury.

Disconnect power before opening the combustion chamber door.



WARNING Risk of health hazard.

Do not connect to an existing boiler/heater system.



WARNING Crush hazard.

Open the cover of the electronic unit until it is secured in the open position. If not secured, it may fall unexpectedly.



WARNING Risk of hand injury.

Use caution when opening the cleaning flap, as it can open suddenly. When opening the cleaning flap, use the tool provided and wear protective gloves.



WARNING Pinch point hazard.

Use caution when closing the cover of the smoke funnel chamber.



WARNING Crush hazard.

Remain alert and aware of surroundings when moving the machine with crane or fork lift.



DANGER Smoke gas.

Mount a warning plate against smoke gas on the boiler room door.



WARNING Health hazard.

In case of an unexpected fire or if flue pipe turns red, disconnect power if the plug, main switch, or main circuit breaker is safe to reach. Call the fire department (911) and evacuate the building. Do not enter smoke-filled rooms to disconnect power.



WARNING Injury hazard by hot water or steam.

Safety devices (such as relief or drain valve) will open automatically and relieve hot water or steam. Keep away from safety devices. Do not manually operate safety devices when the system is hot.



WARNING Health hazard from chemical substances.

Some states list chemical substances known to cause cancer, birth defects, death, serious illness, or other reproductive harm in propositions. This product may contain such substances, either from the fuel, fuel combustion, or in components of the product itself.



WARNING Necessary tasks.

The heat exchanger, flue pipe, and chimney must be cleaned regularly to remove accumulated creosote and ash. Ensure that the heat exchanger, flue pipe, and chimney are cleaned at the end of each heating season to minimize corrosion during the summer months. The appliance, flue pipe, and chimney must be in good condition. These instructions also apply to a draft inducer, if used.



WARNING Pellet feed system: service, maintenance and rules

The pellet feed system operates automatically. All service and maintenance must be completed by trained specialists only. Do not alter the equipment or accessories in any way.

For use in combination with Windhager BioWIN 2 Touch pellet-fueled central heating boiler/furnace only. Do not use to transport any material other than wood pellet fuel listed on the boiler nameplate or in the boiler manuals.

Do not use for vacuum cleaning.

The pellet feed system starts automatically and will make noise. People who are easily startled or have cardiac problems should keep away.



DANGER Pellet feed unit: Risk of fire or explosion.

Can lead to serious injury/death! Ground suction hoses must be installed as described in the installation manual at every connection to avoid static sparking/dust ignition. The pellet feed unit is for use with the day hopper only. The feed unit must be braced, anchored, or strapped to avoid falling/shifting during an earth-quake. Instructions can be obtained from your local Windhager dealer or wholesaler. Pellet feed automatic changeover unit: Fire and explosion hazard

Fire and explosion hazard can lead to serious injury or death.

Do not use the pellet feed automatic changeover unit inside pellet storage room or where there is a lot of dust present. Connect delivery hoses to pellet feed automatic changeover unit as described in the installation manual to avoid static sparking or dust ignition.



WARNING Pellet feed automatic changeover unit: injury hazard by moving parts and electricity



Can lead to serious injury or death. Device starts automatically. Device restarts automatically after power failure. Do not remove cover.

This part should be serviced by trained personnel only.



WARNING Clearances and installation instructions

Minimum clearances from combustible or noncombustible construction: 2 inches left, 12 inches back, 24 inches top (right),

6 inches right side, 22 inches front.

Access to the back side is required to allow the service of parts such as the drain valve, relief valve, and inspection fittings.

This unit is for dry indoor installation only. Not for installation on combustible flooring. Not for installation in manufactured homes or mobile homes.



DANGER Risk of serious bodily injury or death.

This boiler/heater is equipped for one type of wood pellet only. Read the nameplate behind top lid for the correct type of pellet. Do not use this boiler/heater with any fuel other than the one listed on the name plate. Failure to use the correct fuel may cause problems resulting in death, serious bodily injury or property damage.



DANGER Attention. Risk of fire.

Do not operate with incorrect draft. Check nameplate behind top lid for correct draft. Do not operate while refilling the bulk hopper. Do not operate with door or ash removal covering open or when the ash box is removed. Do not store fuel or other combustible material in the boiler room. Regularly inspect and clean flues and chimney. Have a trained professional regularly inspect safety devices, such as the relief and drain valves.



WARNING

For supply connections, only use 10 AWG or larger wires acceptable for at least 176 $^{\circ}$ F (80 $^{\circ}$ C) on a GFCI circuit!

OPERATION

8. Opening the cladding door

WARNIN

WARNING Risk of burns

▶ Before opening the cladding door of the boiler, ensure that it is switched off via the **ON/OFF button** (see Fig. 3) and allowed to cool down (display is blank).

- ▶ Raise the cover and remove; locate the Allen key.
- ▶ Insert the Allen key, turn a quarter turn to the left and open the cladding door Fig. 6, Fig. 7.



Fig. 6 Open the cladding door with the Allen key



Fig. 7 Cladding door open

9. Functional description, components and operating controls BioWIN 2 Touch

The BioWIN 2 Touch automatically fires when the control system signals a heating requirement. Following "purging" (safety function), ignition starts and the pellet auger switches on. The burner bowl is automatically filled with pellets. When flame formation has been detected (by the thermocontrol sensor), the boiler enters flame stabilisation mode and then control mode (modulation) which maintains to the specified boiler temperature setpoint. The boiler enters burnout mode if the output drops below the minimum nominal thermal output or no heating requirement is signalled by the control system. The induced draught fan continues to run until the burner bowl has cooled down.

9.1 BioWIN 2 Touch Klassik/Klassik-L

The boiler pellet hopper is loaded by hand. A motor moves the heating surface cleaning system vertically and the heating surfaces remain clean. The cleaning residues from the heating surfaces drop into the rear ash chamber; the combustion residues from the burner bowl drop into the ash pan. In the event of a cleaning request, the ash has to be removed by hand.



Fig. 8 BioWIN 2 Touch Klassik without cladding door or combustion chamber door



Fig. 10 Cleaning and operating implements

- 1..... Pellet boiler pellet hopper
- 2...... Water tank for burn-back safeguard
- (behind the boiler pellet hopper)
- 3..... Filling cover for pellet boiler pellet hopper
- 4T 6.3 A device fuse
- 5.....Safety thermostat auger tube
- 7..... InfoWIN Touch display and operating unit
- 8 Down chute



Fig. 9 BioWIN 2 Touch Klassik-L without cladding door or combustion chamber door

9 Burner bowl

- 10 Cover for the heat exchanger ash chamber
- 11..... Ash pan
- 12..... Drain cock
- 13..... Cleaning brush
- 14..... Spatula
- 15..... Allen key
- 16..... Scraper

9.2 BioWIN 2 Touch Exklusiv-S/Exklusiv-SL

Version as BioWIN 2 Touch Klassik/Klassik-L, but in addition with automatic ash conveyor into an ash box

Fully automatic ash conveyor:

During fully automatic ash removal, the ash is transported out of the combustion chamber and the heating surfaces into the side ash box under the boiler pellet hopper using a motor and auger. Pellets only have a low ash content (approx. 0.5%). The container therefore only needs emptying 1 to 3 times a year.



Fig. 11 BioWIN 2 Touch Exklusiv-S without cladding door or combustion chamber door



Fig. 12 BioWIN 2 Touch Exklusiv-SL without cladding door or combustion chamber door



Fig. 13 Cleaning and operating implements

- 1..... Pellet boiler pellet hopper
- 2...... Water tank for burn-back safeguard
- (behind the boiler pellet hopper)
- 3..... Filling cover for pellet boiler pellet hopper
- 4T 6.3 A device fuse
- 5...... Safety thermostat auger tube
- 6 Safety thermostat boiler temperature
- 7..... InfoWIN Touch display and operating unit
- 8 Down chute

- 9 Burner bowl
- $10 \hdots$ Cover for the heat exchanger ash chamber
- 11..... Drain cock
- 12...... Ash box 13...... Cleaning brush
- 14...... Spatula
- 15..... Allen key
- 15..... Allen k

9.3 BioWIN 2 Touch Premium / Exklusiv

Version as BioWIN 2 Touch Klassik/Exklusiv-S, but in addition with fully automatic pellet feed

The pellet feed uses a suction turbine to fill the BioWIN 2 Touch boiler pellet hopper fully automatically with pellets from a pellet storage room or storage container. The pellet feed is switched on by the lower fill level switch (proximity switch) in the boiler pellet hopper or at the end of the enable time or the beginning of the start time, and runs until the boiler pellet hopper is full. Filling is not started if the boiler is in heating mode or the feed has been blocked by the control unit (outside the enable time, e.g. at night). If the boiler is operating when filling is necessary, the boiler switches to burnout mode.

When there are several suction probes, switching between the probes is executed automatically. The system changes to the next suction probe after the boiler pellet hopper has been filled a certain number of times. This means the storage room is emptied as evenly as possible.



Fig. 14 BioWIN 2 Touch Premium without cladding door or combustion chamber door



Fig. 16 Cleaning and operating implements

- 1.....Inspection cover for boiler pellet hopper under other cover
- 3..... Pellet boiler pellet hopper
- 4 Fully automated pellet feed
- 5.....T 6.3 A device fuse
- 6 Safety thermostat auger tube
- 7...... Safety thermostat boiler temperature
- 8 InfoWIN Touch display and operating unit
- 9 Down chute
- 10 Burner bowl

¹ Pellet chute for temporary use only or when manually filling the boiler pellet hopper, if feed is not complete.



Fig. 15 BioWIN 2 Touch Exklusiv without cladding door or combustion chamber door

- 11 Cover for the heat exchanger ash chamber
- 12..... Ash pan
- 13..... Drain cock
- 14..... Ash box
- 15..... Cleaning brush
- 16..... Spatula
- 17 Allen key
- 18...... Scraper (only with BioWIN 2 Touch Premium)
- 19..... Pellet chute¹ (accessory)

10. Functional description function module INF F05

10.1 External heating demand (INF F05 W)

An external heating demand can be enabled with a O - 10 V DC analogue signal or a digital extra-low or low-voltage input. Depending on the input used, the function module INF FO5 W determines a temperature set point which is transmitted to the other MES INFINITY or MES^{PLUS} function modules.

10.1.1 Heating demand 0 - 10 V DC

The O - 10 V DC analogue signal is connected at the input (terminal 4). Depending on the voltage, a boiler set point is calculated and set.

0 - 1.5 V DC	No heating demand
1.5 - 10 V DC	Set point 15 - 100 °C

10.1.2 Digital potential-free extra-low-voltage contacts (5 V DC)

A potential-free contact is connected at the input (terminal 8). If the contact is closed, the set value for "Set temperature ext. heating demand" (see Section 3.5.2) is transferred.

A potential-free contact is connected at the input (terminal 5). If the contact is closed, the set value for "Digital set point DHW" (see Section 3.5.2) is transferre3d.

10.1.3 Digital low-voltage input (230 V AC)

If there is voltage at the input (plug X104.1 and X104.4), the set value for "Set temperature ext. heating demand" (see Section 3.5.2) is transferred.

10.1.4 Pump control with relay

When, in the **"Service level"**, **"Pump control"** is set to **"Yes"**, the pump control with relay function option can be enabled under the menu item **"Operator level"** \rightarrow **"Pump control"** \rightarrow **"Relay"**.



The pump control with relay function can only be enabled if the collective alarm function is not enabled.

The pump is switched on or off by the relay depending on the selected function. A heating circuit pump or transfer pump (boiler pump – special function) can be controlled with the relay:

Heating circuit pump

Note.

With the function **"Operator level"** \rightarrow **"Pump control"** \rightarrow **"Heating circuit pump"**, a heating circuit pump can be controlled in conjunction with an external heating demand.

The heating circuit pump is switched on when:

- There is an external heating demand (O -10 V DC, digital potential-free contact 7 8, digital low-voltage input);
- The boiler excess temperature protection function is active;
- The boiler start-up relief protection function is off.

The heating circuit pump is switched off when:

- The external heating demand is no longer available and the pump over run of 10 minutes has elapsed;
- The boiler start-up relief protection function is active.

Operation

Transfer pump

With the function **"Operator level"** \rightarrow **"Pump control"** \rightarrow **"Transfer pump"**, a transfer pump can be controlled in conjunction with an MES INFINITY function module (heating circuit or buffer load/burner). With this function, energy can be pumped from a heat generator to a more distant heating circuit (load circuit).

The transfer pump is switched on when:

- A heating demand is transferred from a MES INFINITY function module;
- The boiler excess temperature protection function is active;
- The boiler start-up relief protection function is off.

The transfer pump is switched off when:

- The heating demand of the MES INFINITY function module is no longer available and the pump over run of 10 minutes has elapsed;
- The boiler start-up relief protection function is active.

Boiler pump – special function

With the special function "Operator level \rightarrow "Pump control" \rightarrow "Boiler pump", a boiler pump (heat generator pump) can be controlled.

The boiler pump is switched on when:

- The burner of the automatic boiler is switched on;
- The boiler excess temperature protection function is active;
- The boiler start-up relief protection function is off.

The boiler pump is switched off when:

- The burner of the automatic boiler is locked out and the pump over run of 10 min. has elapsed;
- The boiler start-up relief protection function is active.

Buffer loading pump

This function is only possible with the cascade function – see Section 2.3.

10.2 Collective alarm (INF F05 S)

Depending on the setting in the menu item "Operator level" \rightarrow "Collective alarm" (see Section 3.5.3), the relay closes in the event of an alarm, fault or information message.

