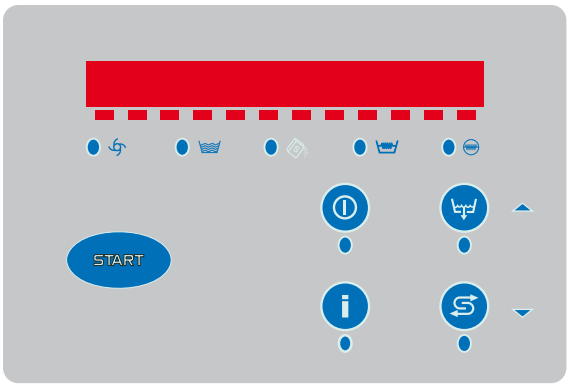
metos

HOOD TYPE MACHINE

HOOD 130S

4246460, 4246462, 4246463, 4246464

Installation and Operation Manual



COD.: 3100ES_U
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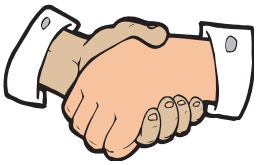


Thank you for choosing our machine.

The instructions for installation, maintenance and use found on the following pages have been prepared to ensure a long life and perfect operation of your unit.

Please, do follow the instructions carefully.

We have designed and built this machine using the latest innovative technologies. Now you shall take good care of it.

Your full satisfaction is our greatest reward.

CONTENTS Page

READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING THE MACHINE.

WARNING: FAILURE TO COMPLY, EVEN PARTIALLY, WITH THE PRESCRIPTIONS IN THIS MANUAL WILL RENDER THE PRODUCT WARRANTY NULL, AND THE MANUFACTURER SHALL NOT BE LIABLE.

WARNINGS

This instruction booklet must be kept with the machine for future consultation. If this machine is sold or transferred to other users, make sure the booklet always goes with the unit so that the new owner can have all the necessary information on operations and all relevant instructions.

The instruction booklet must be carefully read before installation and before starting the machine.

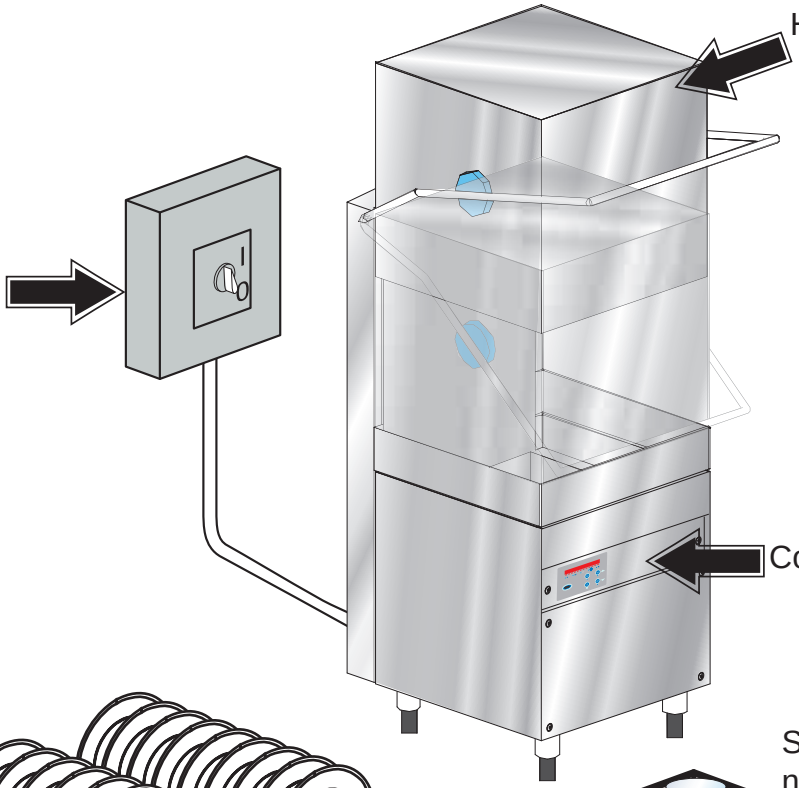
These instructions are supplied to safeguard the users in compliance with Directive 2006/95/CE as amended and the "harmonized product Technical Standard" EN 60335-1 and EN 60335-2-58.

- THE CONNECTION TO THE ELECTRICAL AND WATER NETWORKS, FOR INSTALLING THIS UNIT, MUST BE CARRIED OUT BY QUALIFIED OPERATORS ONLY.
- The user shall not carry out any repair and/or maintenance operations. In any case contact qualified personnel.
- Only qualified personnel can access the control panel, when the main power switch is OFF.
- Servicing of this machine must be performed by authorized personnel only.
  N.B.: Use genuine spare parts only. Non-genuine parts will void the warranty and the manufacturer will take no responsibility for any damage.
- Follow the instructions given in the manufacturer's booklet for cleaning operations (chap.5).
- This machine must only be used by adults. This is a professional machine to be used by qualified personnel, installed and repaired exclusively by qualified Technical Personnel. The Manufacturer declines any responsibility for improper installation, use, maintenance or repair.
- The appliance shall not be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- Children must be attended and shall stay away from this machine.

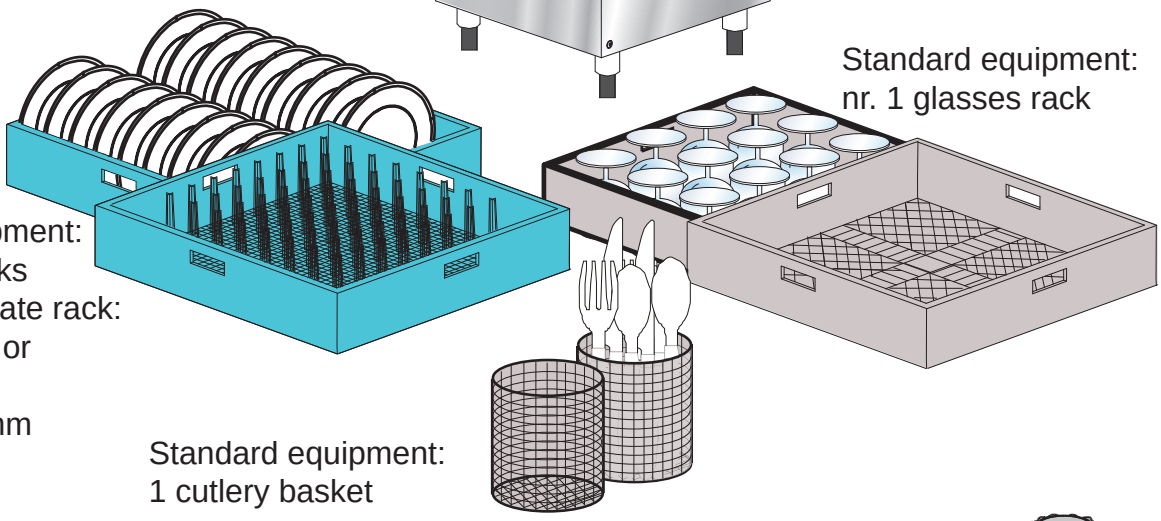
NOTE: The manufacturer declines any responsibility for accidents to people or any damage deriving from failure to observe the above listed instructions.

