

# Wexiödisk<sup>W</sup>

## COMBI DISHWASHER WD-90 DUO *touch*

(original documentation)



Read the manual before using the machine!

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## Installation and user manual

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# 1. General instructions

Read the instructions in this manual carefully as they contain important information regarding the correct, effective and safe installation, use and servicing of the machine. Service personnel should have access to all documentation for the machine.

Keep this manual in a safe place so that it can and should be used by other operators of the machine.



- The machine is intended to be used for washing dishware that is found in the general catering and restaurant trade. Other uses are NOT recommended!
- The machine can be equipped with a number of different options. Certain options may be standard in a number of countries. Check what your machine is equipped with.
- Use auxiliary equipment where possible to avoid heavy lifting.
- The machine's display indicates what the machine is doing. The machine's various temperatures and any alarms are also shown.
- The capacity requirements of the machine can be found in the TECHNICAL DATA chapter.
- The electronics in the machine are RoHS compatible.

Before the machine is started up and used, the following points should be observed:



- The SAFETY INSTRUCTIONS chapter must be studied carefully before commissioning the machine.
- Installation of the machine must be performed in accordance with the requirements and instructions indicated in the INSTALLATION INSTRUCTIONS and TECHNICAL SPECIFICATIONS chapters.
- Any personnel who may at some point use the machine must be trained in its operation, use and care.
- The machine should not be used by anyone suffering from a physical or mental illness.
- A close eye should be kept on any children in the vicinity of the machine to ensure they do not tamper with it.
- All cover plates must be fitted during use.



The machine and equipment requires an annual service. Contact one of our authorised and trained service companies for such a service.

## 1.1 Symbols used



This symbol warns of situations where a safety risk may arise. The instructions given should be followed in order to prevent injury and dangerous situations.



This symbol on a machine part warns of electrical equipment. The machine must be entirely non-live during servicing, turn off the power at the power switch and if required, the switch should be locked to prevent unintentional operation. The component may only be removed by a qualified electrician. You must also remember to switch off the power supply to any external equipment which has a separate supply (e.g. detergent equipment).



This symbol warns that the machine's electronics are sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics at all times.



This symbol explains the right way to perform a task in order to prevent poor results and/or damage to the machine.



This symbol identifies recommendations and hints to help you get the best results when washing, to increase the machine's lifespan and reduce the risk of emergency shutdown.



This symbol explains the importance of careful and regular cleaning of the machine to meet hygiene requirements.



This symbol warns of the importance to read the manual before using the machine.



This symbol warns that local regulations must be followed for recycling of packaging etc. as well as the destruction of the machine.



This symbol shows where any earth cable for potential equalisation can be connected. The earth bolt is placed on the machine's stand.

## 1.2 Machine rating

The machine has two rating plates, one of which is placed at the bottom of one side of the machine and the other in the electrical cabinet. The technical information on the plates is also included on the machine's wiring diagram. The various rating fields show:



1. Machine type
2. Machine serial number
3. Year of manufacture
4. Enclosure protection class
5. Voltage
6. Number of phases with or without neutral
7. Frequency
8. Main fuse
9. Motor output
10. Electrical heating output
11. Max. output
12. QR code

## 1.3 Checking that the machine and manual correspond

Check that the type description on the rating plate corresponds with the type description on manual cover page. If manuals are missing, it is possible to order new ones from the manufacturer or the local distributor. When ordering new manuals, it is important to quote the machine number found on the rating plate.

## 1.4 EU Declaration of Conformity

A so-called EU Declaration of Conformity is provided on delivery of the machine.

**Wexiödisk**

### CE DECLARATION OF CONFORMITY

This declaration of conformity only refers to the machine/product in the condition in which it is supplied, not any additions or modifications made by the customer/user.

1. Manufacturer: Wexiödisk AB, Mårdvägen 4, S-352 45 Växjö, Sweden  
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2. Representatives of Wexiödisk AB:  
 Representer av: Sörens Centraltryckeri, Lake Hygiene Group Ltd, CSP Ltd., Sörens Service OOO, Fastus ehf, IZB, Marlin Food Equipment Ltd, Moffitt Pty Ltd, M's Alshwaika Consoicates Pvt Ltd, Nakantshi MCO Co Ltd, QMB colPrator, Retail doc, SHS Hygiene I Kurdistan, TFN Group, Wexiödisk AB, Wexiödisk UK

3. Computer or technical documentation: Magnus Tillsjö

4. Our machines are manufactured in 2016 in accordance with applicable EU directives and we declare under sole responsibility that the following products:

5. CE Declaration of Conformity:  
 EU's Machinery Directive 2006/42/EG, annex IA  
 EU's Low-voltage directive 2006/95/EC  
 EU's EMC-directive 2014/53/EU  
 EU's WEEE directive 2002/96/CE  
 EU's RoHS-directive 2011/65/EU

6. Harmonised standards:  
 EN 12100 Machines safety: General principles for design - Risk assessment and risk reduction  
 EN 50106 Safety - Particular rules for safety tests  
 EN 60529 Specification for degrees of protection provided by enclosures (IP code)  
 EN 62233 Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure  
 EN 51022 5.2 Electromagnetic compatibility (EMC) - Immunity standards for industrial environments  
 EN 55014 1 EMC immunity compatibility - Requirements for household appliances, electric tools and similar apparatus - (EMC) - Part 1: Guidelines  
 EN 50581 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

7. The above directives and standards are common to the different machine groups. Standards in the tables below are specific to the different machine groups.

<p>Single tools, Patentsjö, Yunné- dörrkastare with accessories:                  WD-1000 (1)                  WD-1000 (2)                  WD-1000 (3)                  WD-1000 (4)                  WD-1000 (5)                  WD-1000 (6)                  WD-1000 (7)                  WD-1000 (8)                  WD-1000 (9)                  WD-1000 (10)                  WD-1000 (11)                  WD-1000 (12)</p>	<p>Harmonised standards to: EU's Machinery Directive 2006/42/EG, annex IA                  EN 12100 Safety: General principles for design - Risk assessment and risk reduction                  EN 50106 Safety - Particular rules for safety tests                  EN 60529 Specification for degrees of protection provided by enclosures (IP code)</p>
<p>General purpose, for use in the workshop:                  WD-1000 (13) &amp; WD-1000 (14)                  WD-1000 (15) &amp; WD-1000 (16)                  WD-1000 (17) &amp; WD-1000 (18)                  WD-1000 (19) &amp; WD-1000 (20)                  WD-1000 (21) &amp; WD-1000 (22)                  WD-1000 (23) &amp; WD-1000 (24)                  WD-1000 (25) &amp; WD-1000 (26)                  WD-1000 (27) &amp; WD-1000 (28)                  WD-1000 (29) &amp; WD-1000 (30)                  WD-1000 (31) &amp; WD-1000 (32)                  WD-1000 (33) &amp; WD-1000 (34)                  WD-1000 (35) &amp; WD-1000 (36)                  WD-1000 (37) &amp; WD-1000 (38)                  WD-1000 (39) &amp; WD-1000 (40)                  WD-1000 (41) &amp; WD-1000 (42)                  WD-1000 (43) &amp; WD-1000 (44)                  WD-1000 (45) &amp; WD-1000 (46)                  WD-1000 (47) &amp; WD-1000 (48)                  WD-1000 (49) &amp; WD-1000 (50)                  WD-1000 (51) &amp; WD-1000 (52)                  WD-1000 (53) &amp; WD-1000 (54)                  WD-1000 (55) &amp; WD-1000 (56)                  WD-1000 (57) &amp; WD-1000 (58)                  WD-1000 (59) &amp; WD-1000 (60)                  WD-1000 (61) &amp; WD-1000 (62)                  WD-1000 (63) &amp; WD-1000 (64)                  WD-1000 (65) &amp; WD-1000 (66)                  WD-1000 (67) &amp; WD-1000 (68)                  WD-1000 (69) &amp; WD-1000 (70)                  WD-1000 (71) &amp; WD-1000 (72)                  WD-1000 (73) &amp; WD-1000 (74)                  WD-1000 (75) &amp; WD-1000 (76)                  WD-1000 (77) &amp; WD-1000 (78)                  WD-1000 (79) &amp; WD-1000 (80)                  WD-1000 (81) &amp; WD-1000 (82)                  WD-1000 (83) &amp; WD-1000 (84)                  WD-1000 (85) &amp; WD-1000 (86)                  WD-1000 (87) &amp; WD-1000 (88)                  WD-1000 (89) &amp; WD-1000 (90)                  WD-1000 (91) &amp; WD-1000 (92)                  WD-1000 (93) &amp; WD-1000 (94)                  WD-1000 (95) &amp; WD-1000 (96)                  WD-1000 (97) &amp; WD-1000 (98)                  WD-1000 (99) &amp; WD-1000 (100)</p>	<p>Harmonised standards to: EU's Machinery Directive 2006/42/EG, annex IA                  EN 12100 Safety: General principles for design - Risk assessment and risk reduction                  EN 50106 Safety - Particular rules for safety tests                  EN 60529 Specification for degrees of protection provided by enclosures (IP code)</p>
<p>Special machines:                  ACS 4000 (100) (131) (132) (133) (134) (135)</p>	<p>Harmonised standards to: EU's Machinery Directive 2006/42/EG, annex IA                  EN 12100 Safety: General principles for design - Risk assessment and risk reduction                  EN 50106 Safety - Particular rules for safety tests                  EN 60529 Specification for degrees of protection provided by enclosures (IP code)</p>

8. Växjö 2016-04-20  
 Magnus Tillsjö  
 Managing Director

CE\_16\_2

- Contact details of the manufacturer (Wexiödisk AB, Mårdvägen 4, SE-35245 Växjö, SWEDEN, Tel.: +46 470 771200, E-mail: wexiodisk@wexiodisk.com).
- Representatives of Wexiödisk AB.
- Person responsible for the product's documentation.
- Year of manufacture of the product.
- The EU Directives with applicable provisions to which all the machines, special machines and accessories comply.
- Harmonised standards for the Directives specified, and which the machines, special machines and accessories meet, wherever relevant.
- Model designation and serial number of the machines, special machines and accessories the document applies to.
- Place and date with signature and name (in block letters) of the person responsible for ensuring compliance with legislation and regulations.



## 2. Safety instructions



Read the chapter GENERAL INSTRUCTIONS carefully before starting work.

### 2.1 General information



The machine is CE marked, which means that it complies with the requirements of the EU Machinery Directive with regard to product safety. Product safety means that the design of the machine will prevent personal injury or damage to property. The CE mark is only valid for an unmodified machine. Any damage to the machine arising from failure to follow the instructions will invalidate the supplier's warranty and product liability.



Installation, repairs and servicing must be performed by an authorised engineer in accordance with local and national rules in effect for such work with water and drainage systems, electricity, ventilation and steam. To ensure electrical safety, components must only be tested when installed in their normal place in the machine. We recommend that the work is performed by the manufacturer or one of the manufacturer's authorised service companies.

To further improve safety during installation, operation and servicing, the operator and the personnel responsible for installing and servicing the machine should read the safety instructions carefully.



The machine's electronics are sensitive to electrostatic discharge (ESD), which is why a static electricity wristband must be used when handling the electronics at all times.

Before the machine enters service, ensure that the personnel are given the necessary training in handling and looking after the machine.

In order to avoid dangerous situations, the following must be followed:



- Switch off the machine immediately in the event of failure or malfunction.
- The work must be performed by an authorised person. Make sure the machine is non-live before removing the cover plate. Turn off the power using the power switch. If required, the switch must be locked to prevent unintentional operation. You must also remember to switch off the power supply to any external equipment which has a separate supply (e.g. detergent equipment).
- Shut off the tap for incoming water and drain the machine's tank(s) before starting work. Let the machine cool down as pipes for water, washing pumps, booster heaters and valves become very hot when the machine is in operation.
- The machine and equipment requires an annual service. The machine should be serviced by a person authorised or trained to do so by us. Use original spare parts.
- Warranty repairs must be performed by an authorised company. Contact an authorised service company to draw up a programme of preventive care and maintenance. For authorised service companies, please see [www.wexiodisk.com](http://www.wexiodisk.com) or contact Wexiödisk AB.
- The regular checks described in the manual must be carried out in accordance with the instructions.
- As the machine is equipped with an external data outlet (USB), this must NOT be used for anything other than its intended purpose.

## 2.2 Transport



Handle the machine with care during unloading and transport; there is a risk of it tipping over. Never lift or move the machine without using the wooden packaging to support the stand.

## 2.3 Installation



- The machine is designed for quick electrical installation.
- The machine must be connected to a lockable power switch, if it does not have an internal main switch.
- Make sure that the mains voltage is the same as that indicated on the machine's rating plate.



For increased safety, it is recommended to equip the installation with a ground fault circuit breaker.

## 2.4 Detergent and drying agent



Be aware of the risks involved in handling detergents and drying agents. Protective gloves and safety glasses should be used when handling, and an eyebath should be within easy access. Read the warning text on the detergent and drying agent containers as well as the detergent supplier's instructions.

## 2.5 Operation



Be very careful around the machine when it is in operation.

### 2.5.1 High temperatures

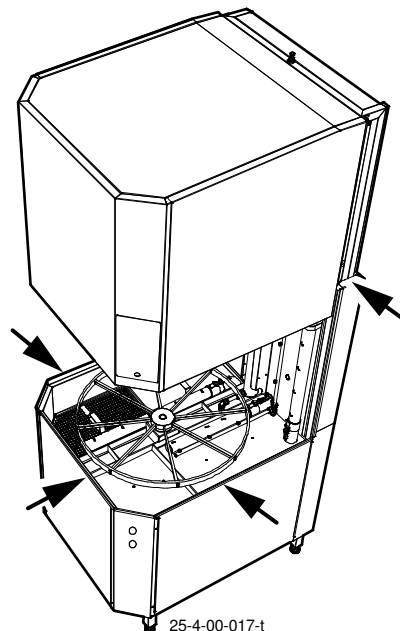


- The temperature of the washing and rinsing water is 60 °C and 85 °C. Do not open the machine until the washing and rinsing phases have finished. The steam that comes out of the machine after the wash has been completed is hot.
- Avoid touching hot pipes and booster heaters. The machine's outer jacket can also become hot during operation.

### 2.5.2 Risk of crushing



- The machine, and any equipment, has moving parts before, during and after washing. Be careful therefore to avoid crush injuries. In connection with service or repairs that require the hood to be open, it must be secured by means of a prop for example.
- The machine is fitted with an anti-crushing system, which prevents serious injury. If anything becomes trapped between the hood and the bottom section, the hood reverses and moves up. The sensitivity of the anti-crushing system is configurable and can be set by a service engineer. Do not place hands or fingers in the locations indicated in the diagram below when the hood is closing.



### 2.5.3 Risk of slipping



The floor should be kept clean and dry to eliminate any risk of slipping. Mop up any water and leftover food that has been spilt. Pay particular attention to granules that have been spilt on the floor.

### 2.5.4 Sounds



The machine is not silent during operation, see TECHNICAL SPECIFICATIONS. Hearing protection may therefore need to be used.

## 2.6 Cleaning the machine



The water in the tank has a temperature of approximately 60°C and contains detergent. Be careful when draining and cleaning the wash tank. Wear protective gloves and safety glasses and have an eyebath within easy access.

## 3. Installation instructions



Read the chapters GENERAL INSTRUCTIONS and SAFETY INSTRUCTIONS carefully before starting work.

### 3.1 General information



Read these instructions carefully, as they contain important information regarding the correct installation method.



- The instructions should be used together with the machine's wiring diagram and flow diagram for water. These can be found in the plastic folder located behind the machine's front panel.
- The machine can be equipped with a number of different options. Certain options may be standard in a number of countries. Check what your machine is equipped with.
- If holes need to be drilled in the machine, the holes must be fitted with an edge strip or similar protection.

#### 3.1.1 Rust on industrial dishwashers



- Large-scale industrial dishwashers in general as well as our dishwashers are made of stainless materials, but despite this, there are still situations where rust can occur on "stainless" materials.
- We are going to describe a few reasons for this here, so that you, as a user, service engineer or other type of personnel, can avoid this.
- Rust usually occurs due to the fact that something that is not stainless finds its way onto the stainless surface. The non-stainless particles will soon start to rust, and then contaminate the stainless material, which also starts to rust. If no action is taken at this point, serious damage such as a hole in the material can occur.

RISK SITUATION	CAUSE	DECLARATION / ACTION
Drilling holes when installing a detergent device.	Using a drill or hole saw that has previously been used for ordinary non-stainless materials.	“Contaminated” hole-drilling tools can cause enormous damage in the form of pores in stainless plates. Never use a cutting tool that has previously been used on other materials or blackplate.
	Using blunt tools when drilling holes.	Stainless plate, which has overheated during hole drilling, may lose its “stainless” properties. This can show up as rust around the hole for the detergent cell.
	Shavings from hole drilling.	The shavings from drilling or hole sawing are usually heated so much that they lose their stainless properties. They must always be removed by hand! Washing after hole drilling is not enough!
Rust spots that occur during normal operation and use.	Minerals, e.g. ferrous gravel or earth, from dishware or food (vegetables and root vegetables) that has been lying in crates, find their way onto the stainless surface. Minerals (gravel) can also be found on the wheels of catering trolleys.	Daily cleaning is always important. Use a suitable brush for “mechanical” cleaning, e.g. in the wash tanks, on the wash trays and filters.
	Steel wool. Ordinary steel wool is not stainless, and can cause serious damage to stainless surfaces and plates.	Use stainless cleaning pads. Remove all ordinary steel wool from the catering facility / restaurant.

NOTE! If rust spots have developed, they must be dealt with immediately by a person authorised to do so!

## 3.2 Requirements for the installation site

### 3.2.1 Lighting

In order to ensure the best possible working conditions during installation, operation, servicing and maintenance, make sure that the machine is installed in a well-lit room.

### 3.2.2 Ventilation and ambient temperature

The machine is intended to be used in an indoor environment at normal room temperature. The machine produces heat and steam when in operation. In order to ensure the best possible working conditions, a certain air renewal rate is required in the dishwashing room. The ventilation requirements for the dishwashing room are to be dimensioned on the basis of the applicable standards.



The machine may optionally have a heat recovery unit connected to an exhaust fan to reduce the amount of steam released.

### 3.2.3 Power supply



In accordance with EN 61000-3-11, the machine is suitable for connecting to a mains voltage with an impedance of  $Z_{max}=0.375 \Omega$  or lower. The maximum impedance must be determined in consultation with the relevant authority prior to carrying out installation.

Power supply connections are made by qualified personnel in a way that complies with local and national regulations. The machine's capacity requirements are stipulated in TECHNICAL SPECIFICATIONS.

### 3.2.4 Water

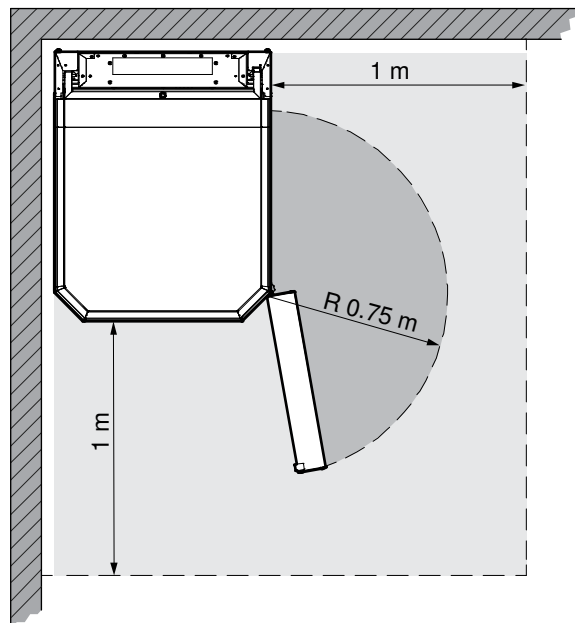
Water connections are made by qualified personnel in a way that complies with local and national regulations. The machine's capacity requirements are stipulated in TECHNICAL SPECIFICATIONS.

### 3.2.5 Drain/waste pipe

There must be a waste pipe with an effective trap for the machine's waste water and for water used for rinse cleaning. The machine's capacity requirements for drainage are stipulated in TECHNICAL SPECIFICATIONS.

### 3.2.6 Space for servicing

The dishwasher is designed to allow it to be positioned in a corner as shown in the figure below. There must be a gap of at least 100 mm between the walls and the dishwasher. A clearance of around 1 metre must be left in front of and to the right of the dishwasher to allow access for servicing and maintenance. The electrical cabinet can be swung out from the dishwasher when servicing and repairs are needed. To facilitate this, clearance is needed in the form of a semi-circle with a radius of around 0.75 m running from the front right-hand corner of the machine, as shown in the figure below. If e.g. a loading table is to be positioned next to the machine, this should be easy to move.



25-4-00-012

*Dishwasher (seen from above) positioned next to a wall*

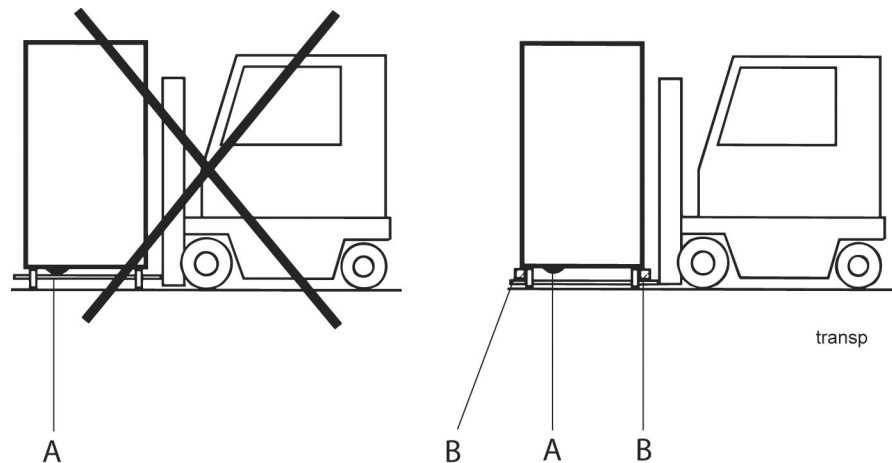


### 3.3 Transport and storage

Always transport the machine in an upright position.



