# **WASHING MACHINES**

# INSTALLATION USE AND MAINTENANCE INSTRUCTIONS



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#### 1. INTRODUCTION

This manual is addressed to explain industrial washing machine use.

It is written in compliance with actual EU directives.

The information here written is addressed to the installer and to the user, which must fully understand them before to work on the machine.

The user manual must always be available to be consulted. In case of missing or damaging of the manual, ask to the manufacturer for a new copy.

The manufacturer is not responsible for any consequence coming from a not correct use of the machine because of a misreading or a not complete reading of this manual.

The manufacturer reserves itself the right to modify the here written machine specification or characteristic without any previous notice. The pictures of this manual may differ from reality for some detail, which could be partially different from the one mounted on the machine. Diagram and technical data may be modified without any previous notice.

The manual and its attachment are part of the manual themselves, so they must be kept and they must follow the machine in case of sale to another user.

Attachments and exploded view with spare parts list can be retrieved in Producer web site restricted area. Before to access to the manufacturer technical area be sure that the machine serial number is available.



The manufacturer declines any responsibility about possible errors contained in this manual because of printing, translation or writing imprecision.

The manufacturer reserves itself the right to make any necessary modification to the machine without affecting any machine essential characteristic.

It is forbidden the copying, also partially, of the text or of the pictures of this manual without any previous manufacturer authorization.

#### 2. SAFETY RULES

The missing observance of the below safety rules may cause damages to people, things and animals

The here described machines installation and maintenance must be done by authorized personnel, who know the product and in compliance with EU directives of sector.

Reparation made in a not correct way may be dangerous for the user.

Before to put in service the machine, these instructions must be read with high attention. This document must be available to everyone is using the machine.

The here described machine are addressed to the professional washing of garments and linen: it is forbidden any other use of the machine if not previously authorized by the manufacturer.

Do not washed linen soaked with substances which are dangerous for the user health like poison or cancerous products.

Do not approach the machine with combustible or inflammable substances to avoid the risk of fire or explosion.

Always stick to the washing instructions of the linen label.

The use of this machine is forbidden to people under 16 years age.

Not properly done external connection to the machine release the manufacturer from any responsibility.

#### **IMPORTANT NOTES**

Working with opened sides is forbidden!



In order to avoid burnings or accident it is forbidden to remove, even temporarily, the protection panels and the safety systems!

It is forbidden to introduce bars, sticks or metallic objects inside the drum. In case of emergency, please refer always the here described procedures.

Each time the machine is started, check always the safety device correct working!

It is compulsory to know the machine and how its safety devices are working!



The machine, because of its nature, presents burns danger.

Burns may be caused by:

- A long contact with door during a high temperature program;
- The contact with the fluxing steam parts.

On the machines are fixed the following labels, if one of them should be damaged, the user must replace it with a new identical one.



#### Near the door



Machine must always be used by trained personnel and with at least one other operator in the room!

READ CAREFULLY THE INSTRUCTION FOR OPERATING IN CASE OF BLACK OUT, AND INFORM ALL THE USERS ABOUT THEM.



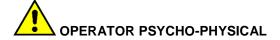
**ELECTROCUTION DANGER** 

Any service on the electrical parts must by operated only by qualified personnel. Before to work on the machine, cut off the electrical supply.

Power and controlled circuits can be modified only by manufacturer personnel, on the contrary the warranty condition empire.

On the electric board, the here below warning label was stuck. If this label should be damaged or unstuck, it needs to be replaced by an identical one.





#### CONDITIONS

People using the machine must be in a perfect psycho-physical condition; during the working cycle, the user must always assume a vertical posture in front of the machine.

Suddenly or not controlled movement must be avoided because of the risks of dangerous knocks against the washer chassis, i.e.: during the dryer unloading.

The other people in the laundry room do not have to distract the operator, who is working on the drver.

While working, the operator does not have to be distracted by TV, radio or any source of distraction.



#### LIGHTING

In the room where the machine is installed, the lighting must be at least of 300-500 lux intensity; unpleasant flashing must be avoided.



# ATTENTION!

These instructions do not cover all possible risks. User must always pay high attention and respect carefully the rules.

#### 3. MANUFACTURER RESPONSABILITY

The instructions written in this manual are not replacing, but completing the duties deriving from the safety and accident prevention laws. With reference to what is written in this manual, the manufacture is not responsible for:

- a use of the machine against the safety and accident prevention laws in force.
- not correct machine installation.
- missing of periodical and programmed maintenance.
- not observance, or not correct observance, of this manual instructions.
- electrical supply fault.
- not authorized modification of the machine.
- use of the machine by not authorized personnel.

