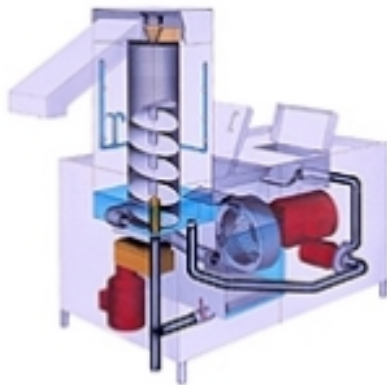


# Operating Instructions

Wet waste treatment unit, AZP 80, AZ / AP 80

## TRANSLATION OF THE "ORIGINAL OPERATING INSTRUCTIONS"

The original operating instructions can be downloaded from: <https://partnernet.meiko-global.com>



EN



**CAUTION – Read operating instructions before using the machine!**

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## 1 Introduction and general information

Dear Customer,

We are delighted about the confidence you have shown in our products.

It is very important to us that you should obtain a great deal of pleasure and usefulness from MEIKO Green Waste Solutions GmbH products and that they should make your work easier.

If you follow the instructions in this document carefully, your Wet waste treatment unit will always give you total satisfaction and will have a long service life.

The Wet waste treatment unit has been assembled by us at the factory and has undergone a thorough inspection. This provides us with the certainty and you with the guarantee that you will receive a fully developed product.

**If the customer orders a non-standard design variant, this may lead to a partially completed machine and thus to deviations from the design and functional description provided in the original operating instructions.**

**In terms of function, complete sections may be inapplicable to the partially completed machine, as they relate only to the standard design.**

**We would therefore ask you to read these operating instructions carefully before using the installation. Any further associated operating instructions for accessories and integrated third-party products must be strictly observed!**

These operating instructions inform users of this installation about the installation, its operating methods, its use, the safety instructions and the maintenance.

This information will help you to get to know the installation fully and to use it properly. It will also enable you to avoid repairs and the concomitant loss of productive work.

In the event of any damage caused by non-observance of these operating instructions, any guarantee claims are invalid. We accept no liability for any additional damage caused as a result.

MEIKO is constantly working on the further development of all its models.

We would therefore ask you to understand that because of this, we must reserve the right to make modifications at any time to any items covered by the contract in terms of their shape, fittings and technical characteristics.

No claims may therefore be based on the details, the images or the descriptions contained in these operating instructions.

Should you require any further information, or in case any particular problems not dealt with in great detail in the operating instructions should arise, you may contact the relevant MEIKO branch to obtain the information you require.

We should also like to inform you that the contents of these instructions do not form part of or amend any earlier or existing agreement, statement, or legal position.

All MEIKO's liabilities arise from the present purchase contract, which contains the entire and solely valid guarantee rules.

The operating instructions must exist in the local language for each EU country. If this is not the case, the installation must not be commissioned.

The original operating instructions in Germany, and all operating instructions in all languages for EU countries can be downloaded from the following address: <https://partner-net.meiko-global.com>

The complete technical documentation is issued to you free of charge.

Additional copies will be charged at cost.

These contractual guarantee rules shall be neither extended nor restricted as a result of any explanations given in the instructions.



The MEIKO Green Waste Solutions GmbH Company very much hopes that you will enjoy our product and use it successfully.

### 1.1 Storage

Always store the operating instructions close to the installation!  
The operating instructions must always be kept within easy reach!

### 1.2 Name and address of the manufacturer

Please address any queries, technical problems etc. directly to:

**MEIKO Green Waste Solutions GmbH**  
Englerstr. 3  
D - 77652 OFFENBURG  
Telefon +49 (0)781 / 9191 9000  
<http://www.meiko-green.com>  
[mail@meiko-green.com](mailto:mail@meiko-green.com)

or:

Name and address of the MEIKO branch, manufacturer's agent or dealer.

(Insert company stamp or address)

### 1.3 Description of the type of equipment

Please provide the following information on any query and/or when ordering spare parts:

Type: \_\_\_\_\_

SN: \_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_

These information can be found on the plate in the electrical switch cabinet

## 2 Explanation of the safety symbols used

The following safety symbols will appear throughout these operating instructions. The purpose of these symbols is to draw the reader's attention to the text of the adjacent safety information.



**ATTENTION!**

This symbol warns that there is danger to human life and health.

---



**DANGER!**

This symbol warns that there is danger to the installation, to the material or to the environment.

---



This symbol denotes information that helps you to understand the installation's operation.

---



Warning of dangerous electrical current!

---



Warning of possible hand injuries!

---



**Danger of burning:** indicates possible hazard due to hot surfaces or media.

---

### 3 General description and use for the purpose intended

#### 3.1 General description

MEIKO food waste treatment appliances convert problematic food waste easy to handle, difficult to dispose of, into a bio-waste which can be used as compost material. The appliance is suitable for the grinding and condensing of assorted bulk food waste, in addition to vegetable peelings and inorganic materials.

Food waste is flushed with water through a loading chute into the grinding mechanism of the machine. The water used for the flow system is re-circulated by means of a heavy duty pump.