Take care during transport, as there is a risk of tipping. NOTE! The machine must not be transported without a pallet or other support. Some form of support beam must always be used along the sides of the machine during transport. Otherwise the machine may become damaged. When transporting the machine without a normal wooden pallet, always check that none of the components underneath the machine can be damaged.



*A=Pumps*  
*B=Spacers*



If the machine is not being installed immediately, it must be stored in a frost-free area where the air is dry.

#### 3.3.1 Unpacking

Check that all parts have been delivered by comparing them with the delivery note.

Remove the packing material. Inspect the machine for any transport damage.

#### Recycling



- The machine is manufactured from stainless steel plate, among other things, and also contains electronic components. Recycling of the appliance when its economic lifetime has been reached must be carried out in accordance with current rules and regulations.
- Packaging must be sent for destruction or recycling in accordance with local regulations.

## 3.4 Installation

### 3.4.1 Preparing for the installation

Check that there is sufficient room for the machine at the installation location.



- Check that correct connections are available for water, electricity, drainage and possibly steam at the installation location. See TECHNICAL SPECIFICATIONS.
- Check that the overheating protection device is reset.
- In accordance with EN 61000-3-11, the machine is suitable for connecting to a mains voltage with an impedance of  $Z_{max}=0.375 \Omega$  or lower. The maximum impedance must be determined in consultation with the relevant authority prior to carrying out installation.

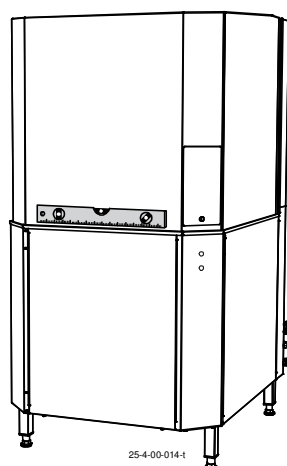
### 3.4.2 Positioning the machine

Check the following points before the machine is placed in position:



- Check that the fuse for the machine at the site is off, blocked and that outgoing electrical circuits from the machine are non-live.
- Remove the protective plastic on the sides which are to be stood against a wall.
- Undo the hose for detergent on the back of the machine. Hang the hose up so that it can be easily accessed by the detergent supplier.
- Put the machine in position, the distance between the wall and the machine should be at least 100 mm.
- Check that the gap between the hood and bottom section is approximately 5 mm around machine.

Place the machine in position and check that it, and any accessories, are horizontally level. Place the spirit level on the join between the machine tank and the upper part. Adjust the height with the legs.



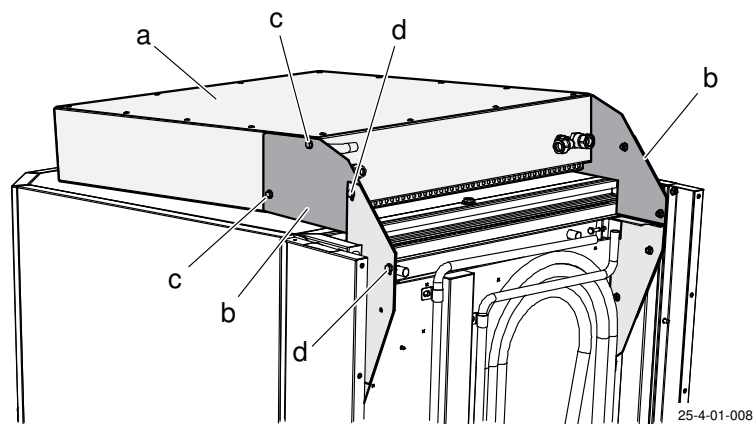
*Check with a spirit level that the machine is horizontal*

Once the machine has been filled with water, do another check to make sure the machine is horizontal.

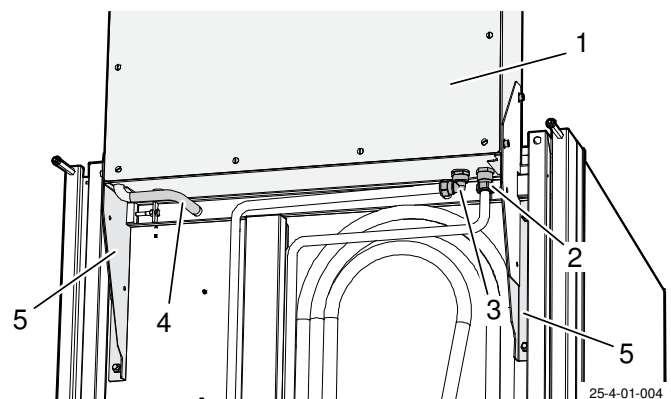
### 3.4.3 Fitting the condensing unit (option)

On delivery of dishwashers with condensing unit, the condensing unit is folded down over the hood and secured with protective transport plates. NOTE! The dishwasher should be adjusted so that it is standing level when assembly of the condensing unit starts

1. Loosen and remove the upper back panel at the rear of the dishwasher.
2. Loosen and remove the screws (c) that hold the protective transport plate (b) against the condensing unit (a).
3. Loosen and remove the screws (d) and nuts that hold the protective transport plate against the brackets at the back of the dishwasher and remove the protective transport plate (b). Possibly need to loosen the contact (JM15) on the power cable to the condensing unit.



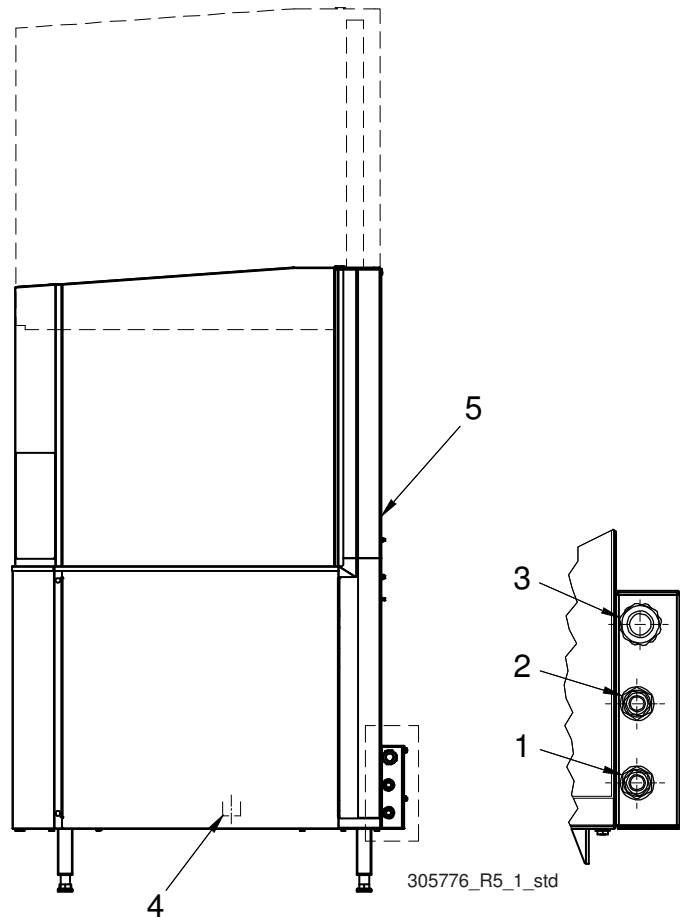
4. Lift the condensing unit into an upright position so that it can be attached to the brackets (5) on the back of the dishwasher. The condensing unit should not be pulled but lifted into place so that the sunken seal high up on the back of the dishwasher is not damaged or warped.
5. Attach the condensing unit to the brackets (5) on the dishwasher using the screws which were previously removed. Check that the condensing unit is perfectly level. Tighten the screws.
6. Connect the water pipes (2) to and from (3) the condensing unit (1), the hose for condensed water (4) and any power cable (contact JM15).



7. Attach the power cable to the condensing unit in such a way that it does not risk becoming trapped in the hood carriage.
8. Replace the back panel.

## 3.5 Connections

### 3.5.1 Standard machine

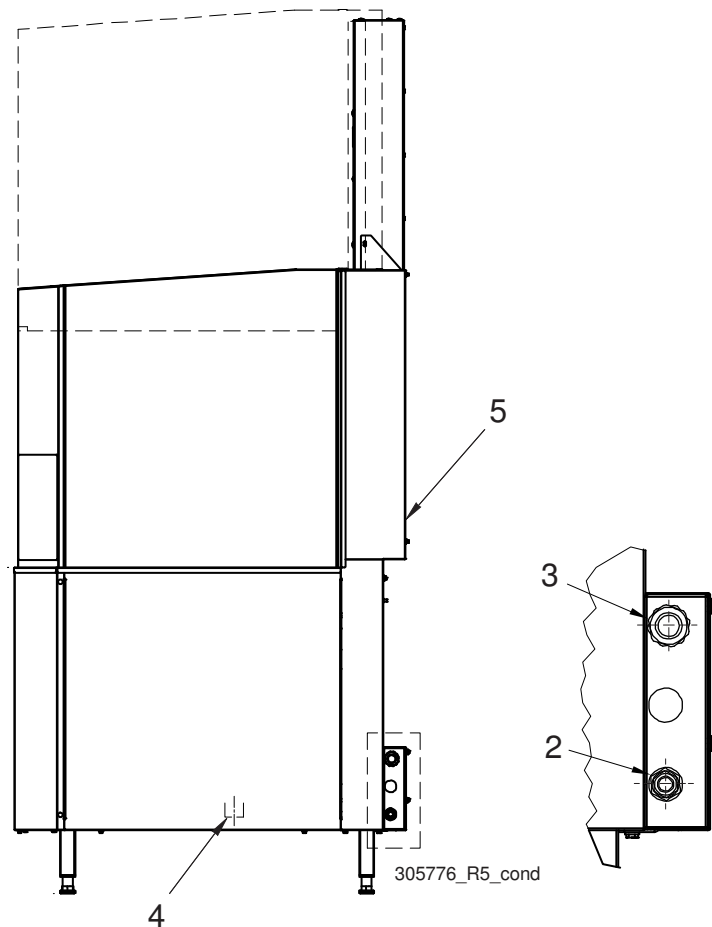


#### *Standard dishwasher*

1. Hot water connection
2. Cold water connection
3. Electrical connection
4. Drain/waste pipe connection
5. Detergent connection

In the following chapter, figures are given in brackets to clarify what needs to be done. These numbers refer to image and list above.

### 3.5.2 Machine with condensing unit (option)



#### *Dishwasher with condensing unit*

1. ---
2. Cold water connection
3. Electrical connection
4. Drain/waste pipe connection
5. Detergent connection

In the following chapter, figures are given in brackets to clarify what needs to be done. These numbers refer to image and list above.

### 3.5.3 Electrical connection

Information about electrical connections (3) is available on the machine's wiring diagram which is provided on delivery. Store the diagrams in the plastic pocket, located behind the machine's front panel.



- The machine is designed for quick electrical installation.
- The machine must be connected to a lockable power switch. This should be placed on a wall, well-protected from water and from the steam which escapes when the machine is opened.
- The connection in the electrical cabinet is at (3).
- The machine is equipped with a phase sequence detector. The machine will not start if the phase sequence is incorrect. If the phase sequence is incorrect, the touch panel will show POWER SUPPLY FAILURE CHECK EMERGENCY STOP.



It is important that the electrical connection is checked so that it is certain that the live and neutral wires are correctly connected and not swapped over. It is also important to check at the same time that the earthing system connection is correct and sufficient so that the machine's electrical and personal security system is not compromised.

After completing the installation, switch on the power switch and all circuit breakers.

### 3.5.4 Water connections



- A shut-off cock must be installed on the incoming pipe.
- It is important that the water supply has sufficient pressure to ensure the correct flow of water to the machine. The required water flow and pressure can be found in the TECHNICAL SPECIFICATIONS.

Hot water (1) and cold water (2) are connected to a standard machine.

The hot water connections on the machine are fitted with filters.

#### **Machine equipped with a heat recovery unit (Option)**



If the machine is equipped with ECO flow (option), which only has cold water, it is connected to (2).

### 3.5.5 Ventilation

The machine's heat load for the room is stipulated in TECHNICAL SPECIFICATIONS.

The machine may optionally have a heat recovery unit connected to an exhaust fan to reduce the amount of steam released.

### 3.5.6 Drain/waste pipe

The waste water system connected to (4) should consist of a 50 mm metal pipe that will withstand mechanical impacts. The waste pipe must run to a floor drain, where its opening must be above the water level.

### 3.5.7 Detergent and drying agent



- The dishwasher is preconfigured for connection of detergent and drying agent equipment. The detergent and drying agent equipment are not normally included in the dishwasher delivery. Contact your detergent supplier!
- Check what your machine is equipped with, as this may vary depending on the model and country.
- Detergent and drying agent equipment is best positioned on the wall to the side of the machine.
- Use the same make and type of detergent and drying agent.
- With machines connected to cold water, the water pipe temperature may be too low for use of powder or paste type detergents.
- If liquid detergent is used together with Wexiödisk's detergent pump, the detergent must be placed under the machine's tank level.
- The positioning of the drying agent is not as critical, but it should be placed in the same way as the detergent.
- Secure the hoses to the detergent and drying agent carefully.

When drilling holes, it is important that the following points should be observed:

- Use sharp tools so that panels do not become unnecessary hot. Red-hot panels can rust in the future.
- Always drill from inside the machine.
- Remove all metal shavings carefully both from the machine and tank before refilling with water. Shavings left in the tank can cause corrosion.

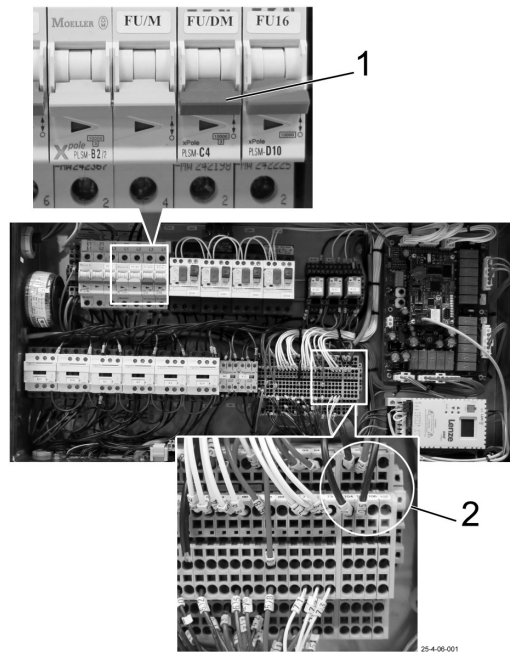
If equipment for a different type of detergent is used, it should preferably be put on the wall behind the machine to avoid holes being drilled unnecessarily in the machine.

Contact your chemical supplier regarding settings and adjustments.

For information about wiring diagram, see the machine's wiring diagram.

## Electrical connection of the equipment

- Remove the machine's front panel. The panel is fixed with screws on the bottom edge under the stand.
- Terminals and a circuit breaker for the detergent and drying agent equipment are located in the electrical cabinet inside the right-hand side panel. They are shown in the figure below.
- See the machine's wiring diagram.



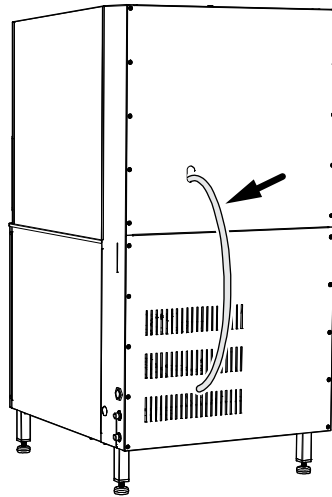
### *Electrical cabinets*

1. Circuit breaker (FU/DM) for detergent and drying agent equipment
2. Terminals (101–107) for connection of detergent and drying agent equipment



## Detergent dosage

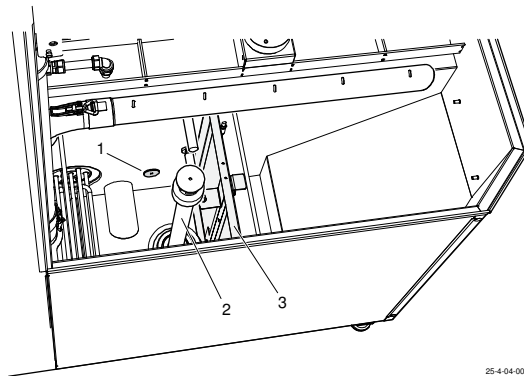
The equipment for detergent dosage is connected to the hose on the rear of the machine.



25-4-04-002\_1

*Hose for detergent dosage on the rear of the dishwasher*

In the tank bottom is an outlet for a sensor for measuring detergent concentration.



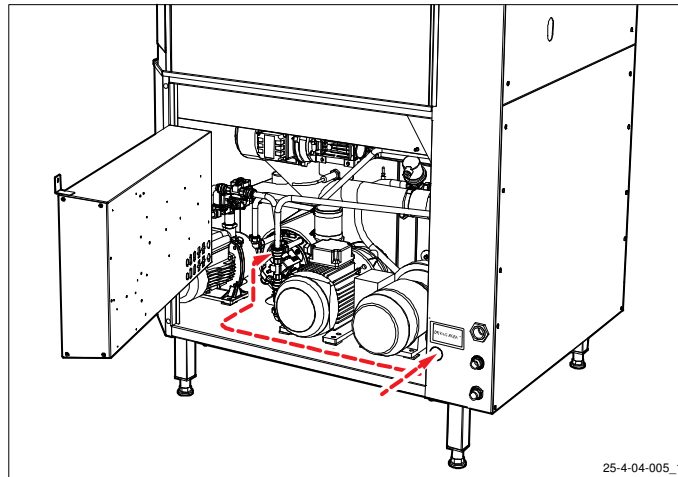
25-4-04-003\_1

*The dishwasher's tank*

1. Outlet for sensor (detergent concentration)
2. Level pipe
3. Dividing wall

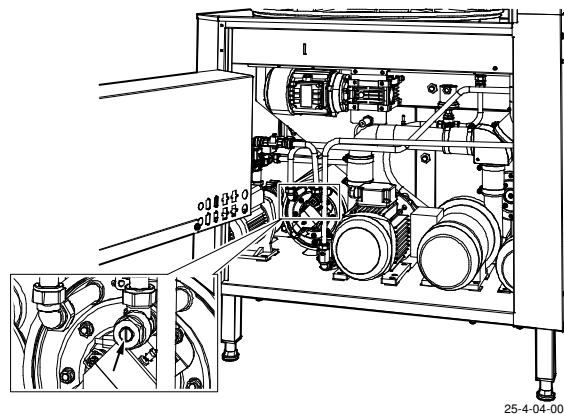
## Drying agent dosage

On the dishwasher's right panel, next to connections for water and electricity, there is a bushing for a hose for a drying agent in the form of a breaker block. This is denoted with a sign which reads DRYING AGENT. The hose for a drying agent is appropriately fed as per the dotted line all the way to the booster heater.



### *Feeding of hose for drying agent*

On the connector between the water pipe and connection for incoming water to the booster heater is a plug where a drying agent dispenser can be connected.



### *Connection for drying agent*

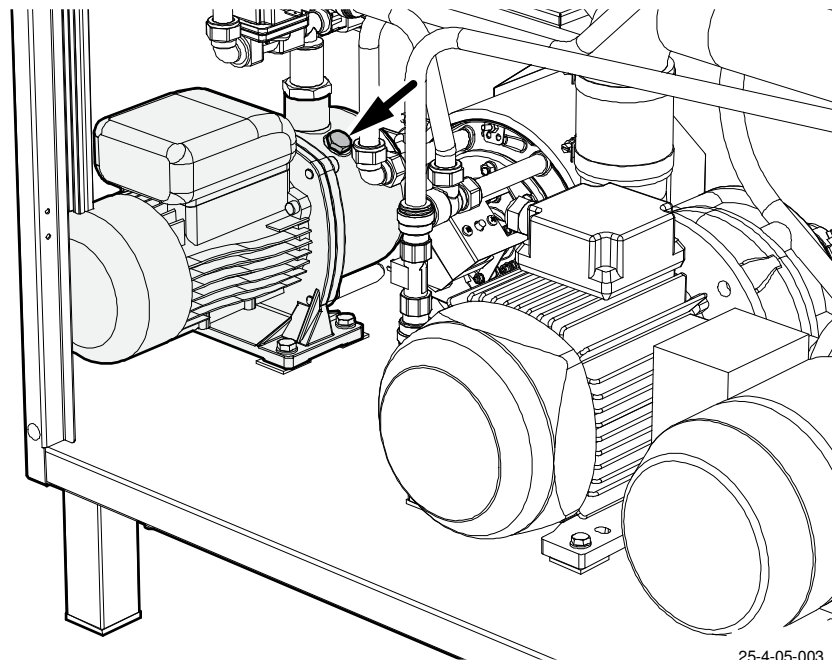
### 3.5.8 Bleeding the booster pump



Bleeding of the booster pump must be performed when the dishwasher is started up.

This is what you should do:

1. Open the water connection to the dishwasher and wait until the dishwasher's break tank has filled with water.
2. Loosen the screw in the ventilation hole on the booster pump and release any air. When water starts to run out of the ventilation hole, the screw is tightened.