1. MACHINE DESCRIPTION

1.1 Machine Description



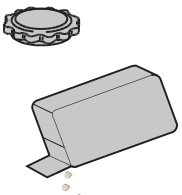
Wall-hung main power switch: at installation serviceman supply and care, according to local laws



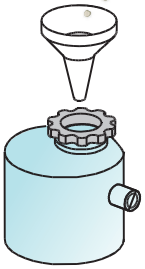
Standard equipment:
nr. 1 glasses rack

Standard equipment:
nr. 2 plates racks
Capacity per plate rack:
12 soup plates or
18 flat plates
Max Ø = 400 mm

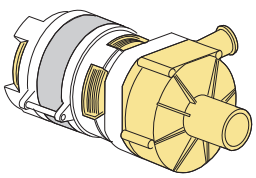
Standard equipment:
1 cutlery basket



Optional:
Water softener



Optional:
Water drain pump



To operate the Hood machine, 3 connections are needed:

- Electrical;
- Water supply;
- Water drain.

This is a cycle machine comprising a 55°C wash cycle with detergent, a 85°C rinse cycle with injection of rinse-aid in the boiler hull. 50x50 cm racks are used.

The machine can be complemented with wash-tables, rinse-showers and dedicated waste collection systems.

A new wash cycle can be started by closing the hood down.

This machine is designed exclusively for washing dishes, glasses and various pots and pans with human food type of residue.

Any other use is deemed improper.

DO NOT wash articles polluted with petrol, paint, chips of steel or iron, fragile objects or material not resistant to the washing process.

Do not use acidic corrosive chemical products or alkaline and solvents or chlorine based detergents.

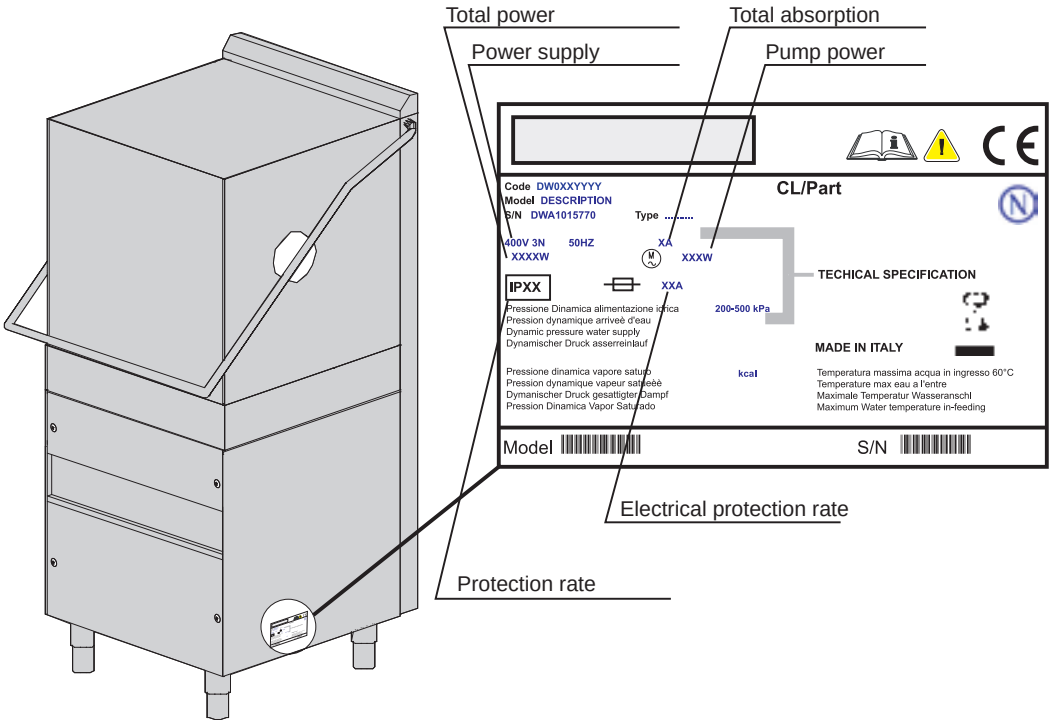
Do not open the machine hood when operating. In any case, the machine has a special safety device which immediately stops the unit if the hood is open, thus preventing water spillage.

Always switch the machine completely off and drain the water tank, before accessing inside.

The optional drain pump is used to keep the correct water level in the wash tank and drain it, in case the drain connection is higher than the machine water discharge pipe itself.

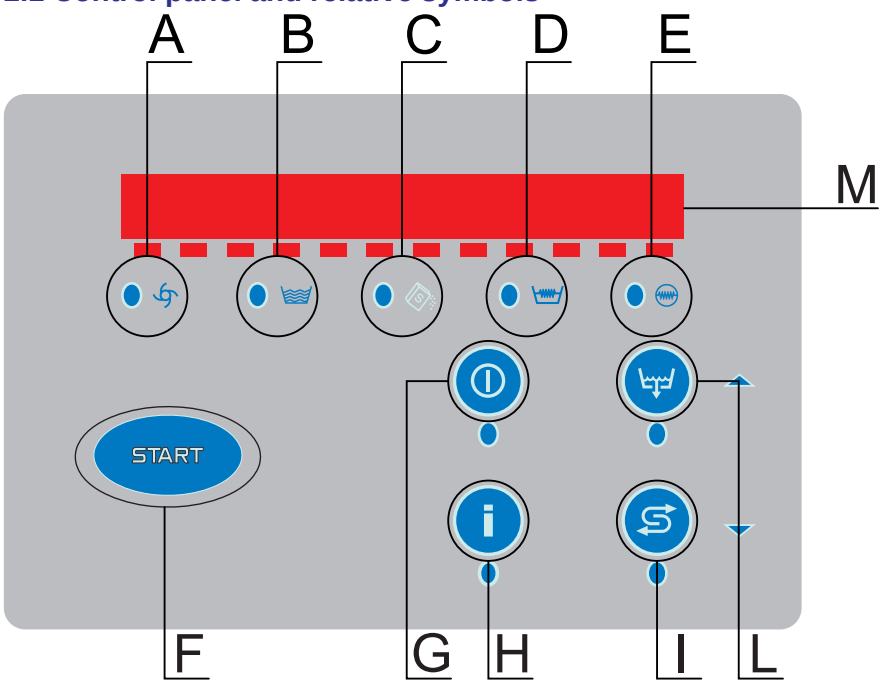
1.2 Machine features

The machine has a noise level below 70 dB.