A 230 V AC digital input (plug X104.1 and X104.2) can also be used to trigger the collective alarm as an option. If the input is enabled, the error text "Error message E1" is displayed.

10.3 Cascade function (INF F05 K)

In a pellet cascade system, the function module INF FO5 K controls the buffer loading pump. This pump is controlled by means of speed regulation via PWM signal or 0 - 10 V DC. The cascade function must be enabled under **"Service level"** → **"Cascade function"** – see Section 5.2.

A separate INF F05 K function module is required for each boiler in the system. This must be paired with the associated firing automate (see Section 5.4.2).

In the menu item "**Operator level**" \rightarrow "**Pump control**" \rightarrow "**Assigned to boiler**", it is possible to check whether the connection with the firing automate is correct. The boiler numbers of the firing automates and the function modules must correspond (also see Cascade system start-up).

10.3.1 Pump control with speed regulation

Note.

The speed regulation with PWM signal function is only possible with high-efficiency pumps from the Windhager delivery range.

Operation

The function must be enabled under "Service level" \rightarrow "Pump control" \rightarrow "Yes" – see Section 5.2. For speed regulation, a 0 - 10 V DC or PWM signal is available and is set under "Operator level" \rightarrow "Pump control" \rightarrow "Speed regulation".

The buffer load is optimised with speed regulation. The speed of the pump is regulated depending on the specifications of the KAS+ cascade module. This control specification is determined depending on the boiler model (maximum possible power) with different outputs.

The calculated speed is restricted by the adjusters under "**Operator level** → "**Pump control**" → "**Min. speed**" and "**Max. speed**" – see Section 3.5.1.

10.3.2 Buffer loading pump

With the function **"Operator level"** \rightarrow **"Pump control"** \rightarrow **"Buffer loading pump"**, a buffer can be loaded in conjunction with a Windhager heat generator (boiler). A cascade module (KAS+) is required for this function.

The buffer loading pump is switched on when:

- A heating demand is available from an MES INFINITY or an external heating demand is available;
- The KAS+ cascade module controls the pump;
- The boiler start-up relief protection function is off;
- he boiler excess temperature protection function is active.

The buffer loading pump is switched off when:

- The heating demand from an MES INFINITY function module or an external heating demand is no longer available and the pump over run of 10 minutes has elapsed;
- The KAS+ cascade module locks the pump and the pump over run of 10 min. has elapsed;
- The boiler start-up relief protection function is active.

10.3.3 Boiler pump

For special systems only, can only be set after consultation with Windhager Zentralheizung.

10.3.4 Assigned to boiler (heat generator)

If the function module is linked to a KAS+ cascade module and a heat generator (boiler), the associated (linked) boiler number is displayed under "**Operator level**" \rightarrow "**Pump control**" \rightarrow "**Assigned to boiler**". This boiler number can be set at the heat generator (boiler).

10.4 General functions

10.4.1 Boiler start-up relief and excess temperature protection functions

The boiler protection functions protect the boiler against corrosion and excess temperature.

If the start-up relief function is active, the pump is switched off depending on the temperature or the speed is reduced. If the excess temperature protection function is active, the pump is forced on and the speed is set to max.

10.4.2 Pumps seizing

The transfer, buffer loading and/or boiler pumps are switched on once a week (Wednesday at 11:59) for 10 sec. if there is no heating demand.

10.4.3 Set point offset

For special systems only, can only be set after consultation with Windhager Zentralheizung.

11. Check before switching on



DANGER Injury

Check all the following items before switching on.

- System pressure (system water pressure): The system must be filled and vented. With the system cold, pressure should be at least 14.5 psi / 1.0 bar (maximum 11.6 psi / 1.8 bar). If you have any questions, your installer will gladly answer them.
- ► Ventilation:

Please make sure the boiler room is well ventilated. The air supply must be free of dust.

► Flue:

Please have the chimney sweeper check the flue, and, if necessary, clean it.

► Water tank:

For level check in water tank for burn-back safeguard – see section 24. Water tank level on side 41.

12. Filling the boiler pellet hopper

12.1 Manual filling, BioWIN 2 Touch Klassik/Klassik-L/Exklusiv-S/ Exklusiv-SL

Open the boiler pellet hopper cover and fill the hopper up to max. 0.39 in (1 cm) below the top. Close the cover.

Operation with external supply of combustion air

The cover on the boiler pellet hopper is monitored by a safety switch. The boiler cannot be operated when the lid is open. If the lid is opened during operation, after 4 mins the boiler switches to burnout.

12.2 Fully automatic filling, BioWIN 2 Touch Premium/Exklusiv

The boiler pellet hopper is filled by the fully automatic pellet feed. Windhager Customer Service or the customer service partner will perform the first fill (start-up), put the boiler and its pellet feed into service and familiarise the customer with the operation and cleaning of the boiler, with reference to the operating manual.

13. Heating system operation

The BioWIN 2 Touch should not be switched off with the ON/OFF button \bigcirc on the InfoWIN Touch or disconnected from the power supply via the main power plug. The heating system should be shut down by switching it off at the control system.



CAUTION Material losses

The frost protection function is **not active** when the boiler is switched off (ON/OFF button).



CAUTION Material losses

The seize protection for cleaning the heating surfaces and for the ash conveyor (is switched on briefly every day at 12:00) is **not active** when the boiler is switched off (ON/OFF button \bigcirc).



Note.

Operation of the **BioWIN 2 Touch** together with the InfoWIN Touch display and operating unit is described in a **separate operating manual** for each method.

13.1 Turning the boiler on

- 1. Touch the InfoWIN Touch, then press the 🕐 turn on button and confirm "Boiler On". During power-up, the system is identified (read in), the self-test starts automatically and the load screen 🌈 is displayed. After a successful self-test, the homescreen is displayed.
- 2. Set the **operating mode switch** on the remote control (installed in the living area) to **"Automatic operation"**.



Fig. 17 BioWIN 2 Touch boiler with InfoWIN Touch

13.2 Emergency operation

In the event the control system fails, selecting "Manual mode" using the InfoWIN Touch (see the InfoWIN Touch operating manual) will activate emergency operation to maintain heat and hot water.

CARE, CLEANING AND FULL SERVICE

14. Overview of intervals between cleaning (Full service)

The BioWIN 2 Touch is equipped with a cleaning and ash removal interval display. The "Cleaning" and "Main cleaning" cleaning request is displayed on the InfoWIN Touch and must be confirmed after cleaning/ash removal has finished – see section 14.1.

A clean boiler saves fuel and operates efficiently. Therefore always clean your boiler as required when the cleaning and ash removal request is displayed.

The cleaning and ash removal intervals may be reduced or extended depending on the pellets used (e.g. ash proportion), the power consumed by the heating system (frequently switching ON and OFF) and the boiler size of the BioWIN 2 Touch (15 to 33 kW).

Full service is required in addition to cleaning. This is also shown in the display as "Full service" and is carried out by Windhager Customer Service or a heating technician. It is a prerequisite for the warranty conditions.



Note.

Note for cascade systems (system with 2 or 3 BioWINs): When cleaning, only the boiler that is actually going to be cleaned need be shut down, the other boiler(s) may continue to operate.

	BioWIN 2 Tou	ch Klassik/Klassik-L/Premium	BioWIN 2 Touch Exklusiv/Exklusiv-S/Exklusiv-SL			
	Display	What needs to be done?	Display	What needs to be done?		
Cleaning	"Cleaning" Info 520 at 1433 lb (650 kg) "Emergency ope- ration. Cleaning" Error 320	Empty the ash pan and remove ash from below the heat exchanger (see section 17) Clean the thermocontrol sensor (see section 19.1) Confirm cleaning (see section 14.1)	"Cleaning" Info 522 at 7716 lb (3500 kg) "Emergency ope- ration. Cleaning" Error 322	Empty ash box (see section 18) Clean combustion chamber and burner bowl (see section 19) Confirm cleaning (see section 14.1)		
Main cleaning	"Main cleaning" Info 521 at 8598 lb (3900 kg) "Emergency ope- ration. Main cleaning" Error 321	Empty the ash pan and remove ash from below the heat exchanger (see section 17) Clean combustion chamber and burner bowl (see section 19) Clean top heat exchangers and induced draught fan wheel (see section 20) Vacuum out exhaust pipe to flue (see section 21) Check water tank level (see section 24) Confirm main cleaning (see section 14.1)	"Main cleaning" Info 523 at 15432 lb (7000 kg) "Emergency opera- tion. Main cleaning" Error 323	Empty ash box (see section 18) Clean combustion chamber and burner bowl (see section 19) Clean top heat exchangers and induced draught fan wheel (see section 20) Vacuum out exhaust pipe to flue (see section 21) Check water tank level (see section 24) Confirm main cleaning (see section 14.1)		
Full service	"Full service" Info 524 at 2500 operating hours "Full service" Error 324	Have full service carried out by Windhager Customer Service or a heating technician within the next 3 months. This is a prerequisite for the warranty conditions. (see section 27)	ried out by Service or a thin the next erequisite for ditions. 27) Full service" Info 524 at 2500 operating hours Full service" Have full service carried Windhager Customer Ser heating technician within 3 months. This is a prefer (see section 27)			
At least once per heating season		Clean boiler Storag	pellet hopper and for (see section 25) e room or storage co (see section 26)	eed unit flap ntainer		

Confirming cleaning or main cleaning – Resetting the cleaning 14.1 request



Boiler cleaning must not be confirmed if cleaning has not been carried out.



欲 $\langle \langle \rangle$

Homescreen Fig. 18

Fig. 19





Fig. 20 BioWIN 2 Touch operator level



Fig. 22 Confirm cleaning or main cleaning

Fig. 21 Selecting cleaning or main cleaning

15. Cleaning and operating implements



Fig. 23 Cleaning and operating implements

- 1..... Cleaning brush
- 2.....Spatula
- 3..... Allen key
- 4 Scraper (only with BioWIN 2 Touch Klassik/Klassik-L/Premium)
- 5..... Pellet chute¹ (accessory for BioWIN 2 Touch Premium/Exklusiv
- only) 6 Folder containing instructions

¹ Pellet chute for temporary use only or when manually filling the boiler pellet hopper, if feed is not complete.



Fig. 24 Cleaning brush and spatula on inside of cladding door

16. Care of cladding and InfoWIN Touch

Clean the boiler cladding and InfoWIN Touch with a damp cloth as needed. In the event of heavy soiling, use soapy water or diluted suds (do not use caustic chemicals or sharp cleaning instruments).

17. Emptying the ash pan and removing ash from below the heat exchanger

BioWIN 2 Touch Klassik / Klassik-L / Premium



DANGER Attention. Risk of fire.

Do not open the combustion chamber door during operation.

► Always turn the boiler off first with the ON/OFF button and wait until burnout mode has finished.



WARNING Injury hazard.

All components/surfaces remain hot for a long period of time after turning off unit!

Before cleaning or touching combustion chamber or any other components, turn off unit completely and allow to cool for at least 2 hours

Use heat-resistant gloves.

Use tools provided.



WARNING Ash tray can crush and cut.

Never insert hands between ash tray and frame. Never insert hands into closing bracket. Never insert hands between ash tray and closing bracket.



WARNING Moving the ash tray can crush and cut.

Never insert hands between frame or floor of boiler and ash tray when moving the ash tray.



WARNING Mounting the ash tray can crush and cut.

Never insert hands between frame of boiler/heater and ash tray when removing the ash tray.



DANGER Attention. Risk of fire.

Risk of fire if ash hasn't cooled! Store ash in a locked, non-combustible container on a non-combustible base for at least 48 hours before removing.



CAUTION Health and environmental hazard

The ash may be loaded with heavy metals, which may affect soil fertility. Therefore, ash is not suitable as a fertilizer and should be disposed of with residual waste – see also chapter 22 and 23.

- Turn off the boiler with the ON/OFF button on the InfoWIN Touch (Fig. 25 see also the InfoWIN Touch operating manual) and wait until burnout mode has finished (approx. 20 minutes).
- ▶ Open the cladding door and combustion chamber door Fig. 26 see also Section 8.





Fig. 25 Turn off the BioWIN 2 Touch

Fig. 26 Open the cladding door and combustion chamber door 31

Care, cleaning and full service

- ▶ Remove the ash pan and place it in front of the boiler Fig. 27.
- Use the Allen key to turn down the handle on the cover (heat exchanger) in a clockwise direction and remove the cover Fig. 28.



Fig. 27 Remove the ash pan and place it in front of the boiler

Fig. 28 Turn handle and remove cover





Fig. 29 Remove ash from below heat exchanger into ash pan



Fig. 30 Rotate handle in an anti-clockwise direction

Assembly:

- ► Clean away all ash, the heat exchanger cover should fit/seal tightly.
- ▶ Position the cover (heat exchanger) and turn the handle as far as it will go in a clockwise direction Fig. 30.
- ▶ Push the ash pan into place.
- Close the combustion chamber door and the cladding door and switch the BioWIN 2 Touch back on with the ON/OFF button.
- ► Confirm the cleaning request once "Cleaning" is complete see section 14.1.



CAUTION Material losses

▶ When reinstalling the ash pan and cover, ensure that they are in the correct position and are airtight.

18. Emptying the ash box

BioWIN 2 Touch Exklusiv / Exklusiv-S / Exklusiv-SL



DANGER Attention. Risk of fire.

Do not open the combustion chamber door during operation.

► Always turn the boiler off first with the ON/OFF button and wait until burnout mode has finished.