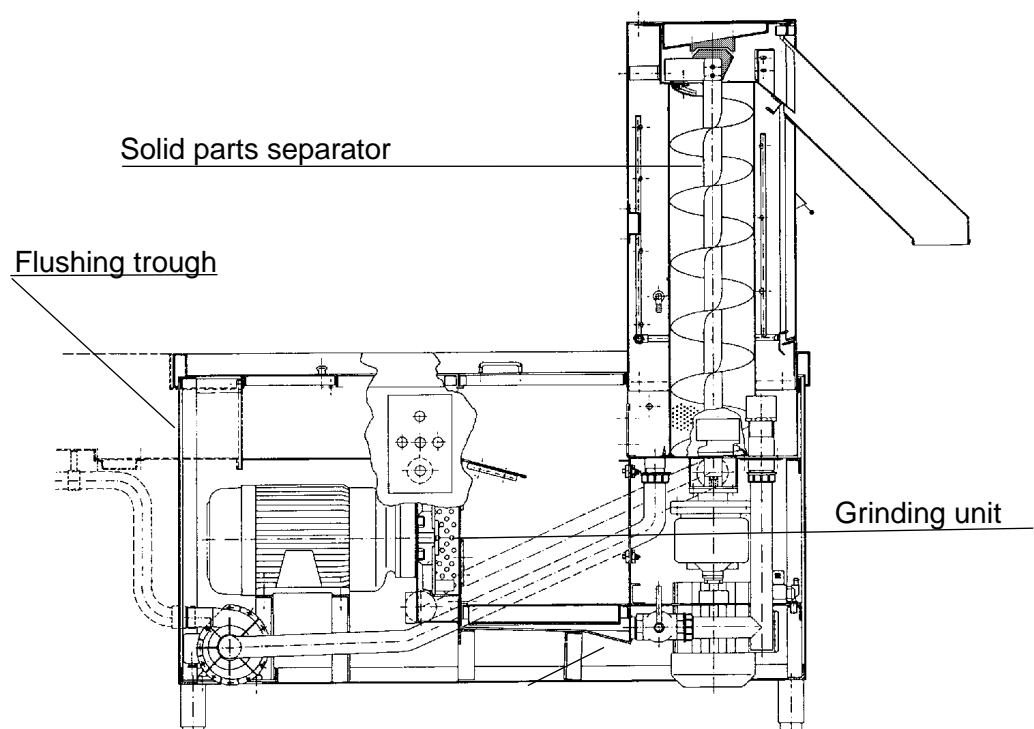
The food waste is broken down in a grinding mechanism consisting of a rotating grinding disc with sieve ring, pump housing, and motor.

Arranged in the grinding disc surface is a set of grinding and cutting teeth in one of the hardest materials available today, tungsten carbide. The circular screen comprising the wall of the grinding unit acts as a sieve ring. A series of pump vanes are arranged behind the grinding plate producing a suction effect and ensuring movement of the broken down waste to the dewatering press. Food waste is drained in the dewatering press consisting of a perforated cover sieve with a worm type screw column conveyor.

The screw conveyor is located within a perforated sieve sleeve and directs food waste vertically along the internal sleeve wall. This results in the liquid being forced outwards through the numerous perforations whilst the remaining food waste is further compacted as it travels to the discharge chute. The liquid separated through the perforated sieve sleeve falls back into the grinding tank.

**A volume reduction of up to 85 %, normally approx. 70 % is obtainable.**

Depending on space availability, the discharge chute of the dewatering press can be turned 90° to enable discharge to be carried out in any one of the three different directions, which is particularly advantageous in the often cramped conditions of the average kitchen.



### 3.2 Use for the Purpose Intended



The food waste treatment machine must only be installed in accordance with the regulations and used for its intended purpose.

This food waste treatment machine is intended only for shredding food waste.

It is possible to shred some other kinds of waste such as, for example:

#### Organic material

- Food residues from the dining room
- Food waste

#### Inorganic material

- Plastic material, such as Polystyrolene, Styropore
- Disposable dishes and plastic cutlery
- Yoghourt cup

#### The unit may not be fed with the following items

- Metal pieces
- Glass/Porcelaine and Chinaware
- Massive bones
- Large plastic foils (bags)

Other uses are prohibited!

This machine is intended solely for use in a commercial environment.

## 4 General safety instructions

### 4.1 Operator's duty of care

The Wet waste treatment unit has been constructed based on a risk analysis and after careful selection of the applicable harmonized standards, as well as additional technical specifications. It therefore corresponds to the latest technology and is guaranteed to provide maximum safety.

This level of safety can only be achieved in practice, however, if all the necessary measures are taken. The operator of the installation has an obligation of care to ensure that these measures are scheduled, and also to check that they are correctly executed:



## Measures to ensure the safe machine operation

#### The operator must ensure in particular that ...

... the wet waste treatment unit is only used in accordance with the regulations.

Should it be used in any other way, damage or danger may occur, for which we accept no liability (see the chapter on "Use for the Purpose Intended").



... in order to preserve the operational and safety guarantees, whenever required, only original parts supplied by the manufacturer are used.

...the user will lose the right to any possible claims if the appliance is modified using any parts other than original parts.



only appropriately qualified and authorized personnel use, maintain, and repair the installation.



... the relevant personnel is regularly trained in all questions relating to safety at work and environmental protection and, in particular, that they are familiar with the operating instructions as well as with the safety information provided in them.





... the installation is only operated in perfect, operationally efficient condition and, in particular, that the safety systems and switch elements are regularly checked for their operational efficiency.



... the required personal protective equipment is made available to maintenance and repair personnel, and is worn by them.



... a functional test on all safety systems of the machine / installation is carried out during every regular maintenance.



... the operating instructions are always kept in legible, complete condition at the place where the installation is installed, and are always at hand.



... all the safety, warning and operating instructions provided are not removed and are legible.



Once the wet waste treatment unit has been installed, put into service and handed over to the customer/operator, no modifications (electrical or location modifications, for example) may be made. Modifications to the Wet waste treatment unit, and in particular technical modifications carried out without the manufacturer's written authorization, or any modifications carried out by unauthorized persons, will lead to the complete loss of any guarantee claims and will invalidate any liability for the product.

## 4.2 Basic safety measures



Danger can arise from the improper use of the machine or if it is used for purposes for which it was not intended



Parts carrying electric current as well as moving or rotating parts can cause

- Dangers to the user's life and limb and
- Material damage



The machine may only be operated by adequately qualified staff who have been trained by the operating company and who have been trained about the Hazard and Safety Instructions.

Qualified staff, as defined by the Operating Instructions, are persons:

- who are over 14 years of age,
- who have read and who observe the safety instructions,
- who have read and who observe the Operating Instructions (or the part applicable to the work to be carried out).



### **WARNING!**

When electrical equipment is in operation, it is inevitable that certain parts carry a dangerous current.

ALL current to the whole machine MUST be switched off before the machine's cladding or electrical equipment is opened.

PLACE THE MAIN SWITCH IN THE "OFF" POSITION and install suitable security measures to prevent the switch from being switched on.

Only specialist personnel may carry out repairs and rectification work on the electrical part of the machine. The Health and Safety Regulations must be observed



The perforated cylinder rinse operates with hot water. Avoid all contact with the rinse water and with the perforated cylinder. Danger of scalding/burning!