2. 2. OPERATION

2.1 Control panel and relative symbols

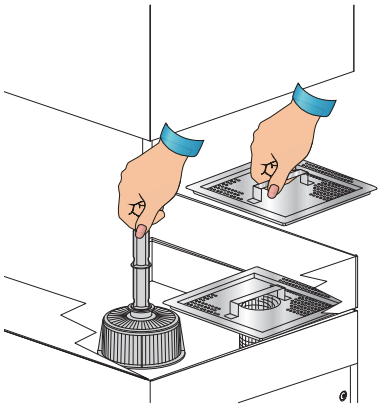


Pict. 1

A - Cycle light indicator
B - Full tank indicator
C - Salt shortage indicator
D - Heating tank indicator
E - Heating boiler indicator
F - START key to start up cycle / Programming key
G - Switching ON / OFF / Programming key
H - Info (temperature / software review / key factory)
I - Regeneration key (optional) / Decrease
L - Drain Pump key (optional) / Increase
M - Display

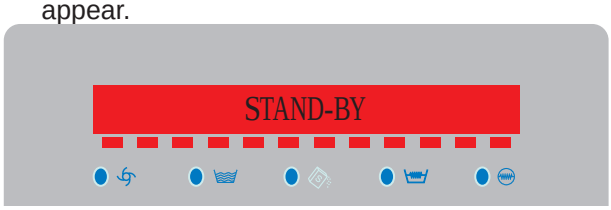
2.2 Machine start-up

2.2.1 Start-up

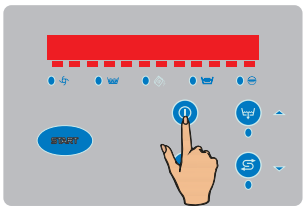


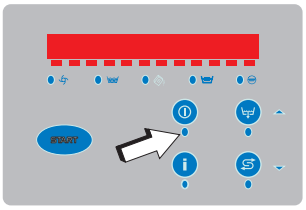
Pict. 2

- Check if the pump suction filter is properly inserted in its seat in the wash-tank bottom (see pict. 2).
  This filter must be cleaned every 20 wash-cycles or whenever necessary.
  DO NOT use the appliance without the filter.
- Insert the overflow pipe in its seat inside the pump suction filter (see pict. 2).
- If supplied, put the surface filters in place (see pict. 2).
- Shut the dishwasher hood.
- Turn the water valve “open”.
- Turn the main power switch ON.
  The display **"M"** will show, for a few seconds, the installed software version code.
- The machine is on **"STAND-BY"**. In the **"M"** display, the message **"STAND-BY"** will appear.

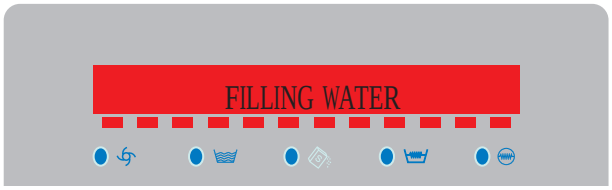


- Turn the button **"G"**. The LED positioned below the **“G”** control, will light (green color) at the machine’s start (when the machine is on **"STAND-BY"** mode, the LED will turn red).

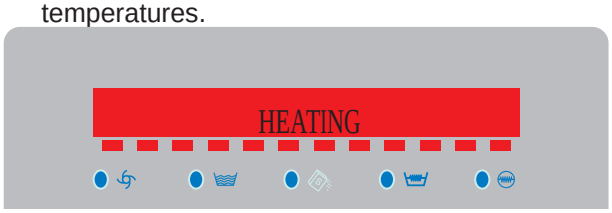




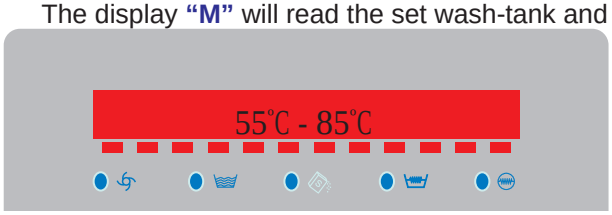
The display **"M"** will read **"FILLING WATER"**.



The display will read **"HEATING"**, till wash-tank and boiler will reach the set temperatures.



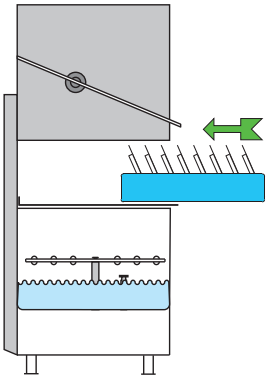
Should the machine be fed with hot water supply (50°C), the heating process will take some 10 minutes.
Should the machine be fed with cold water supply (10°C), the heating process will take some 45-55 minutes.
The display **“M”** will read the set wash-tank and boiler temperatures.



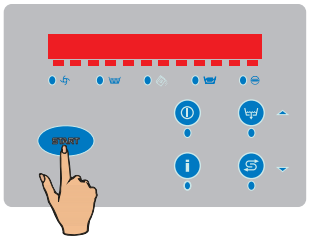
At this stage, the water intake starts.

2.2.2 Operation

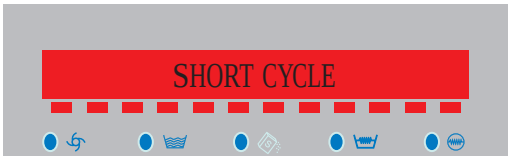
- Insert the rack filled with dishes to wash. The plates must be correctly placed in the rack (see pict. 3).
- Select the wanted washing cycle by pushing the START button **"F"**;

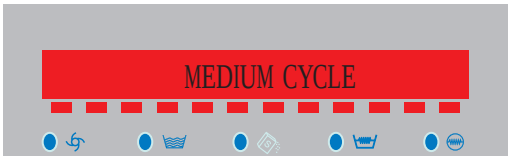


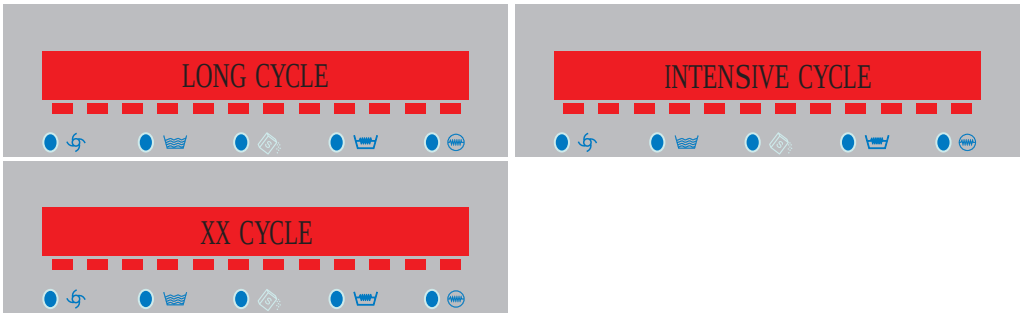
Pict. 3



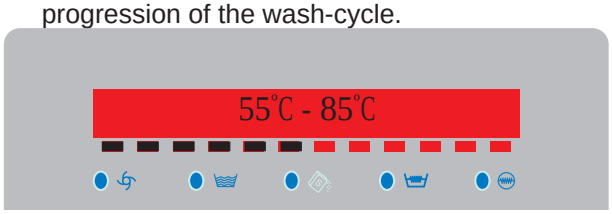
the display will show in sequence all these available programs. Once the wanted program is displayed, do release the button.



