

Winterhalter GS 500-Serie
GS 500 Series
Gamme GS 500

winterhalter



Betriebsanleitung
Operating Instructions
Notice d'utilisation



**Sehr geehrte Damen und Herren,
sehr geehrte Kunden!**

»Vertrauen schenken« – »Vertrauen haben«: Ein Unternehmen zu führen ohne Vertrauen in die eigenen Talente und Fertigkeiten, in die Beziehungen zu Kunden und Lieferanten, ist für uns undenkbar.

Diese Grundhaltung erlaubt uns Spitzenleistungen. Wir stellen uns täglich den Herausforderungen, »tüfteln« an Technik und Design, und entwickeln neue Konzepte, um unseren Kunden Sicherheit und Erfolg zu garantieren.

Ich danke Ihnen für Ihr Vertrauen, das Sie uns mit dem Kauf dieser Winterhalter Spülmaschine schenken.

Mit den besten Grüßen und Wünschen für die Zukunft

Ihr


Jürgen Winterhalter

Dear Customer,

„Giving trust“ – „having trust“: running a company without having faith in your own abilities and skills, and in the relationship to customer and supplier is unthinkable for us. This guiding company principle allows us to give our best. We live up to the challenges on a daily basis, „tinkering“ with technology and design and developing new concepts that guarantee our customers' safety and success.

I thank you for the trust that you have placed in us by buying this Winterhalter product.

With kind regards and best wishes for the future

Yours sincerely


Jürgen Winterhalter

**Mesdames, Messieurs,
Chers clients,**

«Faire confiance et gagner la confiance», telle est notre devise car il est impossible de conduire une entreprise sans faire confiance en nos ressources créatives, aux relations avec la clientèle et les fournisseurs.

Ce principe nous conduit à des réalisations de pointe et, jour après jour, nous nous assignons de nouveaux défis au niveau technique et pour la conception, que nous maîtrisons par notre persévérance, dans l'intérêt de la sécurité et du succès du travail de nos clients.

Je vous remercie de la confiance que vous placez en nous et que vous avez illustrée en faisant l'acquisition de ce lave-vaisselle Winterhalter.

Je vous souhaite un grand succès dans vos activités.

Toujours à votre service


Jürgen Winterhalter

Operating instructions

for Winterhalter Gastronom dishwasher GS 502 and GS 515

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1 Intended use

The **Winterhalter Gastronom dishwasher GS 502/GS 515** may only be used for washing items from the catering industry and related trades. The machine may only be used for this purpose and in accordance with the operating instructions.

The dishwasher is a technical implement for commercial use and is not intended for domestic applications. Any change in design or use of the utensil washer carried out without the written permission of Winterhalter Gastronom GmbH leads to the guarantee and product liability becoming null and void. If damage is caused to the utensil washer due to failure to observe the instructions given in this manual, no claims under guarantee can be made to Winterhalter Gastronom GmbH.

2 Safety instructions

Make sure that you have read and understood the operating instructions before you start to use the washer. The Winterhalter customer service department can tell you how to operate the washer and how it works.

The following symbols are used in this manual:



Warning: Failure to observe these instructions can lead to danger to life, e.g. from electrical equipment.



Attention: Failure to observe these instructions can lead to damage to equipment.



No drinking water! The water in the machine is not for drinking.



This sign indicates recommendations and special features.

3 Before using the machine

Before you use the machine in your work, it must be connected on your premises by trained specialists in conformance with locally effective regulations and then set in operation by the Winterhalter customer service.



Do not expose the machine to freezing temperatures. Freezing can damage running water systems damaged.

3.1 Setup and hookup



Setting up and hooking up the machine to the customer's supply lines and outlets must be performed in conformance with specific local and national circumstances by approved fitters.

Completeness check:

After unpacking the machine, first check the delivery against the packing slip to see that it is complete and has suffered no damage during transportation. Inform the haulage company, the insurance company and the manufacturer immediately of any damages.