ATTENTION!

The machine, switch cabinets and other electrical components must NOT be sprayed with a hose or a high pressure cleaner.



**Attention!**

2 potential-free terminals for connecting a dosing unit are located in the switch cabinet. These terminals are always live, even when the machine is switched off (separate voltage source)!



ATTENTION!

Wet waste treatment unit may only be operated under the supervision of trained personnel.



ATTENTION!

If you are unsure about the operation of the machine, the machine must not be used.



ATTENTION!

Doors and flaps MUST be closed.



ATTENTION!

The operating staff must not wear tight-fitting clothing; they must also remove rings, bracelets and similar articles. We also recommend wearing safety shoes with steel toe caps!



ATTENTION!

Rectification work and work of any kind must only be carried out by specialist staff.



ATTENTION!

Only disinfectant suitable for the use in industrial Wet waste treatment unit may be used.

Corresponding information is submitted by the manufacturers of such products. Disinfectant can be injurious to health.

The manufacturers' Hazard Warnings on the original packaging and in the Safety Data Sheets must be observed.



ATTENTION!

The main switch must be turned off when operation has finished.



ATTENTION!

**WE ACCEPT NO LIABILITY FOR DAMAGE OR INJURY ARISING FROM FAILURE TO OBSERVE AND ABIDE BY THESE SAFETY INSTRUCTIONS**

#### 4.2.1 Working on electrical equipment

Any repair work and repairs to the power supply on the installation's electrical equipment may only be carried out by a qualified electrician!

Check the electrical equipment regularly! Tighten any loose connections! Replace any damaged leads/cables immediately!

Always keep the switch cabinets closed! Access is only allowed to qualified persons with the appropriate key/tool!



ATTENTION!

## 5 Assembly instructions (for a partially completed machine)

These apply where the MEIKO product is a partially completed machine in the sense of the Machinery Directive (Directive 2006/42/EC).

Observe the following items when connecting MEIKO products to an existing installation:

- The components must be aligned with one another, connected in an appropriate manner, and fastened so that safe operation is assured. (Choose conditions and fasteners on site in line with this).
- Dangers (e.g: drawing in, crushing, shearing or cutting) that potentially arised due to the connection must be safeguarded appropriately.
- The electrical connection to the supply grid on site, and any necessary electrical connections must be implemented in line with the enclosed wiring diagram.
- During installation, make sure that you avoid damage, in particular to the electrical installation.
- After completing the works, check the system for damage.
- Safety and functional tests must be performed in the scope of testing the complete system at the latest.
- The system is supplied with slide rails to optimise the transition point where applicable.

### Working on the electric fittings



#### **DANGER!**

**Risk of injury due to electric shock**

Work or repairs to the electrical equipment of the system must be conducted by a qualified electrician!

The wiring diagram for the partially completed machine delivered contains all necessary operational shut-offs known to the manufacturer MEIKO, as well as other known, necessary shut-offs and electrical connections. The connectors are clearly indicated in the wiring diagram. Always make sure that these connections are implemented prior to commissioning the machine, and that they work reliably.

If any unknown sources of danger that are not described by MEIKO arise due to connecting system parts, you must eliminate them; this may potentially mean that you must operate the machine.

## 6 Delivery, shipping, installation and assembly

### 6.1 Delivery

Check that the delivery is complete immediately after receiving it by comparing it to MEIKO's contract confirmation and/or the delivery note..

If necessary, complain about any missing parts immediately to the shipping company and notify MEIKO.

Check the entire installation for any damage that may have occurred during shipping.



Should you suspect any damage has occurred during shipping, you should inform:

- the shipping company,
- MEIKO

in writing, and also send a photo of the damaged parts to MEIKO.

### 6.2 Transport and installation

In order to avoid damage to the appliance or life-threatening injuries during shipping of the installation, the following points must be observed:

- The shipping operations may only be carried out by qualified persons who observe the safety instructions.

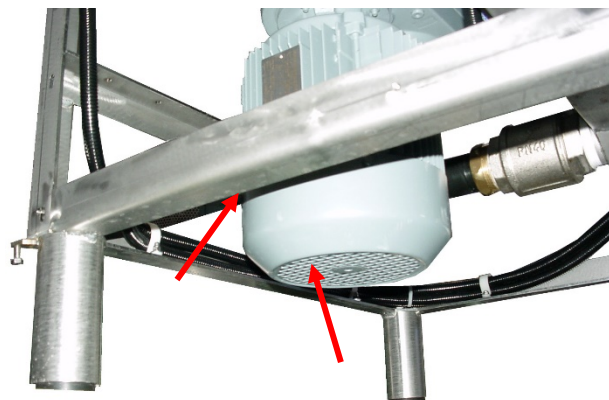


In order to ensure safe shipping, the installation parts are placed on a special four-sided wooden frame.

Incoming goods should only arrive on these wooden frames. The packing is specifically designed to allow the appliances to be moved safely and securely using **two pallet trucks**.

It is possible to negotiate gentle curves if the pallet trucks are not positioned completely under the wooden bearers.

Electric motors may project downwards from the underside of the appliance. Care must always be taken not to damage these.



**Severe damage  
to motor & frame**

The forks of the pallet trucks are lowered when the desired position of the appliance is reached (but must remain under the bearers). The machine is standing on the wooden bearers of the packing. There is no load on the foot cleats.

All the screws and bolts of the packing are now removed.



**e.g. Remove these and other screws and bolts.**

When all the fasteners on the transport packing have been removed, the machine is carefully lowered from the wooden bearers.

**You must take great care to ensure that the appliance is not jolted when it is lowered** otherwise the foot cleats could be damaged beyond repair.

If it is necessary to move the appliance along a wall, the appliance can be pushed along the wall on its cleats for a limited distance.  
(Be careful of gratings in the floor and changes in height.).



When the appliance is finally positioned, you must ensure that all the cleats carry approximately the same weight.

You can check the loading by means of the force needed to turn the cleats with a spanner.