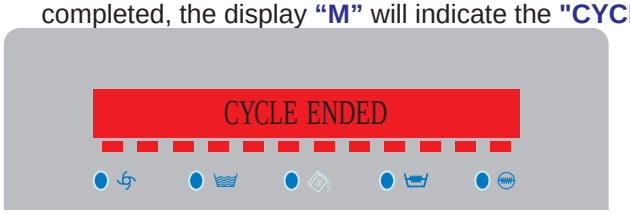




- Close the hood: the wash cycle starts automatically. The indicator **"A"** will start flashing.
  All wash-time long the display will read the wash-tank temperature and the boiler temperature. Below the temperatures indications line-bar is displayed to show the progression of the wash-cycle.



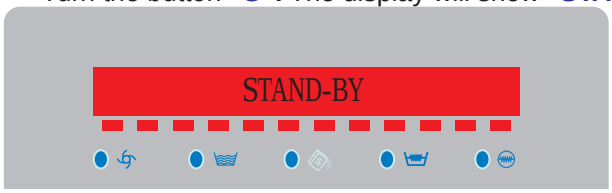
At the end of the washing cycle, a hot rinse cycle will take place. When the cycle is completed, the display **“M”** will indicate the **"CYCLE ENDED".**



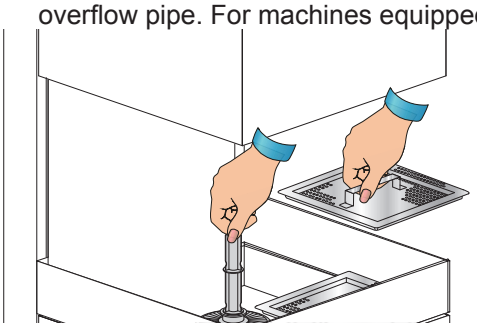
NB: At cycle-end, keeping the hood closed, dishes will not dry. Take out the rack or keep the hood open to allow evaporation, helping the drying of the dishes.
When opening the hood the message **"CYCLE ENDED"** disappeared. The machine is now ready for the next wash-cycle.
We recommend to change water at least twice a day, or whenever needed.

2.2.3 Switching OFF

- Turn the button **"G".** The display will show **"STAND-BY"**.



To drain completely the wash-tank, remove the surface filter (if present) and take off the overflow pipe. For machines equipped with drain pump see chap. 2.5.



- At the end of the day, clean the machine (see chap. 5 "Maintenance").
- Shut the water valve.
- Switch the main power switch OFF.

2.3 Detergent use

The detergent shall be the NO FOAM type, suitable for industrial dishwashers and must comply with the EN 60335-2-58/A11 norms.
The use of good quality liquid detergents is recommended.
The detergent shall be placed in the sump. Follow the manufacturer's recommendations for chemical dosage, related to the local water hardness. The machine can be ordered with an adjustable automatic detergent dispenser (always recommended).
1cm. of the product drawn into the tube is equal to about 0.15 g. A correct amount of detergent is very important for a successful wash.

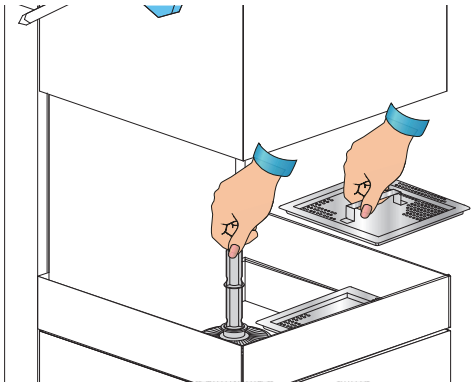
2.4 Rinse aid use

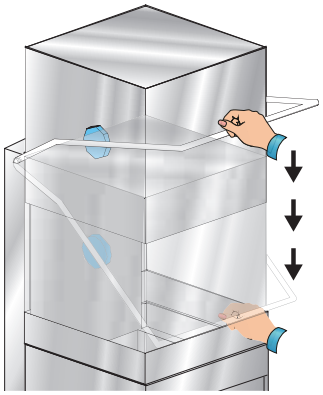
The machine has a standard rinse aid dispenser. The machine automatically sucks the product.

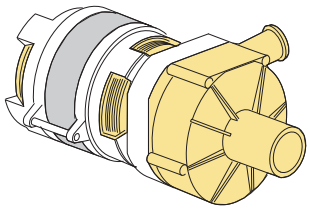
The rinse-aid chemical, shall be suitable for professional glass and dishwashers and must comply with the EN 60335-2-58/A11 norms.
The recommended amount is 2-5 cm of product measured on the suction hose.
1 cm of the product drawn into the hose is equal to about 0.13g. A correct amount of rinse aid is very important for a quick and proper drying.
NB: Excessive amount of chemicals or foam will reduce wash pump efficiency.

2.5 Drain pump system (optional)

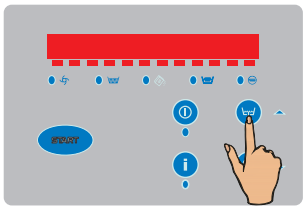
To drain completely the wash-tank keep the machine OFF, extract the overflow pipe and shut the hood.



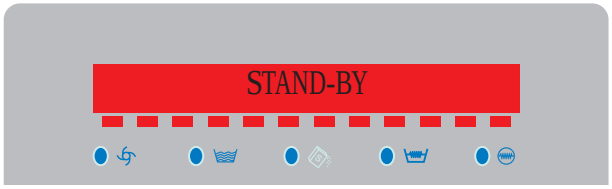




After that, press the key **"L"** fitill the display will show **"TANK DRAINING"**.



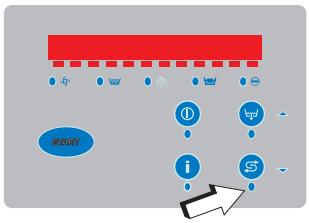
The discharge pump will automatically drain the wash-tank. After the draining is complete, the machine will turn automatically in **"STAND-BY"** mode.