25-4-05-003

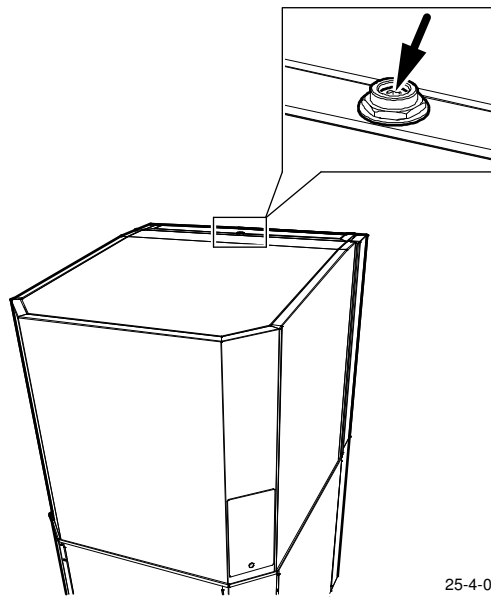
### 3.5.9 Bleeding the hood lifting cylinder



Bleeding of the hood lifting cylinder must be performed when the dishwasher is started up after the booster pump has been bled.

This is what you should do:

1. Start the dishwasher.
2. Open the hood.
3. The dishwasher alarm may sound and the hood stops opening. Reset then the alarm and continue.
4. Loosen the plug in the bleed valve at the very top of the hood and release any air. When water starts to bubble out of the bleed valve, the plug is tightened.
5. Close and open the hood again. Loosen the plug in the air valve and wait until water bubbles out of the bleed valve. Tighten the plug.
6. Repeat this until no more air comes out of the bleed valve. The measurement between the machine's bottom section and the hood when open shall be approx. 660 mm.



25-4-05-002\_1

## 3.6 Installation and connection of auxiliary equipment and options

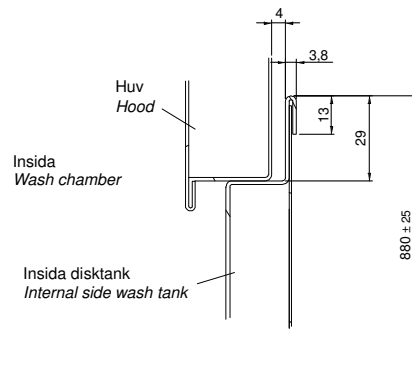


- Once the machine is in place and has been adjusted horizontally and vertically, the auxiliary equipment can be fitted.
- The machine can be equipped with a number of options. Check what your machine is equipped with, which depends on the model, machine type and country.

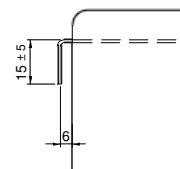
The various options normally place no specific requirement on the installation.

### 3.6.1 Sink connection (option)

**PROFIL DISKTANK  
WASH TANK PROFILE**



**PROFIL DISKBÄNK  
SINK PROFILE**



Max.bredd på  
anslutande bänk:  
Mot sida: 754mm  
Mot front: 614mm  
Max.with  
connected bench:  
Towards side: 754mm  
Towards front: 614mm

### 3.6.2 Folding tables (option)



Available for fitting to:

- Front of the machine (WD209.7451)
- The right-hand side of the machine (the machine seen from the front) (WD209.7452)
- The left-hand side of the machine (the machine seen from the front) (WD209.7453)

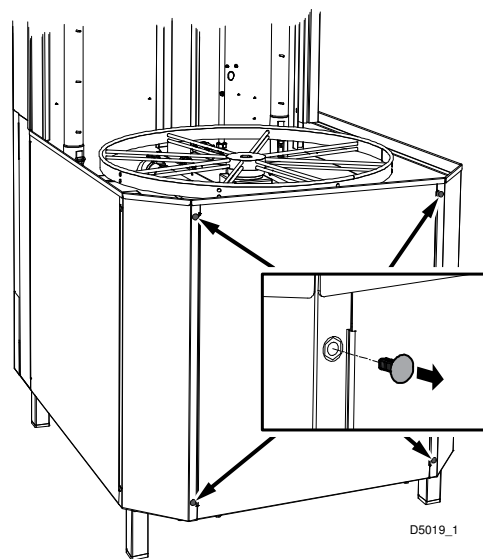
### Front loading (WD209.7451)



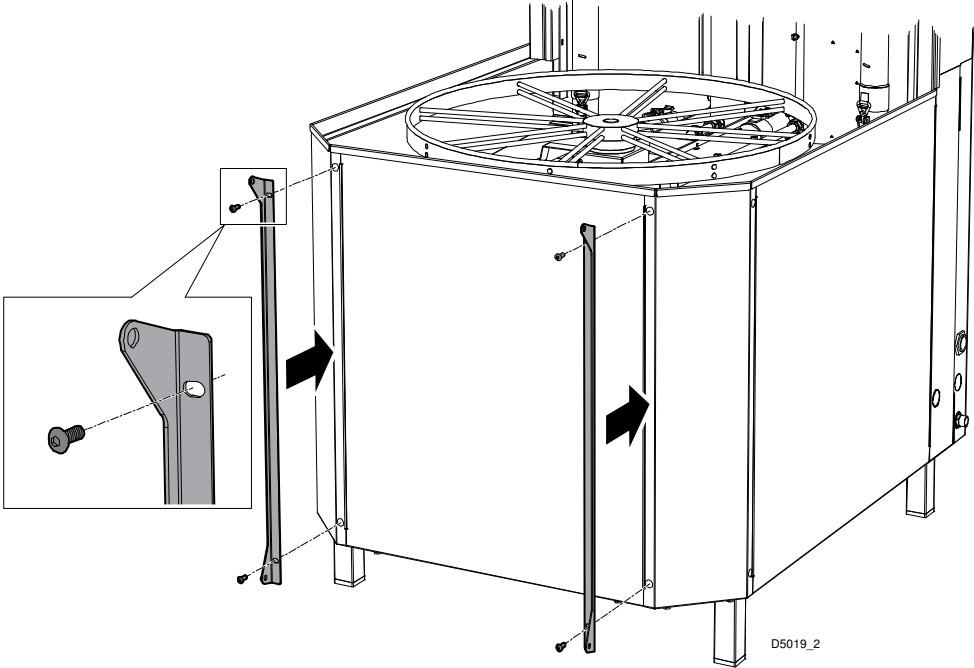
*Folding table for fitting to the front of the machine*

This is what you should do:

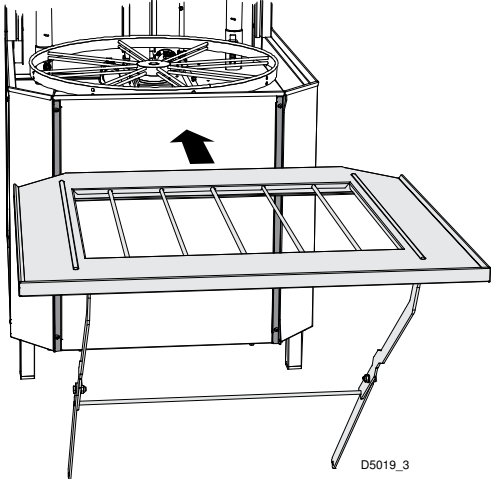
1.



2.

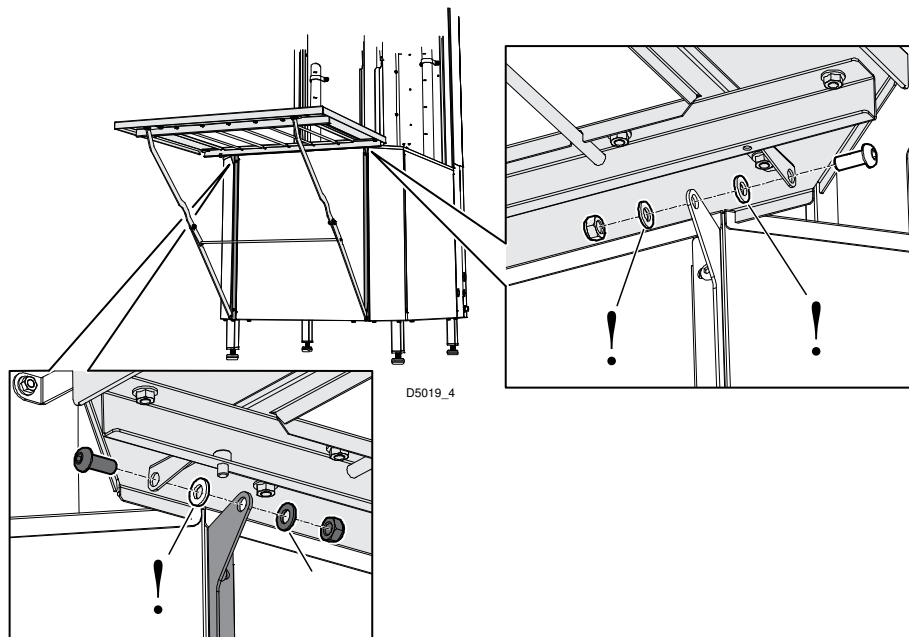


3.

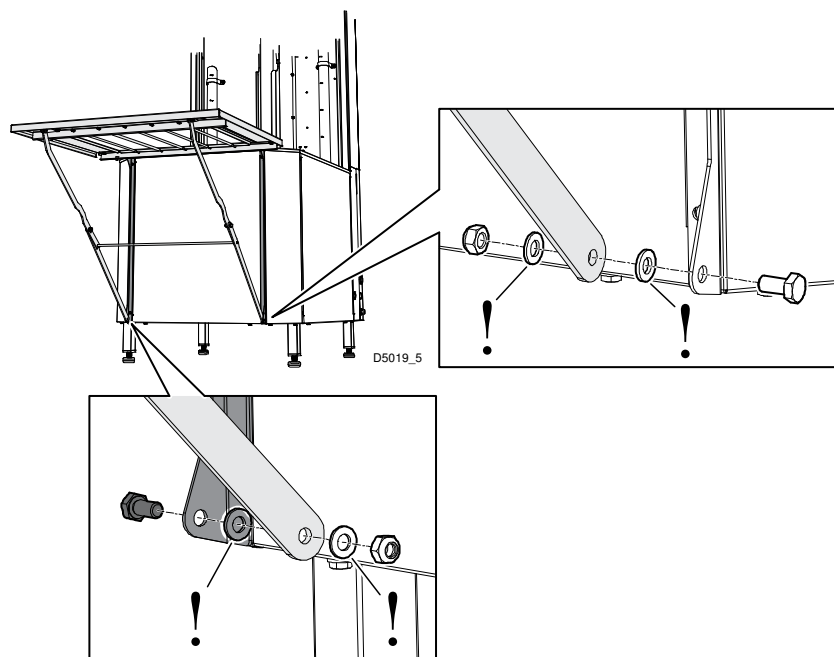




4.



5.



**Side mounting, right (WD209.7452) and left (WD209.7453)**



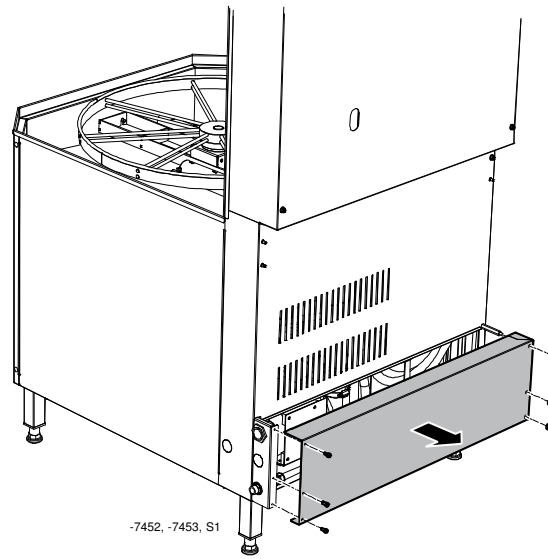
*Folding table for fitting to the right-hand side of the machine*



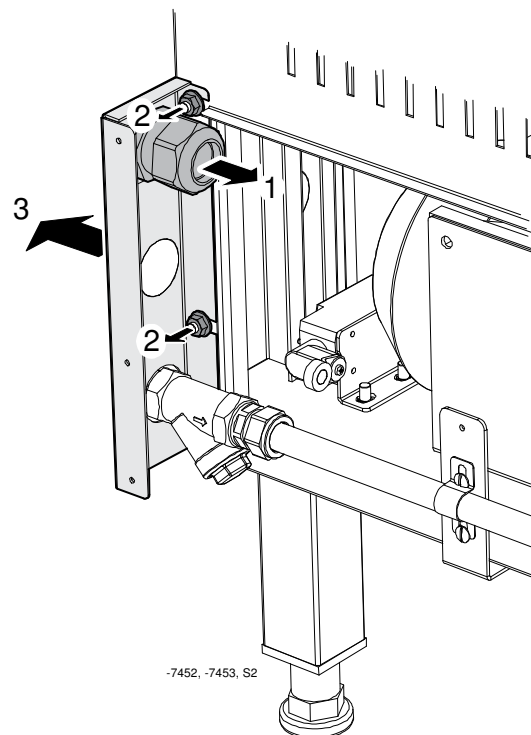
*Folding table for fitting to the left-hand side of the machine*

This is what you should do:

1.

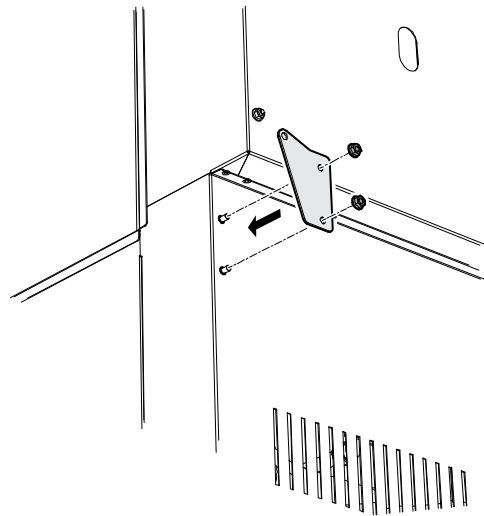
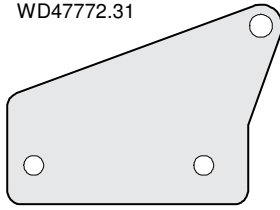


2.



3.

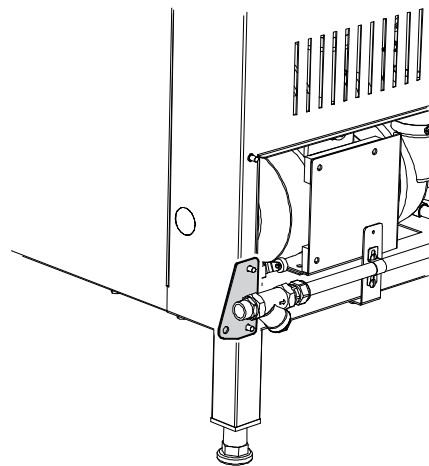
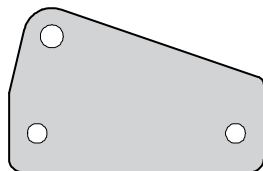
WD47772.31



-7452, -7453, S3

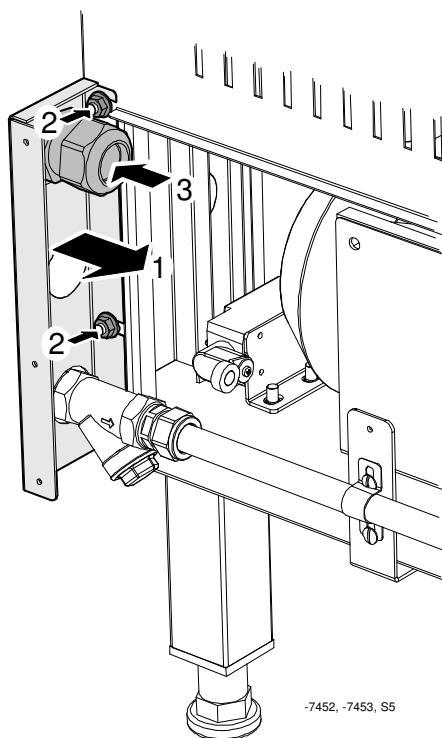
4.

WD47776.31

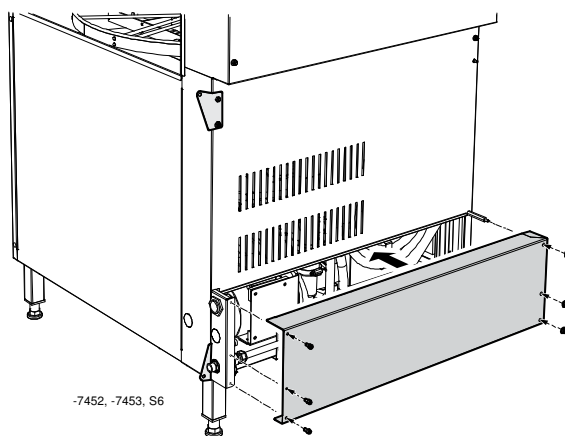


-7452, -7453, S4

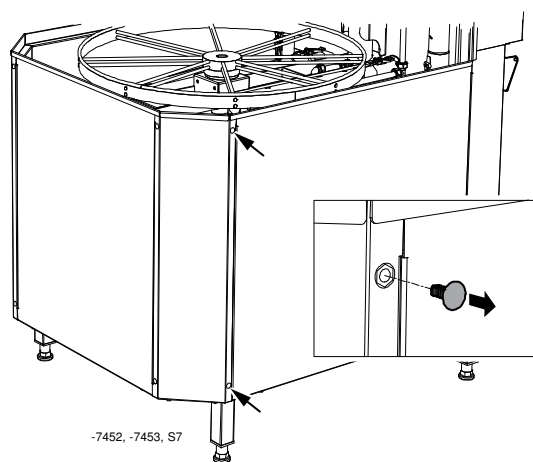
5.



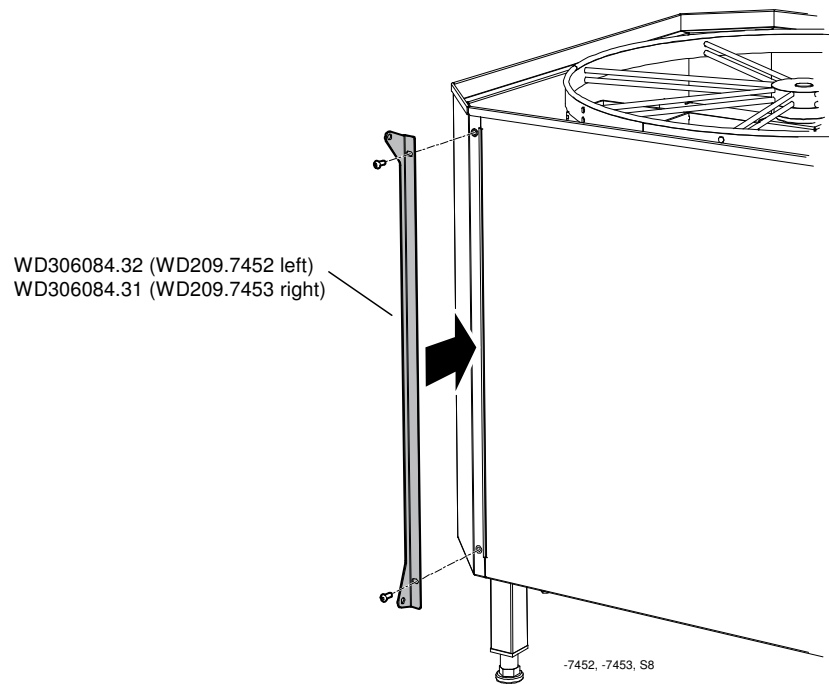
6.



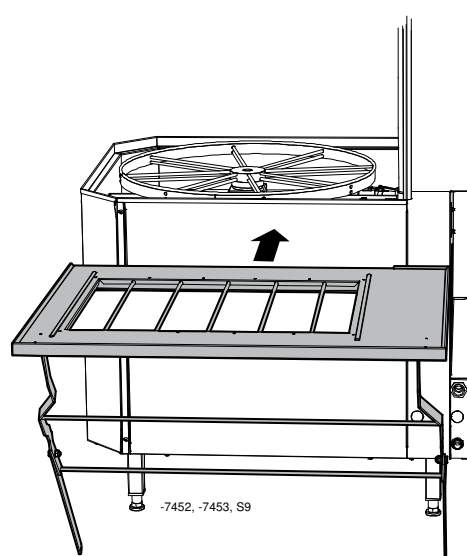
7.



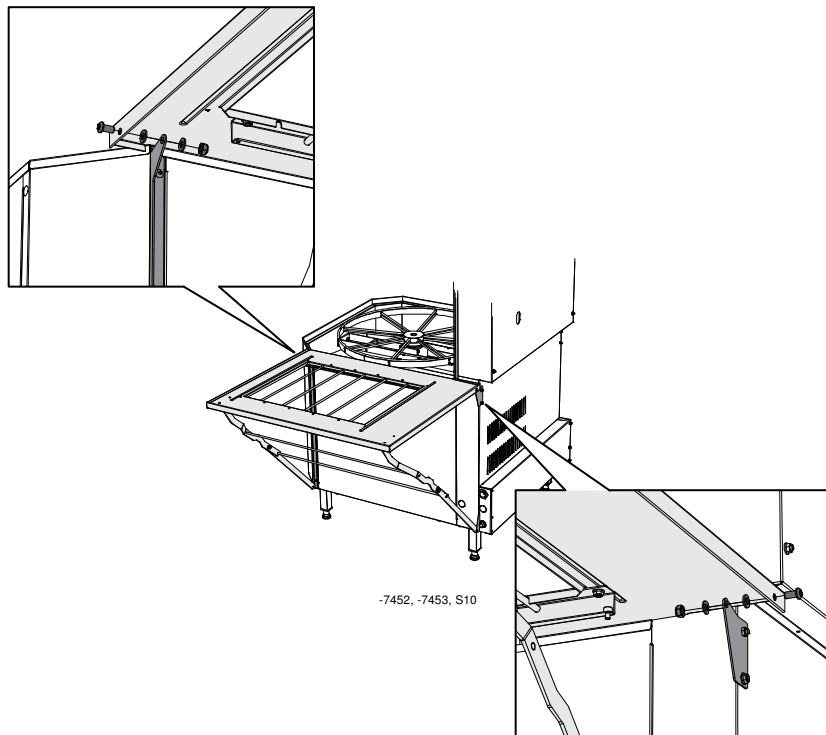
8.