Setting up and aligning the machine

Install supply and drainage tables for pass-through machines and adjust with slight incline to machine or available sink. Before starting installation, use a spirit level to check that the machine is totally horizontal. Adjust the machine's feet to compensate for any unevenness of the floor.

If the machine is installed in a corner, convert the rack carrier to suit the flow direction. The corner guide bolt required can be found in a small bag with the rack accessories.

Sanitary installations:



Please observe carefully the information in the attached connection diagram!
Make sure that the water pressure and flow capacity demanded by the connection diagram are present so that the machine will function properly.

- Install an easily accessible **main shutoff valve** in the water supply line near the machine. It may not be located behind the machine.
- The machine is DVGW and WRC approved, or designed and built according to DVGW and WRC guidelines. It can be connected to the fresh water supply line without any safety device in between.
- Use the hose and the fine filter in the machine to connect it. The fine filter keeps particles from the water supply line from getting into the machine and causing extraneous rust to form on the cutlery or the machine itself. Check that there are no leaks at the connections. The feed pipe may not be shortened or damaged.
- Use the flexible drain pipe to drain the water. The drain pipe may not be shortened or damaged.
- Installation of a water treatment system (if not already integrated into the machine) is recommended if the water hardness exceeds 3°d. This will guarantee optimum washing results. The Winterhalter customer service department will be happy to advise on a suitable system.
- The machine is equipped with a drain pump. The maximum draining capacity is found on the connection diagram.

Electrical installation:



DANGER! Danger of death due to live components!

Have the electric installation of the washer and the auxiliary devices belonging to it carried out only by a specialist firm of electricians approved by the responsible electricity board in accordance with the norms.

Observe the technical connection regulations.

Before commissioning the washer, check that all electrical protection systems are working correctly.

Caution! The machine is only to be considered free from voltage when the mains disconnecting switch (mains switch) provided by the customer is switched off.

The electrician must take note of the following:

- The total connected load of the machine is stated on the rating plate.
- Fuse the electrical connection of the machine as a **separately fused circuit** as part of the building system using slow-blowing fuses or circuit breakers in accordance with the total connected load (see rating plate).
- Install a mains disconnecter as well as a residual-current circuit breaker (RCCB) in the electrical feeder, in accordance with the regulations. These switches must disconnect all poles and must have the prescribed contact gap. The installation location must be close to the dishwashing machine and must be easily accessible.
- Connect the dishwashing machine and the mounted table system to a protective circuit installed and tested in accordance with the regulations.
- Connect the machine to your potential equalization system. The screw for this connection is located in the machine's base.
If you set up the machine on a supporting stand, the potential equalization system must be put between the machine and the stand.

Connecting cable

The connecting cable may only be changed or replaced by the manufacturer, its customer service representative or a similarly qualified person. Use an H07 RN-F type cable or equivalent.

Phase sequence of main power cable

Mains	1/N/~	2/-/~	3/N/~	3/-/~
No. of leads	3	3	5	4
PE	green-yellow	green-yellow	green-yellow	green-yellow
N	blue	-	blue	-
L1	brown	brown	grey	brown
L2	-	blue	brown	grey
L3	-	-	black	black

Final work:

The machine must be entirely connected to the electrical power mains and the fresh water supply and waste water drain system. The electrical safety system must be tested and fully functional.

A Winterhalter customer service technical performs the initial start-up. In the process, the operator of the machine is instructed in how the machine works.