WARNING Injury hazard.

All components/surfaces remain hot for a long period of time after turning off unit!

Before cleaning or touching combustion chamber or any other components, turn off unit completely and allow to cool for at least 2 hours

Use heat-resistant gloves. Use tools provided.



WARNING Ash tray can crush and cut.

Never insert hands between ash tray and frame. Never insert hands into closing bracket. Never insert hands between ash tray and closing bracket.



WARNING Moving the ash tray can crush and cut.

Never insert hands between frame or floor of boiler and ash tray when moving the ash tray.



WARNING Mounting the ash tray can crush and cut.

Never insert hands between frame of boiler/heater and ash tray when removing the ash tray.



DANGER Attention. Risk of fire.

Risk of fire if ash hasn't cooled! Store ash in a locked, non-combustible container on a non-combustible base for at least 48 hours before removing.



CAUTION Health and environmental hazard.

The ash may be loaded with heavy metals, which may affect soil fertility. Therefore, ash is not suitable as a fertilizer and should be disposed of with residual waste – see also chapter 22 and 23.

- Turn off the boiler with the ON/OFF button on the InfoWIN Touch (Fig. 25 see also the InfoWIN Touch operating manual) and wait until burnout mode has finished (approx. 20 minutes).
- ▶ Open the cladding door and combustion chamber door Fig. 26 see also Section 8.
- ▶ Pull handle on the ash box out until stop is reached so that the side openings in the ash box are sealed Fig. 31.
- ▶ Release the bracket fastener at the bottom right Fig. 32.

Care, cleaning and full service







Fig. 32 Open the bracket fastener

- ▶ Push the ash box slightly to the left and pull it out Fig. 33, Fig. 34.
- ▶ Release the side bracket fasteners, remove the cover and empty the ash box Fig. 35, Fig. 36.



Fig. 33 Push the ash box slightly to the left



Fig. 35 Open the side bracket fasteners, remove the cover and empty the ash box



Fig. 34 Take out the ash box



Fig. 36 Empty the ash box



Note.

The size of the box is related to the max. ash content of the pellets. If the ash box is not full when a cleaning request is issued, then the ash content will be lower.

Assembly:

- ▶ Reinstall the ash box by working through these steps in reverse order.
- ▶ **Important:** Slide the ash box handle all the way back in.



CAUTION Material losses

When reinstalling the ash box and cover, check they are in the correct position and are sealed – danger of induced air.



DANGER Attention. Risk of fire.

The boiler must not be operated without the ash box.

19. Cleaning the combustion chamber and burner bowl



DANGER Attention. Risk of fire.

Do not open the combustion chamber door during operation.

► Always turn the boiler off first with the ON/OFF button and wait until burnout mode has finished.

It is essential to let the boiler cool down before cleaning the combustion chamber. Before cleaning with a vacuum cleaner, check that there are no longer any embers in the combustion residue.



WARNING Injury hazard.

All components/surfaces remain hot for a long period of time after turning off unit!

Before cleaning or touching combustion chamber or any other components, turn off unit completely and allow to cool for at least 2 hours

Use heat-resistant gloves. Use tools provided.



WARNING Ash tray can crush and cut.

Never insert hands between ash tray and frame. Never insert hands into closing bracket. Never insert hands between ash tray and closing bracket.



WARNING Moving the ash tray can crush and cut.

Never insert hands between frame or floor of boiler and ash tray when moving the ash tray.



WARNING Mounting the ash tray can crush and cut.

Never insert hands between frame of boiler/heater and ash tray when removing the ash tray.



DANGER Attention. Risk of fire.

Risk of fire if ash hasn't cooled! Store ash in a locked, non-combustible container on a non-combustible base for at least 48 hours before removing.



CAUTION Health and environmental hazard.

The ash may be loaded with heavy metals, which may affect soil fertility. Therefore, ash is not suitable as a fertilizer and should be disposed of with residual waste – see also chapter 22 and 23.

- Turn off the boiler with the ON/OFF button on the InfoWIN Touch (Fig. 25 see also the InfoWIN Touch operating manual) and wait until burnout mode has finished (approx. 20 minutes).
- ▶ Open the cladding door and combustion chamber door Fig. 26 see also Section 8.

19.1 Cleaning the thermocontrol sensor and down chute

- If necessary, remove fly ash from the thermocontrol sensor with a cleaning brush. The thermocontrol sensor is located in the combustion chamber Fig. 37.
- ▶ If necessary, use a screwdriver to clean the inside of the down chute Fig. 38.
- ▶ Remove combustion residue from the combustion chamber with a vacuum cleaner Fig. 39.



Fig. 37 Clean the thermocontrol sensor



Fig. 39 Remove combustion residue from the combustion chamber



Fig. 38 Clean the down chute

19.2 Cleaning the burner bowl

- ▶ Lift the bottom and top part of the cone out of the burner bowl Fig. 40, Fig. 41.
- Remove all traces of sediment accumulation from the cones with a brush or scrape off with the spatula Fig. 42, Fig. 43.



Fig. 40 Lift out top part of cone



Fig. 42 Clean cone



Fig. 41 Lift out bottom part of cone



Fig. 43 Clean cone



CAUTION Material losses

- When cleaning the boiler, always first remove all the ash from the combustion chamber. Do not remove the primary air pin for cleaning until afterwards.
- Vacuum out the burner bowl (Fig. 44), remove the primary air pin and carefully clean the holes with a small screwdriver or drill bit if necessary (holes must be clear) Fig. 45, Fig. 46.
- ▶ All secondary air holes in the burner bowl must be kept clear Fig. 47.



Fig. 44 Vacuum out the burner bowl



Fig. 46 Clean the primary air pin carefully



Fig. 45 Take out the primary air pin



Fig. 47 Clean the secondary air holes in the burner bowl

Remove combustion residue from the burner bowl with a vacuum cleaner. Vacuum the ash out of the primary air tube (in the middle of the burner bowl) – Fig. 48.



CAUTION Material losses

Before inserting the primary air pin, once again vacuum out the primary air tube in the middle of the burner bowl. Make sure there is no debris in the tube (to avoid damage to the ignition element.).





Fig. 48 Vacuum out the primary air tube in the centre of the burner bowl

Fig. 49 Top and bottom part of cone, primary air pin

Assembly:

- ▶ Reassemble the burner by working through these steps in reverse order (Fig. 49).
- ► Confirm the cleaning request once "Cleaning" is complete see section 14.1.

20. Cleaning the top heat exchangers and induced draught fan wheel

► Turn off the BioWIN 2 Touch with the ON/OFF button on the InfoWIN Touch (Fig. 50 – see also the InfoWIN Touch operating manual) and wait until the display goes blank (approx. 20 minutes).



DANGER Electrocution

- Turning off the on/off button on the InfoWIN Touch does not mean the boiler and its accessories are completely without power.
- Therefore, you must de-energise the boiler (e.g. by unplugging the main power plug) when carrying out cleaning or repair work Fig. 53.



WARNING Risk of burns

Before touching the screw connections and heat exchanger cover, you must switch off the boiler and let it cool.

▶ Lift off the top cover - Fig. 51.





Fig. 50 Turn off the BioWIN 2 Touch

Fig. 51 Lift off the top cover

Care, cleaning and full service

- ► Take the insulation off the heat exchanger cover Fig. 52.
- ► Connect the device power plug Fig. 53.
- ▶ Unscrew the screw connection on the cover and lift the cover out Fig. 54, Fig. 55.



Fig. 52 Remove the insulation



Fig. 54 Unscrew the screw connection



Fig. 53 Disconnect the device power plug



Fig. 55 Lift off the cover

- ► Clean the induced draught fan wheel with a brush Fig. 56.
- ▶ Clean the top of the heat exchangers with a spatula and brush Fig. 57.
- ► Vacuum out the ash from the heat exchangers Fig. 58.



Fig. 56 Clean and vacuum the induced draught fan wheel



Fig. 58 Vacuum out the ash

Assembly:

► By working through these steps in reverse order.



Fig. 57 Clean the heat exchangers

21. Exhaust pipe to flue



DANGER Attention. Risk of fire.

► Always turn the boiler off first with the ON/OFF button and wait until burnout mode has finished.

It is essential to let the boiler cool down before cleaning the Exhaust pipe to flue. Before cleaning with a vacuum cleaner, check that there are no longer any embers in the combustion residue.

Clean/vacuum out the exhaust pipe (pipe connecting the pellet boiler and flue) around the cleaning aperture – Fig. 59.



Cleaning aperture in exhaust pipe (provided by customer)
 Cleaning aperture in flue
 Energy-saving draft stabiliser/explosion flap

Fig. 59 Cleaning apertures in exhaust pipe - view from front, (drawing does not show exhaust pipe insulation)

22. Disposal of ashes

Ashes should be placed in a steel container with a tight lid. The container should be closed and placed on a noncombustible floor or on the ground, well away from all combustible materials, while waiting final disposal. If the ashes are to be buried in soil or otherwise locally dispersed, they should be kept in the closed container until completely cooled.

23. Creosote - formation and need for removal

When wood is burned slowly, it produces tar and other organic vapors, which combine with moisture to form creosote. Creosote vapors condense when in a relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, creosote creates an extremely hot fire.

Especially in CANADA:

During the heating season, the chimney and chimney connector should be inspected at least twice per month to determine if a creosote buildup has occured. At the very least, they should be checked annually.

If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

Especially in the USA:

During the heating season, the chimney and chimney connector should be inspected at least twice per month to determine if a creosote buildup has occurred.

If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

24. Water tank level

- Check the level in the water tank (approx. 8 litres) at every cleaning and service interval and re-fill with water if necessary. The water level must not fall below the min. mark.
- ▶ Remove the plug from the water tank and top up Fig. 60.



Fig. 60 Fill the water tank

► Confirm the cleaning request once "Main cleaning" is complete – see section 14.1.

25. Cleaning the boiler pellet hopper and feed unit flap, and re-filling the boiler pellet hopper in an emergency

(BioWIN 2 Touch Premium / Exklusiv only)

It is necessary to clean the boiler pellet hopper and/or flap in the feed unit if too much dust has collected or there are foreign bodies in the boiler pellet hopper.

If pellets cannot be fed into the boiler pellet hopper via the fully automatic pellet feed, it can be emergency re-filled by hand via the inspection cover.

Turn off the BioWIN 2 Touch with the ON/OFF button on the InfoWIN Touch (Fig. 61 – see also the InfoWIN Touch operating manual) and wait until the display goes blank (approx. 20 minutes).



- Before opening the inspection cover, always disconnect the boiler from the power supply. Disconnect the device power plug Fig. 64
- ► Lift off the top cover Fig. 62.





Fig. 61 Turn off the BioWIN 2 Touch

- Fig. 62 Lift off the top cover
- ► Take the insulation off the heat exchanger cover Fig. 63.
- ► Connect the device power plug Fig. 64.



Fig. 63 Remove the insulation



Fig. 64 Disconnect the device power plug

Care, cleaning and full service

- ▶ Place a container for the pellets at the front.
- Remove the bottom screw from the boiler pellet hopper cover; push the cover down and remove it (hooked on with a bayonet lock) Fig. 65, Fig. 66.
- Remove the screws from the inspection cover and carefully lift it off. Pellets may spill out depending on how high a level of them there is inside Fig. 67.



Fig. 65 Remove the screws



Fig. 67 Remove the screws and take off the inspection cover

25.1 Clean the boiler pellet hopper and the feed flap

- ▶ Remove pellets and dust from the boiler pellet hopper.
- Remove dust from the feed unit flap and proximity switch (Fig. 68, Fig. 69); check that the flap opens and closes smoothly. It must make full contact with the seal when closed.



Fig. 68 Feed unit flap



Fig. 69 Feed unit proximity switch



Fig. 66 Push down the cover and remove (bayonet lock)

25.2 Emergency re-fill of the boiler pellet hopper

- ▶ Fill pellets into the boiler pellet hopper through the inspection cover using a small bucket or shovel, or attach Pellet chute (accessory pellet chute for temporary use only or when manually filling the boiler pellet hopper, if feed is not complete.) and then add the pellets Fig. 70.
- ▶ Mount the inspection cover as a means of anti-contact protection in front of the opening to the auger conveyor Fig. 70.



DANGER Attention. Risk of fire.

In the BioWIN 2 Touch model with external combustion air supply, the inspection cover must always be firmly closed when the system is in operation.



Fig. 70 Mount the Pellet chute and inspection cover

Assembly:

▶ By working through these steps in reverse order.

26. Storage room or storage container

(BioWIN 2 Touch Premium/Exklusiv only)



DANGER Attention, risk of suffocation.

Please also note the hazard information in section 2.5.3 Entering the pellet storage room, storage container on side 9. Do not attempt to enter an unventilated storage room (particularly buried tanks).



DANGER Injury

No access for unauthorized persons. Keep children away.



DANGER Injury

Do not enter until ventilated - keep door open during access to room.



DANGER Injury

Enter the storage room only under the supervision of a second person standing outside.



DANGER Risk of fire or explosion.

Pellet dust is flammable and may explode under certain circumstances if it becomes airborne. Keep pellet dust and its disposal container away from any source of ignition.



DANGER Attention. Risk of fire.

Before filling, turn off pellet boiler for a minimum of 15 minutes.



DANGER Attention. Risk of fire.

Before filling, turn off pellet boiler for a minimum of 15 minutes.



WARNING Entanglement hazard.

Risk of injury by moving parts.



WARNING Injury

Pellet dust may contain harmful substances - use a fine dust mask when handling.