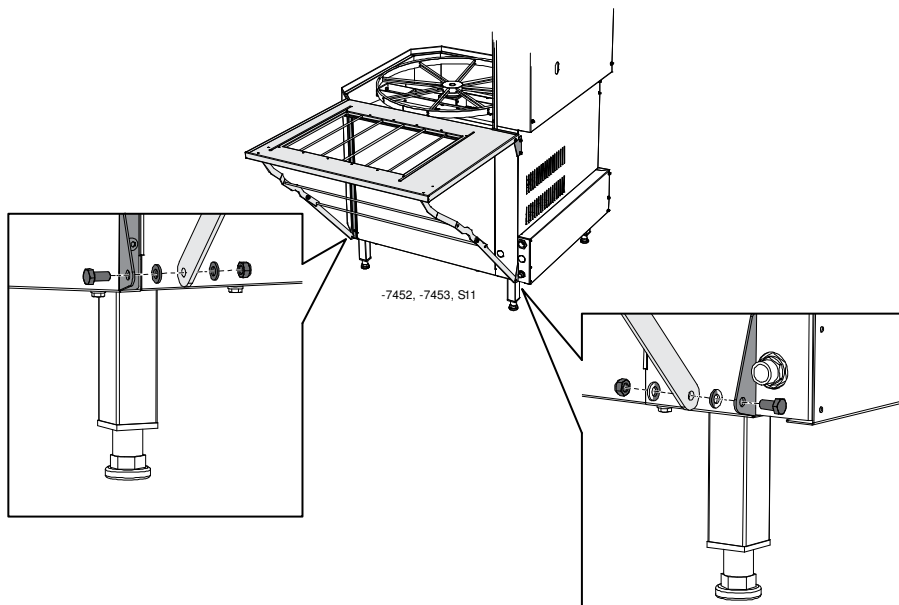
9.



10.



11.



## 3.7 Trial operation

Prepare the machine for trial operation with the help of OPERATING INSTRUCTIONS. The instructions describe the measures that must be taken to prepare the machine for operation.

### 3.7.1 Start-up schedule

This should be completed when the machine is started up and used.

<b>Machine type:</b>
<b>Machine serial number:</b>
<b>Date of installation:</b>

Read the installation and user manuals carefully. Then check the following points:

#### 1. Check:

- Water and waste pipe connections
- That the dishwasher stands level
- The wash basket / cassette should allow easy movement in and out of the machine
- Any equipment for detergent and drying agent is correctly connected
- The filter, filter tray, cover plates and level pipe should be in position
- The right amount of granules should be in the machine
- The overheating protection device has been reset
- The FU21 and FU42 mini-switches are in the OFF position.

#### 2. Filling the machine:

- Open the tap(s) to the dishwasher's water connection and fill the break tank with water.
- Bleed the booster pump
- Start the dishwasher
- Check the direction of rotation of the pumps  
NB! If the pump is rotating in the wrong direction, the phase must be inverted on the incoming electrical cable connection
- Fill the machine with water in accordance with the manual
- Turn on the mini-switches FU21 and FU42 when the booster heater and tank have filled with water
- Bleed the hood cylinder

#### 3. Check the setting of the reference values:

- All the reference values have been set to the recommended values on delivery
- Check that temperatures according to set reference values are reached



**4. Run a number of washes complete with dishware and check:**

- There are no water leaks
- The hood's switch, anti-crushing system and automatics are working
- The water temperatures are maintained
- The dishware is clean  
N.B.: Contact your chemical supplier regarding any detergent dosage.
- The dishware dries  
N.B.: Contact your chemical supplier regarding any drying agent dosage.
- There is adequate water flow to the machine. Inform the customer if the water flow and / or the water pressure are too low
- The motor cut-off switch setting against the wiring diagram

**6. Final check: Empty the machine and turn off the power using the power switch.**

- Re-tighten all connections on contacts and any circuit breakers
- Set all the circuit breakers to the ON position
- Display the Quick Guide supplied with the machine

**7. Train and inform personnel concerning:**

- Washing
- Care (daily, weekly and other frequencies)
- Recommendation for annual service
- Wexiödisk's original granules, which are reusable, must be used (warranty conditions).

### 3.8 Documentation



For correct use and servicing, it is essential that the documentation accompanying the machine is made available to personnel who will be using the machine. The installation and user manual, which describes handling and care among other things, should be stored near the machine.

## 4. Operating instructions



Read the chapters GENERAL INSTRUCTIONS and SAFETY INSTRUCTIONS carefully before starting work.



- The machine's touch panel contains built-in guides on what and how things must be done.
- The use of the machine is dependent on how the machine is equipped.



This chapter describes what must be done with the machine:

- Before washing
- How washing should be performed
- After completed washing
- In the event of error messages and troubleshooting



When the machine is not in use for an extended period of time, e.g. overnight, over a weekend or similar, the machine's power supply must be isolated, the water supply shut off and the machine left open.



The machine is equipped with an external data outlet (USB), which is located next to the machine's emergency stop. This outlet must NOT be used for anything other than its intended purpose.



*External data outlet (USB)*

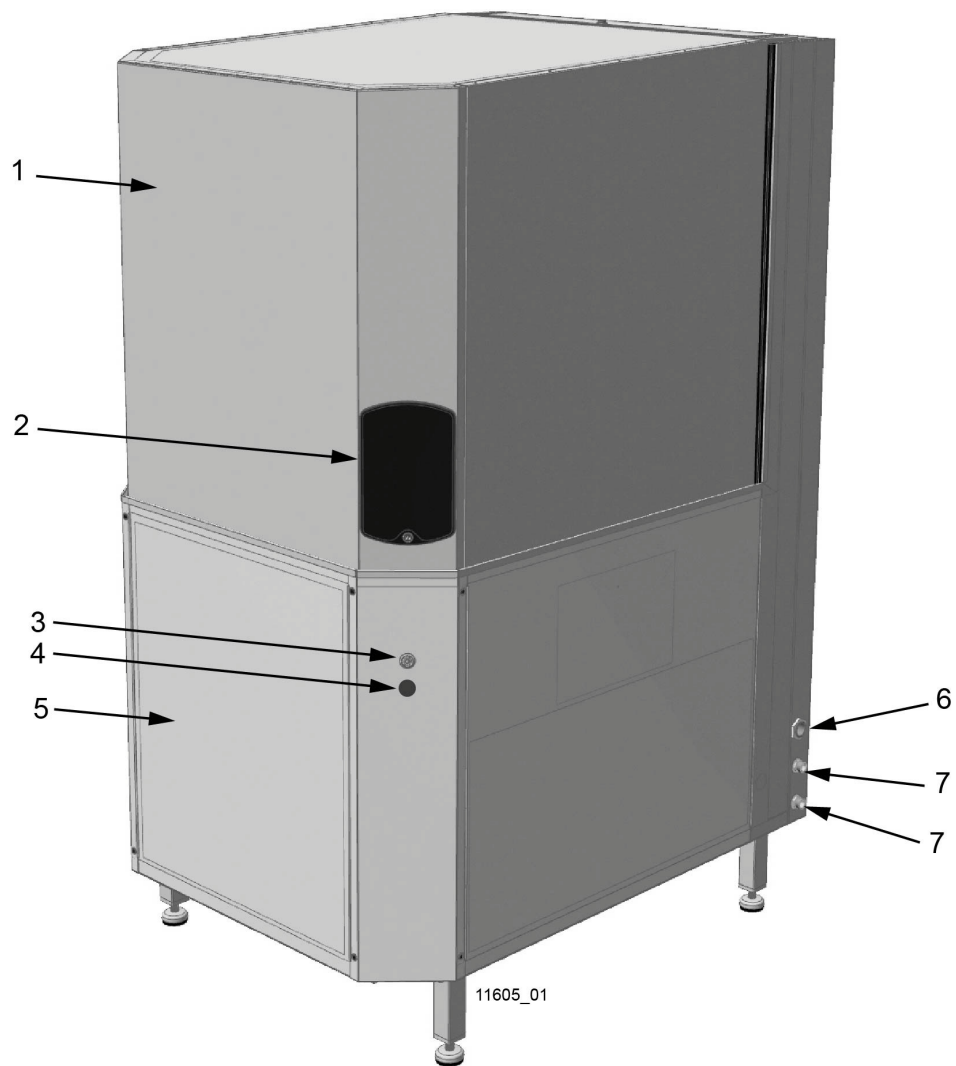
The user can download a customer report for this outlet.

- The user can download a customer report by connecting a USB stick (with an LED) to the outlet.
- The report includes “Current machine model”, “Operating information” and “HACCP”.
- When the machine is switched on and ready to use, the USB stick is connected. The report is then downloaded. The LED on the USB stick flashes while the report is downloading and changes to a steady light when the download is complete. Wait a few more seconds before removing the USB stick.

## 4.1 Before washing

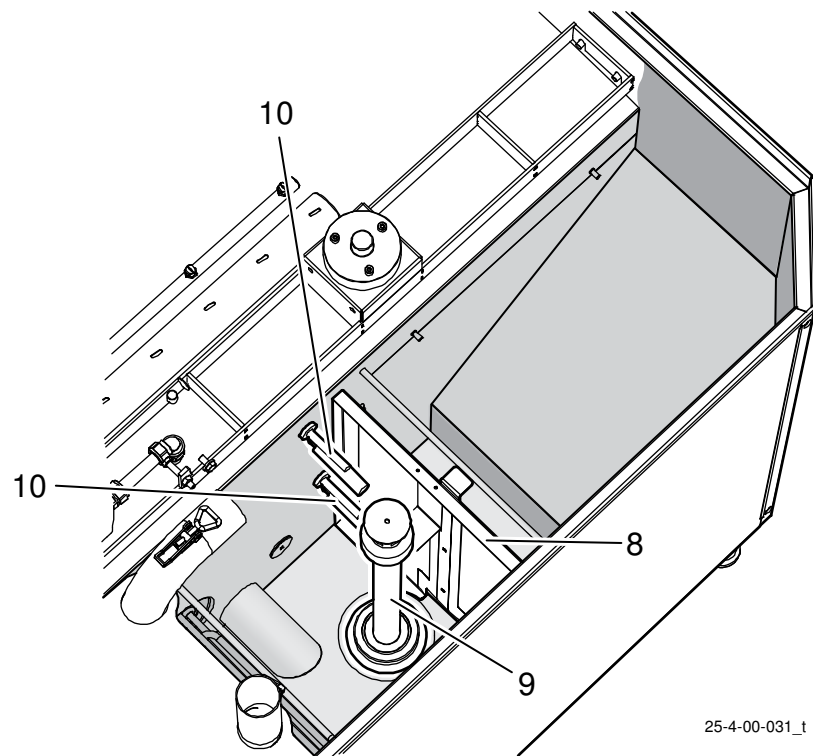
### 4.1.1 Machine design

#### Externally



1. Hood
2. Touch panel
3. ON/OFF button
4. External data outlet (USB)
5. Dishwasher bottom section
6. Electrical connection
7. Water connection

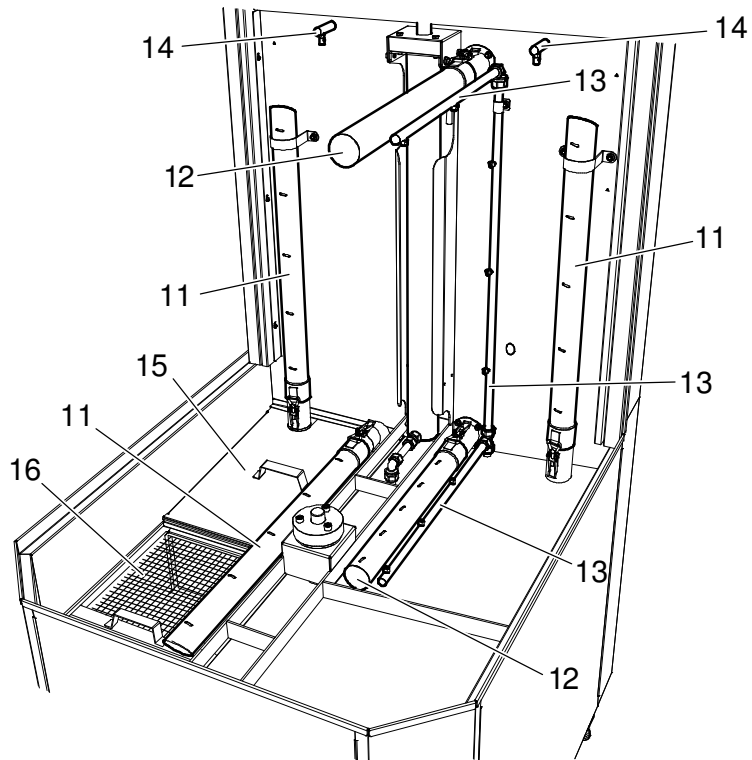
## Tank



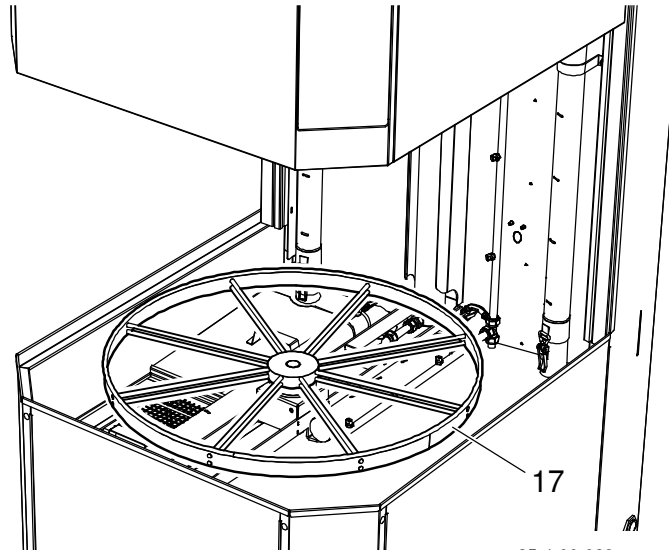
25-4-00-031\_t

- 8. Dividing wall
- 9. Level pipe
- 10. Level monitor

## Wash compartment



25-4-04-006\_t



25-4-00-028\_t

- 11. Initial rinse pipes, potwash
- 12. Initial rinse pipes, normal wash
- 13. Final rinse pipes, final rinse
- 14. Cold water jet, Drain connection (option)
- 15. Cover plate
- 16. Filter
- 17. Rotating table

## 4.1.2 Preparations before filling

Check:



- That the machine and removable parts have been cleaned. If not – clean them!
- that no dirt is in the washer arms' (11, 12) or in the rinse pipes' (13) nozzles
- the level sensors (10) in the tank are not dirty
- the water tank has been rinsed out.
- there is enough granules in the machine (5 kg), and that they are only in that part of the tank intended for them.
- The amount of detergent and drying agent (option)
- that removable parts are correctly in place. Rinse pipes (11, 12), rotating table (17), level pipe (9), filter (16), and that the level pipe's rubber sleeve is against the bottom plate.
- the stopcock(s) for water for the machine is open
- That the power switch is in the ON position
- the machine's ON/OFF control button is on

Remember:



- Ordinary washing-up liquid must not be used in the machine or for soaking. Contact your detergent supplier regarding the choice of a suitable detergent. Washing-up liquid causes a build-up of foam, produces poor wash results and can damage the machine.
- Steel wool must not be used for pre-treating the dishware.
- Only detergent and drying agent intended for industrial machines may be used.
- If using liquid detergent and drying agent, the same make and type of detergent and drying agent should be used.
- If the machine is equipped with a condensing unit, dishware should be removed from the machine as soon as the wash cycle is complete so that recondensation does not occur.

## 4.1.3 ON/OFF button

The white light of the ON/OFF button will illuminate when the power switch is set in the ON position.



**NOTE!** When the ON/OFF button is pressed, it will take around 10 seconds before the touch panel illuminates.

The button is off when the machine's isolating power switch is in the OFF position or there is no power supply to the machine. The button is also off if any emergency stop is activated or another error occurs, and in such cases you must follow the instructions on the touch panel display regarding actions.

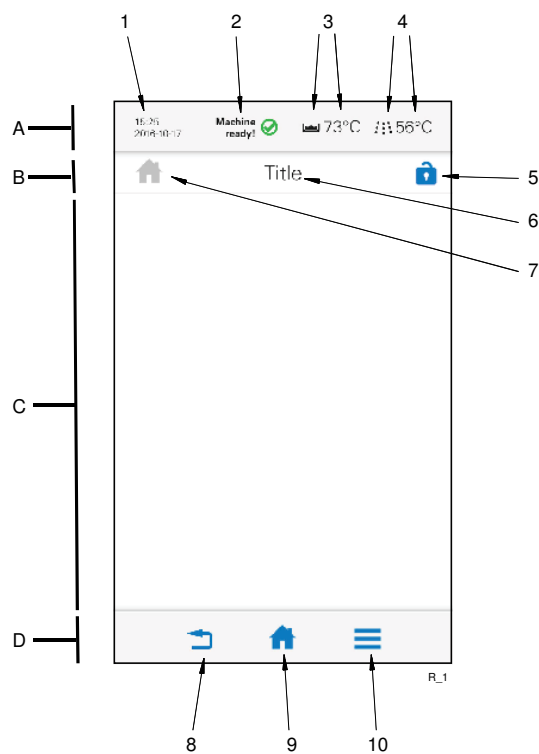
## 4.1.4 Touch panel

### General

The panel comprises four fields:

- A = Top bar
- B = Process bar
- C = Activity field
- D = Bottom bar

Active (clickable) symbols are in blue. Inactive symbols are in grey. The activity field (C) contains both information text and selectable symbols which are used to continue to different entries:



The various fields are divided into the following parts:

1. Date and time
2. Machine status
3. Temperature of tanks
4. Temperature of final rinse
5. Login symbol
6. Text describing what happens in the activity field
7. Symbol for function displayed
8. Back button
9. Home button
10. Menu button



## Top bar (A)

This indicates the machine status using text and symbols (2, 3, 4) and the date and time (1).

Alarm and information messages are displayed here. More information about these is shown in the activity field (C).

## Process bar (B)

This indicates what the machine is doing using various symbols (7) and text (6). This is where authorised personnel log in (5).

## Activity field (C)

This indicates what must be done or what is happening in the machine, and is shown using various figures and text.

Alarm and information messages are displayed in detail here. There are three different levels of these.



- BLUE: Information message with code number.
- YELLOW: Non-critical alarm message with code number. Yellow alarms may be reset by the user. A yellow alarm may change to a red alarm after being displayed a certain number of times.
- RED: Critical alarm message with code number. Service personnel must be contacted for these alarms.

## Bottom bar (D)

This displays the machine's three main symbols (8, 9, 10).



*Back button (8)*



*Home button (9)*







































*Menu button (10)*

## Symbols

The following symbols and a brief description may be displayed in the various fields of the panel (some depending on machine type).

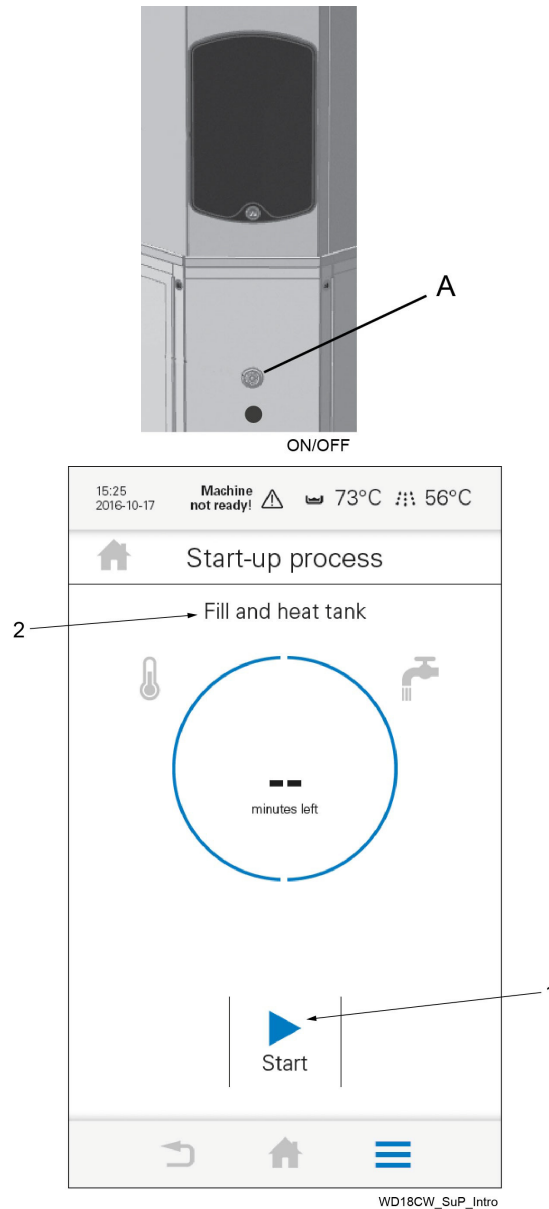
Symbol	Explanation	Symbol	Explanation
	Black: Information Blue: About the machine		Change the water
	Autostart of filling and washing		Consumption
	Back to previous figure / Reduce	<b>ECO</b>	Environmentally friendly/ Lowest consumption
	Cleaning the machine		Consumption costs
	Contact details		Warning / Alarm for operator
	Cost		Detergent
	Cancel / Reset		Down / Reduce
	Remove / Clear		Yes / Confirm / Ready
	Diagnosis		Fill tank
	Drying		Forward to next figure / Increase
	Edit		Strong/ Highest consumption
	Empty tank	<b>HACCP</b>	HACCP
	Final rinse		Medium / Normal consumption
	Home		Journal
	Language		Log
	Logged in		Logged out

Symbol	Explanation	Symbol	Explanation
	Low flow		Machine status
	No / Cancel		No flow
	Other		Spin dry
	START		Protocol
	Repeat / Machine is in operation		Reset
	Save to PC		Save to USB
	Service alarm		Service settings
	Machine configuration		Settings
	Updating software		Time and date
	Statistics		STOP / Off
	Tank		Temperature / Heating
	User		Up / Increase
	Filling tank		View service settings
	Eco programme with granules		Eco programme without granules
	Open / Close		Granules
	Heavy wash program with granules		Heavy wash program without granules
	Medium wash program with granules		Medium wash program without granules
	Return / Back		Menu

### 4.1.5 Filling and heating the machine



When filling the machine with water, you should not have any items in the machine. Water which is hotter than for normal washing is flushed into the wash compartment when the machine is being filled. This can result in food residue getting burnt onto any items in the machine, giving a poorer wash result.