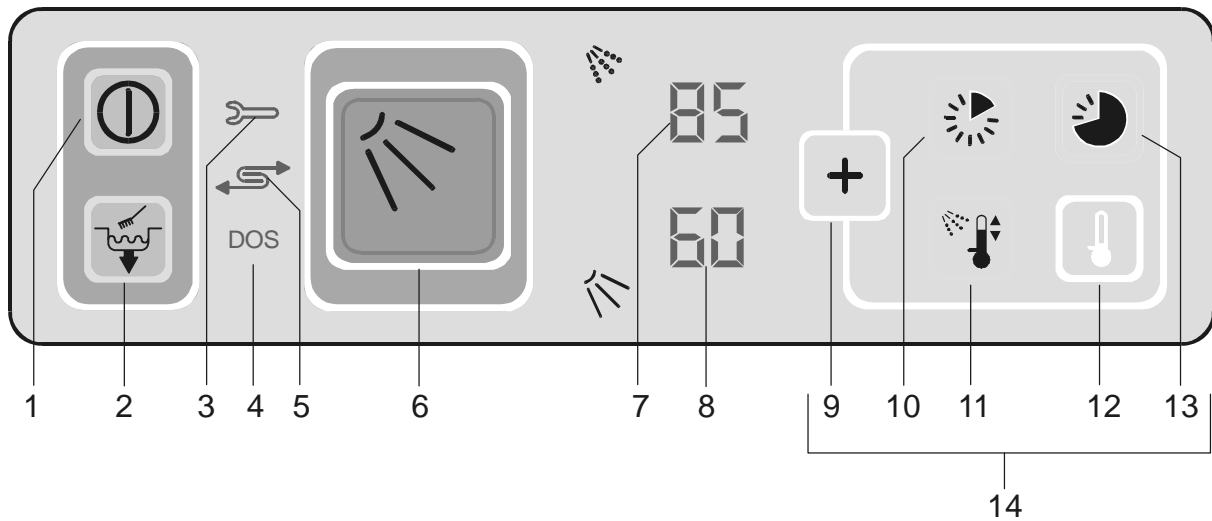
3.2 Initial start-up

After the machine has been connected to your supply lines according to regulations, contact the Winterhalter agent responsible for your locality in order to perform the initial start-up and be instructed in how to run the machine.

4 Description of the machine

4.1 Operating panel

The operating panel is situated in the upper part of the machine.



- 1 On/Off switch
- 2 Tank drainage / self-cleaning
- 3 Control lamp for fault
- 4 Control lamp for lack of detergent or rinse aid (optional)
- 5 Control lamp for lack of salt or external water treatment exhausted
- 6 Programme button normal programme
- 7 Temperature display – Boiler
- 8 Temperature display – Tank
- 9 Function button – activates the special programmes (10-13)
- 10 Short programme
- 11 Reduced rinse temperature (optional)
- 12 Not allocated
- 13 Intensive programme
- 14 Button area for special programmes

4.2 Functions of the dishwasher

After the machine is switched on, the dishwasher heats up the water in the boiler. During this heating up phase, the tank is filled in stages with water which is heated simultaneously. The programme button (6) is lit red during the heating up phase. As soon as the pre-set target temperatures for the boiler and tank have been reached, the dishwasher is ready for operation. The programme button (6) is now lit green.

The dishwasher is fitted with an automatic hood start. When closing the hood, the last selected wash programme starts automatically. When the hood is opened, the pre-set wash programme remains stored. Thus operation can continue immediately with the pre-set wash programme.

An automatic hood opening system is available as a cost option. With this machine version, the hood opens automatically at the end of the programme. The hood is closed manually.



Warning! Keep head or chin away from top of hood and handles.

Note! Do not place any articles such as towels, equipment, dishes or racks on the hood or hang them on the handles. Otherwise correct functioning of the hood opening is not guaranteed.

The container for rinse additive is stored separately from the dishwasher. Dosage for the rinse additive is controlled automatically by the dishwasher.

Detergent must be added by hand (in the form of powder) or by means of a dosing pump in the case of liquid detergent.

4.3 Wash programmes

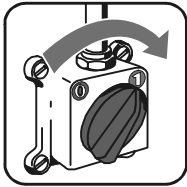
The dishwasher can be operated with various wash programmes. The individual programmes are selected by means of the control panel.

Programme	Description
Normal programme (6)	Normally soiled items Medium drying time
Short programme (10)	Lightly soiled items. Short/no drying time
Intensive programme (13)	Heavily soiled items. Long drying time
3 programmes with reduced rinse temperature (optional)	For washing glasses Programme duration: according to selected wash programme
Tank drainage / self-cleaning (2)	Cleaning the machine: <ul style="list-style-type: none">• rinse water circulates in the rinsing space• rinse water is pumped out• rinsing space is rinsed out with fresh, hot water• used fresh water is pumped out. When the self-cleaning program is finished, the machine automatically switches off.