If you want to refill the machine for a new cycle, see chap. 2.2.
The drain pump will operate also during the rinse cycle, to drain the water in excess from the wash tank.

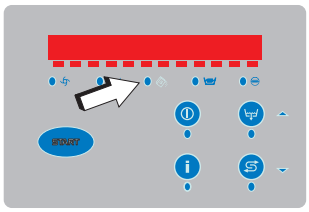
2.6 Regeneration device (Optional only on standard machines)

Should the machine be equipped with a water-softener circuit, this will be fully automatic. The circuit board is designed to call periodically for a 20 min. regeneration cycle (based upon the set water hardness). This regeneration cycle can also be activated by the user, should the rinse quality be dissatisfactory.
When on the **“M”** display the LED below the **“I”** key flashes



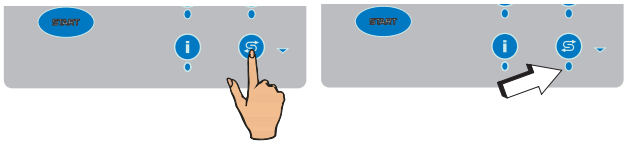
or when the users want to activate the cycle, **“R”** regeneration cycle, start the following procedure:

- When on the **“M”** display the **“C”** key flashes, fill the special container, placed on the inside of the tank, with coarse salt (0,500 kg - 1-4 mm. grains), being careful not to spill it into the sump. A strong concentration of salt can negatively affect the correct functioning and service life of the machine and generate rust and the steel oxidation. After filling with salt, lock the plug tightly.

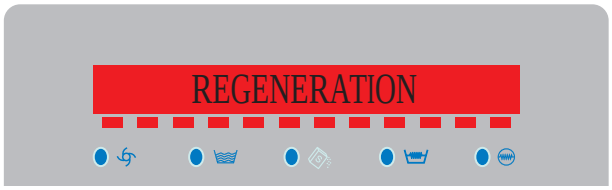


- With the machine in **"STAND-BY"** mode, the water valve open, the wash-tank empty and the hood shut, press the **"I"** button.

The LED under the **“I”** key lights on.



The display "M" will show **"REGENERATION"**.



- This cycle cannot be interrupted and the normal operation is inhibited.
- At the cycle end, the machine will switch in **"STAND-BY"** mode, automatically.

At this moment, it is possible to start a normal operation phase(see 2.2.2 Operation).

In case of water hardness above 35°f an external water softener is recommended.

WARNINGS:

- Do not slam the hood when opening and closing.
- Do not put material or objects on the hood.
- The machine has an IPX3 protection rating against accidental water splashes and is not protected against pressurized water jets. Pressure-cleaning systems shall, therefore, not be used on this machine.
- Do not dip bare hands into water containing detergent. If this should occur, wash them immediately with plenty of water. Check the safety instructions on the detergent container.
- Some important rules must be followed for using this appliance:
  1) never touch the appliance with wet hands or feet;
  2) never use the appliance when barefooted;
  3) do not install the appliance in places exposed to water splashes.
- **This machine must be disconnected from the main electrical supply after use at the end of the day and for any service/maintenance operation. Switch off the main switch located on the wall, which shall be installed by a professional installer. Shut the water supply valve(s).**
- Do not cover the intake or dissipation grids.
- Do not use water to extinguish fires on electrical parts.

WARNING: INTERNAL CLEANING OF THE MACHINE SHALL BE CARRIED OUT AT LEAST 10 MINUTES AFTER THE POWER SWITCH HAS BEEN TURNED OFF.

WARNING: DO NOT INSERT HANDS AND/OR TOUCH THE PARTS LOCATED AT THE BOTTOM OF THE WASH TANK AND/OR AT THE END OF THE WASH CYCLE.

3. ECOLOGICAL ASPECTS

3.1 Recommendations for optimal use of energy, water and additives

Salt dosing

A pre-set (by the manufacturer) quantity of salt is injected in the resins at each regeneration cycle. It is important to observe the number of regeneration cycles recommended in paragraph 2.6 "Regeneration device" in order to avoid salt spills or lime deposits.

Use the machine fully loaded when possible.

This shall prevent detergent, rinse aid, water and energy consumption waste.

Detergent and rinse-aids

Use detergents and rinse-aid chemicals with high biodegradability, to best respect the environment. Verify proper dosage in relation to water hardness at least three times a year. Excess product pollutes rivers and seas while an insufficient dose results in unsatisfactory dish washing and/or hygiene.

Boiler and Wash-Tank temperatures

The boiler and tank temperatures are set by the manufacturer in order to obtain the best washing results with detergents on the market. The temperatures can be reset by the installer in relation to your detergent.

Pre-washing

Carefully pre-wash with a moderate amount of water at room temperature to facilitate the removal of animal fats. To remove encrusted materials warm water soaking is recommended.

Note:

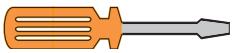
Wash objects as soon as possible to avoid deposits from drying and compromise effective washing.

For effective washing routine dishwasher cleaning and maintenance is advised (see chap. 5).

Disregarding the points listed above and of any the information contained in this manual can cause energy, water and detergent waste with a subsequent increase in running costs and/or performance reduction.

4. H.A.C.C.P. AND HYGIENE REGULATIONS

- When starting the machine ON, no wash-cycle will be starting until the set boiler and wash-tank temperatures are reached. During operation, the machine will not start the rinse cycle till the set boiler temperature is reached.
- Remove carefully all solids from the objects to be washed, to avoid obstruction of filters, nozzles and piping.
- Drain the wash tank and clean the filters at least twice a day.
- Check if the detergent and rinse-aid dosage are correct (as recommended by the manufacturer). In the morning, before starting the machine, check that the quantity of chemicals in the canisters is enough for daily supply.
- Keep your working tables clean.
- Extract the rack with clean hands or gloves to avoid finger marks.
- Do not dry or polish the washed objects with cloths, brushes or rags that are not sterile.



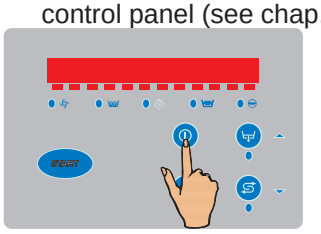
5. MAINTENANCE

5.1 Routine maintenance

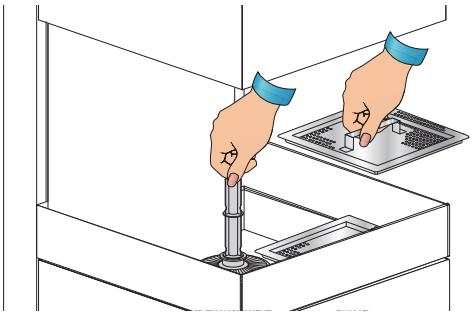
WARNING: The machine is not protected against pressurized water jets. Do not use pressure cleaning system against the machine.
It is recommended to contact the seller of chemicals for proper cleaning instructions, in order to have detailed indications on methods and products for the correct periodical machine sanitation.
Do not use bleach or chlorine based detergents.