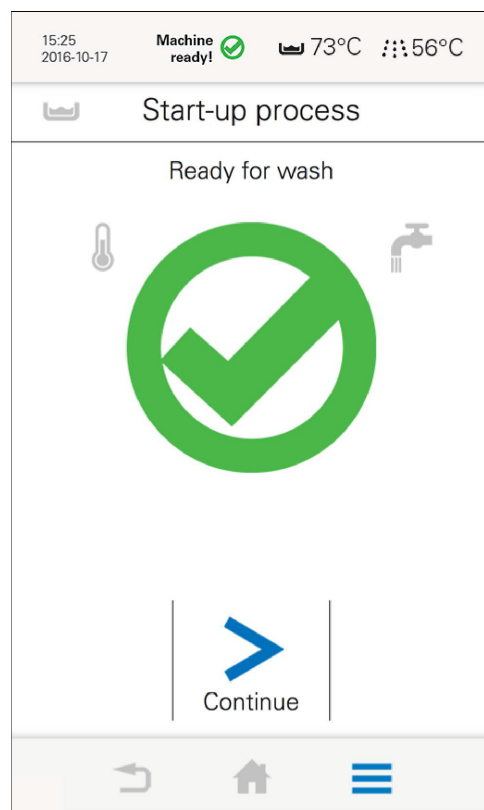


- A: ON/OFF button
- 1. Start button
- 2. Activity text

- Wait for around 10 seconds then put the power switch to the ON position.
- Press the ON/OFF button (A) and the panel is turned on.
- Press the start button (1) in the activity field to start filling and heating.
- It is possible to follow what is happening now in the machine through “Activity text” (2) on the touch panel.
- The machine has an Autostart function, where a date and time can be entered for the automatic filling and heating of the machine. The function is located under Autostart in the main menu and only works if level pipes have been set and the hood is closed.



NOTE! The time needed to heat the water to the right wash temperature depends on the temperature of the incoming water.



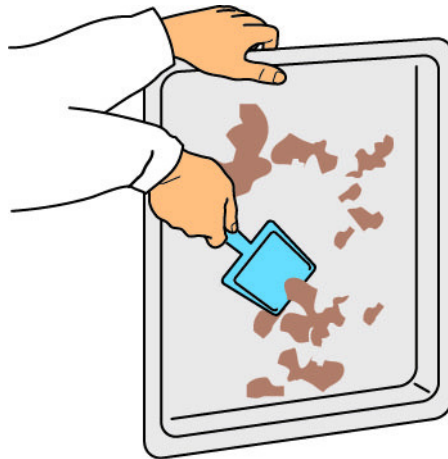
WD18CW\_SuP\_Ready

The figure above will be displayed when the machine is ready for washing.

#### 4.1.6 Before washing, regardless of program



- Perforated canteens, perforated containers and plastic canteens should NOT be washed with granules (shortens the lifespan of the granules and there is a risk of the granules getting stuck in a hole and getting into finished food).
- Scrape away all loose food remnants. We recommend using our separating spatula WD209.7261 for this.
- If you rinse the items, you must only use water to do so.
- When granules are used during washing, the items should not be soaked.
- The items are placed in the cassette which can be rotated.
- All items must be securely attached, there are different accessories for attachment.
- The dirty side of the items must be facing outwards (away from the centre of the cassette).
- Check that nothing is sticking out and preventing the cassette from rotating in the machine.



*Scraping off of items*

### 4.1.7 Using accessories



- The machine comes with different accessories and the number depends on the choices made.
- It is important to use the correct accessories in order to obtain the best washing results. Items which are incorrectly positioned can come loose and damage the machine.
- Below are a number of examples of using the machine's accessories. All parts must face in the correct direction. No parts must stick out from the cassette.

#### Granules (WD209.7260) and Granules spatula (WD209.7261)

Granules are used for the wash programmes with granules. Wexiödisk's original granules must be used (warranty conditions). The spatula is used to scrape off loose dirt.

10 kg granules and 1 separating spatula come with the machine.

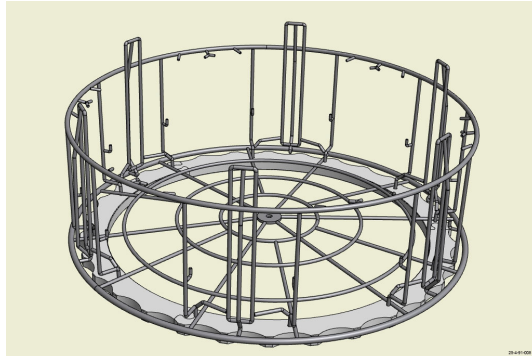


Granules and separating spatula

### Potwash basket (WD209.7450)

The items are placed in the basket with the dirty side facing outwards. Place the dishes so that water does not collect in the items.

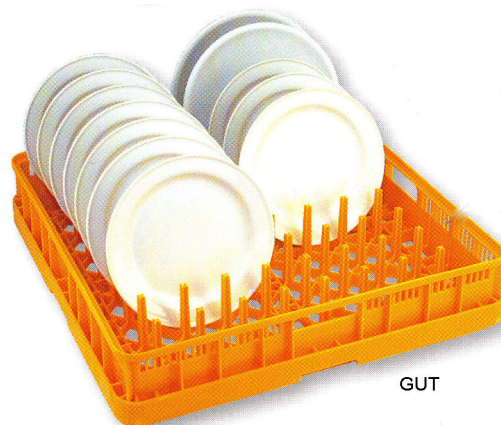
1 potwash basket comes with the machine.



*Potwash basket*

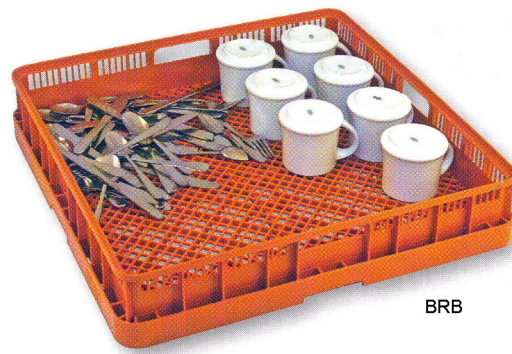
### Normal wash (WD009.9011 & WD009.9013 & WD009.9014)

Normal wash items are placed in 50x50 cm plastic baskets. The machine comes with three baskets.



*The yellow basket (WD009.9011) is used for plates, side plates etc.*





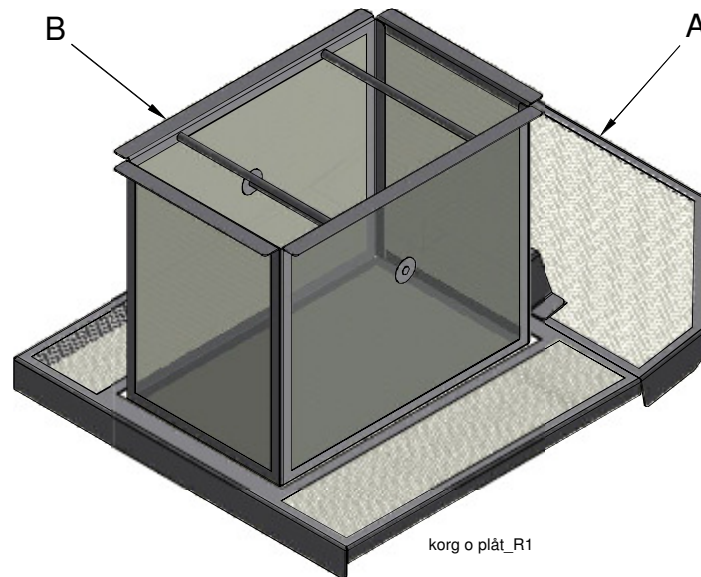
*The brown basket (WD009.9013) is used mainly for cutlery, but also other items*



*The blue basket (WD009.9014) is used for glasses and cups*

## Collection plate and granule collector

The collection plate and granule collector are used for collecting granules for cleaning, filling and replacement. Wexiödisk's original granules must be used (warranty conditions). Delivered with the machine.



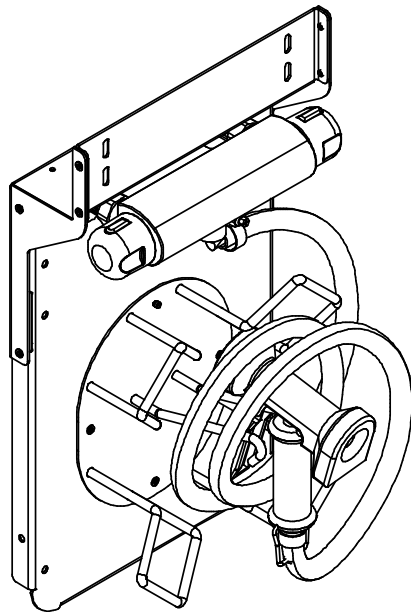
*A=Collection plate*  
*B=Granule collector*

## Dockable potwash trolley (WD209.7454) (option)

The potwash trolley is available with and without wheels and depends on the feed direction of the machine.



### Cleaning gun with hose (WD751.0105) (option)



WD751.0105  
*Cleaning gun*

### Trolley (WD209.7462) (option)

To reduce the risk of strain injuries, the trolley should be used for moving dish-ware.



*Table trolleys*

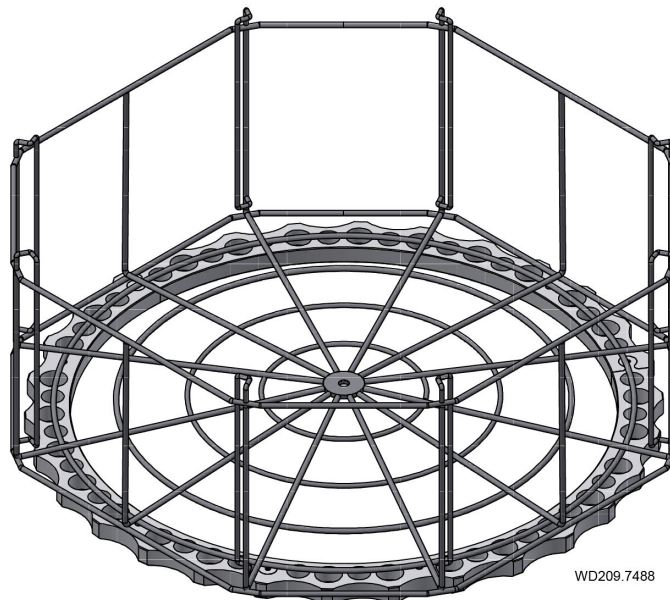
### Folding tables (WD209.7451 & WD209.7452 & WD209.7453 (option))

This is available for right, left and front loading.



### Cassette for four (4) 1/1 canteens (WD209.7488) (option)

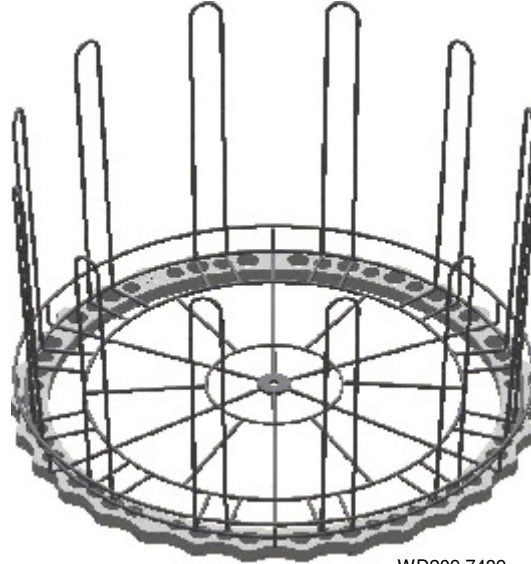
The canteens are placed in the basket with the dirty side facing outwards. Place the dishes so that water does not collect in the items.



*Cassette for 4 1/1 canteens*

**Cassette for ABC canteens (WD209.7489) (option)**

The ABC canteens are placed in the basket with the dirty side facing outwards. Place the dishes so that water does not collect in the items.

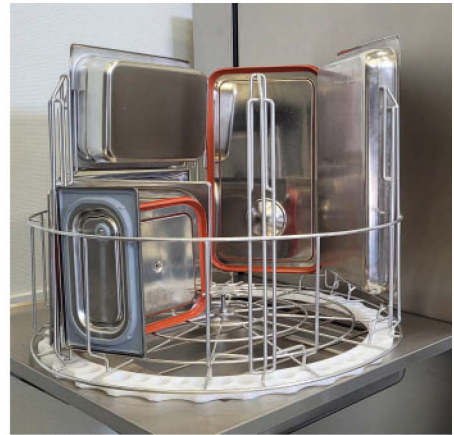


WD209.7489

*Cassette for ABC canteens*

**Cassette for sous vide canteens (WD209.7490) (option)**

The items can be placed in two levels. Place the dishes so that water does not collect in the items.



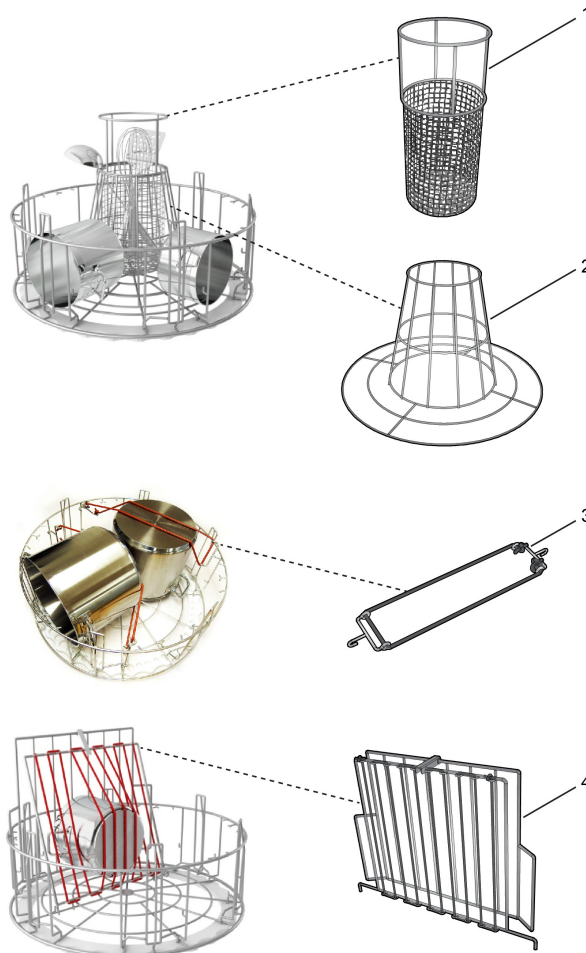
WD209.7490

*Cassette "sous vide"*

## Accessories for potwash basket (option)



For optimum use, there are a number of accessories which are options.



WD209.7450\_Tillbehör\_1

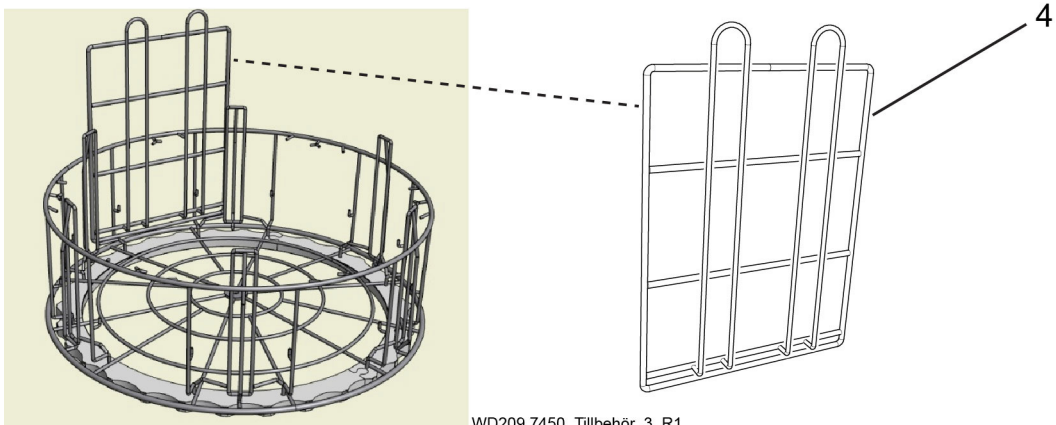
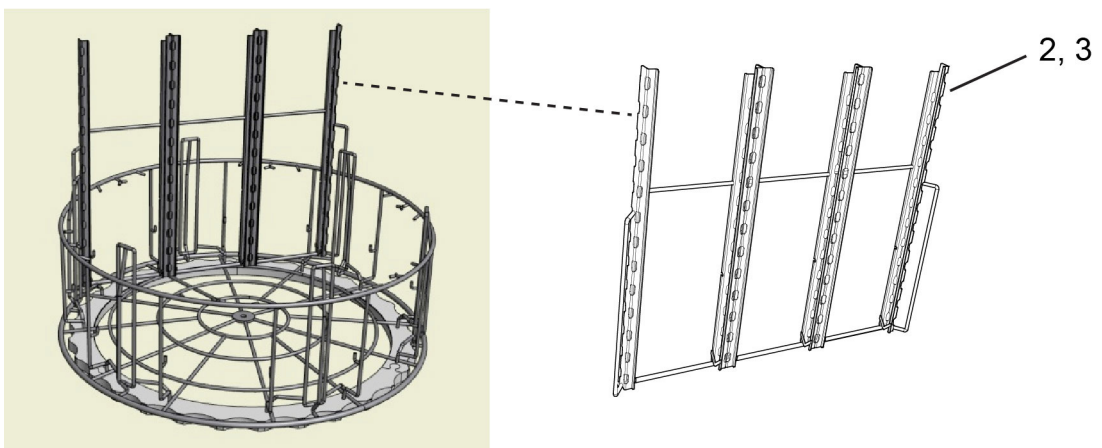
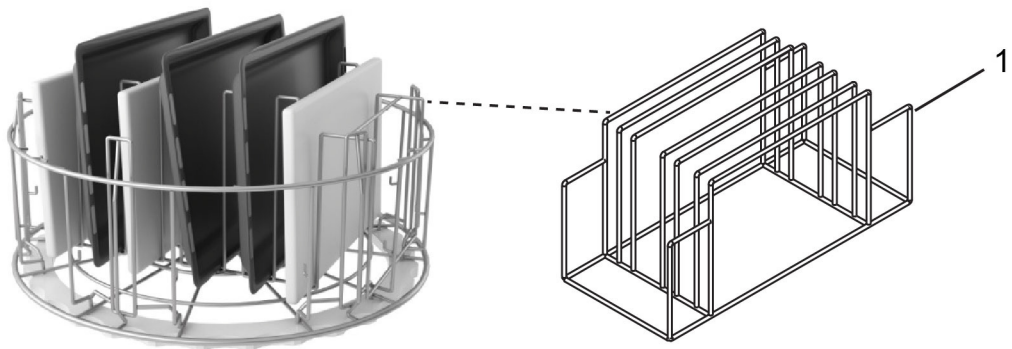
- 1: Utensil holder WD209.7251  
 2: Saucepan support WD209.7252  
 3: Rubber tensioner WD209.7272  
 4: Flexible insert WD209.7481

The ladle holder is used to hold ladles, whisks, gravy boats etc. in place during washing. The ladle holder is positioned in the middle of the saucepan holder and can only be used together with it.

The saucepan support is used to hold larger pots in position during washing. It is positioned in the middle of the wash basket and items are laid down on their side in the basket with the bottom against the saucepan holder and the opening towards the edge of the wash basket.

The rubber tensioner is used to secure smaller items, such as for e.g. bowls, small pots and similar, to the edges of the wash basket.

The flexible insert is used to secure bowls, pots, etc. The rear part is pushed down between two hoops on the edge of the wash basket. The frame with rubber band is secured to the bottom of the wash basket.