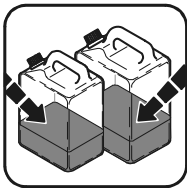
5 Before washing



Open the stop valve on the water supply.



Switch on the mains disconnecting device (mains switch) provided by the customer.



Check level in rinse additive container and detergent container (only with automatic detergent dosage).

Replace or fill up empty containers.

Adding rinse aid and detergent¹:



Only use detergent and rinse aid which are suitable for commercial washers. Do not use normal washing-up liquid. This leads to large amounts of foam building up in the washer.

We recommend the products developed by Winterhalter Gastronom. These are specially developed to suit Winterhalter Gastronom washers.

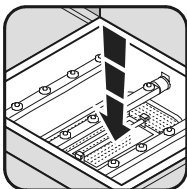


Warning: Detergents for commercial dishwashers can cause corrosion. Always follow the instructions on the packaging and drums.

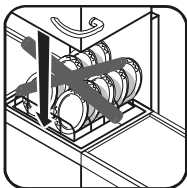


Do not mix different detergent products, since this could cause the dosing pump to break down due to crystallisation (see Maintenance and care).

Checking the filter system:



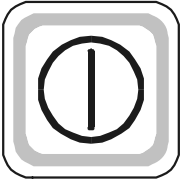
Check whether drainage filter, pump suction filter, basket filter and flat filter are installed.



Do not load dishes at this stage.
Ensure Hood is closed.

¹ Detergent for machines with automatic detergent dosing only.

Switch on machine:



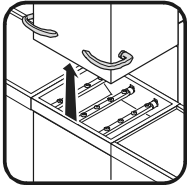
Press On/Off switch (1), heating up phase begins.

Programme button (6) is lit red: Boiler and tank are both filled and heated up.

Programme button (6) is lit green: Filling and heating up phase completed.



Hood must remain closed during filling / heating up.

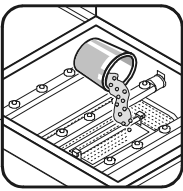


Open hood.

Manual detergent pre-dosage:

If the dishwasher is fitted with a built-in or external detergent dosing pump, there is no need for manual dosing. In this case, detergent dosing is carried out automatically by the dishwasher.

With an external detergent dosing pump, please observe the operating instructions supplied with it.



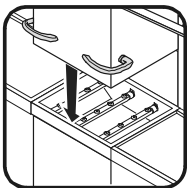
Pour detergent powder into basket filter with cup.
Dosage: Approx. 120g



Only use detergent which are suitable for commercial washers. Do not use normal washing-up liquid. This leads to large amounts of foam building up in the washer. We recommend the products developed by Winterhalter Gastronom. These are specially developed to suit Winterhalter Gastronom washers.



Warning: Detergents for commercial dishwashers can cause corrosion. Always follow the instructions on the packaging and drums.



Close hood.



Start normal programme. For this, press button (6).
Detergent powder is mixed with wash water.

The dishwasher is now ready for operation.

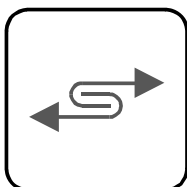
Manual addition of detergent :



Manual addition of the detergent powder must be repeated after approx. every 5 wash cycles. Pour 60g of detergent powder into the basket filter. Then start the wash programme.

Adding regenerating salt *:

* Only for machines with an integral water softener



The salt container inside the machine must be filled with regenerating salt when the symbol lights up on the operating panel². You can do this while the machine is on: you do not have to switch off the machine or drain the water.



Open the screw cap on the salt container and insert a funnel into the filler opening. Fill the salt tank to the top with Winterhalter water softener salt (3x500 gram). Remove the funnel and remove any salt residues from around the filler opening. Fill the salt container up to the rim with water (only at the first commissioning), then tighten the screw cap again ensuring the cap is correctly seated!