CAUTION Material losses

Protect wood pellets from moisture.



CAUTION Material losses

When entering the pellet storage room or storage container, do not stand on the pellets around the suction probe.

Before filling the pellet storage room or storage container, check the following:

- ▶ Whether the storage room is free of foreign bodies.
- Whether a lot of dust has settled on the floor over time.
 Please note: A layer of dust on top of the pellets is normal because the dust that is present migrates to the surface when the pellets gush out during removal.
- ▶ Whether pellets have swelled up against the wall if the storage room is not fully dry.

Tip.

Pellet dust is totally organic and can therefore be disposed of as organic waste.



Leading pellet suppliers recommend fully emptying the storage room every 2 to 3 years. You can deactivate automatic changeover between the suction probes using the InfoWIN Touch (see the InfoWIN Touch operating manual). This allows you to fully empty the storage room for one probe and remove the dust around that particular suction probe. If you repeat this process each year with different probes, you will be cleaning all the suction probes regularly.



CAUTION Material losses

When entering the pellet storage room or bulk hopper, do not stand on the pellets surrounding the suction probe.

27. Full service

In addition to cleaning your pellet boiler, full service is also required. This is also shown in the display as "Full service" (Fig. 71) and is carried out by Windhager Customer Service or a heating technician. It is a prerequisite for the warranty conditions. Full service must be arranged following a request on the InfoWIN Touch (info 524 or error 324).

Info	524
Full service: Full service is key prerequis	ite for Warranty.
	BioWIN 2 / Tu 08.09.2015 / 09:06
Reset	Cancel

Fig. 71 Display "Full service"

28. Spare parts

28.1 BioWIN 2 Touch pellet boiler



No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
10	Cover plate BW2/BW2T 21-33, BWL/BW2P 21/26	048991	048991	048991
10	Cover plate BW2/BW2T 10/15, BWL 10/15, BW2P 10/15	050918	050918	050918
20	Blower incl. gaskets BW2/BW2T/BWL 10-26, BW2P 10-26	053010	053010	053010
20	Blower incl. gaskets BW2/BW2T 33, BW-XL	054674	054674	054674
30	Axle for door handle LWK18-30, LWPT18-50, BW2/BW2T 10-33, BWL10-26, BW2P 10-26	048881	048881	048881
40	Collar screw M8 x 33,5 x 43,5	013813	013813	013813
50	Ash pan BW2, BW2T, BWL	055000	055000	055000
60	Mounting support for microswitch, complete BW2/BW2T 10-33, BWL, BW2P	051045	051045	051045
70	Spare part set cover left incl. warning stickers: englisch/french BioWIN2T NA	054381	054381	054381
80	Cover, right BW2/BW2T 10-33, BWL, BW2P	048609	048609	048609
90	Socket connector RST25I3S B1 ZR3SV	012573	012573	012573
110	Cover complete, heating surface	051056	051056	051056
120	Sealing cord, short BW2/BW2T 21-33, BWL21/26, BW2P 21/26	051040	051040	051040
120	Sealing cord, short BW2/BW2T 10/15, BWL10/15, BW2P 10/15	051041	051041	051041
130	Sealing cord for cleaning cover BW2/BW2T 21-33, BWL21/26, BW2P 21/26	051017	051017	051017
130	Sealing cord for cleaning cover BW2/BW2T 10/15, BWL10/15, BW2P 10/15	051034	051034	051034
140	Gasket blower box seal BW2/BW2T 10-26, BWL10-26, BW2P 10-26	051006	051006	051006
140	Gasket blower box BW2/BW2T 33	054673	054673	054673
150	Heating door seal BW2/BW2T 10-33, BWL10-26, BW2P 10-26	048916	048916	048916
160	Auger tube seal silicone 60SH BW2/BW2T 10-33, BWL10-26, BW2P 10-26	048926	048926	048926
170	Differential pressure watchdog FW, BW2/BW2T 10-33, BWXL 35-60, BWL 10-26	045404	045404	045404
170	Differential pressure transmitter Typ 401 BW2P	055019	055019	055019
190	Down chute BW2/BW2T 10-33, BWL 10-26, BW2P 10-2	048921	048921	048921
200	Combustion chamber sensor spring	050647	050647	050647
210	Wing nut DIN315-M6	019410	019410	019410
220	Blower seal	051005	051005	051005
230	Blower box for BioWIN BW2/BW2T/BWL 10-26	053234	053234	053234
230	Blower box incl. gasket BW2/BW2T 33	054672	054672	054672
240	Blower wheel Ø160 x 25 for BioWIN2 102 - 262	052951	052951	052951
240	Blower wheel Ø210 BW-XL, BW2T 33	054460	054460	054460
250	Boiler handle LW, BW2, BW2T, BWL, BW2P	007480	007480	007480
260	Spare part set heating door incl. warning stickers: englisch/french BioWIN2T NA	054379	054379	054379
270	Insulating stone for cleaning cover BW2/BW2T/BWL 10/15, BW2P 10/15	050636	050636	050636
270	Insulating stone for cleaning cover W2/BW2T 21-33, BWL 21/26, BW2P 21/26	051007	051007	051007
280	Cup insulation BW2/BW2T 10-33, BWL 10-26	048863	048863	048863
290	Insulation floor BW2/BW2T 10-33, BWL 10-26	048864	048864	048864
300	Insulation rear BW2/BW2T 10-33, BWL 10-26	051116	051116	051116
310	Insulation left BW2/BW2T/BWL 21/26	051117	051117	051117
310	Insulation left BW2/BW2T/BWL 10/15	051119	051119	051119
310	Insulation left BW2/BW2T 33	054455	054455	054455
320	Insulation heating surface cleaning BW/BW2T/BWL 10/15	048910	048910	048910
320	Insulation heating surface cleaning BW/BW2T 21-33, BWL 21/26	048958	048958	048958
330	Insulation top BW2/BW2T 10-33, BWL 10-26, BW2P 10-26	048911	048911	048911
340	Insulation right BW2/BW2T 21-33, BWL 21/26	048907	048907	048907
340	Insulation right BW2/BW2T/BWL 10/15	050924	050924	050924
350	Cable feed-through 2400 black Ø 50 BW/BW2/BW2T, BWXL, BWL, MWP WZS, BW2P	004096	004096	004096
360	Cage nut M 8 BW2/BW2T 10-33, BWL 10-26, BW2P	051112	051112	051112
370	KFE cock	004385	004385	004385
380	Pellet container clamp BW2/BW2T 10-33, BWL 10-26, BW2P 10-26	048611	048611	048611
400	Microswitch with lever EF83161.8 BW2/BW2T 10-33, BWL 10-26, BW2P 10-26	007632	007632	007632
410	Eyelet M6	031274	031274	031274
415	Plate flanged nut BW2/BW2T 10-33, BWL 10-26, BW2P	052484	052484	052484
420	Cleaning cover, complete BW2/BW2T 21-33, BWL 21/26, BW2P 21/26	048870	048870	048870
420	Cleaning cover, complete BW2/BW2T/BWL 10/15, BW2P 10/15	050477	050477	050477
430	Spare part set rear cladding incl. warning stickers: englisch/french BioWIN2T NA 21/26 NA	054382	054382	054382
430	Spare part set rear cladding incl. warning stickers: englisch/french BioWIN2T NA 10/15 NA	056346	056346	056346
440	Disc 3 DIN134	021474	021474	021474
450	Protective tube for combustion chamber sensor, complete	051069	051069	051069
460	Hexagon nut M3 DIN 934	016551	016551	016551
470	Hexagon nut M8 DIN 934 V2	015992	015992	015992

No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
475	Hexagon nut M8 with flange and gearing	016553	016553	016553
480	Hexagon screw M5x12 DIN 7500 (not ilustrated)	031545	031545	031545
500	Hexagon screw M6x45 DIN933	021504	021504	021504
505	Hexagon screw M8x80 DIN 933	016461	016461	016461
515	Silicone hose 5 x 8mm for FireWIN	016022	016022	016022
520	Clamping rail 10-33, BWL 10-26, BW2P 10-26	048975	048975	048975
530	Plug connector RST25I3S S1 ZR3SV	012574	012574	012574
540	Leg M10 x 40	009990	009990	009990
550	Star handle M12 x 35 LWP, BW2, BW2T, BWL, BW2P	005125	005125	005125
560	Thermocouple	007626	007626	007626
570	Door stone BW2/BW2T 10-33, BWL 10-26, BW2P 10-26	048914	048914	048914
580	Door stone bottom BW2/BW2T 10-33, BWL 10-26, BW2P 10-26	050447	050447	050447
590	Locking pin BW2/BW2T 10-33, BWL 10-26, BW2P	051004	051004	051004
600	Cylinder drilling screw 4.2 x 38 DIN7504	016719	016719	016719
10010	Transformer 2 kVA , AC 115 V to AC 230 V	013839	013839	013839
10020	Transformer bracket for BioWIN2TNA	056230	056230	056230
10030	Hexagon screw M5x12 DIN 7500 (not ilustrated)	031545	031545	031545
10040	Hexagon screw Niro DIN 933 - M5x12 - A2 for HMX, FireWIN, VarioWIN"	017020	017020	017020
10050	Hexagon nut M5 DIN 934	016586	016586	016586
10060	Disc 5 DIN134	018309	018309	018309
10070	Cable transformer - main plug BioWIN2T NA	056321	056321	056321
10080	Cable transformer - 110V main plug BioWIN2T NA	056329	056329	056329
10090	Cable electric panel - funtion modules INFF05 BioWIN2TNA	056220	056220	056220
10100	Set for function module INFF05 NA for external heating demand and pump control"	056320	056320	056320
10120	Cable conduit hopper BioWIN2TNA	056222	056222	056222
10130	Cheese head screw M5x10 Taptite	051386	051386	051386

28.2 Reserve supply container – BioWIN 2 Touch

28.2.1 Reserve supply container with suction feed and reserve supply container 236 lb / 107 kg - without suction feed



28.2.2 Reserve supply container L 441 lb / 200 kg



No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
5	Cover panel hopper Premium BW2T 10-33, BWL 10-26, BW2P 10-26	054361	054361	054361
8	Cover panel hopper Klassik BW2T 10-33, BWL 10-26	054363	054363	054363
10	Feed axle PMX, BW, BW2, BW2T, BWL, BW2P	042452	042452	042452
20	Mount connections PG9	006340	006340	006340
30	Water tank support PMX, BW2, BW2T, BWL, BW2P	006877	006877	006877
40	Water tank support	051107	051107	051107
50	Support plate, motor PMX, BW2, BW2T, BWL, BW2P	006851	006851	006851
60	Fastening bracket BW2, BW2T, BWL, BW2P	048974	048974	048974
70	Hopper lid Exklusiv/Premium BW2T 10-33, BWL 10-26, BW2P 10-26	054346	054346	054346
75	Hopper lid Klassik BW2T 10-33, BWL 10-26	054348	054348	054348
80	Inspection lid for hopper BW2, BWL, BW2P	050868	050868	050868
100	Seal frame BW, BW2, BW2T, BWL, BW2P	031254	031254	031254