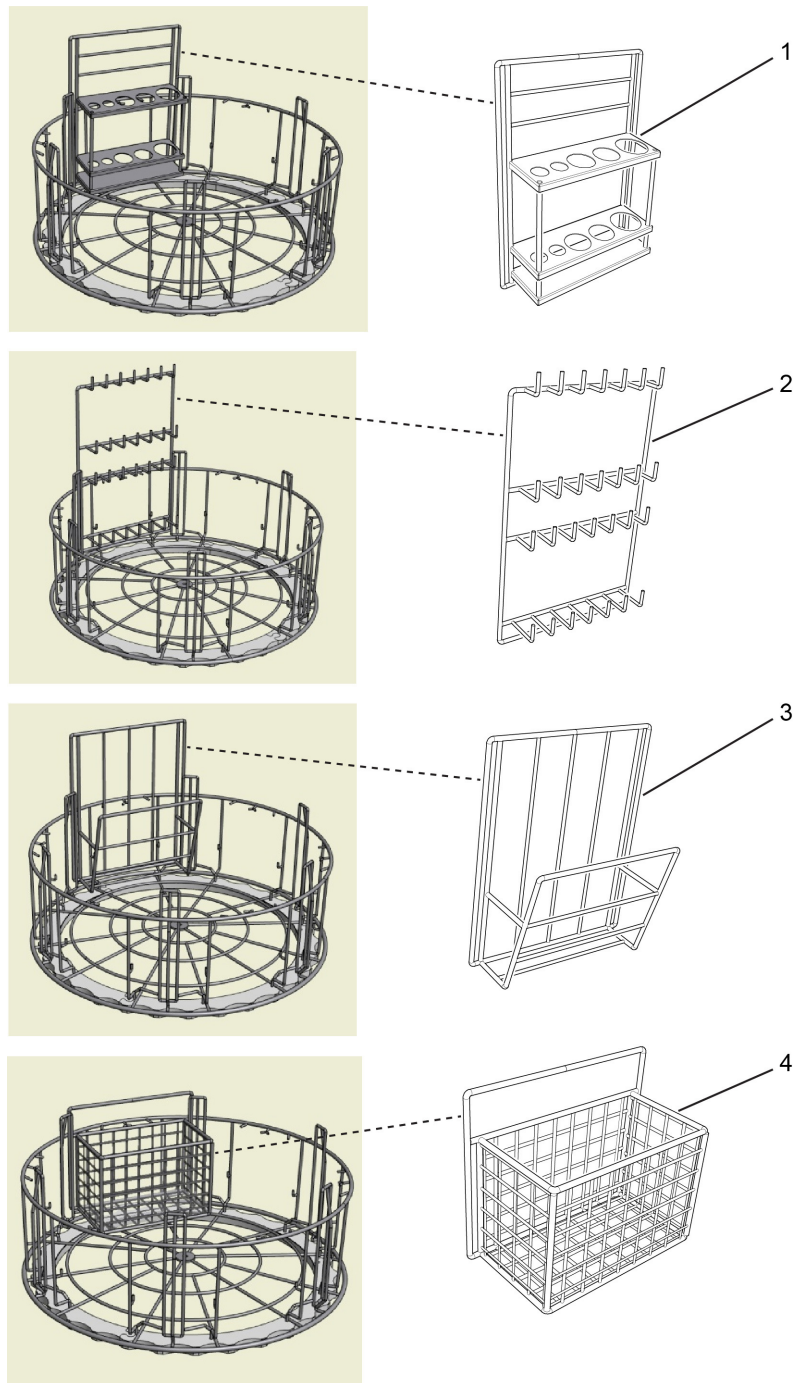


WD209.7450\_Tillbehör\_3\_R1

- 1: Utensil holder WD209.7284
- 2: Holder for GN 1/3-canteens WD209.7485
- 3: Holder for GN 1/4-canteens WD209.7486
- 4: Holder for ABC canteens WD209.7487

The universal holder is positioned in the wash basket and used to put baking trays, chopping boards, canteen lids etc. in. Both short sides are pushed down between two hoops on the edge of the wash basket.





WD209.7450\_Tillbehör\_2

- 1: Utensil holder WD209.7277
- 2: All-round holder WD209.7273
- 3: Holder for small pots and bowls WD209.7279
- 4: Mesh basket WD209.7278

## 4.2 Washing



In order to reduce the risk of strain injuries, the dishware should be stacked in the wash basket which is best placed on the potwash trolley, table trolley or the folding table fitted on the machine (option).

### 4.2.1 Selecting a programme



The programme can be run with or without granules and with or without a spin cycle. The program time can vary somewhat depending on the pressure and flow of incoming water.

Perforated canteens, perforated containers and plastic containers should NOT be washed with wash programs where granules are used.

#### Wash programme with granules and spin



Perforated canteens, perforated containers and plastic canteens should NOT be washed with granules (shortens the lifespan of the granules and there is a risk of the granules getting stuck in a hole and getting into finished food).



*Program time approx. 2.2 minutes (P1)*



*Program time approx. 4.2 minutes (P2)*



*Program time approx. 6.2 minutes (P3)*

## Wash programme without granules and with spin



Programmes without granules are used for items which cannot be washed using granules, such as perforated canteens, perforated containers and plastic containers.



*Program time approx. 2.2 minutes (P4)*



*Program time approx. 3.7 minutes (P5)*



*Program time approx. 6.2 minutes (P6)*

## Normal wash programs without spin dry



A normal wash program is used for items such as, e.g. glass, crockery and cutlery. There are three different normal wash programs.



*Program time approx. 1.3 minutes (P1)*



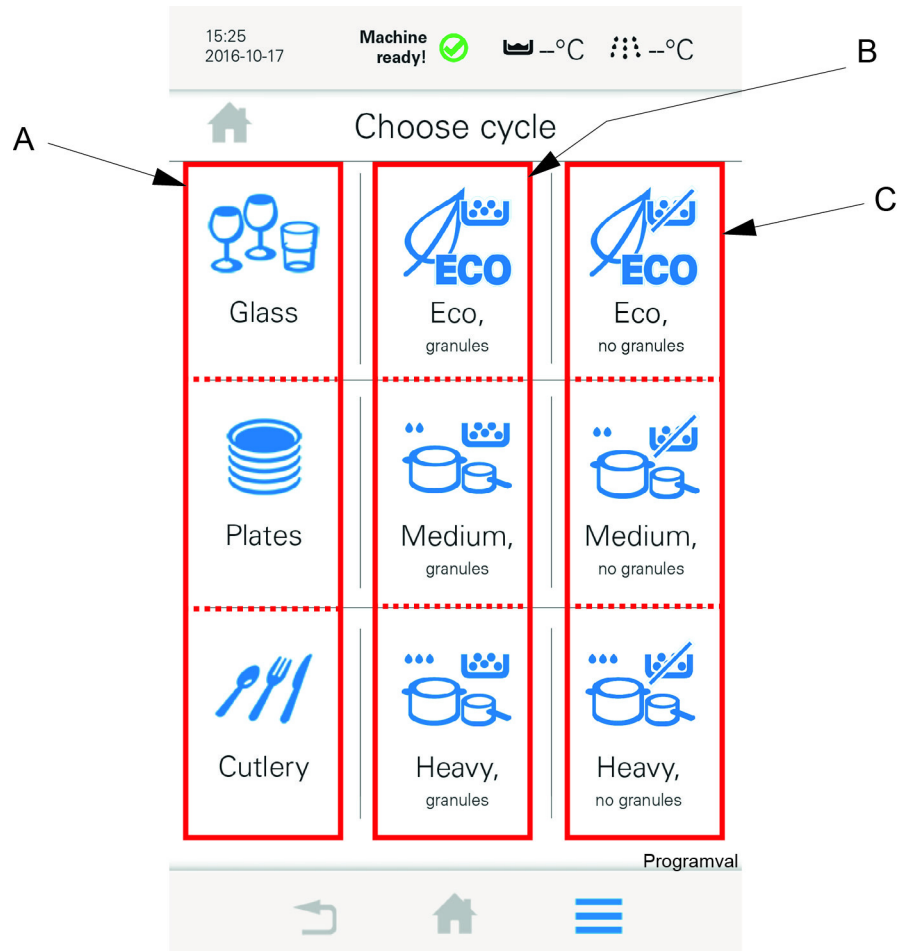
*Program time approx. 1.8 minutes (P2)*



*Program time approx. 3.3 minutes (P3)*

### 4.2.2 Starting washing

Place the cassette with the dishes, which must be well stacked and secured, in the machine.




When the machine is ready to starting washing, the following display is shown on the touch panel

A=Normal wash, (P1 - P3)

B=Potwash with granules, (P1 - P3)

C=Potwash without granules, (P4 - P6)


Select a suitable programme on the touch panel.

Start the programme by pressing .



- You can see what the machine is doing on the machine's touch panel.
- The hood opens automatically when the programme is finished, take the washed cassette out of the machine.
- Always check the wash result when wash cycle has finished.
- NOTE! If there is to be a long break between washes, select pause mode P0. The hood remains closed to save energy and to stop the temperature of the water in the wash tank from falling.

### 4.2.3 Interrupting a wash program

If the machine needs to be stopped during operation for some reason, press  on the panel.

### 4.2.4 Guaranteed final rinse

The temperature of the final rinse water is always correct and the right amount of rinse water is always used.



If there is an error during the final rinse, this is indicated by an alarm and information on what must be done.

### 4.2.5 Changing the water





The machine has an alarm which indicates when the water is dirty and must be changed. The alarm is triggered after a preset number of wash cycles. The machine can also be locked to prevent it from being used any further when the water change alarm is triggered. The setting must be changed in the machine's software by a service engineer.



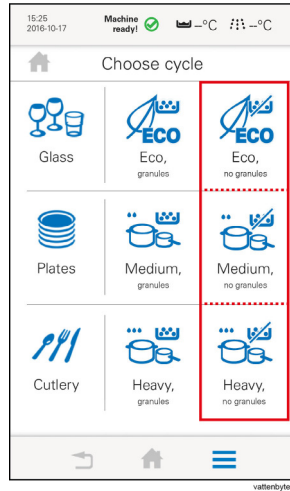
The water in the washer tank should be changed daily. More frequent changes of water are needed if:

- Foam builds up in the machine, e.g. if you can see foam coming out of the waste pipe, or the filter in the machine's tank is covered with foam. If this occurs, the water should be changed immediately.
- A lot of items are washed at certain periods of the day. Schedule water changes so that a good wash result is achieved over the entire work shift. Change the water, for instance, after periods when a lot of items have been washed.
- A problem is detected when checking the wash result.

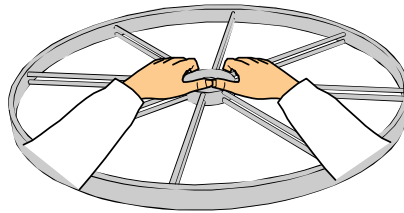


A guide to changing the water is also displayed on the panel when the function for this has been selected. This is done by pressing the menu button  and then selecting water change .

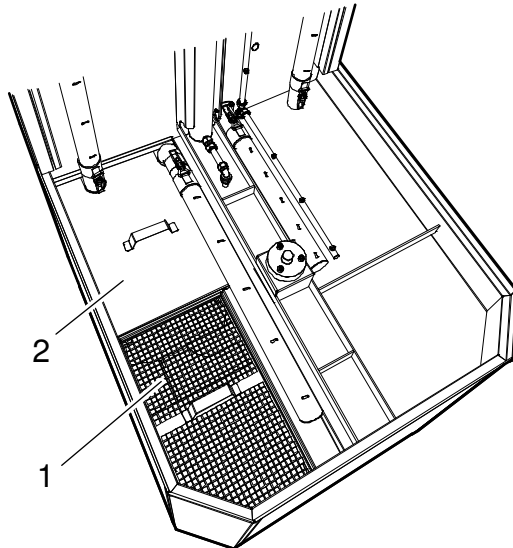
- NOTE! Before changing the water, you must run the programme without granules. Use a cassette containing no items for washing.



- Open the hood.
- Remove the rotating table. Get hold of the spokes in the rotating table, towards the hub, and pull it straight up towards you. Where necessary, press on the shaft with the thumb of one hand to get the rotating table to come off more easily.




- Remove the strainer (1) and cover plate (2). Clean them.



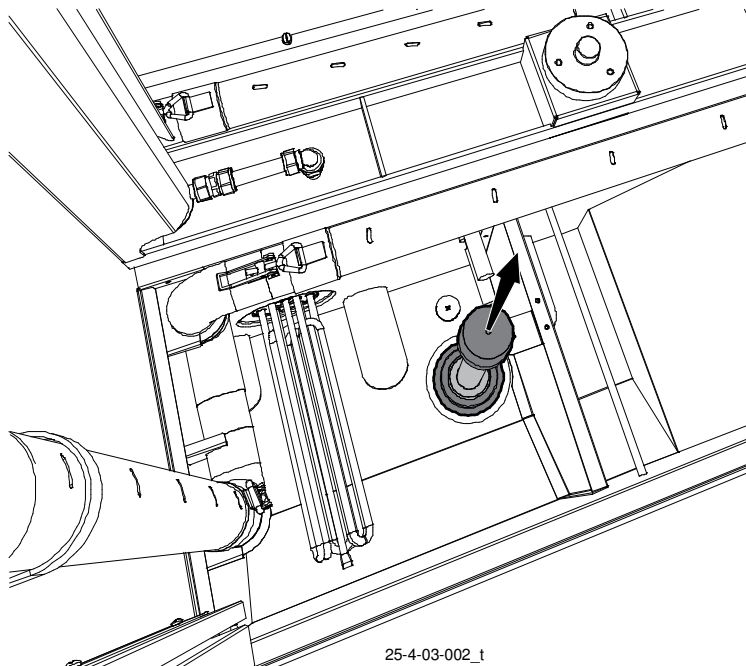
25-4-03-001\_t

- Unhook the level pipe from its holder, lift it and leave it positioned in the waste pipe. There should now be a slight chink between the bottom of the tank and the rubber sleeve to allow the water to run out.


**Machines with a drain pump (option):** Remove the level pipe and press  to start emptying.



DON'T open the damper in the dividing wall! The granules will be flushed out with the water into the drain in that case.



25-4-03-002\_t

- Refit the level pipe. Make sure the rubber sleeve achieves a good seal with the bottom of the tank.
- Refit the cover plates and the strainer.
- Refit the rotating table. Make sure the screw heads on the shaft plate which supports the rotating table end up in the holes on the bottom of the rotating table's hub.
- Press "START"  located on the touch panel.
- The machine will now fill with clean water.

When the tank is full and the correct operating temperature has been reached, the machine is ready for use again.



### 4.2.6 Checking the wash result



Check that no granules have become lodged in or on the washed items.

The dishware should be checked after each wash for:

PROBLEM	CAUSES & MEASURES	
Starch spots	<ul style="list-style-type: none"> <li>• <b>Scraping:</b> Important to remove as much food particles as possible before washing. This also means that the water in the machine does not need to be changed as often. Scrape better.</li> <li>• <b>Detergent and drying agent dosage:</b> If using liquid detergent and drying agent, the same make and type should be used. A service technician should be contacted to rinse the equipment with water when replacing the detergent and drying agent. The dosing affects both detergent and drying results of the dishware. The hardness level of the water affects the consumption of detergent. Contact the detergent supplier.</li> <li>• <b>Temperatures:</b> At incorrect temperatures the dishes will not be clean. Contact a service technician if you need to change the set values.</li> <li>• <b>Washing time/contact time:</b> If cleaning is inadequate, the contact time can be increased.</li> <li>• <b>Time/water volume:</b> If starch spots or misting can be seen, or if there is still detergent residue on the item, this may mean that the flow through the wash arms during the final rinse is too low. The final rinse flow can be checked and adjusted by a service technician. The duration of the final rinse may also play a part. Increase the contact time if necessary.</li> <li>• <b>Cleaning the machine:</b> Insufficient cleaning of the machine affects the results of the washing. Ensure better cleaning of the machine.</li> <li>• <b>Positioning items to be washed:</b> Incorrectly placed items can mean that the washing water does not reach the items during washing and rinsing.</li> <li>• <b>Soaking (NOT when washing with granules):</b> Items with hard dried food. Soak the dishes in water. Do NOT use washing-up liquid.</li> <li>• <b>Changing the water:</b> How often the water needs to be changed depends on several factors, such as the number of items being washed, how well food residue is scraped off the item, how much detergent there is in the washing water etc. It is therefore important to continuously check the wash result, which may indicate when it is time to change the water.</li> <li>• <b>Water circulation:</b> If water circulation in the machine is inadequate, this can lead to problems such as starch spots on glass and on the undersides of plates. Contact the service company for help in dealing with the problem.</li> <li>• <b>Water hardness:</b> If the water used for washing is hard (&gt;10 °dH), a higher concentration of detergent may be needed to ensure the washed items emerge clean. Contact your detergent supplier!</li> </ul>	
Misting		
Protein residues		
Detergent residues		

## 4.3 After use – Cleaning

### HACCP

HACCP is a preventive inspection system to ensure hygiene requirements are met during the washing process and cleaning of the machine. As a result of its design, the machine meets strict hygiene requirements. Regular, thorough cleaning is also important from a hygiene perspective. A machine that is properly cleaned helps produce a good wash result, reduces the risk of dirt accumulating, increases the service life of the machine and reduces the risk of emergency shut-down.

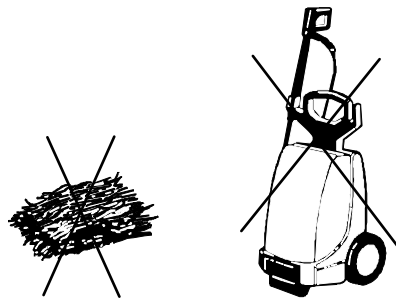
See the WebTool touch manual for the HACCP alarm option.

### 4.3.1 Incorrect cleaning methods



NOTE! An incorrect cleaning method may damage the machine. The following points must be observed:

- Do NOT use steel wool as it will cause corrosion to form on the machine.
- If detergent is used, it must not contain abrasives. Detergents containing abrasives will damage the stainless steel panels.
- The exterior of the machine must not be hosed. Water can enter the machine and damage the control panel and electrical equipment.
- Pressure washers and steam can damage the machine and must NOT be used for cleaning purposes. Never use a pressure washer to clean the floor within 1 metre of the machine. The supplier cannot be held liable for any faults caused by the use of pressure washers on the machine and any such use may invalidate the warranty. There is a risk of splashing even if the floor is hosed down.



WD9\_07

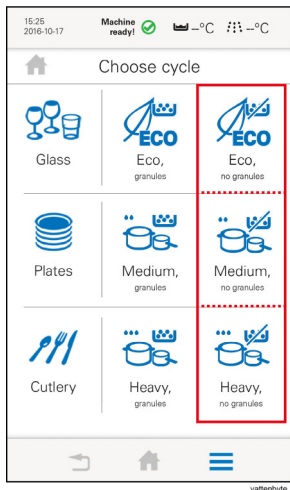
*Steel wool and pressure washers must not be used for cleaning*

### 4.3.2 Emptying and daily cleaning

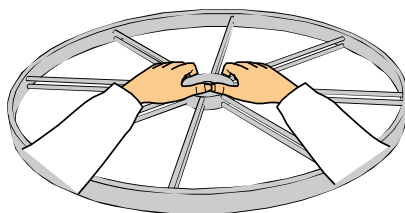


A guide to daily cleaning is also displayed on the panel when the relevant function has been selected. This is done by pressing the menu button and then selecting cleaning .

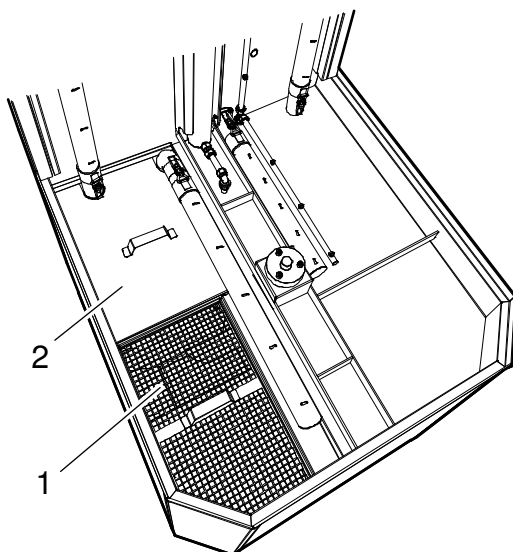
- NOTE! Before emptying, you must run the programme without granules. Use a cassette containing no items for washing.



- Remove the rotating table. Get hold of the spokes in the rotating table, towards the hub, and pull it straight up towards you. Where necessary, press on the shaft with the thumb of one hand to get the rotating table to come off more easily. Cleaning and rinsing.




- Remove the strainer (1) and cover plate (2). Clean them.



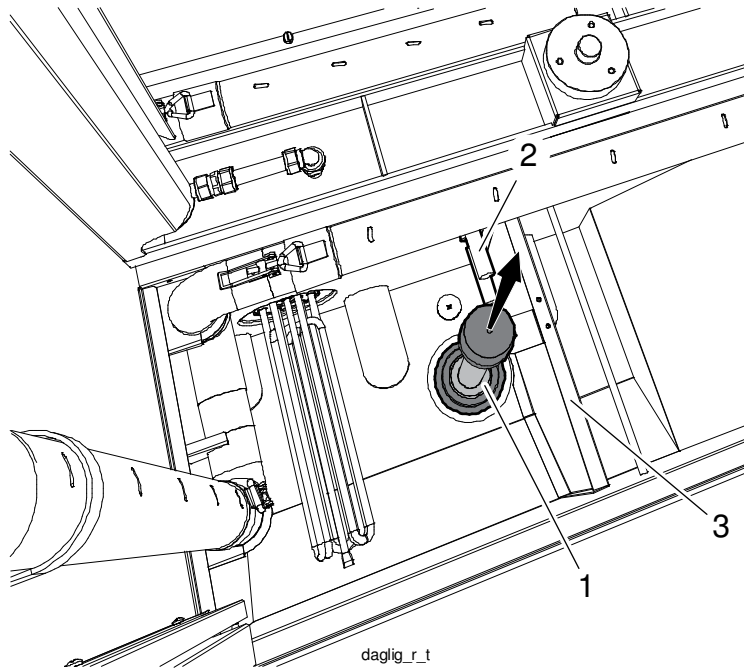
25-4-03-001\_t



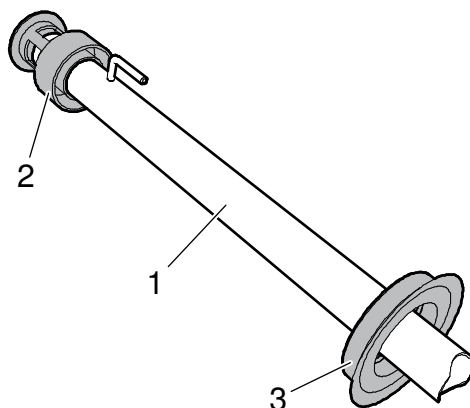
- Unhook the level pipe from its holder, lift it and leave it positioned in the waste pipe. There should now be a slight chink between the bottom of the tank and the rubber sleeve to allow the water to run out.

**Machines with a drain pump (option):** Remove the level pipe and press  to start emptying.

**DON'T** open the damper in the dividing wall! The granules will be flushed out with the water into the drain in that case.