Then perform a washing program immediately to flush out any salt residues. Otherwise there is a risk of **rust forming** in the filling area.



Only add regenerating salt to the salt tank!

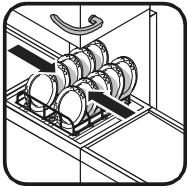
The salt used should be very fine (max. grain size 5 – 7 mm). Salt tablets are not suitable. Do not add any other chemicals, such as detergent or rinse aid. These will cause damage to the machine.

² **Note:**

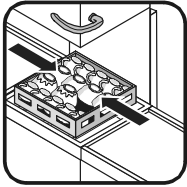
If the machine does not have an integral water softener and this symbol lights up, the connected external water treatment system is exhausted and must be regenerated. Follow the instructions in the documentation supplied with the water treatment system.

6 Washing

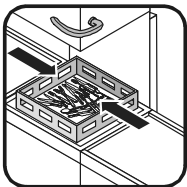
Pre-clean dishes (if necessary pre-wash with spraying nozzle), place in wash rack:



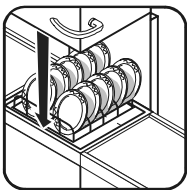
Upper surface of plate or tray facing forward.



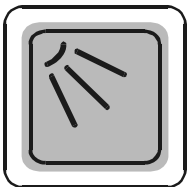
Cups and glasses, facing down.



Insert cutlery in one layer only.



Close hood.

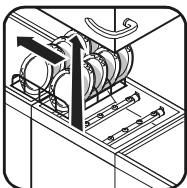


Press programme button (6). The programme button is lit **blue** while the programme is running.

The programme button (6) is flashing **green** when the programme has ended and the door has not yet been opened. As soon as the door of the machine is opened, the flashing stops and the programme button 6 switches to a continuous green light.

The flashing programme button (6) indicates that the wash programme is complete and the door has not yet been opened.

If the flashing disturbs you, the machine control system can be adjusted by an authorised service engineer to prevent key 6 from emitting the flashing green light.



Open hood or wait for automatic hood opening (OPTION).
Remove rack.



- After the first wash cycle, each further wash cycle is triggered by closing the hood.
- Check basket filter for blockages and clean if necessary. The basket filter can be removed without having to drain the tank first.
- Check tank water for soiling. If necessary, drain and re-fill machine.

Wash pause



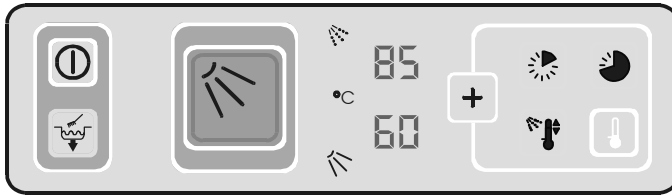
Before closing the hood, press function button in order to cancel automatic hood start.

Close hood.

7 Changing from normal programme to special programmes

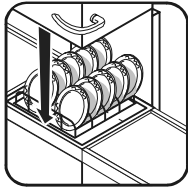


Press function button.



The button area with the special programmes is activated.

The temperatures are also shown now.



Close hood.

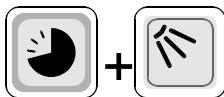
Short programme or intensive programme

Depending on the level of soiling on the wash items, select one of the two special programmes:

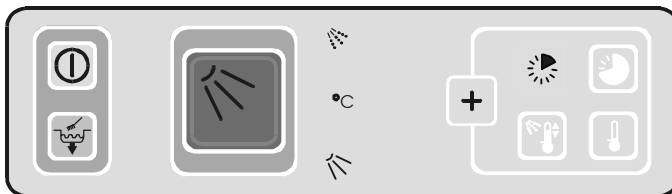


Short programme

or

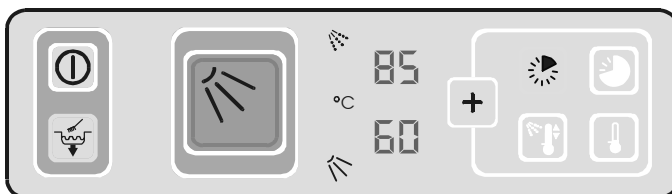


Intensive programme



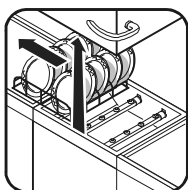
Example: Operating panel display during wash cycle with **short programme** selected.