Remove the load from the cleats of the appliance before attempting to adjust them.  
When the load has been removed, the cleats can be adjusted using an SW 17 mm open-ended spanner.x

**IMPORTANT!**

**Horizontal adjustment of the machine by means of the vertically adjustable feet (spanner/wrench size 27) must be done with care to ensure that the weight of the machine is evenly distributed on the cleats. This is absolutely essential in order to avoid displacement or stresses caused by loading on one side. These stresses can cause, for example, the vertical doors to jam or can prevent them from being water-tight when closed.**

- Please also read the chapter on "General safety instructions".

### 6.3 Installation and assembly

MEIKO has prepared an assembly diagram showing the machine dimensions and the connected loads in detail.

Assembly is completed by reference to the assembly diagram and, in general, by following the instructions of a trained MEIKO engineer.



The installation must **only** be connected by suitably qualified personnel.

We accept no liability for connections carried out by unqualified personnel.

After unpacking, position the appliance as indicated in the assembly diagram and as the dimensions allows.

The appliance must be level and straight when erected.

### 6.4 Instructions for the disposal of the packaging material

- The four-sided wooden frame consists of untreated, raw pine / spruce.
- The plastic sheeting (PE sheeting) may be recycled.
- The cardboard packaging material used to protect the edges can also be recycled.
- The steel tensioning strap made of strip steel may be recycled with the steel scrap.
- The plastic tensioning strap of plastic (PP) can be recycled.



### 6.5 Electrical connection

Work on the electrical part of the machine may only be undertaken by specialist personnel.



The wiring diagram is located in the switch cabinet. This wiring diagram is part of the machine and therefore must not be removed.



<b>m</b>	<b>Meiko</b>			
<b>MEIKO</b>	Maschinenbau GmbH & CO. KG			
<b>77652 Offenburg</b>				
<b>Speiserestebehandlungsanlage</b>				
Typ	AZP 80			
AuftragsNr.:	AU 08 01520 100			
SerienNr.:	10123067			
Stromart	3/N/PE400	v	50	Hz
El. Anschluß	7,5	kW	18,45	A
Elt. Boileranschluß			-	kW
Überdruck			-	kPa
Boiler Inhalt			-	ltr
Dampf	PN -	Temp.	-	°C
HDW	PN -	Temp.	-	°C
Baujahr	07.2008			
<b>CE IP X5</b>				

The manufacturer's plate with the connected electrical loads is located behind the inspection door.



General Electrical Regulations must be observed when connecting the machine to the power supply.

**Attention::**

**The fuses on site must be selected to suit the local conditions and the appliance's nominal current in such a way that back-up protection is guaranteed (Germany: VDE 0100).**

**The mains supply cables must be provided with fuses in accordance with regulations and must have a main switch (accessible on site or inside the appliance for operating personnel). If the neutral conductor (N) is not grounded, a 4 phase main switch must be used. Cables connecting to the main power supply must be oil-resistant and sheathed and must not be lighter than an H 07 RN-F cable. The potential equalisation connection must be carried out in accordance with the requirements of the local electricity supply company and all applicable local regulations (in Germany VDE 0100 Part 540 must be observed).**

**For the supply connection use a 5-pole terminal strip (L1, L2, L3, N, PE).**

The electrical connection data, voltage, type of current, output can be seen on the manufacturers' plates on the machine.

Please check the voltage.

All electrical connections must be made inside the electrical switch cabinet by means of marked screwed cable glands as in the circuit diagram and connected to the terminals and the fuses provided. The unit is readily installed for connection and operation. All switching elements are arranged in an easily accessible and clearly visible position and wired in a splashing water protected switch box of chromium nickel steel at the front part of the unit.

All motors and valves pertaining to the unit are protected against short circuit, overload and single phase running. The control switches and pilot lamps are easily accessible and clearly arranged. The operation order is indicated by pilot lamps. The whole electrical installation is made according to the local electricity supply company and all applicable local regulations. Emergency-off switches are incorporated.

For hand-over of the unit please only ask for a specialist technician with our agency when all connections are completed. He will check the complete unit, demonstrate its operation and instructs the operators. Against a signature the system will be handed-over to an authorized person.

## **6.6 Dosing pump**

On request a dosing unit for disinfectant can be incorporated.  
Observe the manufacturer's operating instructions.

## 6.7 Technical Data

Protection class	IP X5
Water connection	R ¾"
Electr. supply	5x6 mm <sup>2</sup>
Water (flow) pressure	2,5 – 5 bar
Throughput:	Food residues: max. 450 kg/h Mixed garbage: max. 320 kg/h
Electrical characteristics	Max. 35 Amp.
Loss of heat	approx. 7 kW
Noise level	Noise level in the workplace: 74 dB(A).
Floor load per foot	loaded surface of D=60 mm per foot = 6 N/cm <sup>2</sup>
Operation weight	460 kg
Weight netto	Own weight: 360 kg
Massive pieces (dead load) to be handled manually	Perforated cylinder: 7,7 kg Screw conveyor: 11 kg
Dimensions DxWxH	1900 x 700 x 1675 mm

### Noise level:

The acoustic power level from the acoustic pressure measurement was determined in accordance with DIN EN ISO 11204 precision class 2

Noise level in the workplace	LpA ≤ 74,1 dB (Measurement uncertainty +/- 2,5 dB)
------------------------------	-------------------------------------------------------

### 6.7.1 EC-/EU-Declaration of Conformity

See separate EC-/EU-Declaration of Conformity

## 7 Non-ionizing radiation

Non-ionizing radiation is not produced intentionally but unfortunately comes about due to electrical operating equipment (e.g. electrical motors, high-voltage cables and magnetic coils). In addition the machine has no strong permanent magnet. There is a high possibility of eliminating the influence of active implants (e.g. pacers, defibrillators) by maintaining a safety distance of 30 cm (distance of the field source to the implant).

## 8 Machine settings for initial commissioning by the service engineer

### 8.1 Commissioning

In order to avoid damage to the installation and the injury and death of persons when commissioning the installation, the following points must be observed without fail

Any necessary initial tests to parts supplied by sub-suppliers, such as heat pumps or other equipment, must be carried out. More detailed information, if required, can be found in the relevant Instructions for Use.