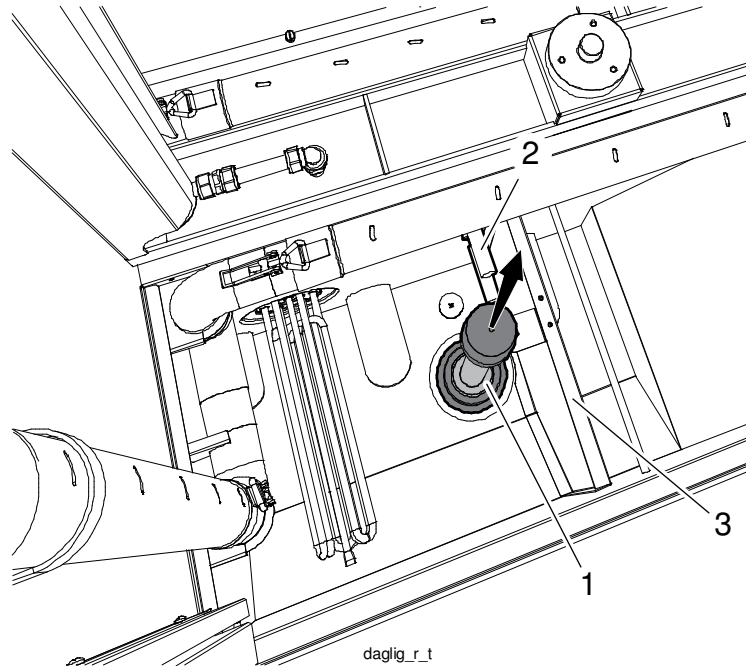


- If the tank and granules are dirty, they are rinsed with water. Stir the granules round while they are being rinsed and remove any detritus that may be present. Check there is no detritus clogging the dividing wall (3) in the tank.
- Once the tank is empty, take out the level pipe (1). Check that the foam separator (2) is not stuck and can be moved. There is **NO** foam separator (2) on machines with a drain pump installed.





- Clean the inside of the tank and also the dividing wall in the tank.
- Cleaning the level sensors (2) in the tank. Check the operation of the float on the level sensor. This should move freely and must not jam.



- Clean the initial rinse pipes.
- Clean the inside of the hood, etc.
- Clean the wash accessories for the machine, such as baskets, etc.



Once it has been cleaned, it is a good idea to leave the machine with the hood open if no washing is due for a day, e.g. overnight.

### Externally

Wipe the outside of the machine with a soft, damp cloth.

### Other equipment

Also clean the other equipment.

### 4.3.3 Cleaning and checking every week

Once the daily cleaning is complete, you have the option of proceeding to the weekly cleaning and can also follow the instructions on the touch panel for this.

The weekly cleaning is more thorough than the daily cleaning. As well as the measures for daily cleaning, the granules are also cleaned.

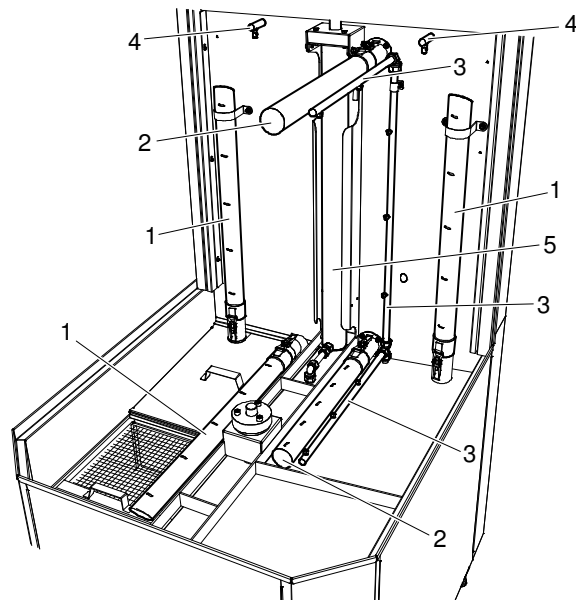


Once it has been cleaned, it is a good idea to leave the machine with the hood open if no washing is due for a day.

#### Checking and cleaning of initial rinse pipes, final rinse pipes, cold water jet and draining nozzles



Initial rinse pipes, final rinse pipes and nozzles are checked and cleaned as needed when cleaning the dishwasher in general.



25-4-04-001

*The machine's wash compartment with wash arms and cold water jets*

1. Initial rinse pipes, potwash
2. Initial rinse pipes, normal wash
3. Final rinse pipes, final rinse
4. Standard machine: cold water jet  
Machine with condensing unit: drain connection
5. Hood lifting cylinder

Check:

- initial rinse pipes, final rinse pipes and jets are not dirty
- there is no detritus clogging the wash nozzles on the initial rinse pipes or in the jets on the final rinse pipes
- catches for the initial rinse pipes for normal wash (2) and potwash (1) are properly engaged
- The initial rinse pipes, final rinse pipes and jets are not damaged (if they are damaged, contact the service company).

Cleaning proceeds as follows:

1. Rinse the outside of the initial rinse pipes and cold water jets with water.
2. Open the catches for the initial rinse pipes for normal wash (2) and potwash (1).
3. Remove the initial rinse pipes and rinse them out on the inside with water.
4. Check there is no detritus clogging the wash nozzles or inside the spool pipes. Remove any detritus.
5. Refit the spool pipes in their correct position and close the catches around the pipes.

### **Weekly cleaning of granules**

1. Pour the granules into a bucket.
2. Place the bucket in a sink.
3. Rinse the granules with water. Stir in the granules at the same time as they are rinsed.
4. Remove any food residues and detritus. As the granules are heavier than the food residues, the food residues will float to the surface and run off with the excess water.
5. Let the granules remain in the water until they are needed again.
6. Return the granules to the granule wash tank when the machine is next started.

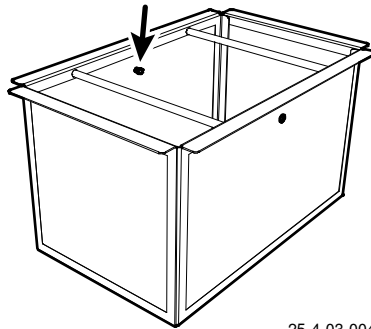
## Checking and filling the granule quantity



Wexiödisk's original granules, which are reusable, must be used.

The amount of granules is checked by:

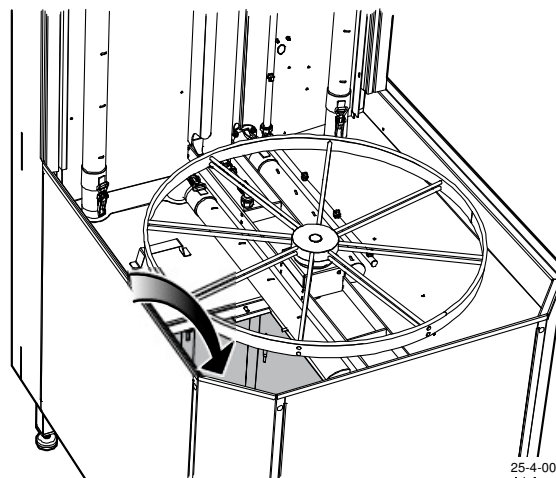
- they are measured using a litre measure or similar (approx. 5 kg)
- the amount of granules is checked when the granules are in the granule collection basket. There is a measuring stick in the basket that indicates the height the granule level should reach. If the granules reach this level, the amount is correct.



25-4-03-004



- Add fresh granules as needed! The granules are filled in that part of the tank that is located under the strainer nearest the front of the dishwasher, see diagram. If all cover plates and strainers are in place, the granules should automatically end up in the right part of the tank.



25-4-00-030

## Changing the granules



- Wexiödisk's original granules, which are reusable, must be used.
- The granules should be changed once or twice a year. It may be a good idea to do this during longer scheduled periods without use, such as e.g. holiday periods or similar.

## Recycling the granules



Used granules can be recycled either as hard plastics or combustible materials.



#### 4.3.4 Periodic servicing

##### Long intervals between using the machine



- If the machine is not being used for a long period, the granules and the machine should be disinfected with an appropriate environmentally friendly disinfectant. You can store the granules in the freezer during this period.
- If the machine is not being used for a long period, cooking oil should be sprayed into the pump housings. The oil will prevent rust from forming in the pump housing and jamming the impeller. The cooking oil is sprayed into the pumps' inlet pipes (carried out by authorised engineers).
- If the machine will not be used for a longer period, the power to the machine should be turned off using the power switch, the water supply turned off and hood should be left open.

##### Disinfecting the machine



NOTE! Contact the service engineer or detergent supplier to shut off the detergent and drying agent dosing system.

- Start the machine and fill it with water in the usual way.
- Pour one litre of environmentally friendly disinfectant into the wash tank, then run programme ECO without granules.
- Run programme ECO with granules three times followed by programme ECO without granules. Then empty the water from the tanks.
- Refill the washing tank and run programme ECO without granules once to rinse out the machine. The machine and granules are now disinfected.
- Now empty the machine according to the instructions on the touch panel screen.



Contact the service engineer to switch the detergent and drying agent dosing system back on.

##### Clean the heat recovery unit (option)



NOTE! Cleaning of the heat recovery unit should be performed 1-2 times a year. The machine also has an alarm which is displayed on the panel when cleaning is necessary.



NOTE! When rinse cleaning the heat recovery unit and the base of the battery box, do not use more water than the drain under the battery can remove from the machine. The battery must be cleaned with hot water at normal pressure. Do not directly rinse the fan motor. The electric motor can be damaged if it is rinsed with water.

The safety valve should be checked when cleaning. This is done by turning it.

### 4.3.5 Operating problems



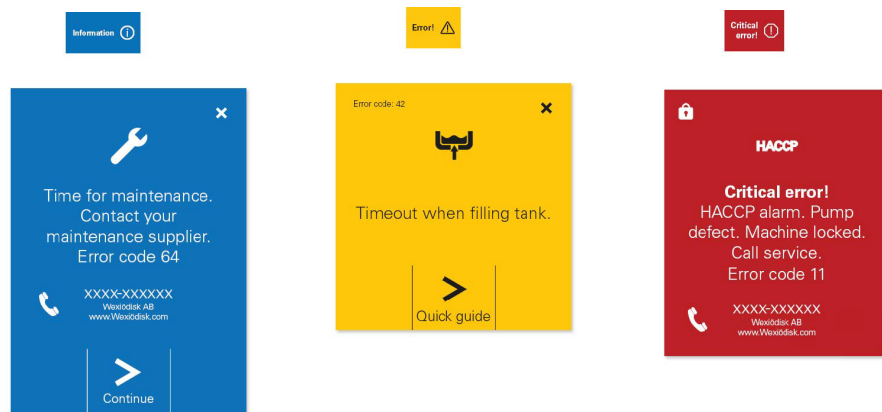
Check:

- Has the appliance been used according to the instructions?
- Are all the removable parts in their correct place?
- Is the main switch in the ON position?
- Are there any error messages on the display?
- Are the fuses in the electrical cabinet still intact? Ask service personnel to check the fuses.

### Troubleshooting

If the touch panel screen gives no indication of whether the ON/OFF button has been pressed, check the power switch to see whether it is turned on. If the problem persists, contact authorised service personnel.

The figure on the touch panel will change when an error or an alarm is presented. There are three different levels.



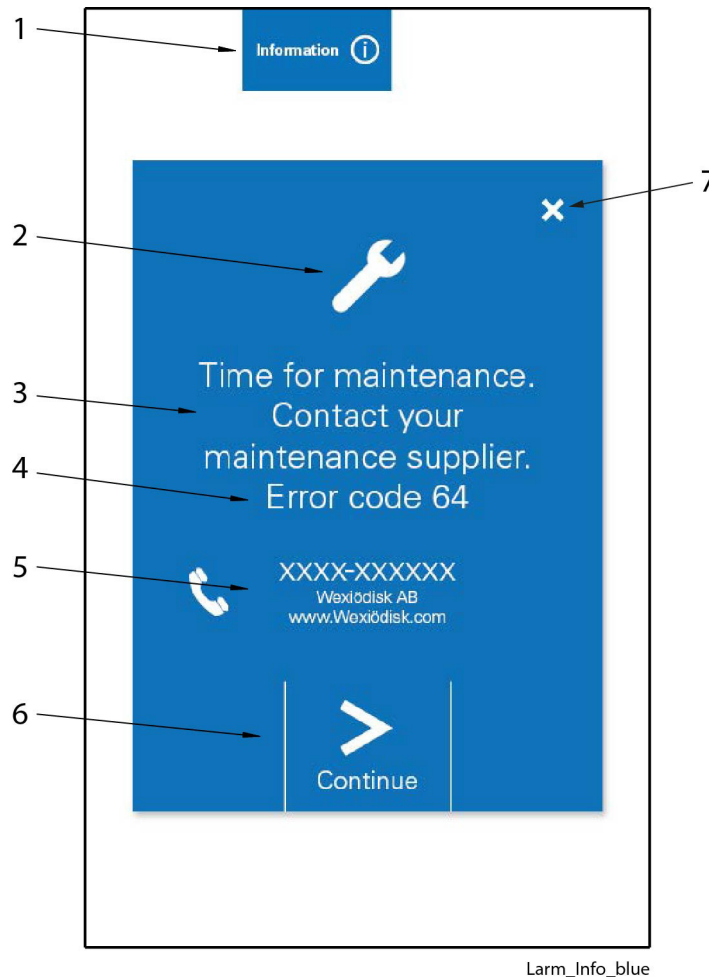
1. Information alarms (blue), which can be dealt with by the operator
2. Error alarms (yellow), which can often be dealt with by the operator
3. Critical error alarms (red), where service personnel must be contacted

The majority of these alarms can be remedied by the operator. Some blue alarms that have been dealt with by the operator a number of times will eventually change to yellow or red alarms, meaning that service personnel must be contacted.

Depending on previous settings, the machine may be stopped but not restarted until the cause of the alarm has been addressed. The operator is assisted by guides presented on the touch panel to perform measures or alternatively contact details for a service provider will be displayed.

**Information alarms (blue)**

An information alarm is generated, e.g. because a predetermined number of wash cycles has been reached.



1. Type of alarm and minimise / maximise
2. Descriptive text
3. Symbol for type of alarm (maintenance)
4. Error code
5. Name and contact details of service personnel
6. Continue to next screen
7. Reset alarm



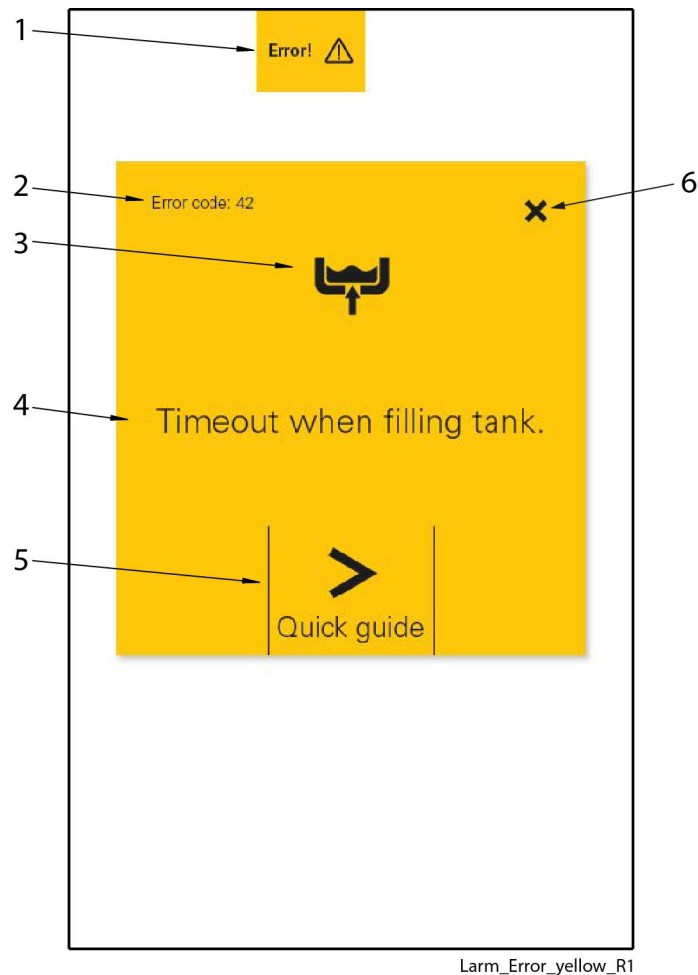
The information alarm can be minimised and then maximised by clicking on the button (1)

Follow the instructions on the touch panel, which are displayed by clicking on the symbol (6).

The information alarm can normally be reset using the X button (7), if you do not wish to click through the entire guide.

**Error alarms (yellow)**

An error alarm is generated, e.g. because of a low temperature in one of the tanks.



1. Type of alarm and minimise / maximise
2. Error code
3. Symbol for type of alarm
4. Descriptive text
5. Continue to next screen
6. Reset alarm



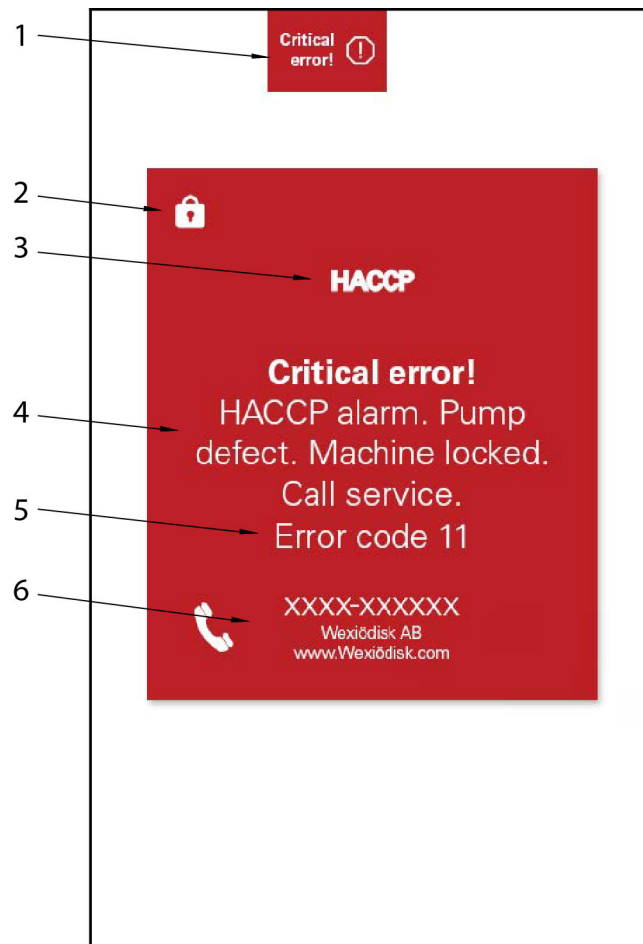
The alarm can be minimised and then maximised by clicking on the button (1)

Follow the instructions on the touch panel, which are displayed by clicking on the symbol (5).

The alarm can be reset using the X button (6) if you do not wish to click through the entire guide. Certain alarms cannot be reset, but will remain activated until the cause of the alarm has been rectified.

**Critical error alarms (red)**

A critical error alarm is generated because a serious error has occurred. The majority of these alarms cannot be reset by the operator, and service personnel must be contacted.



Larm\_Critical error\_red\_R1

1. Type of alarm and minimise / maximise
2. Login symbol
3. Descriptive text
4. Symbol for type of alarm
5. Error code
6. Name and contact details of service personnel

**Alarms**

Error code and text	Cause	Action
(4) Communication error between CPU card and I/O card 1. Call service	The communication between the CPU card and I/O card 1 has been interrupted. All relays on I/O card set to OFF position. The alarm will be reset if communication between the cards is restored.	Restart the machine! If the alarm recurs repeatedly; replace the CPU + I/O card.
(9) Motor protection pumps activated. Call service	The motor safety cut-out for one of the pumps has tripped.	Check the load's electricity consumption during operation. Must not exceed value according to wiring diagram. Check that the voltage on all the phases to the motor safety cut-out correspond with the electrical diagram. Check the settings on the motor safety cut-out and reset it manually.
(10) HACCP alarm pump functionality defect. Press reset	This alarm only occurs if the reference value (115-S2) is set to YES:1. The alarm will be shown when one of the pumps has been stopped for more than one minute after alarm (9) has been activated and the reference value (118-S2) is set to NO:0.	Rectify the fault, see alarm (9). Reset the alarm by pressing the reset button on the touch panel.
(11) HACCP alarm pump defect. Machine locked. Call service	This alarm only occurs if the reference value (115-S2) is set to YES:1. The alarm will be shown when one of the pumps has been stopped for more than one minute after alarm (9) has been activated and the reference value (118-S2) is set to YES:1. Current wash is completed, after which the machine is locked.	Rectify the fault, see alarm (9). Reset the alarm by pressing the reset button on the touch panel. Restart the machine!
(16) Communication error frequency converter. Call service	CAN communication between CPU board and frequency inverter has been interrupted. The frequency converter is stopped.	Check the CAN cable between the frequency converter and the CPU board.
(17) Rotation error rotating table. Press reset.	The rotation sensor for the rotating table (B0) has not registered any pulses within the prescribed time, i.e. sensor B0 is issuing no signal when the table should rotate. The frequency converter is stopped. The wash program is interrupted.	Check that nothing has got stuck in the drive mechanism. Check the rotating table's sensor B0. Check that no alarm codes are displayed on the frequency converter's display. Reset the alarm by pressing the reset button on the touch panel.
(18) Overtemperature frequency inverter. Call service	The frequency inverter has overheated. The frequency converter is stopped.	Check/reduce the frequency converter's load. Improve the cooling function.
(19) DC BUS overvoltage frequency inverter. Call service	Alarm from the frequency converter about voltage being too high in the DC bus. The frequency converter is stopped.	Check the reference values and alarm code for the frequency converter.