No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
103	Container seal BW, VAE, FW, BWXL, BW2, BW2T, BWL, BW2P	046665	046665	046665
105	Hopper seal	053465	053465	053465
107	Hopper seal 200 kg BW2, BW2T 10-33, BWL10-26, PW	053467	053467	053467
110	Seal section (cyclone)	042232	042232	042232
120	Distance bolt BW10-26 ab Los 30, BW2, BW2T, BWL, BW2P	031256	031256	031256
130	Cheese head screw M5x10 Taptite	051386	051386	051386
140	Cheese head screw M5x10 Taptite	051386	051386	051386
150	Flange, auger motor BW2, BW2T 10-33, BWL 10-26, BW2P 10-26	051114	051114	051114
160	Filling lid BW2T 10-33, BWL 10-26	054349	054349	054349
170	Blower seal	031253	031253	031253
180	Rubber grommet DK 6-9-12-7	009559	009559	009559
190	Half-collar auger tube BW2, BW2T, BWL, BW2P	053540	053540	053540
195	Bracket	005077	005077	005077
200	Retaining bracket, pellet tank BW2, BW2T, BWL, BW2P	048976	048976	048976
210	Cable feed with relay BW2, BW2T, BWL	045048	045048	045048
210	Wiring harness feed unit incl relais BW2T, BWL, BW2P	055305	055305	055305
215	Cable feed-through Ø 16	009542	009542	009542
220	Cage nut M5	051388	051388	051388
230	Cage nut M 8 BW2/BW2T 10-33, BWL 10-26, BW2P	051112	051112	051112
240	Receptacle flap BW2, BW2T, BWL, BW2P	045955	045955	045955
250	Flap seal BW10-26 ab Los30, BW2, BW2T, BWL, BW2P	031257	031257	031257
260	Terminal, 3-pin OE/KM,PSX, BW2T, BWL, BW2P	000965	000965	000965
270	Clamp collar OE/KM,PSX, BW2T, BWL, BW2P	048967	048967	048967
280	Set of carbon brushes (2 pcs.) AMETEK/Lamb for PMX, BioWIN 10-26	046194	046194	046194
285	Set of carbon brushes (2pcs.) motor suction turbine 230V ebetec 15m BW2T, BWL, BW2P"	054653	054653	054653
290	Piston set BW2, BW2T, BWL, BW2P	042035	042035	042035
300	Bracket for proximity sensor bracket BW2T, BWL, BW2P	048970	048970	048970
305	Bracket for proximity sensor bracket lid BW2, BW2T, BWL	051786	051786	051786
310	Bracket for auger motor BW2, BW2T, BWL, BW2P	048891	048891	048891
315	L- bracket cover BW2T, BWL, BW2P	054424	054424	054424
320	Back-burn safeguard lead BW2, BW2T, BWL, BW2P	050867	050867	050867
330	Air duct BW2, BW2T, BWL, BW2P	050866	050866	050866
340	Blower motor 122151-12 for feed Conversion instructions for use with PMX 15-26 are enclosed! for BioWIN 10-26, PMX,BioWIN XL 35-60	044667	044667	044667
350	Motor for suction turbine 15m, 230V, 1450W BW2T, BWL, BW2P	006242	006242	006242
360	Proximity switch with connection cable 340mm	007825	007825	007825
370	Proximity switch M12, inductive	006832	006832	006832
375	Relay 30A 250V AC 1pole BW2, BW2T, BWL, BW2P	005026	005026	005026
380	Relay 30A 250V BW2, BW2T, BWL, BW2P	005067	005067	005067
390	Grooved ball bearing VAE, BW XL, BWL, BW2P	012499	012499	012499
400	Burn-back protection completely assembled for PMX, BioWIN 10-26	042510	042510	042510
410	Hinge M345 BW2, BW2T, BWL, BW2P	050990	050990	050990
420	U-washer DIN 125 - M10	018058	018058	018058
430	Disc 5 DIN134	018309	018309	018309
440	Disc 6 ISO 7093	031753	031753	031753
450	Hose-PVC 7X2mm 450mm	055827	055827	055827
460	Hose clip ABA 11 PMX, BW2, BW2T, BWL, BW2P	006874	006874	006874
470	Hose clip 40-60 changeover	006875	006875	006875
480	Auger BW2, BW2T, BWL, BW2P	051544	051544	051544
490	Auger motor SPG 4,8 rpm	050901	050901	050901
500	Cutting ring DL8 07-151 BW, BW2, BW2T, BWL, BW2P	006378	006378	006378
510	Partition plate BW, BW2 until January 31 2015	045951	045951	045951
510	Partition plate BW2 From February 2015) BW2T, BWL, BW2P	052480	052480	052480
515	Protection plate for cable BW2, BW2T, BWL	051790	051790	051790
520	Protective cover for auger BW2, BW2T, BWL, BW2P	048971	048971	048971
540	Protection cover GPN 690	051397	051397	051397
550	Hexagon nut M10 with flange and gearing (not illustrated)	016567	016567	016567
560	Hexagon nut M5 with flange and gearing (not illustrated)	016565	016565	016565
570	Hexagon nut M5 DIN 934	016586	016586	016586
580	Hexagon nut M6 DIN 934	016594	016594	016594