- The installation may only be commissioned by suitably qualified persons observing the safety instructions.
- Before initial startup, check that any tools and parts not belonging to the installation have been removed.
- Check whether any escaping liquid is removed.
- Activate all the safety systems and door switches before commissioning.
- Check that all screw connections are tight.
- Please also read the chapter on "General safety instructions".

Commissioning and instructions will be provided by technicians specially trained by MEIKO. The operator may only use the installation after training has been provided.

## 8.2 Works to be carried out before initial commissioning

All the points in this section must be observed before initial commissioning.

### – water-carrying pipes

All pipes must be thoroughly flushed out.  
All dirt collectors must be cleaned afterwards

### – Connection to the electricity supply.

- Tighten all electrical terminals in the switch cabinet; check that electrical plugs/jacks are firmly in position..
- All motors must be check for the correct direction of rotation.
- Carry out a visual check on all electrical equipment (e.g. switches, cables, housings, covers).
- Carry out functional tests on all electrical switches.

### – Internal regions of the machine

Ensure that there are no foreign bodies inside the machine (e.g. cleaning rags, loose bolts/washers/nuts, tools, packaging materials etc.).

Ensure that all the screens, tank covers, waste pipes, waste screens, flaps and valves are installed. Ensure that all components are seated correctly!

## 9 Operation with the food waste treatment machine

### 9.1.1 Basic safety measures during normal operation

The installation may only be operated by trained and authorized persons who are familiar with the operating instructions and who are capable of working in accordance with them!



#### **Before switching the installation on, check and ensure that**

- Only authorized persons are present in the installation's operating area
- Nobody will be injured when the installation starts

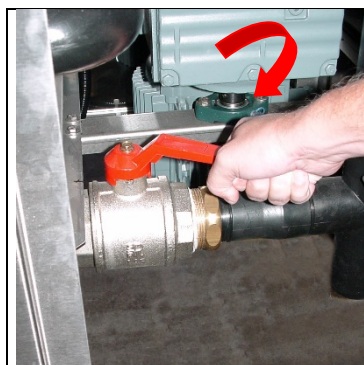
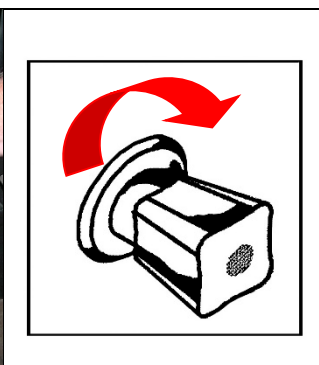
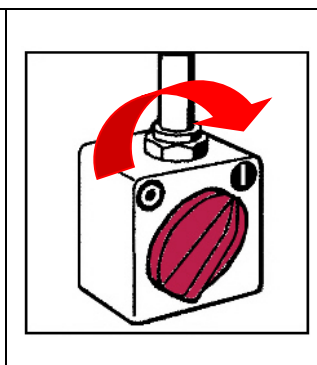


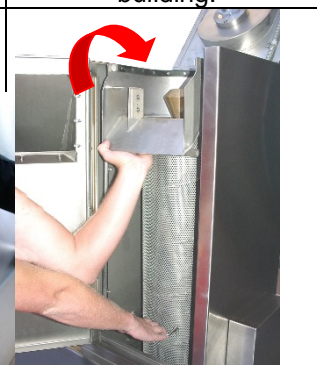




#### **Before commissioning, each time**

- Inspect the installation for any visible damage and ensure that it will only be operated in a perfect condition!

Report any defects to the foreman immediately!

- Remove any materials or objects not required for the operation of the installation from the installation's operating area!
- Check and ensure that all the safety equipment is operating perfectly!

## 9.2 Operation

 <p>Close the drain valve.</p>	 <p>Open the stop valve on the water pipe.</p>	 <p>Switch on the main power supply from the building.</p>
 <p>Insert the screen in the tank.</p>	 <p>Close the tank cover.</p>	 <p>Insert the screen tube and the worm spindle.</p>
 <p>Close the cover and the cleaning door of the wet waste press.</p>	 <p>Release the EMERGENCY STOP switch. (Operating pannel AZP 80)</p>	 <p>Press the "FILLING" button. (Operating pannel AZP 80)</p>
<p>The filling is made automatically. After reaching the necessary filling level the water level control is switched off and the green lamp indicates: "READY".</p>		
 <p>Press the "BEGIN OPERATION" button. (Operating pannel AZP 80)</p>		

Garbage can now be given into the unit. The following kinds of waste can be grinded:

**Organic material**

- Food residues from the dining room
- Food waste

**Inorganic material**

- Plastic material, such as Polystyrolene, Styropore
- Disposable dishes and plastic cutlery
- Yoghourt cup

**The unit may not be fed with the following items**

- Metal pieces
- Glass/porcelaine and chinaware
- Massive bones
- Large plastic foils (bags)

In order to ensure a smooth functioning the following fundamental rules should be observed:

Do not put too large quantities of waste into the feeding chute resp. flushing trough. Otherwise, the flushing effect towards the grinder is reduced considerably and the rotational flow in the grinding unit is interrupted. Thus the throughput is reduced.

If possible, the waste should not be sorted before being fed into the unit but should be mixed, f.ex. food residues with napkins and drinking cups. Hollow-ware such as plastic containers should only be fed in open condition. Floating parts also reduce the throughput.

**Do not put in oil and grease.**

Some garbage can cause increased foam formation. This can be avoided by adding of other waste or a foam absorbing product. The water level is controlled by an adjustable stand pipe overflow in the solid parts separator. Adjustment works are made by our technician when setting the machine in operation.

## 10 Cleaning

### 10.1 Safety instructions for cleaning

Machine, electrical components, switch cupboards and other electrical components may not be sprayed with a water hose or high-pressure cleaner.

### 10.2 Cleaning after operation

It is recommended that you maintain the machine in good condition not only for reasons of hygiene but also to keep your dish-washing machine in full working order and to be able to recognise damage more easily. Observe the following points after operation.