Button  is lit blue.



Operating panel at end of programme

Button  is lit green.



Open hood or wait for automatic hood opening (OPTION).
Remove dish rack.

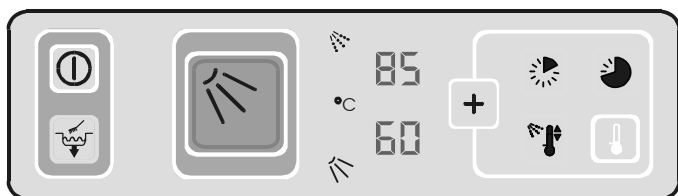
Programmes with reduced rinse temperature (optional)



The first rinse cycle with reduced rinse temperature is carried out with the high rinse temperature of the wash programme set previously.



Press function button.



The button area with the special programmes is activated.



Press function button.

Select one of the 3 wash programmes:



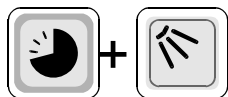
Normal programme with reduced rinse temperature.

oder

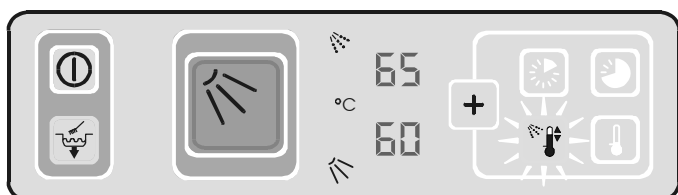


Short programme with reduced rinse temperature.

oder

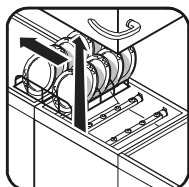


Intensive programme with reduced rinse temperature.



Operating panel display for programme end (with pre-set normal programme)

Function button  flashes until another programme is selected.



Open hood or wait for automatic hood opening (OPTION).
Remove dish rack.



- After the first wash cycle, each further wash cycle is triggered by closing the hood.
- Check basket filter for blockages and clean if necessary. The basket filter can be removed without having to drain the tank first.
- Switching between special programmes: see section 8 "Changing the programme setting"

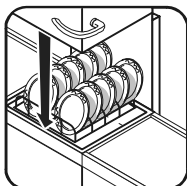
8 Changing the programme setting

Changing the programme setting for the special programmes and for the normal programme can be carried out with the hood open or closed (if the automatic hood start is inactive).

Changing between the special programmes



Select desired programme (press button). The previously selected programme is thus cancelled.



Close hood.



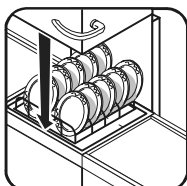
Press programme button.

Changing from special programme to normal programme

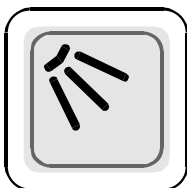


Press function button.

The button area with the special programmes is no longer lit.



Close hood.



Press programme button.
Normal programme starts.

Cancelling the programme selection



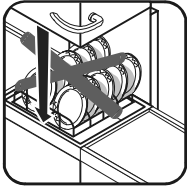
Press function button.

Close hood.

9 Each day after rinsing

9.1 Empty tank; self-cleaning program

With the self-cleaning programme, the interior of the dishwasher is cleaned. The dirty wash water is pumped out. The dishwasher switches off automatically after the self-cleaning programme has finished.

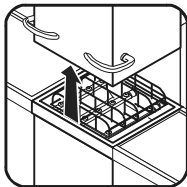


Close hood.

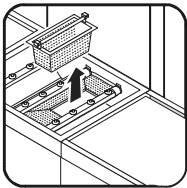


Press down the function key (2) and hold it down for three seconds to start the self-cleaning program. The function key will flash.