990 Heagon ant H8 with Integrand gening 01553 01553 000 Heagon stree M512 DIN 923 (ost Illustrated) 017051 017051 017054 010 Heagon stree M545 DIN 923 017051 017051 017051 017054 021 Heagon stree M545 DIN 923 015194 021504 02504 02504	No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
600 Hexagon serve Mod 2D NP (1 port likestee) 01345 013456 013765 610 Hexagon serve Mod 2D NP (1 port likestee) 017031 017035 017035 620 Hexagon serve Mod 2D NP 33 01534 01534 01534 610 Hexagon serve Mod 1D NP 33 01534 01534 01534 610 Hexagon serve Mod 1D NP 33 011245 013258 013258 620 Lake poller, MN 2, MN 2 01326 013258 013258 630 Lake poller, MN 2, MN 2, MN 1, MN 2, MN	590	Hexagon nut M8 with flange and gearing	016553	016553	016553
filt Hexagons screev Mixed DIN 933 (ord Illustrated) D17051 D17051 D17051 D17051 D17150 D171500 D171500 <thd171500< th=""> D171500 D171500</thd171500<>	600	Hexagon screw M5x12 DIN 7500 (not ilustrated)	031545	031545	031545
200 Hoxagon screew M6x40 D1N933 021504 021504 021504 021504 015134 015134 500 Hesagon screew M6x20 D1N 933 (not illustrated) 0117086 0117086 0117086 0117086 0117086 0117086 0117086 0117086 011268 011268 011268 011268 011268 011268 011268 011268 011268 011268 011267 016727 <	610	Hexagon screw M6x12 DIN 933 (not illustrated)	017051	017051	017051
650 Hesgen screw MSA 0019 033 01512 015134 015134 660 Hesgen screw MSA 019 033 (not literated) 017086 017086 017086 660 Cable pully BND, BNDT, BNL, BND 031261 <	620	Hexagon screw M6x45 DIN933	021504	021504	021504
640 Heragon screev Wab20 DN 931 (on Histrated) 017086 017086 017086 650 Steet opp 702-LSmm Steet Endnippet BW2, BW2, BW2, BW2, BW2, BW2, BW2, BW2,	630	Hexagon screw M8x16 DIN 933	015134	015134	015134
550 Stell roge 7024.15mm betövitt smit Endniggel BW2, BW2F, BW1, BW2 031261	640	Hexagon screw M8x20 DIN 933 (not illustrated)	017086	017086	017086
660 Cable pulley BV2, BV2, BV1, BV1 031041 031096 030597 005597 005597 005593 045563 055651 <td>650</td> <td>Steel rope 702x1,5mm beidseits mit Endnippel BW2, BW2T, BWL, BW2P</td> <td>031258</td> <td>031258</td> <td>031258</td>	650	Steel rope 702x1,5mm beidseits mit Endnippel BW2, BW2T, BWL, BW2P	031258	031258	031258
6707 Constraining server Map20 DIN965 gv KS (net illustrated) 031096 031096 031096 680 Lock mut MS 016727 016727 016727 0700 Lock washer Ø 0 006877 006877 006877 1700 Lock washer Ø 0 005043 005043 005043 1710 Sieve with rege WV-0.26 ab Losilo BW2, BW2T, BWL, BW2P 0.05944 0.09546 0.09546 1710 Base for relay 0.05043 0.05043 0.05043 0.05043 1710 Brenism adjaster for stell rope BW2, BW2T, BWL, BW2P 0.05869 0.05869 0.05869 1700 Spurg gare M2 26 AV2 26 BW2, BW2T, BWL, BW2P 0.045771 0.045771 0.045771 1701 Grommer 10/1251-12 0.03308 0.03308 0.03308 0.03308 1701 Grommer 10/1251-12 0.03308 0.03308 0.03308 0.03308 0.03308 1701 Grommer 10/1251-12 0.04511 0.0451 0.0651 0.06551 0.05552 0.05552 0.05552 0.05554 0.0554	660	Cable pulley BW2, BW2T, BWL, BW2	031261	031261	031261
680 Lock nut M5 016727 016727 016727 690 Lacking ing (2001.2) 016171 016171 016171 016171 01 Lock washer 8 6 006897 006897 006897 006897 710 Sieve with eye BW10-26 ab Locio, BW2, BW2, BW1, BW2P 005043 007043 005043 720 Farsina adjuster for steel ope BW2, BW2, BW1, BW2P 0045952 0045952 045952 730 Spring lock 009546 009546 009546 009546 750 Spring exer M 2245 ALG, BW2, BW2T, BW1, BW2P 0045771 045771 045771 760 Germent 10417541.2 013749 013749 013749 013749 770 Germent 10417541.2 003208 003208 03308 003208 800 B100921FMP-D hopper 1078; BW2T, BW1, BW2P 004956 046956 045956 801 B10021FMP-D hopper 1078; BW2T, BW1, BW2P 046956 035650 055651 055652 801 B10021FMP-D hopper 2005; BW2T, BW1, BW2P 046956 045669 0	670	Countersinking screw M4x20 DIN965 gv KS (not illustrated)	031096	031096	031096
6960 Locking ring 82001.2 016171 016171 016171 700 Lock waths 8 6 006897 005897 005897 715 Sieve with ye EW10.26 ab Lu30, BW2, BW2T, BWL, BW2P 045949 045949 045949 715 Base for relay 005503 005503 005563 005566 716 Spring lock 009566 005566 005566 005566 717 Geomet 10a17.51.2 003208 005308 005308 005308 005308 710 Geomet 10a17.51.2 013749 013	680	Lock nut M5	016727	016727	016727
TOO Lock washer Ø 6 O064897 O064897 O064897 710 Sieve with eye BW10-26 ab Lo30, BW2, BW2, BW2, BW2, BW2P 045949 045949 045949 045949 730 Tension adjuster for steel rope BW2, BW2, BW2, BW2P 0464952 045952 045952 740 Spring lock 009564 009566 005669 005669 005651 005651 005651 005651 005651 005651 005651 055651 055651 055651 055651 055651 055651 055651 055651 055651 055651 055651 055651 055650 055650	690	Locking ring Ø20x1.2	016171	016171	016171
Time Since with arg BW10-26 at Lts30, BW2, BW2T, BWL, BW2P 045949 045949 725 Base for relay 005043 005043 005043 736 Tension adjuster for steel rope BW2, BW2T, BWL, BW2P 045952 045952 045952 740 Spring lock 005046 005046 005046 750 Spring gar M 236 M2, BW2, BW2T, BWL, BW2P 045711 0457711 045771 750 Immain L0X/5512.01 003208 003208 003208 003208 003208 003208 0032749 013749 013749 013749 013749 013749 013749 013749 013749 035651 055651 800 Peliet container cladding BW2, BW2T, BW1, BW2P 046351 006351 055651 055652 055652 055652 055652 055652 055650	700	Lock washer Ø 6	006897	006897	006897
725 Base for relay 005043 005043 005043 730 Tension adjuster for steel rope BW2, BW2, BW2, BW2P 045952 045952 045952 740 Spiring lock 009546 009546 009546 009546 009546 750 Spur gear M2 245 AK, MV2, BW2, BW2, BW2, BW2P 0045711 045771 04571 045851 005651 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 055551 0555649 055649<	710	Sieve with eye BW10-26 ab Los30, BW2, BW2T, BWL, BW2P	045949	045949	045949
Tonsion adjustra for steel rope BW2, BW2T, BWL, BW2P 0.04952 0.04952 740 Spring lock 0.09546 0.09546 0.09546 750 Spur gaar M 2.26 M2.256 BW2, BW2T, BWL, BW2P 0.05869 0.050869 0.050869 760 Spur gaar M 2.245 AE, BW2, BW2T, BWL, BW2P 0.03208 0.032	725	Base for relay	005043	005043	005043
TAO Spring Inck. 009546 009546 009546 750 Spur gear M2 236 BW2, BW2, BW1, BW2P 050869 050869 050869 750 Spur gear M2 246 AE, BW2, BW1, BW1, BW2P 063771 045771 045771 770 Grommet 10x175x1.2 003208 003208 003208 780 Union mul 3/8" 013749 013749 013749 013749 780 Union mul 3/8"Union nut ML8 GW BW, BW2, BW2, BW1, BW2P 006351 005652 0055651 0055651 0055651 0055651 0055651 055651 055651 055651 055651 055650 055	730	Tension adjuster for steel rope BW2, BW2T, BWL, BW2P	045952	045952	045952
750 Spur grant N2 246 NZ 736 BWZ, BWZ, BWZ, BWZ, BWZ, BWZ, BWZ, BWZ,	740	Spring lock	009546	009546	009546
760 Spur gen M 264 SE, BW2, BW2, BW2, BW2, BW2, BW2, BW2 045771 045771 045771 770 Grommet 10x175x1.2 003208 003208 003208 780 Union nut 3/8" 013749 013749 013749 780 Union nut 3/8" 006351 006351 800 Pellet container clading BW2, BW2, BW1, BW2P 048986 048986 048986 801 BI0081F-FMP-D hopper 200kg for BioWIN2T BWK102LT-26217 / BWE102ST-332517 / BW1022-262 (lite) 055651 055651 802 BI0092F-FMP-D hopper 107kg BW2T BWK102T-2627 / BWE102T-332T (up to 15m) 055650 055650 820 BI0092F-FMP-D hopper for BioWIN2T BWP102T -2627 / BWE102T-332T (up to 15m) 055630 055650 830 Water tank BW2, BW2T, BWL, BW2P 060379 050379 050379 840 Shaff seal ring DIN 3760AS AD52 ID20 048903 048903 048903 850 Cyclone cover, fully sealed, new Ef for BioWIN 10-26 from batch 30, BW2T, BWL, BW2P 061666 053466 053466 053466 053466 053466 053466 053466 054390 054439 054439	750	Spur gear M2 Z36 M2 Z36 BW2, BW2T, BWL, BW2P	050869	050869	050869
7700 Grammet 10x175x1.2 003208 003208 003208 780 Union nut 3/8" 013749 013749 013749 790 Union nut 3/8" 006351 006511 006511 006511 800 Pellet container cladding BW2, BW2, BW2P 048986 048986 048986 048986 048986 048986 048986 048986 045986 055651 055651 055651 055651 055651 055651 055651 055651 055650	760	Spur gear M2 Z45 AE, BW2, BW2T, BWL, BW2P	045771	045771	045771
780 Union nut 3/8" Union nut ML8 GW, BW2, BW2T, BWL, BW2P 00331 006351 006351 900 Piele tontainer cladding BW2, BW2T, BWL, BW2P 048986 048965 055651 055651 055651 055651 055651 055649 055649 055649 055649 055649 055649 055649 055649 055649 055649 055649 053646 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 054330 01813	770	Grommet 10x17.5x1.2	003208	003208	003208
790 Union nut 3/8"tunion nut MIS GV BW, BW2, BW2, BW2P 0046351 006351 006351 800 Pellet container cladding BW2, BW2T, BWL, BW2P 045652 055652 055652 805 BI00817-FMP-D hopper 200kg for BioWINT BWK102T-26217 BWE102SLT332 SLT / BWL102L-2621 (Itle) 055654 055651 055651 055651 810 BI0917-FMP-D hopper 107kg BW2T BWK102T-26217 BWE102T-332T (Jup to 15m) 055650 055650 055650 820 BI0997F-FMP-D hopper for BioWIN 2 T BWP102T - 2621 / BWE102T - 332T (Jup to 15m) 055630 055650 055650 830 Watter tank BW2, BW2, BW2, BW2P 0048903 048903 048903 048903 840 Shaft seal ring DIN 3/60AS AD52 ID20 048903 048903 048903 048903 850 Cyclone cover for Brobrary 2015 05346 053466	780	Union nut 3/8"	013749	013749	013749
800 Pellet container clading BW2, BW2T, BWL, BW2P 0A8986 048986 048986 048986 048986 805 BIO081T-FMP-D hopper 200kg for BioWIN2T BWK1021T-2621 / BWE102S1T-332 S11 / BW1021-2621 (IWE) 055651 055651 055651 810 BIO91T-FMP-D hopper 107kg BW2T BWK102T-2627 / BWE102ST-3325 / BW102-2650 055640 055649 055640 055646 053646 053646 053646 053646 053646 053646 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 053466 01838 018339 018339 018339 018339 018339 018339 018339 018339 018339 054339 054339 054339 054339 054339 054339 054339 054	790	Union nut 3/8""Union nut ML8 GV BW, BW2, BW2T, BWL, BW2P	006351	006351	006351
BIO 081F-FMP-D hopper 200kg for BioWIN2T BWK102LT-262LT / BWE102SLT-332 SLT / BWL102L-262L (lite) 055552 055552 810 BIO91T-FMP-D hopper 107kg BW2T BWK102T-262T / BWE102ST-332ST / BWL102-262 (lite) 055649 055649 055651 820 BIO997F-FMP-D hopper BW2 T Premium/Exklusiv (up to 25m) 055649 055650 055650 055650 830 Water tank BW2, BW2T, BWL, BW2P 05379 05379 05379 05379 840 Shaft seal ring DIN 3760AS A052 ID20 0A48903 0A48903 0A48903 0A48903 0A48903 0A48903 0A48903 0A48903 0A48904 053646 053466 05439 05439<	800	Pellet container cladding BW2, BW2T, BWL, BW2P	048986	048986	048986
BIO BIO91F-RP-D hopper 107k BW2T BWK1027-2627 (#WE1025T-3325T / BWL102-262 (iite) O55651 O55650 O55656 BIO 092F-FMP-D hopper BW2 T Premium/Exklusiv (up to 25m) O55650 O55650 O55650 O55650 BIO 091F-FMP-D hopper F or BioWIN2 T BWF102T - 262T / BWE102T - 332T (up to 15m) O50379 O50379 O50379 O50379 O50379 BAO Shaft seal ring DIN 3760AS AD52 ID20 O48903 O53466 O53466 O53466 O53466 O53466 O53466 O53465 O19836 O16768 O16768 O16768 O16763 O16763 O16764 O16763 O16764 O16764 O16764 O16764 O16760 O1760	805	BIO081T-FMP-D hopper 200kg for BioWIN2T BWK102LT-262LT / BWE102SLT-332 SLT / BWL102L-262L (lite)	055652	055652	055652
820 BIO992T-FMP-D hopper BW2 T Premium/Exklusiv. (up to 25m) 055649 055649 820 BIO99T-FMP-D hopper for BioWIN2 T BWP102T - 262T / BWE102T - 332T (up to 15m) 055037 050379 050379 840 Shaft seal ring DIN 3760AS AD52 ID20 048903 048903 048903 048903 048903 850 Cyclone cover, from February 2015 055466 05466 05466 053466 054350 054439 054439 054439 054439 054439 054439 054439 054439 054350 054350 051754 051754 051755 051755 051755 051755 051754 051754 051754 051754 05	810	BI091T-FMP-D hopper 107kg BW2T BWK102T-262T / BWE102ST-332ST / BWL102-262 (lite)	055651	055651	055651
820 BI099T-FMP-D hopper for BioWIN2 T BWP102T - 262T / BWE102T - 332T (up to 15m) 055650 055650 055650 055650 055650 055650 055650 055650 055650 055650 055650 055650 055650 055650 055650 055650 053666	820	BIO092T-FMP-D hopper BW2 T Premium/Exklusiv (up to 25m)	055649	055649	055649
830 Water tank BW2, BW2T, BWL, BW2P 050379 050379 050379 840 Shaft seal ring DIN 3760AS AD52 ID20 048903 018139 018139 018139 018139 018139 018139 054439 054439 054439 054439 054439 054350 054350 054350 054350 054350 054754 051754 051754	820	BIO99T-FMP-D hopper for BioWIN2 T BWP102T - 262T / BWE102T - 332T (up to 15m)	055650	055650	055650
840 Shaft seal ring DIN 3760AS ADS2 ID20 048903 048903 048903 850 Cyclone cover, from February 2015 053466 063466 053466 850 Cyclone cover from February 2015 053466 019836 019836 019836 860 Cylinder screw 4.2x13 DIN7981SP (not illustrated) 018139 018139 018139 880 Cylinder screw 4.2x13 DIN7981SP (not illustrated) 054439 054439 054439 900 Cover, hopper BW21, BWL 054350 054350 054350 910 Cover, hopper BW21, BWL 051754 051755 051755 920 Magnetic lock, black VAE, LWP, LWK, BW27, BWL 001760 001760 001760 930 Magnetic lock, black VAE, LWP, LWK, BW27, BWL 001760 001760 004237 940 Silicone buffer 000299 000299 002299 950 Cytinder screw M5x10 IS0 4762 (not illustrated) 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x	830	Water tank BW2, BW2T, BWL, BW2P	050379	050379	050379
850 Cyclone cover, fully sealed, new ET for BioWIN 10-26 from batch 30, BW2T, BWL, BW2P 046166 046166 850 Cyclone cover from February 2015 053466 053466 053466 860 Cylinder screw 2.9x16 (not illustrated) 018139 018139 018139 870 Cylinder screw M3x5 016768 016768 016768 890 Cladding dor hopper set BW2T, BWL 054439 054439 054439 900 Cover, hopper BW2T, BWL 051755 051755 051755 900 Cover, hopper BW2T, BWL 051754 051754 051754 910 CoverPB BW2/BW2T/BWL, BW2P 051754 051754 051754 920 Maintenance cover hopper BW2, BW2T, BWL 001760 001760 001760 930 Magnetic lock, black VAE, LWP, LWK, BW2T, BWL 001299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299 000299	840	Shaft seal ring DIN 3760AS AD52 ID20	048903	048903	048903
850 Cyclone cover from February 2015 053466 053466 053466 860 Cylinder screw J.2x16 (not illustrated) 019836 019836 019836 870 Cylinder screw J.2x13 DIN7981SP (not illustrated) 018139 018139 018139 880 Cylinder screw M3x5 016768 016768 016768 016768 890 Cladding dor hopper set BW2T, BWL 054439 054439 054439 900 Cover, hopper BW2T, BWL 051755 051755 051755 920 Maintenance cover hopper BW2, BW2T, BWL 001760 001760 940 Silicone buffer 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051773 051773 970 Leg M10 x 40 009990 009990 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051751 051773 051773 051773	850	Cyclone cover, fully sealed, new ET for BioWIN 10-26 from batch 30, BW2T, BWL, BW2P	046166	046166	046166
860 Cylinder screw 2.9x16 (not illustrated) 019836 019836 019836 870 Cylinder screw 4.2x13 DIN7981SP (not illustrated) 018139 018139 018139 880 Cylinder screw M3x5 016768 016768 016768 890 Cladding don hopper set BW2T, BWL 054439 054439 054439 900 Cover, hopper BW2T, BWL 051755 051755 051755 920 Maintenance cover hopper BW2, BW2T, BWL 051754 051754 051754 930 Magnetic lock, black VAE, LWP, LWK, BW2T, BWL 001760 001760 001760 940 Silicone buffer 000299 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 960 Door mouning, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x 40 05990 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051713 051773 051773 985 Suc	850	Cyclone cover from February 2015	053466	053466	053466
870 Cylinder screw 4.2x13 DIN7981SP (not illustrated) 018139 018139 018139 880 Cylinder screw M3x5 016768 016768 016768 890 Cladding door hopper set BW2T, BWL 054439 054439 054439 900 Cover, hopper BW2T, BWL 054350 054350 054350 910 Cover, hopper BW2T, BWL 051755 051755 051755 920 Maintenance cover hopper BW2, BW2T, BWL 051754 051754 051754 930 Magnetic lock, black VAE, LWP, LWK, BW2T, BWL 001760 001760 001760 940 Silicone buffer 000299 000299 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x 40 009990 009990 009990 009990 980 Magnetic sheet hopper BW2, BW1, BW2P 051614 051614 051614 051614 1000 Water tank support BW2, BW1, BW2P 052482 052482	860	Cylinder screw 2.9x16 (not illustrated)	019836	019836	019836
880 Cylinder screw M3x5 016768 016768 016768 890 Cladding door hopper set BW2T, BWL 054439 054439 054439 900 Cover, hopper BW2T, BWL 051755 051755 051755 920 Maintenance cover hopper BW2, BW2T, BWL 051754 051755 051755 920 Maintenance cover hopper BW2, BW2T, BWL 001760 001760 001760 940 Silicone buffer 000299 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x 40 009990 009990 009990 009990 009990 009990 0051773 051773 051773 985 Suction pipe BW2, BW2T, BWL 051711 051771 051771 051771 051771 051771 1000 Water tank support BW2, BW2T, BWL 051614 051614 051614 <t< td=""><td>870</td><td>Cylinder screw 4.2x13 DIN7981SP (not illustrated)</td><td>018139</td><td>018139</td><td>018139</td></t<>	870	Cylinder screw 4.2x13 DIN7981SP (not illustrated)	018139	018139	018139
890 Cladding door hopper set BW2T, BWL 054439 054439 054439 054439 900 Cover, hopper BW2T, BWL 051755 051755 051755 051755 910 Cover PB BW2/BW2T/BWL, BW2P 051754 051754 051754 051754 920 Maintenance cover hopper BW2, BW2T, BWL 001760 001760 001760 940 Silicone buffer 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x 40 05990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL 051711 051771 051771 1010 Pedestal BW2, BW2T, BWL 051614 051614 051614 051614 051614 051	880	Cylinder screw M3x5	016768	016768	016768
900 Cover, hopper BW21, BWL 054350 054350 054350 054350 054350 054350 054350 054350 051755 051755 051755 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051754 051750 001760 001760 001760 001760 001760 001760 001760 001299 000299 000299 000299 000299 000299 000299 004237 0051751 051773 051773 051773	890	Cladding door hopper set BW2T, BWL	054439	054439	054439
910 CoverPB BW2/BW27/BW1, BW2P 051755 051755 051755 920 Maintenance cover hopper BW2, BW2T, BWL 001760 001760 001760 001760 001760 000299 940 Silicone buffer 000299 002990 0099282 052482	900	Cover, hopper BW2T, BWL	054350	054350	054350
920 Maintenance cover hopper BW2, BW2T, BWL 051754 051754 051754 930 Magnetic lock, black VAE, LWP, LWK, BW2T, BWL 001760 001760 001760 940 Silicone buffer 000299 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x 40 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL 051614 051614 051614 1020 Cladding left hopper BW2T, BWL 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 1050 Southco hinge 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 </td <td>910</td> <td>CoverPB BW2/BW2T/BWL, BW2P</td> <td>051755</td> <td>051755</td> <td>051755</td>	910	CoverPB BW2/BW2T/BWL, BW2P	051755	051755	051755
930 Magnetic lock, black VAE, LWP, LWK, BW2T, BWL 001760 001760 001760 001760 940 Silicone buffer 000299 000299 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 051753 970 Leg M10 x 40 005990 009990 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL 051614 051614 051614 1020 Clading left hopper BW2T, BWL 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 1050 Southco hinge 044802 044802 044802 1060 Li-bracket BW2, BW2T, BWL 051751 <td>920</td> <td>Maintenance cover hopper BW2, BW2T, BWL</td> <td>051754</td> <td>051754</td> <td>051754</td>	920	Maintenance cover hopper BW2, BW2T, BWL	051754	051754	051754
940 Silicone buffer 000299 000299 000299 950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x 40 009990 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL 051614 051614 051614 1010 Pedestal BW2, BW2T, BWL 054352 054352 054352 1030 Door mounting top BW2T, BWL 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 1050 Southco hinge 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 1070 Hopper lid BW2T, BWL 054365 054365 05	930	Magnetic lock, black VAE, LWP, LWK, BW2T, BWL	001760	001760	001760
950 Cylinder screw M5x10 ISO 4762 (not illustrated) 004237 004237 004237 960 Door mounting, bottom BW2, BW2T, BWL 051753 051753 051753 970 Leg M10 x 40 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL 051771 051771 051771 1010 Pedestal BW2, BW2T, BWL 054352 054352 054352 1020 Cladding left hopper BW2T, BWL 051752 051752 051752 1030 Door mounting top BW2T, BWL 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 1050 Southco hinge 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 1070 Hopper lid BW2T, BWL 054365 054365 054365 <td>940</td> <td>Silicone buffer</td> <td>000299</td> <td>000299</td> <td>000299</td>	940	Silicone buffer	000299	000299	000299
960 Door mounting, bottom BW2, BW21, BWL 051753 051753 051753 051753 970 Leg M10 x 40 009990 009990 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051773 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL 051711 051771 051771 1010 Pedestal BW2, BW2T, BWL 051614 051614 051614 1020 Cladding left hopper BW2T, BWL 054352 054352 054352 1030 Door mounting top BW2T, BWL 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 1050 Southco hinge 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 1070 Hopper lid BW2T, BWL 054365 054365 054365 1080 Intermediate plate fan ass	950	Cylinder screw M5x10 ISO 4762 (not illustrated)	004237	004237	004237
970 Leg M10 × 40 009990 009990 009990 009990 009990 980 Magnetic sheet hopper BW2, BW2T, BWL 051773 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL, 051771 051771 051771 1010 Pedestal BW2, BW2T, BWL 051614 051614 051614 1020 Cladding left hopper BW2T, BWL 054352 054352 054352 1030 Door mounting top BW2T, BWL 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 1050 Southco hinge 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 1070 Hopper lid BW2T, BWL 054355 054355 054365 1080 Intermediate plate fan assembled BW2, BW2T, BWL, BW2P 054449 054449 054449 1090 DU0006	960	Door mounting, bottom BW2, BW2T, BWL	051753	051753	051753
950 Magnetic sneet nopper BW2, BW21, BWL 051773 051773 051773 051773 985 Suction pipe BW2, BW2T, BWL, BW2P 052482 052482 052482 052482 1000 Water tank support BW2, BW2T, BWL, 051771 051771 051771 051771 1010 Pedestal BW2, BW2T, BWL 051614 051614 051614 051614 1020 Cladding left hopper BW2T, BWL 054352 054352 054352 054352 1030 Door mounting top BW2T, BWL 051752 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 012600 1050 Southco hinge 044802 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 051751 1070 Hopper lid BW2T, BWL 054365 054365 054365 054365 1080 Intermediate plate fan assembled BW2, BW2T, BWL, BW2P 054449 054449 054449 1090 DU000	970	Leg MIU X 40	009990	009990	009990
985 Suction pipe BW2, BW21, BWL, BW2P 052482 05171 051771 051771 051771 051771 051771 051714 051614 051614 051614 051614 051614 051614 051614 051614 051614 051751 051752 054352 054352 054352 054352 054352 051752 051752 051752 051752 051751 054459 </td <td>980</td> <td>Magnetic sheet hopper BW2, BW21, BWL</td> <td>051773</td> <td>051773</td> <td>051//3</td>	980	Magnetic sheet hopper BW2, BW21, BWL	051773	051773	051//3
1000water tank support Bw2, Bw21, BwL,0517/10517/10517/10517/11010Pedestal BW2, Bw2T, BWL0516140516140516141020Cladding left hopper Bw2T, BWL0543520543520543521030Door mounting top BW2T, BWL0517520517520517521040Gas spring 4534DS 0100 N0126000126000126001050Southco hinge0448020448020448021060L-bracket BW2, BW2T, BWL0517510517510517511070Hopper lid BW2T, BWL0543650543650543651080Intermediate plate fan assembled BW2, BW2T, BWL, BW2P0544490544490544491090DU0006 steel tube guide for hoses in vicnity of flue gas pipe5040515040515040511100FIRE045 Pipes for straight feed0459020459020459020459021110Hexagon screw DIN 933 · M6x10 · 8.8 · galvanisedfor VarioWIN, FireWIN0150260150260150261120Bushing BW2 galvanized0537150537150537150537151130Lin seal Ø=50 for FireWIN VarioWIN031250031250031250031250	985	Suction pipe BW2, BW21, BWL, BW2P	052482	052482	052482
1010 Pedestal BW2, BW21, BWL 051614 051614 051614 051614 1020 Cladding left hopper BW2T, BWL 054352 054352 054352 1030 Door mounting top BW2T, BWL 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 1050 Southco hinge 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 1070 Hopper lid BW2T, BWL 054365 054365 054365 1080 Intermediate plate fan assembled BW2, BW2T, BWL, BW2P 054449 054449 054449 1090 DU0006 steel tube guide for hoses in vicnity of flue gas pipe 504051 504051 504051 1100 FIRE045 Pipes for straight feed 045902 045902 045902 1110 Hexagon screw DIN 933 - M6x10 - 8.8 - galvanisedfor VarioWIN, FireWIN 015026 015026 015026 1120 Bushing BW2 galvanized 053715 053715 053715 053715 1130 Lin seal Ø=50 for FireWIN VarioWIN 0131250 031250 031250<	1000	water tank support BW2, BW21, BWL,	051771	051771	051//1
1020 Clauding left hopper bw21, bwL 054352 051752 051752 051752 051752 051752 051750 012600 <td>1010</td> <td>Cladding laft hopper PWDT DWL</td> <td>051614</td> <td>051614</td> <td>051614</td>	1010	Cladding laft hopper PWDT DWL	051614	051614	051614
1030 Door mounting top BW21, BWL 051752 051752 051752 051752 1040 Gas spring 4534DS 0100 N 012600 012600 012600 012600 1050 Southco hinge 044802 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 1070 Hopper lid BW2T, BWL 054365 054365 054365 1080 Intermediate plate fan assembled BW2, BW2T, BWL, BW2P 054449 054449 054449 1090 DU0006 steel tube guide for hoses in vicnity of flue gas pipe 504051 504051 504051 1100 FIRE045 Pipes for straight feed 045902 045902 045902 1110 Hexagon screw DIN 933 - M6x10 - 8.8 - galvanisedfor VarioWIN, FireWIN 015026 015026 015026 1120 Bushing BW2 galvanized 053715 053715 053715 053715 1130 Lin seal Ø=50 for FireWIN VarioWIN 0131250 031250 031250 031250	1020	Cladding left hopper BW21, BWL	054352	054352	054352
1040 Gas spring 453405 0100 N 012600	1030		012600	012600	012600
1050 Source Image 044802 044802 044802 044802 044802 1060 L-bracket BW2, BW2T, BWL 051751 051751 051751 051751 1070 Hopper lid BW2T, BWL 054365 054365 054365 054365 1080 Intermediate plate fan assembled BW2, BW2T, BWL, BW2P 054449 054449 054449 1090 DU0006 steel tube guide for hoses in vicnity of flue gas pipe 504051 504051 504051 1100 FIRE045 Pipes for straight feed 045902 045902 045902 1110 Hexagon screw DIN 933 - M6x10 - 8.8 - galvanisedfor VarioWIN, FireWIN 015026 015026 015026 1120 Bushing BW2 galvanized 053715 053715 053715 053715 1130 Lin seal Ø=50 for FireWIN VarioWIN 031250 031250 031250 031250	1040	Gauthea hinga	0///800	012600	012600
1000 L'Bracket BW2, BW21, BWL 051751 05365 054365 054365 054365 054365 054459 054449 054449 054449 054449 054451 504051	1050		044802	044802	044802
1070 Hopper Hd BW21, BWL 054365 054469 054449 054449 054449 054449 054449 054459 1000 FIRE045 Pipes for straight feed 045902 <	1070	Longer Lid DW2T, DWL	051751	051751	051/51
1000 Internetiate plate fair assembled BW2, BW21, BW1, BW2P 054449 054459 100451 100451 100451 10451 1045902 045902 <td>1070</td> <td>Intermediate plate fan accombled DWA, DWAT, DWL, DWAD</td> <td>054305</td> <td>054365</td> <td>054365</td>	1070	Intermediate plate fan accombled DWA, DWAT, DWL, DWAD	054305	054365	054365
1000 Fire of the garder for hisses in vicinity of hide gas pipe 504051 50405	1000	DII0006 stool tube guide for bases in visnity of flue gas pine	504051	50/051	504051
1100 Finebuly ripes for straight feed 043902 043902 043902 043902 1110 Hexagon screw DIN 933 - M6x10 - 8.8 - galvanisedfor VarioWIN, FireWIN 015026 015026 015026 1120 Bushing BW2 galvanized 053715 053715 053715 1130 Lip seal Ø=50 for FireWIN VarioWIN 031250 031250 031250	1100	FIREO/5 Pipes for straight feed	0/(5002	0/(5002	045002
1110 Itexagori setew niv 955 Priozi 0.5 e gatvalised of variowity, ritewity 015020 015020 015020 1120 Bushing BW2 galvanized 053715 053715 053715 1130 Lin seal Ø=50 for FireWIN VarioWIN 031250 031250 031250	1110	Havagon screw DIN 033 - M6x10 - 8.8 - galvanisodfor VariaWIN EiroWIN	045902	015026	015026
1120 Lin seal Ø=50 for FireWIN VarioWIN 031250 031250 031250	1120	Rushing RW2 galvanized	053715	053715	053715
	1130	Lip seal, Ø=50 for FireWIN. VarioWIN	031250	031250	031250