**Cleaning of the food waste treatment machine:**

1. Open lid, cleaning door and tank covers
2. Clean the solid parts separator with a water hose, possibly with warm water. When lifting the overflow sheet the water with the garbage residues can be flushed into the tank.
3. If necessary, remove perforated cylinder and screw and separate them. Both items can now easily be cleaned on a floor grid or anything else.
4. Rinse the feeding chute with direction to the tank.
5. Rinse tank and grinder.
6. Waste residues, metal pieces etc. can now be removed from the tank by taking out the two floor sieve baskets.
7. Empty out and clean the bottom screen box.
8. Clean electrodes for the water level control.



ATTENTION!



### 10.3 Cleaning instruction – daily

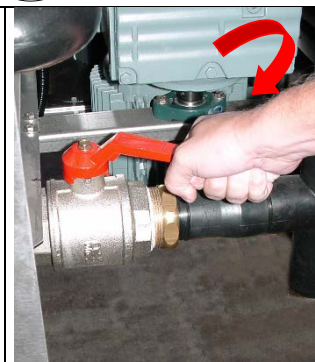
**Do not use a high pressure cleaner!!!**



Press the "OFF" button for the final cleaning cycle. After approx. 15 min. this cycle is terminated automatically. (Operating pannel AZP 80)



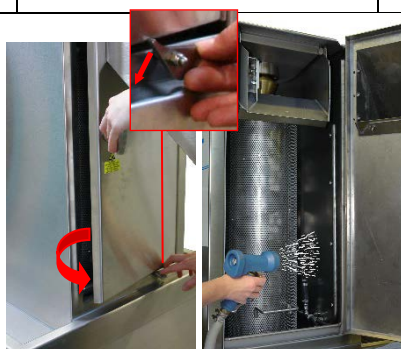
Press the EMERGENCY STOP switch off! (Operating pannel AZP 80)



Open drain valve.



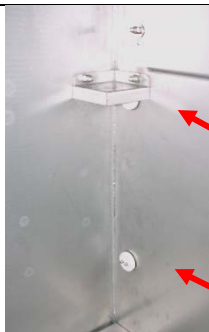
Open the tank cover and the cleaning door of the wet waste press. Flush out the interior of the press and the protection hatch of the discharge chute.



Lift the flap and flush out the tank and the shredding mechanism, using a water hose and warm water, if possible.



Flush out the inlet chute in the direction of the tank.



Clean the level control system's electrodes.



Now remove the bottom screen box and any remaining waste, metal parts, etc. from the tank. Empty out and clean the bottom screen box.



Re-insert the bottom screen box when it is clean.

**Option flushing trough:**

**The flushing trough must be cleaned daily!**

**The machine, switch cabinets and other electrical components must NOT be sprayed with a hose or a high pressure cleaner.**

## 10.4 Cleaning instruction – weekly

We recommend that the following cleaning operations are undertaken each week in addition to the daily cleaning.

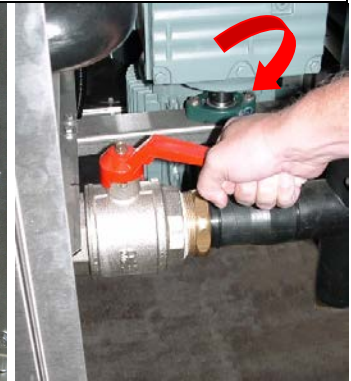
**Do not use a high pressure cleaner!!!**



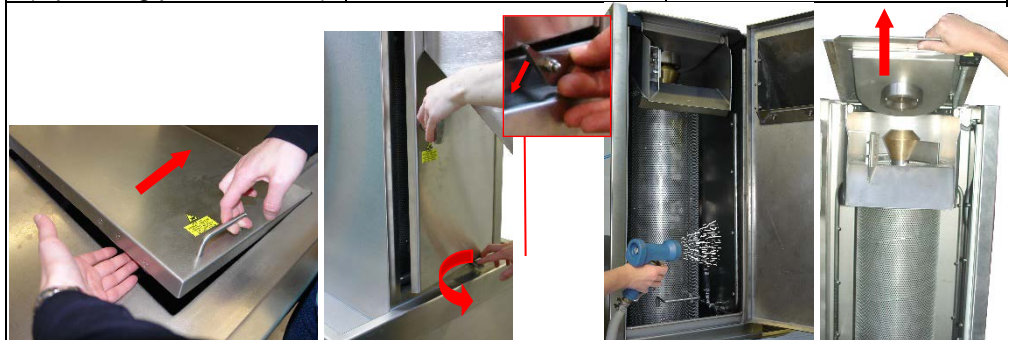
Press the "OFF" button for the final cleaning cycle. After approx. 15 min. this cycle is terminated automatically.  
(Operating panel AZP 80)



Press the EMERGENCY STOP switch off!  
(Operating panel AZP 80)



Open drain valve.



Open the tank cover and the cleaning door of the wet waste press. Flush out the interior of the press. Open the cover of the wet waste press.



Remove the screen tube and the worm spindle and pull them apart. Both parts can now be cleaned easily, e.g. on the floor plate.  
(Important! A second person may have to help owing to the weight of the parts. Beware of shearing and crushing points when assembling the worm spindle and screen tube!)



Lift the flap and use a water hose to flush out the tank and the shredding mechanism, if possible with warm water.



 <p>Flush out the inlet chute in the direction of the tank.</p>	 <p>Clean the level control system's electrodes.</p>	 <p>Now remove the bottom screen box and any remaining waste, metal parts etc. from the tank. Empty out and clean the bottom screen box.</p>
 <p>Re-insert the bottom screen box when it is clean.</p>	<p><b>The machine, switch cabinets and other electrical components must NOT be sprayed with a hose or a high pressure cleaner.</b></p> 	

### 10.5 Care of stainless steel surfaces

We recommend cleaning the stainless steel surfaces only when needed with cleaner and care products suitable for stainless steel. Lightly soiled parts can be wiped with a (possibly damp) cloth or sponge. Be sure to wipe dry after cleaning to avoid traces of scale. Use demineralised water if possible.

Do not use aggressive cleaning or scouring agents. The care products must not attack the stainless steel, form deposits, or cause discoloration. Never use cleaning agents that contain hydrochloric acid or bleaches based on chlorine.