Daily cleaning is needed to ensure that the machine runs perfectly. The following shall be carried out:

- Turn the machine in **"STAND-BY"** mode, by pressing the push-button **"G"** of the control panel (see chap. 2).

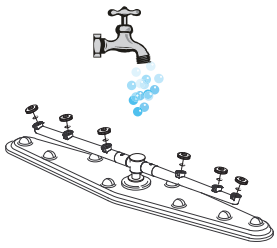


- Remove the surface filter (if present) and clean with a brush and a water shower. Drain the water by removing the overflow pipe.

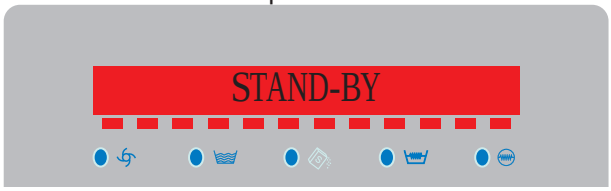


For machines equipped with drain pump, follow all indication at chap. 2.5.

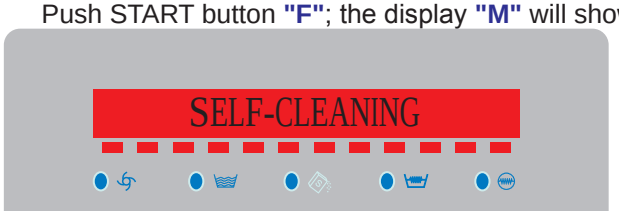
- Remove the pump filter and clean with a brush and a water shower.
- Remove the arms by loosening the fixing screws, and thoroughly clean them, and the nozzles under running water.



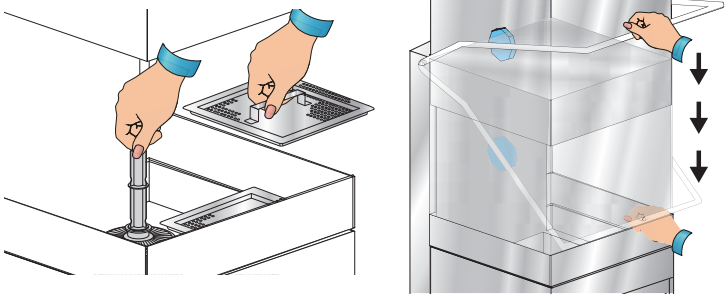
- Reassemble the parts and reposition the wash pipes firmly in place.
- Clean the tank very carefully, using a water shower.
- It is recommended to leave the machine hood open at the end of the day.
- Automatic cycle of machine self-cleaning/rinsing: recommended at each day end. The machine should be in **"STAND-BY"** mode. Remove the overflow pipe. Wait the tank to be totally empty and close the hood. For machines equipped with drain pump, follow all indication at chap. 2.5.

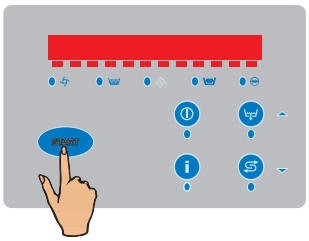


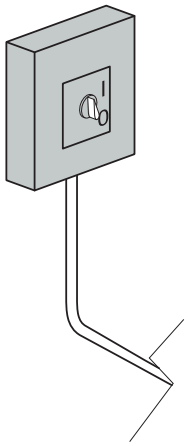
Push START button **"F"**; the display **"M"** will show **"SELF-CLEANING"**.

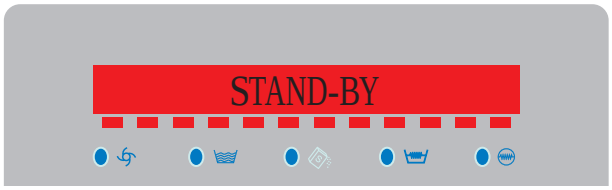


An automatic cycle of 30 seconds will start, after this the machine will be in **"STAND-BY"** mode.









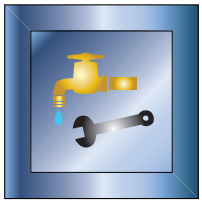
- Shut the water valve.
- Turned off the machine by switching the main power switch OFF.

5.2 Extraordinary Maintenance – by qualified Service Personnel

At least once per year, the machine should be supervised by qualified Service Personnel:

1 Clean the solenoid-valve(s) filters.
2 Remove scale from the heating elements.
3 Control the status of the seals.
4 Control for components integrity and/or consumption.
5 Control the dispenser(s) efficiency;
6 Check the efficiency of the door safety switch.

A qualified electrician, should check all electric connections inside the machine, at least once a year.



6. MACHINE INSTALLATION

6.1 Handling

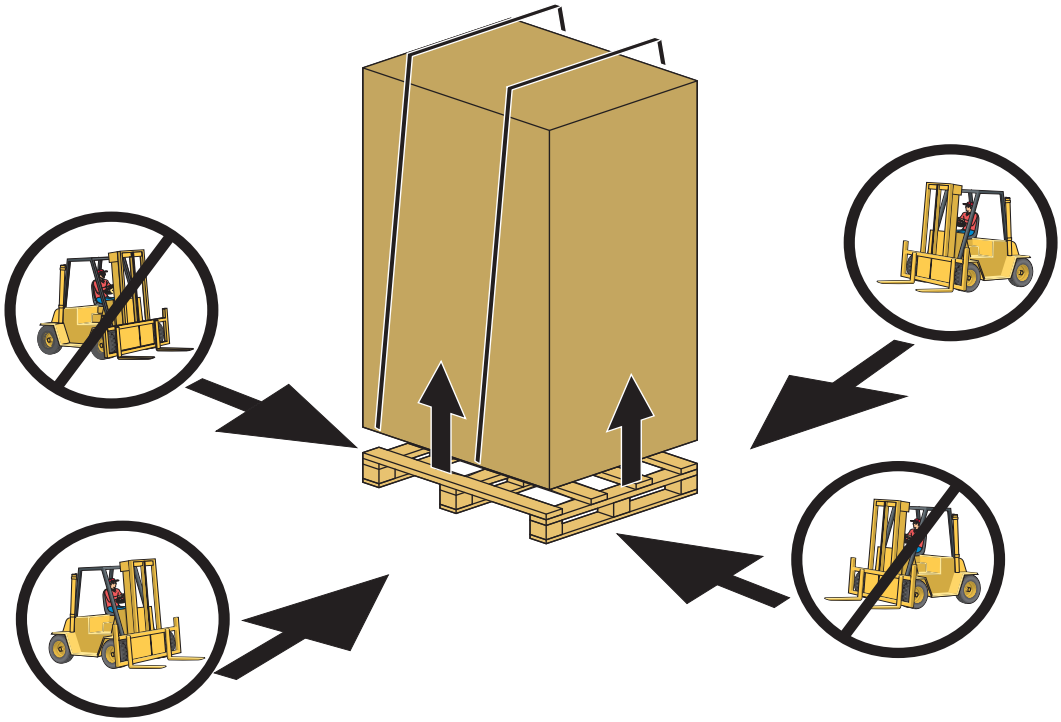
6.1.1 Handling the product

The machines must be handled strictly as shown in pict. 4 regarding the grip points indicated for lifting with a lift truck.