28.3 Control panel – BioWIN 2 Touch



No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
5	Cover cable conduit BW2/BW2T/BWL/BW2P 10/15	054093	054093	054093
5	Cover for cable conduit BW2/BW2T 21/33, BWL/BW2P 21/26	054334	054334	054334
7	Plug set for flue gas thermosthat and airflap	055825	055825	055825
10	Spare part set cover electric panel incl. warning stickers BioWIN2T NA	054380	054380	054380
15	Electric panel BW2T/BWL/BW2P 10/15	054090	054090	054090
15	Electric panel BW2T 21/33, BWL/BW2P 21/26	054097	054097	054097
20	Retaining plate	048902	048902	048902
30	Wiring harness 230V BW2T, BWL, BW2P (de-ashing, auger conveyor, ignition)	055184	055184	055184
40	Electronic assembbly (wires/cablesl) supply compl. BW2P, XL	055171	055171	055171
60	Cable fan BW2T, BWL, BW2P	055172	055172	055172
70	Wiring harness 2 x STB and fuse	055169	055169	055169
75	Cable Lon InfoWIN Touch BW2T, BWL, BW2P	055185	055185	055185
80	Wiring harness - Lon BW2P / XL	055181	055181	055181
90	Wiring harness 12V BW2T, BWL, BW2P (pressure transmitter, limit switch de-ashing, proximity sensor hopper empty, door switch)	055183	055183	055183
100	Wiring harness for ash removal and heating surface cleaning BW2T, BWL, BW2P	055175	055175	055175
110	Cable feed-through Ø 16	009542	009542	009542
120	Cable feed-through 2160 black Ø 28	009536	009536	009536
130	Terminal bar MS 8-pin 8x8mm for VarioWIN, FireWIN, BioWIN XL 35-60	009929	009929	009929
140	Oval-head screw 3.2x16 (not illustrated)	018190	018190	018190
145	Mains connection socket 3-pin for MIRA,ETX,PMX,BioWIN10-26,LogWIN Premium 180- 505, EasyWIN Premium 180,BioWIN XL 35-60, FireWIN	041430	041430	041430
150	Power supply 24V. 1.5A	002057	002057	002057

No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
180	PCB FMP-D for pellet, Generation D with software BW2T, BW2XL, BW2P"	055567	055567	055567
190	PCB holder VAE, FW, BW10-26, BWXL, BW2, BW2T, LWPT, PW24-103, BWL	007609	007609	007609
200	Hexagon screw BW2T, BWL, BW2P	054438	054438	054438
205	Relay 16A AC 2 polar 12V DC	005075	005075	005075
210	Flue gas sensor PT1000 BW2, BW2T, PW24-103, BWL, BW2P	007620	007620	007620
220	Control panel bottom LWPT, BW2T, BWL, BW2P	052994	052994	052994
230	Control panel surface BW2T, BWL, BW2P	054089	054089	054089
240	Hexagon pin key with T-handle 10x200 for VarioWIN, BioWIN XL 35-60	027392	027392	027392
250	Fuse 1 A T 5x20 ceramic tube	006900	006900	006900
260	6.3A fuse (not illustrated)	003228	003228	003228
270	Spare part set fuseholder incl. conversion instructions	055193	055193	055193
280	Hexagon nut M4 with flange and gearing, galvanized	016564	016564	016564
290	MESOO9M Immersion sensor for hot water tank, buffer, solid fuel, or third-party boiler	502186	502186	502186
300	Thermocouple	007624	007624	007624
305	Thermostat LS1+100-6U	005672	005672	005672
310	Wago terminal block 261 5pcs."ext. Heating demand" 1-4	006835	006835	006835
330	Wago terminal block 261 6-pce. heating requirement/probe switching for BioWIN 10-26, BioWIN XL 35-60 (*not illustrated)	006719	006719	006719
340	Wago terminal block 261; 11-pin safety 1-11 for FireWIN, VarioWIN	009891	009891	009891
355	Wago terminal block 261; 2-pin WMS 1-2, 3-piece for VarioWIN, FireWIN	009948	009948	009948
360	Cylinder screw M 4 x 10 - 8.8 ISO 4762	016782	016782	016782
370	Cylinder screw 4.2x13 DIN7981ST (not illustrated)	018140	018140	018140
10000	Set for function module INFF05 NA for external heating demand and pump control	056320	056320	056320
10010	Cable transformer - main plug BioWIN2T NA	056321	056321	056321
10020	Cable transformer - 110V main plug BioWIN2T NA	056329	056329	056329
10030	Cable electric panel - funtion modules INFF05 BioWIN2TNA	056220	056220	056220
10040	Set for function module INFF05 NA for external heating demand and pump control	056320	056320	056320