Never use cleaning equipment that you have used previously by non-stainless steel to avoid external corrosion.

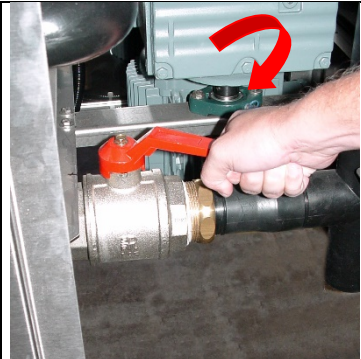
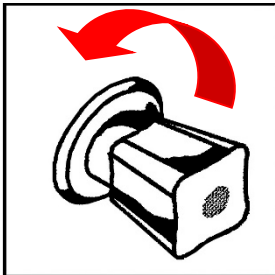
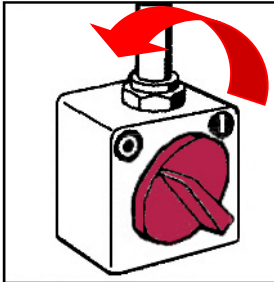
Aggressive external influences due to cleaning and care products that evaporate in the vicinity of the installation, or caused by direct application, can lead to machine damage and put the material at risk (e.g., aggressive tile cleaners).

#### Caution!

Respect the safety rules of the manufacturers on the original packing as well as on the safety data sheets.

## 11 Setting out of operation

This machine must be switched off after use and cleaning, or when no one is regularly supervising its installation site!

 <p>Open the drain valve.</p>	 <p>Close the stop valve on the water pipe.</p>	 <p>Switch off the main power supply from the building.</p>
----------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------

The food waste treatment machine is now isolated from the power supply.

**The wet waste treatment unit is now ready for the next shift.**

## 12 Suggestions for trouble shooting

Despite of a well proved construction minor faults can occur which normally can easily be repaired. We have listed some possible faults and explained how they can be repaired so that you are able to repair minor defects by yourself.

**Please note:**

**When working at the machine, please always switch off the main switch before and consult an electrician !**

Fault	Remedy
Motor of grinder resp. solid parts separator does not work!	<ul style="list-style-type: none"> <li>Fuses are blown off. Check motor protector for motors.</li> </ul> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><b>Attention:</b> Disconnect the switch box by switching off the main switch or by removing the local main fuse. We do not assume liability for any damages resulting from non-observance of this regulation.</p> </div>



Fault	Remedy
<b>No fresh water supply!</b>	<ul style="list-style-type: none"> <li>• Solenoid valve is not energized and plunger does not actuate. A repair can normally only be effected by a technician or electrician.</li> <li>• Dirt traps are plugged. Remove dirt trap sieve at the solenoid valve and clean it..</li> <li>• No regeneration water, nozzle plugged.</li> </ul>
<b>Automatic filling or water supply for regeneration does not stop!</b>	<ul style="list-style-type: none"> <li>• Solenoid valve is jammed due to lime or other deposits. Check solenoid valve for cleanness. In case of breakdowns due to wear or too much lime exchange lower part of the valve.</li> <li>• Water level controls are dirty. Clean electrodes.</li> </ul>
<b>Foam formation!</b>	Some garbage can cause increased foam formation. This can be avoided by adding of other waste or a foam absorbing product. The water level is controlled by an adjustable stand pipe overflow in the solid parts separator. Adjustment works are made by our technician when setting the machine in operation.
<b>Reduced throughput</b>	Hollow-ware such as plastic containers should only be fed in open condition. Floating parts also reduce the throughput.
<b>Solid parts separator is blocked!</b>	<ul style="list-style-type: none"> <li>• Large quantities of plastic parts having long fibres and which have not been mixed with other garbage can cause blockage.</li> <li>• Remove perforated cylinder and screw, pull out the screw and clean it.</li> </ul>
<b>Water penetrates the discharge chute!</b>	<ul style="list-style-type: none"> <li>• Too much oil and grease in the grinder.</li> <li>• Perforated cylinder in the solid parts separator is blocked. <ol style="list-style-type: none"> <li>1. Clean perforated cylinder</li> <li>2. In case the brushes of the screw are worn to a large extent, these must be renewed.</li> </ol> </li> </ul>

### 13 Staff training

Only trained and instructed personnel are allowed to work on the dishwashing machine.

The skills required by the personnel for the installation's operation, maintain and repair must be clearly established. Any personnel undergoing training are only allowed to work on the dishwashing machine installation under the supervision of an experienced person.

Persons \ Activity	Trained operating personnel	Trained company tradesman	Trained company tradesman or installation engineer
Installation and assembly			◆
Commissioning			◆
Operation, use	◆	◆	◆
Cleaning	◆	◆	◆
Checking safety devices	◆	◆	◆
Fault finding		◆	◆
Troubleshooting, mechanical		◆	◆
Troubleshooting, electrical			◆
Maintenance			◆
Repairs		◆	◆

Such training should be confirmed in writing.

### 14 Disposal of the installation

When you eventually dispose of the installation (dismantlement/scrapping), the parts and their corresponding materials should preferably be re-used.

Here is a list of the materials that most frequently occur when dismantling:

- Chrome-nickel-steel
- Aluminium
- Copper
- Brass
- Electrical and electronic parts
- PP and other synthetic materials
- Chrome-nickel steel

### 15 Maintenance

Maintenance work may only be carried out when the dishwashing machine is shut down. In addition, the dishwashing machine main power switch must be in the OFF position and locked in this position

#### Existing safety systems may not be removed!

A functional test on all safety systems of the machine / installation is carried out during every regular maintenance.

We recommend that you take out a maintenance contract with our manufacturer's agent in order to ensure a long service life.



**ATTENTION!**

## 15.1 Basic safety measures during normal operation

Observe the maintenance periods prescribed in the operating instructions!  
Observe the maintenance instructions given in these operating instructions for individual components!



Before carrying out any maintenance or repair work, prohibit access to the operating area to any unauthorized persons! Provide or display a sign drawing attention to the maintenance or repair work!