Latch the machine in a way that secures no vibration or shocks during transportation.

N.B.: Slinging with ropes not recommended.

After unpacking, make sure the appliance has not been damaged due to transportation. If it has been, do notify the seller about this problem. If the damage might question the machine's safety, do not install the appliance. See chapter 8 for disposal of the packing material.



Pict. 4

6.1.2 Storage

Storage temperature: min. +4°C - max +50°C - humidity <90%.

The stored parts should be checked periodically, to detect any sign of deterioration.

Do not put anything on the machine, even if packed in its box.

6.2 Prepare for installation

This is just a guide-line for the machine installation.
The installation must be performed by a qualified engineer.

6.2.1 Room features

Install the machine, in a room closed to weather and with a guaranteed temperature-range between 5 and 35°C.

The machine is equipped with thermostatic sensors to manage the temperatures. To guarantee a proper functionality these sensor shall not operate at a room temperature below 5 C°.
For this reason, it is fundamental that before starting the machine reaches the room temperature.

6.2.2 Electrical connection - Characteristics

The electrical connection to network shall be carried out in accordance to the local laws in force.
Make sure that the supply voltage is the same as reported on the machine plate and that the network can stand the needed power absorption shown on the same plate.
Make sure that the facility is equipped with efficient ground connection.
A suitable omni-polar, one-way switch shall be installed and sized according to the absorption provided, with a contact opening of at least 3 mm. This switch shall be solely and exclusively used for this purpose and installed in the immediate vicinity of the machine, installed in full respect of the local laws. Always turn the machine off via this switch. This is the only model of switch that guarantees a total electrical power disconnection.

6.2.3 Water supply connection - Characteristics

Tab. 1

Water characteristics table	Min	Max
Static Pressure	200Kpa	600Kpa
Dynamic Pressure*	150Kpa	400Kpa
Water hardness**	5°f	8°f
Cold water-supply temperature	5°C	15°C
Hot water-supply temperature***	45°C	50°C

*Should the water supply pressure be more than 400 kPa, a pressure reducer must be installed (only for those versions where it is not a standard supply, already).

****It is compulsory to install a water-softener, in case of water with average hardness above 8°f.** Washed objects will be cleaner and the machine will last much longer.
The machine can be equipped with a water softener, on request. If the machine is equipped with a water-softener, a regeneration of the resins shall be done on regular basis (see par. 2.6).
Note: Any damage caused by limestone (calcareous water higher-up than 8°F and without water-softener) will not be covered by warranty.
A periodical check of the supplied water hardness is highly recommended.
***The water supply temperature shall never exceed 55°C.
The drain tube shall always be connected to a siphon in order to prevent the release of odors.
Maximum drain height = cm. 15.

6.2.4 Steam evacuation

In accordance with regulations of environmental hygiene, for the proper functioning of the machine and a healthy environment for the operator who working in there, it should be at least 10 air volume changes per hour in the room where the machine is installed.

For small wash rooms we recommend at least 15 air volume changes per hour.

6.3 Installation

6.3.1 Positioning the machine

Remove the packing with care.

Lift the machine as described in chap. 6.1.1 " Handling the product".

Position the machine as shown on the installation diagram (lay-out) approved at the time of the offer.

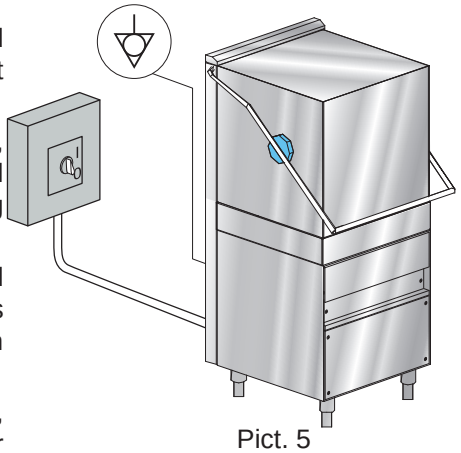
Maintain a minimum distance of about 50 mm from the walls, so that motors are ventilated. Install suction hoods to assure proper ventilation of the room, in order to eliminate steam and excessive humidity.

Check that the machine is properly levelled, by adjusting the legs.

Make sure the machine is not standing on the power cable or on the filling/drain hoses. Level the machine flat, by adjusting the support feet.

6.3.2 Electrical connection

The electrical connection shall be carried out in accordance to the local laws in force. Moreover, the machine has a clamp at the back indicated by the symbol that is meant to connect the metal structure and masses among different apparatuses, to prevent electro-static electrical shocks.



Pict. 5

The electrical supply cable must be new, flexible, and according to "har" H07RN-F or a local valid equivalent. The cable size is dimensioned according to the power.

Should the electrical supply cable get damaged it shall be changed by the Manufacturer, or his Authorized Service, or other technician with equivalent qualification, to prevent any risk.

If the machine is fitted with a three-phase pump, check the correct motor rotation (right rotation as per arrow on the casing). This is not needed if the pump is a single-phase model.

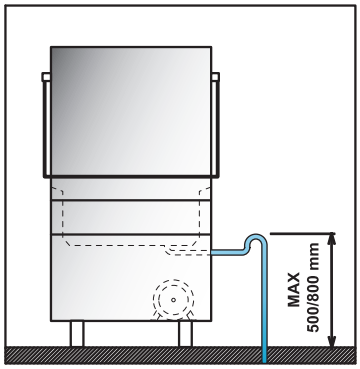
6.3.3 Water connection

Connect the machine draining hose to the connection located under the tank, making sure that the water flows freely (optimizing the slope).

Should not be possible to drain the water at a level lower than the appliance outlet (see pict. 6), it's advisable to choose a machine provided with a drain pump.

In those machines equipped with “water softener” the water supply temperature shall not exceed 40 C°, to avoid damages to the filters’ resins.

The drain tube shall always be connected to a siphon in order to prevent the release of odors.