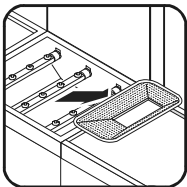
Now the tank water in the rinsing space will circulate for a while before it is pumped out. Then the interior of the machine will be rinsed out with fresh, hot water, which will also be pumped out afterward. When the self-cleaning programme is finished, the machine will switch off automatically. The operating panel will no longer be lit.



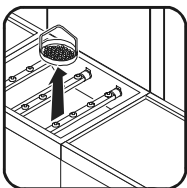
Open hood.



Remove and clean basket filter.



Remove and clean flat filter.



Remove and clean drainage filter.

Insert the parts removed again after cleaning.



- Leave hood open. This helps the interior dry out. This is important to prevent rust, even on stainless steel.
- Clean the outer walls of the dishwasher with cleaning products for high grade stainless steel. We recommend Winterhalter Gastronom high grade stainless steel cleaner and Winterhalter high grade stainless steel protection.

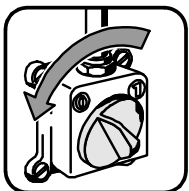
9.2 Switching off



After the cleaning programme has finished, the control of the dishwasher is switched off. The machine is not yet safe, however.



Turn water stop valve to closed position.



Switch off the mains disconnecting device (mains switch) provided by the customer.
Now the machine is safe.

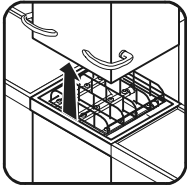
10 Maintenance and care

To keep the machine functional for a long time, it should be cared for at regular intervals. In addition, we recommend have Winterhalter customer service overhaul the machine twice each year.

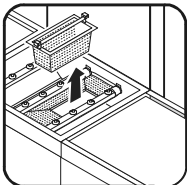


Do not spray the machine with a high-pressure or steam jet cleaning unit.

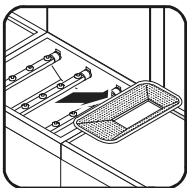
10.1 Every day after washing



Open hood.



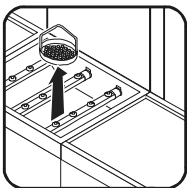
Remove and clean basket filter.



Remove and clean flat filter.



Fold up or remove rack carrier.
Remove wash arms and check jets for blockages, clean if necessary.



Remove drainage and pump suction filter, check for blockages and clean if necessary.

Use a brush to clean off any deposits which may have formed in the interior of the machine. When cleaning, make sure that not foreign bodies which could rust remain in the interior of the machine. These could cause the interior to rust. These foreign bodies could come from rinsing things not made of stainless steel, from cleaning aids, damaged wire racks or supply lines which are not rustproof.

Insert filters and wash arms again.



Clean the outer walls of the dishwasher with special cleaning products for high grade stainless steel. We recommend Winterhalter Gastronom high grade stainless steel cleaner and Winterhalter high grade stainless steel protection.

10.2 As required

FI fault-current circuit-breaker:



Check the required FI-residual current operated device for faults regularly according to the regulations by pressing the test button.

Changing the detergent type (liquid product)

If changing to a different detergent type (even one by the same manufacturer), you must rinse the suction and pressure hoses with fresh water before connecting the new detergent container.

Otherwise, the mixing of different types of detergent will cause crystallisation, which may result in a breakdown of the dosing pump.

Failure to observe this rule will lead to the loss of guarantee and product liability claims vis-à-vis Winterhalter Gastronom GmbH.

Procedure:

- Remove the suction stick from the empty detergent container and place it in a container filled with fresh water.
- Drain the machine completely and refill it. Then drain it again, since no detergent has been dispensed during this process.
- Insert the suction stick in the new detergent container

Descaling

Drain machine.

Interrupt detergent supply: Remove suction pipe from the detergent canister.

Re-fill machine.

Addition of the descaling solution according to manufacturer's instructions.



Observe the printed safety instructions.

Trigger intensive programme once or twice (max. 10 minutes circulation). This loosens the coating of scale.

Drain machine.



Never leave the descaling solution in the machine for a period of several hours.