Before carrying out any maintenance and repair work, switch off the electrical power at the main electrical power switch and secure the switch with a padlock! The key for this lock must be kept in the hands of the person carrying out the maintenance and repair work! Failure to observe these precautions can result in severe physical injury or damage to property



Before carrying out any maintenance and repair work, ensure that all the parts of the machine that may be touched have cooled down to room temperature!  
Carefully dispose of any lubricating, cooling or cleaning products that could harm the environment!

### 15.1.1 Before starting operations following maintenance or repair work



Before starting operations following maintenance or repair work, all initial tests must be carried out as described in "Machine Settings for Initial Commissioning by the Service Engineer".

### 15.1.2 Observe the environmental protection regulations

Legal obligations relating to the avoidance of waste materials and to their recycling/removal in accordance with applicable regulations must be observed!  
In particular, during installation, repair and maintenance work, materials that could pollute water such as:

- Grease and oils
- Hydraulic oils
- Coolants
- Cleaning fluids containing solvents

must not pollute the ground or run into the sewerage system! These materials must be stored, shipped, collected and disposed of in suitable containers!



## 16 Maintenance recommendation

The gear lubricant oil of the screw should be exchanged after approx. 2 years. Shell gear lubricant oil 90, resp. Shell-Omala 220, or a similar gear lubricant oil should be used. The filling quantity is 1,7 l.

### ONLY AP 80:

If necessary, the upper counter bearing of the screw must be greased weekly with a commercial lubricator.



	Service step			
	①	②	③	④
<b><u>Maintenance</u></b>	Cleaning works  Daily	At least once quarterly	At least once or twice a year  but  every 1000 h	At least once yearly  but  every 2000 h
<b><u>PLEASE NOTE:</u></b> Whenever any electrical components are disconnected and reconnected, replaced or repaired, a safety test must be conducted, at least on these components!!!				

## 1. General cleaning

Screen basket	◆			
Tank cover screen	◆			
Solids eliminator	◆			
Screen cylinder	◆			
Shredding tank	◆			
Tank filling sensor	◆			

## 2. Drives

<b>Check drive motor</b>				
Check drive motor for exterior damage			◆	◆
Check drive motor for quiet running			◆	◆
Check current consumption (I <sub>N</sub> see wiring diagram)			◆	◆
Check ventilation grid for cleanliness			◆	◆

## 3. Flushing pump

<b>Check pump motor</b>				
Check motor for exterior damage			◆	◆
Check current consumption (I <sub>N</sub> see wiring diagram)			◆	◆
Check motor for quiet running (bearing damage)			◆	◆
Check ventilation grid for cleanliness			◆	◆
<b>Check flushing pump</b>				
Check sliding ring seal for watertightness (external visual check)		◆	◆	◆
Replace sliding ring seal				Approx. every 2 years approx. every 3000 h
Check pump impeller for damage				◆
Check pump housing for damage		◆	◆	◆



	Service step			
	①	②	③	④
<b><u>Maintenance</u></b>	Cleaning works  Daily	At least once quarterly	At least once or twice a year  but  every 1000 h	At least once yearly  but  every 2000 h
<b><u>PLEASE NOTE:</u></b> Whenever any electrical components are disconnected and reconnected, replaced or repaired, a safety test must be conducted, at least on these components!!!				

#### 4. Impeller pump

9740104

<b>Check pump motor</b>				
Check motor for exterior damage		◆		
Check current consumption (I <sub>N</sub> see wiring diagram)		◆		
Check motor for quiet running (bearing damage)		◆		
Check ventilation grid for cleanliness		◆		
<b>Check the pump</b>				
Check sliding ring seal for watertightness (external visual check)	◆	◆		
Replace sliding ring seal		Approx. every 2 years Approx. every 3000 h	9666363 Sliding ring seal	
Check impeller for damage		◆	9666361 Impeller	
Check pump housing for damage	◆	◆	9666362 Seal housing	

#### 5. Machine housing and built-in components

Check machine housing, tank, sheet metal body, doors and cladding for watertightness			◆	◆
Check machine housing, tank, sheet metal body, doors and cladding if they are complete	◆	◆	◆	◆
Check bottom screen box for damage and correct position and if it is complete.		◆	◆	◆

#### 6. Equipment area

<b>Clean water system</b>				
Check the complete system for watertightness				◆
Clean dirt trap			◆	◆
Check function of the valves			◆	◆
Clean level control	◆	◆	◆	◆
Check level control function			◆	◆
Check the machine and all the components for lime-scale deposits. De-scale, if necessary			◆	◆

#### 7. Float switch

Check float switch function		◆		◆
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	Service step			
	①	②	③	④
<b><u>Maintenance</u></b>	Cleaning works  Daily	At least once quarterly	At least once or twice a year  but  every 1000 h	At least once yearly  but  every 2000 h
<b><u>PLEASE NOTE:</u> Whenever any electrical components are disconnected and reconnected, replaced or repaired, a safety test must be conducted, at least on these components!!!</b>				

<b>8. Waste water equipment</b>				
Check drain cock and standpipe for watertightness			◆	◆
<b>9. Electrical equipment</b>				
Tighten all screwed fuses and connections				◆
Check all switches for correct operation and damage (see electrical wiring diagram)				◆
Carry out a visual check on all electrical equipment (e.g. switches, cables, housings, covers).				◆
Make the operator aware of the need for electrical safety checks. (One at least every 4 years according to BGVA 3)				◆
<b>Check safety switch for correct disconnection</b>				
Check electrical function of the limit switch			◆	◆
Check limit switch for mechanical damage		◆	◆	◆
<b>10. Desinfectant dosage</b>				
Check function (if possible, coordinate with chemical supplier)			◆	◆
<b>11. Function test on the complete machine</b>				
Check machines for the interaction of all functions			◆	◆
Test run: Check results			◆	◆

The service steps ① - ④ must be carried out by personnel trained for this purpose.

- ① trained operating personnel
- ② company tradesman after instruction
- ③ trained company tradesmen or installation engineers
- ④ installation engineers trained by MEIKO

You can document the completed maintenance work on the following pages. MEIKO recommends that you enter the half-yearly service steps (③), and the annual service steps (④).



Maintenance recommendation

Date:	Service step		Name: Completion Installation engineer	Name: Confirmation Customer
	③	④		
	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>		
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