28.4 Burner – BioWIN 2 Touch



No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
5	Stop plate BW2, BW2T, BWL, BW2P	053544	053544	053544
10	Ash stop plate, Klassik, Premium BW2K/P., BW2T, BWL, BW2P	051048	051048	051048
20	Ash stop plate, Exclusive BWE2, BW2T, BWL, BW2P	051046	051046	051046
40	Mounting support for microswitch, complete BW2/BW2T 10-33, BWL, BW2P	051045	051045	051045
50	Bracket mounting plate BW2, BW2T, BWL, BW2P	050632	050632	050632
60	Mounting plate BW2, BW2T, BWL, BW2P	050649	050649	050649
70	Mounting plate, top BW2, BW2T, BWL, BW2P	051042	051042	051042
80	Burner BW2, BW2T, BWL, BW2P	051065	051065	051065
90	Blower seal BW10-26 ab Los30, BW2, BW2T, BWL, BW2P	048861	048861	048861
100	Driving rod feed-through BW2, BW2T, BWL, BW2P	048841	048841	048841
110	Grate plate guide BW2, BW2T, BWL, BW2P	048842	048842	048842
120	Setscrew M8x10 DIN916	033112	033112	033112
125	Cable - ignition element for BW1, BW2, FireWIN and VarioWIN	053643	053643	053643
130	Bracket for shake-out BW2, BW2T, BWL, BW2P	050639	050639	050639
140	Cone, top part 45° BW2, BW2T, BWL, BW2P	050642	050642	050642
150	Cone, bottom part	050643	048941	048941
160	Bearing for vibrating drive	007125	007125	007125
165	Sleeve socket BW2T 21-33, BW2P 21/26	-	055660	055660
170	Microswitch with lever EF83161.8 BW2/BW2T 10-33, BWL 10-26, BW2P 10-26	007632	007632	007632
180	Motor shake-out BW2, BW2T, BWL, BW2P	012561	012561	012561
190	O-ring FPM70 45 x 4 PMX, FW, VAE, BW2, BW2T, BWL, BW2P	006849	006849	006849
200	Shoulder screw M8 10x25 ISO 7379	017048	017048	017048
210	Primary air pin	007210	047774	047774
220	Grate plate, left PMX, FW, VAE, BW2, BW2T, BWL, BW2P	051051	051051	051051
230	Grate plate, right BW10-26, BW2T, BWL, BW2P	053539	053539	053539
240	Disc 3 DIN134	-	021474	021474

No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
250	Disc 8 ISO 7093	031755	031755	031755
260	Disc 8 ISO 7089	024779	024779	024779
270	Grate plate scraper	051023	051023	051023
280	Hexagon nut M3 DIN 934	016551	016551	016551
290	Hexagon nut M5 DIN 934	017035	017035	017035
300	Hexagon nut M8 DIN 934	031153	031153	031153
305	Hexagon nut with flange and gearing M6	016566	016566	016566
310	Hexagon nut M8 with flange and gearing	016553	016553	016553
320	Hexagon screw M5x12 DIN 7500 (not ilustrated)	031545	031545	031545
330	Hexagon screw M6x12 DIN 7500	031549	031549	031549
340	Hexagon screw M5x10 DIN 933	016756	016756	016756
350	Hexagon screw DIN 933 - M5x16 - 8.8 - galvanized	015025	015025	015025
355	Hexagon screw M6x20 DIN 933	015471	015471	015471
370	Spur gear M1,5; Z21	007222	007222	007222
380	Venturi nozzle	051066	051067	051067
390	Steering rack BioWin2 10-26 BW2/BW2T/BWL/BW2P 10-26	048161	048161	048161
400	Ignition elementBioWIN10-26, FireWIN from lot 15, VarioWIN from lot 15, BioWIN XL, LWK"	055201	055201	055201
402	Ignition element with cable	053851	053851	053851
410	Intermediate plate	051054	051054	051054
420	Cylinder screw M4x12 DIN 7985	016780	016780	016780

28.5 Heating surface cleaning – BioWIN 2 Touch







No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
10	Axle heating surface BW2/BW2T/BWL/BW2P 10-26	048882	048882	048882
20	Collar screw	012502	012502	012502
25	Ash sheet BW2T, BWL, BW2P	051624	051624	051624
30	Distance rod BW2T, BWL, BW2P	048980	048980	048980
40	Setscrew M8x10 DIN916	033112	033112	033112
50	Lever for cleaning heating surfaces BW2, BW2T, BWL, BW2P	051547	051547	051547
60	L-bracket, motorheating surface BW2, BW2T, BWL, BW2P	051121	051121	051121
70	Motor PMX15, BWE10-60, BW2, BW2T, PW, BWL, BW2P	044665	044665	044665
75	Hexagon nut M8 DIN 934 V2	015992	015992	015992
80	Clearer flat	051609	051609	-
90	Clearer flat with turbulator	051610	051610	054671
100	Clearer flat pre assembled BW2/BW2T/BWL/BW2P 21/26	051611	051611	-
105	Cleaning plate for combustion chamber BW2, BW2T, BWL, BW2P	051076	051076	051076
110	Shaker lever 1 heating surface cleaning BW2P	055134	055134	055134
120	Shaker lever 2 heating surface cleaning BW2, BW2T, BWL, BW2P	048885	048885	048885
130	Shaker lever 3	051367	051367	051367
140	Disc BW2, BW2T, BWL, BWP2	051122	051122	051122
150	Disc 10 IS07089	024780	024780	024780
160	Disc 8 ISO 7093	031755	031755	031755
170	Hexagon screw M8x16 DIN 933	016721	016721	016721
180	Cylinder screw M5x25 ISO 7045	016837	016837	016837
190	Cylinder screw M8x16 ISO 4762	016773	016773	016773

28.6 Ash box – BioWIN 2 Touch



No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
10	Ash box axle	051379	051379	051379
20	Ash conveyor bearing bush PMX, BWE100-600, BW2, BW2T, BW2P, PW	006745	006745	006745
25	Ash removal, completely pre- mounted, BioWIN2 BW2, BW2T, BW2P	054418	054418	054418
30	BIO9OT Ash box, cpl for BW2T 10-33kW	054414	054414	054414
40	Cover for ash conveyor motor BW2, BW2T, BW2P	051125	051125	051125
45	Cover ash box BW2T, BW2P"	054342	054342	054342
50	Cover ash box lid curve BW2T, BW2P	054343	054343	054343
55	Container seal BW, VAE, FW, BWXL, BW2, BW2T, BWL, BW2P	046665	046665	046665
58	Gasket flange BW2, BW2P	054679	054679	054679
60	Distance BW2, BW2T, BW2P	048573	048573	048573
70	Friction bearing with connector	012508	012508	012508
80	Cup insulation BW2, BW2T, BW2P	051124	051124	051124
90	Ash pipe insulation	051126	051126	051126
100	Insulation ash chamber BW2, BW2T, BW2P	051127	051127	051127
110	Insulation Motor, rear BW2, BW2T, BW2P	051128	051128	051128
120	Insulation Motor, front BW2, BW2T, BW2P	051129	051129	051129
130	Bracket for ash conveyor BW2, BW2T, BW2P	048572	048572	048572
135	Ash box flap BW2, BW2T, BW2P	051635	051635	051635
140	Auger bearing BW2, BW2T, BW2P	051120	051120	051120
150	Motor PMX15, BWE10-60, BW2, BW2T, PW, BWL, BW2P	044665	044665	044665
160	Wheel AG 125-12	006888	006888	006888
170	Disc 5 DIN134	018309	018309	018309
180	Sheet slider BW2T, BW2P	054444	054444	054444
190	Slider ash box BW2	050689	050689	050689
200	Auger PMX15, BWE10-60, BW2, BW2T, PW, BWL, BW2P	051542	051542	051542
210	Hexagon nut M10 DIN 439	031156	031156	031156
220	Hexagon nut M8 with flange and gearing	016553	016553	016553
230	Hexagon screw M5x12 DIN 7500 (not ilustrated)	031545	031545	031545
235	Hexagon screw M6x12 DIN 7500	031549	031549	031549
240	Hexagon screw M8x20 DIN 933 (not illustrated)	017086	017086	017086
250	Hexagon screw M8x25 DIN 933	017191	017191	017191
260	Countersinking screw M6x16	016863	016863	016863
270	Washer Ø12	006889	006889	006889
280	Lock nut M5	016727	016727	016727
290	Ash box base BW2, BW2T, BW2P	050692	050692	050692

No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
300	Spring lock	009546	009546	009546
310	Leg M10 x 40	009990	009990	009990
320	Spur gear M2 Z20 BWXL60, BW2, BW2T, BW2P	047543	047543	047543
330	Spur gear M2 Z36 M2 Z36 BW2, BW2T, BWL, BW2P	050869	050869	050869
340	Spur gear M2 Z36 Ø12 BW2, BW2T, BW2P	048566	048566	048566

28.7 Cladding – BioWIN 2 Touch



No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
10	Cover rear, left BW2T 21/26, BW2P 21/26	054442	054442	054442
10	Cover rear, left BW2T 10/15, BW2P 10/15	054443	054443	054443
20	Switch panel compl. BW2T, BW2P	054440	054440	054440
40	Cover, left BW2T, BWL, BW2P	054356	054356	054356
50	BIO87T Pellet container cover BW2 TKlassik/Premium	054407	054407	054407
60	Lid coated BW2T 10/15, BW2P 10/15	054121	054121	054121
60	Lid coated BW2T 21/26, BW2P 21/26	054132	054132	054132
70	Turning bolt	012256	012256	012256
80	Panel BW2T, BW2P	054072	054072	054072
85	Cleaning brush BW2, BW2P	017090	017090	017090
90	INF8 MES INFINITY InfoWIN Touch	001009	001009	001009
100	Driver BWXL 35-60, BW2, BW2T, BWL, BW2P	047891	047891	047891
105	Scratcher	072192	072192	072192
110	Hexagon screw M6x12 DIN 7500	031549	031549	031549
115	Spatula	009540	009540	009540
120	Locking plate BWXL60, BW2, BW2T, BWL, BW2P	047892	047892	047892
125	BIO063 Pellet chute for manual hopper filling	051759	051759	051759
130	Cladding right BW2T/BW2P 10/15	054359	054359	054359
130	Cladding right BW2T/BW2P 21/26	054360	054360	054360

No.	Spare part designation	BioWIN 152	BioWIN 212/262	BioWIN 332
140	Cladding right-top BW2T/BW2P 10/15	054075	054075	054075
140	Cladding right-top BW2T/BW2P 21/26	054325	054325	054325
150	Cladding left BW2T/BWL/BW2P 10/15	054353	054353	054353
150	Cladding left BW2T/BWL/BW2P 21/26	054355	054355	054355
160	Door mounting top BW2T, BW2P	054077	054077	054077
170	Door mounting bottom BW2T, BW2P	054076	054076	054076
180	Disc 5 DIN134	018309	018309	018309
190	Cladding door complete set BW2T, BW2P	054441	054441	054441
200	Clamping plate BW2, BW2T, BWL, BW2P	047893	047893	047893
210	Dog point screw	015507	015507	015507
220	Cylinder screw 4.2x13 DIN7981SP (not illustrated)	018139	018139	018139

28.8 3-way changeover unit



No.	Spare part designation	Spare part no.
10	Cover disc for fire protection - PMX042 and BI0021	042444
10	Cover disc with entry - BIO020	045982
20	Retaining bracket	046284
30	Bolt for mounting	006927
40	Fire protection collars (2x) for 3-way changeover unit – (BIO021)	045987
50	Fire protection collars (2x) for masonry attachment	503330
60	Seal ring	006884
70	Axial bearing seal	006929
80	Seal set for feed	042534
90	Flange plate	045975
100	Delivery and return hose	505110
110	Gear motor	046617
120	Capacitor F48/3 0.82	007335
130	Fire protection collar bracket	045979
140	Motor bracket	042441
150	Axial ball bearing	006925
160	Collar, complete with insert	042539
170	Microswitch	006936
180	Mounting plate	045988
190	Relay (for shut-off unit) – not illustrated	005496
200	Hose clip for pellet feed	006875
210	Spiral spring	006926
220	Hexagon nut M10	016616
230	Base for relay (for shut-off unit) – not illustrated	009908
240	Pellet feed probe	045304
250	Clamping pin 4 x 20 – not illustrated	018666
260	Clamping pin 4 x 30 – not illustrated	018665
270	Connector bracket	045332
280	Galvanised spur gear – not illustrated	006930
290	End disc	045974
300	U-washer M10	018058
310	Cladding	046872
320	Wago terminal block	006921
330	Time relay (for shut-off unit) – not illustrated	003642
340	Strain relief	001884

DISPOSAL/RECYCLING

Disposing of the packaging

The packaging material (wooden crate, cardboard boxes, inserts, plastic films and plastic bags, etc.) must be disposed of correctly in line with the local legal provisions and regulations.

Disposing of components or the boiler

To dispose of defective components or the heating system (e.g. boiler or control system) after the product life has expired, please observe the following information:

- ▶ Dispose of the items correctly, i.e. separate the parts to be disposed of into material groups.
- Do not simply dispose of electrical or electronic waste with the general waste under any circumstances; instead, use the public collection points provided for this purpose.
- ► As a matter of principle, dispose of items in a way that is as sustainable as possible and that is in line with the current environmental protection, reprocessing and disposal technology.

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