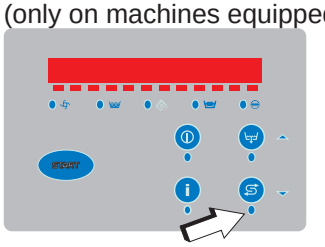
Pict. 6

6.3.4 Start-up

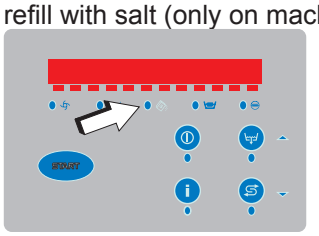
At installation engineer’s care.

7. SIGNALS AND ALARMS

The alarm messages are displayed, based upon their meaning.
When on the **“M”** display the LED below the **“I”** key flashes a total regeneration is needed (only on machines equipped with optional water softener).



When on the **“M”** display the **“C”** light flashes, the salt-container in the wash tank needs refill with salt (only on machines with optional water softener).



When displaying **"SHUT HOOD"** means that the open hood does not allow the maneuver tried, or a wash cycle was in progress, when lifting the hood.
When displaying **"DRAIN WATER IN WASH TANK"** means that a full wash-tank does not allow the manoeuvre tried.
When displaying **"LOAD WATER IN WASH-TANK"** means that the wash-tank is empty and does not allow the manoeuvre tried.

TYPE OF ALARM	CAUSE	REMEDIES
B1	BOILER FILLING FAIL	Open the water supply valve and check the overflow pipe
B2	BOILER PROBE FAIL.	Contact Technical Service
B3	BOILER HEAT. ALARM	Contact Technical Service
B4	RINSING FAILED	Contact Technical Service
B5	BOILER OVERHEATING	Contact Technical Service
E1	WATER LOAD FAILED	Open the water supply valve and check the overflow pipe
E2	TANK PROBE FAIL.	Contact Technical Service
E3	TANK HEATING ALARM	Contact Technical Service
E5	TANK OVERHEATING	Contact Technical Service
E6	TANK DRAINING FAIL.	Check the overflow pipe. Contact Technical Service
Z9	REGENERATION FAIL	Contact Technical Service

Table 3

8. ENVIRONMENTAL ASPECTS

8.1 Packaging

Packaging is made of the following components:

- a wooden pallet;
- a nylon sack (LDPE);
- a multi-layer carton;
- polystyrene (PS) strips;
- polypropylene (PP) banding.

All above materials, shall be disposed and treated in accordance with the Local Laws in force.

8.2 Disposal

The symbol WEEE/RAEE used on this product indicates that it cannot be treated as domestic waste. Proper disposal of this product contributes to protecting the environment. For more information on product recycling, contact the local authorities, domestic waste authorities or the dealer where the product was purchased.
For product or parts disposal, follow the Council directives 2002/95/EC and 2002/96/EC as amended and/or application legislative decrees.
The present product or parts cannot be disposed of as urban waste but shall be collected in separate containers (see the waste bin on wheels symbol with an “X” on the product).
At the time of product disposal, the user shall refer to the waste electrical and electronic equipment (WEEE/RAEE) specification.
The manufacturer guarantees the absence of dangerous substances in the EEA used in conformity to the directive 2002/95/EC.
If the user does not comply with the regulations he/she shall be subject to the penalties foreseen by each member state.
Disconnect electricity and water before disposal.
Cut away the electrical cable to ensure that further use is impossible.
All metal parts are recyclable as they are made of stainless steel.
Recyclable plastic parts are marked with the plastic material symbol.

9. TROUBLESHOOTING

Type of Problem	Possible Causes	Cure
The machine does not turn on.	Main switch not ON.	Turn switch ON.
The machine does not load water.	Water valve shut.	Open the hot and/or cold water valve.
	Rinse area nozzles or solenoid-valve filter blocked and/or scaled with limestone.	Clean the rinse arm nozzles, conductors and solenoid-valve filter. Check that the water hardness is <10°f.
	Defective pressure-switch.	Replace pressure-switch.
The display will flash "ALARM"	See chapter 7 "Alarms".	---
Washing results are unsatisfactory.	The washing nozzles are obstructed or the rack does not rotate.	Clean the nozzles carefully, and check the right positioning of the wash-arm, tightening firmly.
	Foam is present.	Use no-foam detergents or reduce the dose in use. Check the rinse-aid dosage.
	Fats or starches not removed.	Insufficient detergent concentration.
	Filters are dirty.	Remove filters, clean with brush under a jet of water and replace in original position.
	Check tank temperature (which must be between 50°C and 60°C).	Adjust the thermostat or check correct heating element operation.
	Wash time insufficient for the type of dirt.	Select a longer wash-cycle, if possible, otherwise repeat the wash cycle.
	Wash water is dirty.	Drain the tank water, clean the filters; refill the tank and replace the filters correctly.
Glasses or dishes are not properly dried.	Not enough rinse aid.	Increase dosage by turning the dispenser screw (see par. "Rinse aid dispenser").
	The rack is not suitable for the pots or the tools.	Use the suitable rack which gives the pots and tools an inclined position so that water can rinse away.
	The washed items may have been sitting in the wash chamber too long.	As soon as the cycle stops, remove the rack with pots and tools so that they can dry more quickly in the air.
	Rinse temperature under 80°C.	Check the boiler thermostat temperature.
	Surface of dishes and glasses too rough or porous for material wear.	Replace type of dishes and glasses used. If the dirt on the dishes is dry and old, soak before washing.
Streaks and spots on glasses and dishes.	Too much rinse-aid chemical.	Reduce the rinse aid amount by turning the micrometric dispenser screw (see par. 1.4 "Rinse aid dispenser").
	Too hard water.	Check the water quality. Water must not exceed 8°f in hardness.
	For appliances with softener: too little salt in the salt container or the resins have not been properly regenerated.	Fill the salt container (coarse salt: 1-2 mm grains) and regenerate the resins more often. If lime deposits are also observed on the body of the machine, have a qualified technician check the operation of the water softener.
	Salt present in dishwasher sump.	Thoroughly clean and rinse the appliance, and avoid spilling salt when filling the container.
The machine suddenly stops during operation.	The machine is connected to an overload device.	Connect the machine on a own overload device (call Service).
	A machine safety device was triggered.	Check the electrical devices (call Service).
The machine stops during the wash stage and starts refilling water.	The previous day's water was not changed.	Drain the tank totally and refill.
	Excessive water temperature in tank.	Call Service to check thermostat and pressure-switch.
	Defective pressure switch.	
	Overflow pipe improperly positioned.	Remove and reposition the overflow pipe properly.

N.B.: For any other question, please contact your Service provider.

The manufacturer has right to modify any technical characteristics without prior notice.