Error code and text	Cause	Action
(20) Frequency inverter error. Call service	Buzzer alarm signal from the frequency converter including problems such as overvoltage, voltage too low, retardation time too short. The frequency converter is stopped.	Check the reference values and alarm code for the frequency converter.
(31) Temperature sensor error tank B21. Call service	The temperature sensor has registered either a failure or a short-circuit in the sensor.	Replace the sensor.
(33) Temperature sensor error B42. Call service	The temperature sensor has registered either a failure or a short-circuit in the sensor.	Replace the sensor.
(34) Temperature sensor error B43. Call service	The temperature sensor has registered either a failure or a short-circuit in the sensor.	Replace the sensor.
(35) Temperature sensor error heat recovery unit B05. Call service	The temperature sensor has registered either a failure or a short-circuit in the sensor.	Replace the sensor.
(37) Low flow during final rinse. Press reset	The alarm is tripped because the flow through flow meter BV02 is below the nominal value defined as the reference value (40) when valve Y02 is open.	Check the function of: booster pump M10, valve Y02 (valve blocked, coil or membrane broken, etc.), water meter BV02. Check the setting of the reference value (40). The alarm is reset when the flow returns to normal or using the reset button on the touch panel.
(38) HACCP alarm no flow during final rinse. Press reset	This alarm only occurs if reference value (115-S2) is set to YES:1. No water flow measured by flow meter BV02 during final rinse (valve Y02 open and no temperature reduction in the booster heater measured by temperature sensor B42). The alarm is set as per the time specified by the reference value (33). This alarm is activated if reference value (41) is set to NO:0.	Check the function of: break tank (level monitor B12, float valve, water level in the machine, etc.), water meter BV02, booster pump M10, valve Y02, temperature sensor B42. The alarm is reset when the flow exceeds the alarm limit or using the reset button on the touch panel.
(39) Final rinse error sensor error flow meter BV02. Call service	No water flow through flow meter BV02 during final rinse (valve Y02 open) while at the same time the temperature is falling in the booster heater (measured by temperature sensor B42). The alarm is triggered as per the time defined by reference value (33) "Timeout during final rinse". The alarm is reset when the flow returns to normal.	Check flow sensor BV02. Reset the alarm by pressing the reset button on the touch panel.

Error code and text	Cause	Action
(40) HACCP alarm final rinse defect. Press reset	This alarm only occurs if reference value (115-S2) is set to YES:1. Final rinse function deficient. This alarm is activated when the conditions for alarm nos. 37, 38 or 39 have been fulfilled three times in a row. This alarm is activated if the reference value (41) is set to NO:0.	Check cause, see alarm nos. (37), (38) and/or (39). Reset the alarm by pressing the reset button on the touch panel.
(41) HACCP alarm final rinse defect. Machine locked. Call service	This alarm only occurs if reference value (115-S2) is set to YES:1. Final rinse function deficient. The alarm is activated when the conditions for alarm nos. 37, 38 or 39 have been fulfilled three times in a row. This alarm is activated if the reference value (41) is set to YES:1. Current wash is completed, after which the machine is locked.	Check cause, see alarm nos. (37), (38) and/or (39). Reset the alarm by pressing the reset button on the touch panel. Restart the machine!
(42) Timeout when filling tank. Press reset to start filling again	The level in the tank is still low (level monitor B5:2 is off) despite the time defined as reference value (31) having passed since filling of the machine started. Valves Y02 and Y05 (standard machine only) are closed.	Check the operation of break tank (level monitor B12, float valve, water flow into the machine, etc.). Check that the level pipe is in place and its rubber sleeve achieves a good seal with the tank's bottom plate. Check that valves Y02 and Y05 (standard machine only) are working and are not jammed. Check that booster pump M10 is working. Check that level monitor B5:2 is working. Reset the alarm by pressing the reset button on the touch panel. The alarm recurs if the tank is not full after an additional period (reference value (31) has passed.
(43) Timeout when heating tank. Press reset	The temperature in the tank has not reached the correct level reference value (1) for the prescribed time reference value (32).	If the alarm repeats, the following should be checked: the heating element in tank E21, that contactor K21 is not faulty, that circuit breaker FU42 has not been activated, temperature sensor B21 in the tank. If necessary, increase the time for heating by changing reference value (32). Reset the alarm by pressing the reset button on the touch panel. It is then possible to start washing even if the temperature has not reached the correct level.



Error code and text	Cause	Action
(44) Low temperature in tank. Press reset	The temperature in the tank (measured by temperature sensor B21) is below the alarm limit reference value (39) when the wash cycle is in progress.	If the alarm repeats, check: tank-heating element E21, that contactor K21 is not faulty, that circuit breaker FU42 has not been triggered, temperature sensor B21 in the tank, the setting of reference value (39). The alarm is reset when the temperature in the tank exceeds the alarm limit or using the reset button on the touch panel.
(45) HACCP alarm heating of tank defect. Press reset	This alarm can only occur if the reference value (115-S2) is activated, i.e. the reference value is set to YES:1. This alarm is activated if the conditions for alarm (44) have been met and these have persisted for at least one minute and the reference value (116-S2) is set to NO:0.	See alarm no. (44). Reset the alarm by pressing the reset button on the touch panel.
(46) HACCP alarm heating of tank defect. Machine locked. Call service	This alarm can only occur if the reference value (115-S2) is activated, i.e. the reference value is set to YES:1. This alarm is activated if the conditions for alarm (44) have been met and these have persisted for at least one minute and the reference value (116-S2) is set to YES:1. Current wash is completed, after which the machine is locked.	Rectify the cause, see alarm (44). Reset the alarm by pressing the reset button on the touch panel. Restart the machine!
(47) Low temperature before final rinse.	The temperature in the booster heater is low when the final rinse starts. The wash sequence is extended by 2 minutes, if the temperature after the extension is still low the machine will rinse despite the low temperature. If, despite this, the temperature is below what is specified by any of the reference values (12), (13) and (14), the alarm will be activated.	Check that: the heating element in booster heater E42, temperature sensor B42, contactor K42 are not faulty, circuit breaker FU42 has not tripped, setting of reference values (12), (13) and (14). Reset the alarm by pressing the reset button on the touch panel.
(48) HACCP alarm heating of boiler defect. Press reset	This alarm only occurs if the reference value (115-S2) is set to YES:1. See alarm no. (47).	See alarm no. (47). Reset the alarm by pressing the reset button on the touch panel.
(49) HACCP alarm heating of boiler defect. Machine locked. Call service	This alarm only occurs if the reference value (115-S2) is set to YES:1. See alarm no. (47), current wash is completed, after which the machine is locked.	Check and rectify the cause of the alarm, see alarm no. (47). Reset the alarm by pressing the reset button on the touch panel. Restart the machine.
(50) Washing detergent alarm active. Check detergent device	Alarm signal from external detergent device has activated input on dishwasher's control system.	Check the detergent device according to the supplier's recommendations. Reset the alarm by pressing the reset button on the touch panel.

Error code and text	Cause	Action
(51) HACCP alarm washing detergent dosing defect. Press reset	This alarm can only appear if the reference value (115-S2) is set to YES:1. The alarm is activated if the conditions for alarm (50) have been met for at least one minute and the reference value (119-S2) is set to NO:0.	Check the detergent device according to the supplier's recommendations. Reset the alarm by pressing the reset button on the touch panel.
(52) HACCP alarm washing detergent dosing defect. Machine locked. Call service	This alarm can only appear if the reference value (115-S2) is set to YES:1. The alarm is activated if the conditions for alarm (50) have been met for at least one minute and the reference value (119-S2) is set to YES:1. Current wash is completed, after which the machine is locked.	Check the detergent device according to the supplier's recommendations. Rectify the fault. Reset the alarm by pressing the reset button on the touch panel. Restart the machine.
(57) External alarm activated. Press reset	External alarm, i.e. alarm denoting fault in connected device.	Troubleshoot connected device. Reset the alarm by pressing the reset button on the touch panel.
(58) Time to change water in tank. Press reset	A predefined number of wash cycles have been completed. The counter function that counts the number of wash cycles and raises an alarm when a specific number of wash cycles have been completed is activated by setting the reference value (42) to the desired number of wash cycles before an alarm is to be raised. This alarm is activated when reference value (43) is set to NO:0. The counter must be reset when the water change has been completed in order that the machine can be started again (see ACTION column).	Drain the water from the machine. The alarm is reset (the counter is reset to zero) when the water is drained from the machine (level monitor for lower level in tank set to 0 certain time). The alarm can be reset temporarily by pressing the reset button on the touch panel. Machine then washes one cycle, after which the alarm returns.
(59) Time to change water in tank. Machine locked	A predefined number of wash cycles have been completed, see alarm (58). This alarm is activated when reference value (43) is set to YES:1. The machine is locked when this alarm is activated. It is then not possible to use the machine to wash until the water has been changed.	The machine is locked (see the CAUSE column). Change the water! See alarm (58). Restart the machine!
(60) Check granule level. Press reset	A predefined number of wash cycles have been completed. The number of wash cycles before an alarm to check the granule level is set using the reference value (44). The alarm is switched off by setting the reference value to 0.	Check the amount of granules in the dishwasher in accordance with the instructions in the user manual. Reset the alarm and counter (reference value (44) is set to 0) by acknowledging the alarm via the reset button on the touch panel.

Error code and text	Cause	Action
(62) HACCP alarm no flow during final rinse. Machine locked	This alarm only occurs if reference value (115-S2) is set to YES:1. No water flow measured by flow meter BV02 during final rinse (valve Y02 open) and no temperature reduction in the booster heater measured by temperature sensor B42. The alarm is set as per the time specified by the reference value (33). This alarm is activated if reference value (41) is set to YES:1. Current wash is completed, after which the machine is locked.	Check the function of: break tank (level monitor B12, float valve, water level in the machine, etc.), water meter BV02, booster pump M10, valve Y02. Restart the machine!
(63) Power supply failure. Check the emergency switch	Power supply fault. Internal check upon startup of the IO board to ensure that the power from relay 0 is activated (LED by relay 0 is lit). If there is no power to input J71, the alarm is tripped. The machine will not start.	Check that there is power to input J71 on the IO card. Restart the machine!
(64) Time for maintenance	The alarm is activated via WebTool (reference value (130-S2) set to YES:1). The alarm is tripped when a year has passed since the last service, or after 15,000 wash cycles.	Annual service must be performed on the machine. The alarm can be overridden on the machine's touch panel, after which the machine can be used as normal. The alarm is reset by the service engineer by resetting the service counter, i.e. reference value (49) set to YES:1, via the panel (service mode) or WebTool touch.
(66) Sensor error. Clean and check function for level sensors	If both the level sensors in tank B5:1 (lowest tank level) and B5:2 (upper tank level) do not transmit the same signal (low level) this alarm is triggered. The heating element in the tank cannot be activated.	If the tank has been emptied upon startup: clean and check that tank level sensors B5:1 and B5:2 are working. Reset the alarm by pressing the reset button on the touch panel.
(95) Short circuit on digital inputs check flow sensor	Input with short-circuit.	Check the input circuits according to the machine's wiring diagram. Check which input is causing the problem by removing one cable at a time on the contacts on the I/O card, and then replace the cables one at a time until the alarm returns. Troubleshoot! Check that the flow meter is not leaking.
(98) Hardware error power on function defect. Call service	The machine's "power on" function is defective. When the machine is switched off, an internal check of the I/O card must show that the power from relay 0 is deactivated. If it is not, the consequence is that the machine is not shut down, but all relays are set to the OFF position.	Check: the status of relay 0 on the I/O card, incoming voltage. Restart the machine! If the above does not help, replace the CPU + I/O card.

Error code and text	Cause	Action
(99) The machine type has been changed. Verify the change	The machine type has been changed. The alarm only appears when the machine has been re-started following a change of machine type. The machine is locked.	The change must be verified in order to come into force and for the machine to be unlocked. Log in using WebTool touch or on the machine's display (NOTE! Requires S2 authorisation). Check that the reference values for the current machine type are correct. Save!
(100) Nominal values restored from SD memory	The configuration has been retrieved from the SD card. Operating data and other statistics have been reset.	This is an information text. Reset the alarm on the touch panel.
(101) Hood safety protection activated	The hood safety protection has been triggered (SP2=0 when the hood is closed).	Check that whatever caused the anti-crushing system to trip has been removed. Reset the alarm by pressing the reset button on the touch panel. If no cause can be found for the anti-crushing system having tripped, it may be due to the anti-crushing system's setting being too sensitive or that the switch for indication of closed hood (S1) is set to switch too late.
(102) Timeout when opening hood. Press reset to start filling again	The alarm is activated when the booster pump (M10) and the solenoid valve for hood opening/closing (Y4) have been open for the time defined by the reference value (29) without the hood having opened (the power switch S1 has left closed position). The booster pump and solenoid valve are stopped at the same time as the alarm is issued.	Check the function of: break tank (level monitor B12, float valve, water level in the machine, etc.), valve Y4, booster pump M10, power switch S1. Max. time for hood opening can be adjusted by changing the reference value (29). Reset the alarm by pressing the reset button on the touch panel.
(103) Timeout when closing hood. Press reset	Closing the hood has taken longer than the time defined by the reference value (30), i.e. the solenoid valve for opening/closing the hood Y4 has been open for the time defined by the reference value above, without the hood having closed, (the limit switch S1 indicates a closed position).	Check that valve Y4 is working. Check that the hood switch S1 is working. Max. time for hood closing can be adjusted by changing reference value (30). Reset the alarm by pressing the reset button on the touch panel.
(104) Time to change granules. Press reset	The granules must be changed. The alarm is activated after a configurable number of potwash cycles using granules have been run. The number of potwash cycles with granules that are run before a granules change is set with a reference value (61).	Replace the granules in accordance with the guide on the machine's panel. The alarm and counter will be reset automatically when the guide has been run.

Error code and text	Cause	Action
(105) Timeout when filling break tank. Press reset to start filling again	The time limit (30 s) for filling the break tank has elapsed without the break tank being filled (level monitor B12 still off).	Check: that the stopcock on the incoming water pipe is not closed, the filter on the water connection is not blocked, the flow or water pressure of incoming water is not too low, (see user manual under heading "Technical specifications"), that the float valve in the break tank is operational, that level monitor B12 is not broken. Filling the break tank is restarted if the alarm is reset by pressing the reset button on the touch panel.
(120) Clock not set or low battery.	The alarm will be activated if the clock has not been set or the battery on the card is low.	Check the clock. Replace the battery if necessary.
(121) Electrical fault in ON/OFF button detected. Call service.		
(122) Electrical fault in digital inputs detected. Call service.		
(123) Possible power failure detected.		
(124) SD-card not mounted. Call service.		
(251) / (252) Platform error	The machine has crashed. The software cannot execute the correct operations.	Switch off the machine and restart it. Call service and inform them.

All errors displayed on the touch panel have an error code, which is displayed in the alarm. This error code must be specified when contacting service personnel.



Call the service company and state the following:

- Machine type and model.
- Machine serial number and date when the machine was installed.
- The error code displayed on the touch panel.
- What happened/was being done immediately before the fault occurred?

In addition to the errors shown on the touch panel, other problems can occur. The table below shows some problems which can be rectified by the operator.

PROBLEM	CAUSE	ACTION
No indication on the control panel display when the control button is pressed.	Power switch off.	Switch on the power switch.
The machine does not fill with water.	The stopcock on the incoming water supply is closed.	Open the tap.
	The hood is open.	Close the hood.
	The level pipe's rubber sleeve is not sealing against the bottom plate.	Adjust the level pipe. Check that the rubber sleeve has not been damaged. Change the rubber sleeve if it is damaged.
	The final rinse pipe nozzles are blocked.	Clean the wash nozzles.
The machine fills slowly.	The final rinse pipe nozzles are blocked.	Clean the wash nozzles.
The tanks overflow.	The level pipe is not in place.	Fit the level pipe.
	The level pipe's rubber sleeve is not sealing against the bottom plate.	Check that the level pipe is closed. Change the rubber sleeve if it is damaged.
The machine does not start washing.	The hood is not closed.	Close the hood.
Noise from the washing pump.	Low water level. Foam in the tank.	Check the level. Change the water.
The machine stops in the middle of the wash cycle and starts taking in water from the washing pump	The level pipe's rubber sleeve is not sealing against the bottom plate.	Adjust the level pipe. Check that the rubber sleeve has not been damaged. Change the rubber sleeve if it is damaged.
The machine is not cleaning properly.	The rinse and wash nozzles are clogged with dirt.	Check and clean the nozzles.
	There is too little detergent.	Check the amount of detergent.
	The water in the tank is too dirty.	Change the water.
	Foam forming in the tank.	Check that the washing temperature is not too low and that the correct detergent is being used.
	Programme with too short a wash time selected.	Choose a wash programme with a longer wash cycle.
	The program without granules has been selected.	Select a wash program with granules.
	Dirt has dried on the dishware to be washed.	Soak the dishware before washing.
	The dishware is incorrectly positioned in the basket.	Use the correct type of accessory to ensure that the dishware is correctly positioned.
	Detergent and drying agent of another make than usual are used.	Use the same make and type as before. Rinse the hoses and pumps with water if necessary.

<b>PROBLEM</b>	<b>CAUSE</b>	<b>ACTION</b>
Granules are sticking to the washed items.	The rinse nozzles are blocked.	Clean the nozzles.
	There is too much foam in the machine.	Check to see how clean the wash water is. Change the water if necessary.
	The dividing wall in the tank has not been cleaned.	Clean the dividing wall
The granules end up in the wrong tank.	The cover plates and/or filter are not in place in the tank or have been incorrectly fitted.	Fit cover plates and strainer(s). Check they are correctly located and cover the tank.
Dishware does not dry.	The rinse nozzles are blocked.	Check and clean the nozzles.
	Too little rinsing agent.	Check the amount of rinsing agent. The hose must be submerged in liquid and the filter in the hose must be clean.

## 5. Technical specifications

The manufacturer reserves the right to make changes to the technical data.

TECHNICAL DATA	
Granules pump (kW)	2.2
Chemical wash pump (kW)	1.5
Normal wash pump (kW)	0.74
Rinse pump / Booster pump (kW)	0.58
Drain pump (W) *	100
Rotating table motor (kW)	0.55
Booster heater (kW)	12 / 9 *
Tank heater (kW)	9
Condensation fan (W) *	45
Heat recovery unit, flow (m <sup>3</sup> /h) *	540
Tank volume, total (litres)	90
Tank volume, granules tank (litres)	40
Weight, machine in operation (kg)	415 / 445 *
Granule quantity (kg)	5
Maximum temperature of the surroundings for machines in operation (°C)	35
Enclosure protection class (IP)	55

\* Option



CAPACITY AND OPERATING DATA	
Normal wash, GLASS (P1) (min.) *	1.3
Normal wash, PLATES (P2) (min.) *	1.8
Normal wash, CUTLERY (P3) (min.) *	3.3
Potwash, ECO with granules (P1) (min) *	2.2
Potwash, MEDIUM with granules (P2) (min) *	4.2
Potwash, HEAVY with granules (P3) (min) *	6.2
Potwash, ECO without granules (P4) (min) *	2.2
Potwash, MEDIUM without granules (P5) (min) *	3.7
Potwash, HEAVY without granules (P6) (min) *	6.2
Granule collection program (min)	2.0
Capacity (1/1-canteens/programme) (units)	7
Capacity (1/1-canteens/hour) (units)	91
Capacity normal wash (wash baskets/hour) (units)	46
Water consumption, rinsing/programme (litres) **	4–6
Water consumption, cooling/programme (litres) **	0–1.5
Max. surface temperature at a room temperature of 20 °C ( °C)	30
Sound pressure level (normal wash / without granules / with granules), LPA (dBA) ***	60 / 64 / 70
Sound effect level (normal wash / without granules / with granules), LWA (dBA) ***	73 / 78 / 84

\* Factory setting (with spin cycle). The wash time is adjustable.

\*\* Applies under ideal conditions. The water consumption depends on local conditions. Fine adjustments can be made during installation.

\*\*\* in accordance with EN 60 335-2-58, §ZAA.2.8 with instruments that satisfy class 1.

Measurements of the sound pressure level on site are performed in three places 20 cm from the edges of the front at a height of 1.55 m using a microphone. When measuring sound power level, create an imaginary measurement area consisting of five sides at a distance of 1 m from all edges of the machine.

CONNECTION, ELECTRICALLY HEATED MACHINE	
Total connected load (kW)	14.7 / 11.7 *
Main fuse (A) * (400-415V 3N~ 50Hz) & (400-440V 3~ 50/60Hz)	25 / 20 **
Main fuse (A) * (230V 3~ 50/60Hz)	40 / 35 **
Max. connectable conductor cross-sectional area Cu (mm <sup>2</sup> ) (400-415V 3N~) (L1-L3, N, PE) & (400-440V 3~) (L1-L3, PE)	6
Max. connectable conductor cross-sectional area Cu (mm <sup>2</sup> ) (230V 3~) (L1-L3, PE)	25
Maximum short-circuit current I <sub>cu</sub> (kA)	1.5

\* Other voltages on request

\*\* Option

\*\*\* 2.6 m cable outside the machine

WATER, DRAIN AND VENTILATION CONNECTIONS *	
Water quality, hardness (°dH)	2–7
Hot water connection 50-65°C (external thread)	R½
Cold water connection, 5–12°C (external thread)	R½
Drain connection, PP pipe (ø mm)	50
Water capacity, hot water, min./max. pressure (kPa)	50 / 600
Water capacity, hot water, flow (litres/minute)	5
Floor drain, capacity (litres/sec.)	3
Ventilation of machine (m <sup>3</sup> /hour)	600
Heat load to room, latent / sensible / total (kW)	0.5 / 1.0 / 1.5 (0.5 / 10.7 / 1.2) *

\* Option

SIZE AND WEIGHT FOR TRANSPORT *	
Size (LxWxH) (mm)	920 x 1150 x 2000
Weight (kg)	340

\* Including packaging