Put detergent supply into operation again.

Re-fill machine.

Operate machine twice more in intensive programme mode.

Drain machine or use for the current wash programme.

11 Malfunctions

11.1 Malfunctions you can remedy yourself

You can remedy minor malfunctions yourself. See the following table. If you cannot remedy the fault, please get in touch with the responsible Winterhalter customer service.




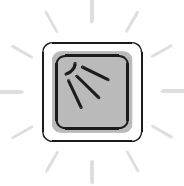
Do not open any panels or parts of the machine if you need a tool to do so. You may get an electric shock.

Only trained specialists are allowed to work on the electrical system. Unplug the machine from the mains supply beforehand.




Do not switch the machine back on until the cause of the fault has been remedied.

Switch off the main switch on your premises. Only then is the machine no longer live.

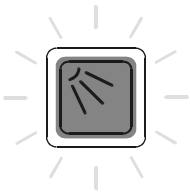
Display	Cause	Remedy
The washer cannot be switched on	The mains disconnecting device (mains switch) provided by the customer is not switched on.	Switch on the mains disconnecting device (mains switch) provided by the customer.
	Customer's fuses blown	Replace the customer's fuses
Wash programme does not start	Hood is not completely closed	Close hood completely. Press hood down onto hood catch
Dishes are not clean	Too low dosage of detergent or detergent container empty	Fill up detergent container or add detergent powder
	Basket filter and/or flat filter blocked	Clean basket filter and flat filter
	Wash jets in the wash arms blocked	Clean wash jets
	Functional fault in the water treatment	Call Winterhalter service engineer

Display	Cause	Remedy
Display shows: 	Water stop valve closed Malfunction	Switch off machine (press on-off switch). Then Err will appear on the control panel accompanied by a fault code. If error code 20 is shown, close the water shut-off valve and notify Winterhalter customer service. If other error codes are displayed, check whether the water shut-off valve is opened. Then switch on the machine again. If the fault message appears again, note the fault code and get in touch with the appropriate Winterhalter customer service
Key flashes blue 	If the cutlery has not been properly cleared away beforehand, so much dirt may have collected on the flat filter and in the filter cassette that the rinsing program can no longer run properly. The washing pump switches off and the program key flashes blue.	<ul style="list-style-type: none"> • Switch off machine, the program key will continue to flash. • Take out filters, clean and replace them. • After two minutes, the flashing will stop. Switch the machine back on and continue to run it. • Clear away the cutlery more carefully to avoid further malfunctions.

11.2 Error alarms in machines with optional extras

Display	Possible cause	Remedy
	Lack of detergent or rinse additive	Re-fill detergent or rinse additive
	Out of regeneration salt	Refill with regeneration salt and run one wash programme (see also Page 8)
	External water treatment system needs regenerating	Regenerate external water treatment system
	Peak load cut-off active	Wait until the peak load cut-off switches on the machine completely again.

11.3 Malfunctions calling for the Winterhalter customer service



Red flashing light: Temperature in boiler or tank is greater than 95°C.



Caution: Surface is very hot. The fault (3) symbol appears together with the fault code Err 2 or Err 3. Switch off main switch. Notify the Winterhalter service team immediately.

When the machine can no longer be used because of internal faults, the machine turns itself off automatically and displays an error code.

Display	Possible cause	Remedy
Machine switches off and displays Err 1, 11	Fault inside machine	Notify Winterhalter customer service
Machine switches off and displays Err 6	Fault inside machine or water drain is clogged	Notify Winterhalter customer service or remove cause of clogging.
Machine switches off and displays Err 20	Magnetic valve not closing	Close the water shut-off valve and notify Winterhalter customer service.
Machine is switched off and displays Err 21	Magnetic valve not closing	Close the water shut-off valve and notify Winterhalter customer service.
Machine switches off and displays nothing at all	Fault inside machine	Notify Winterhalter customer service

12 Emissions

Noise

The workplace-related emissions L_{pAeq} as defined in DIN EN ISO 11202 amount to <70dB(A)

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