# 4. UNPACKING

The machine must be controlled at the delivery moment, any external or inside damage dues to the transport, must be reported immediately to the forwarder.

The machine must be completely unpacked next to the installation position. The packing material must not be spread on the environment, but must be collect in the appropriate collecting place as per the environmental directives.

Using a monkey spanner, take off the bolts fixing the machine to the pallet.



# ATTENTION!

Check the technical data sheet, which is sent together with the machine documents, to control the net and gross weight: check if they meet the data of the available lifting means.



# **ATTENTION!**

The pallet must not be used as a normal machine support! Always take down the machine from the pallet. Install the machine has described in the opposite paragraph.



#### ATTENTION!

The machine must be moved only when it is still fixed on its pallet and, in case of forklift truck, only by authorized personnel.

During the transport, the high spin washing machines basement and cradle are blocked with locks in order to avoid shock absorber stress.

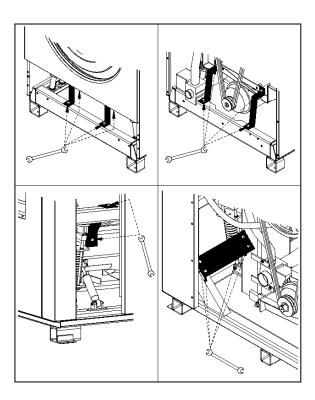


# **ATTENTION!**

Transport locks need to be removed once the machine is positioned and before it is supplied.

To take off the transport locks, follow the next instructions. Pictures indicate the lock type, not the machine.

- Remove frontal and rear panels.
- Unscrew the bolts fixing the transport locks.
- Remove the transport locks
- Mount again the panels in the original position.



Each panel must be mounted again in the original position before the machine is switched on.

When removed, the locks need to be kept and used again each time the machine needs to be moved.

Transport locks <u>are not present</u> in hard mounted machines.

# 5. INSTALLATION AND PLACING

Machine placing and installation must be operated only by qualified personnel in the maximum respect of the instruction written in this installation manual.

To assure the correct machine use and working, as well as an easier maintenance, a free space of at least 600mm must be left all around the machine.

In case of in-line mounting, i.e. Coin Op Shop, the space between the machines can be reduced to 10 mm.

Room temperature bust be between +5°C and +40°C. The room where the machine is installed need to have a sufficient air recycle.



#### **ATTENTION!**

DO not use or stock near the machine petrol, oil or any other inflammable stuff. Fire or explosion may be caused.



#### **ATTENTION!**

In case of machines equipped with a tilting system, external elements could move during the load and unload operation.

For the overall dimensions of the machine and

of the moving elements in different positions, refer to the data sheet.

#### 6. MACHINE IDENTIFICATION

The machine is identified by a sticker reporting the machine serial number, model, power and technical characteristics. The label is stuck on the machine back.

Be sure that the electric, hydraulic, steam and compressed air connection are satisfying the data written on the label

Spare parts and / or servicing need the correct model individuation.

Warranty automatically expires if the sticker is damaged, removed, missing or not readable. In one of these condition installation and servicing operation may be difficult because of the machine cannot be correctly identified.

#### 7. NOISE

The air noise produced by the machine gives an acoustic pressure continued and weighted of level "A" below 72 dB.

# 8. GROUND FIXING

High spin washing machine up to 23 Kg capacity do not need a ground fixing. This machine are free standing and supplied with rubber feet which must be screwed using the threaded holes.

The not correct adjusting of the rubber feet can origin strong vibration of the machine external structure. The machine must be installed perfectly level on a ground without elastic reaction.

The high spin washing machine from 30 Kg of capacity must be fixed to the ground using four anchor bolts passing through the base holes. Machine must be installed perfectly level and the ground must not have elastic reaction.



#### **ATTENTION!**

Do not insert any elastic stuff between the machine base and the floor.

Hard mounted machine <u>must be fixed to the</u> ground.

Hard mounted machines with a capacity over 30 Kg must be supplied with a steel counter frame:

- The frame must be let into a concrete base, which is opportunely anchored to the floor.
- Before to anchor the machine to the base, be sure that the concrete set well to the ground and, very important, be sure that the frame is perfectly in level.
- Place the machine in the suitable anchor holes and close all the bolts.

To control frame and concrete base dimension, check the machine technical sheet. .

Hard mounted machines up to 23Kg are delivered with the necessary anchor bolts.



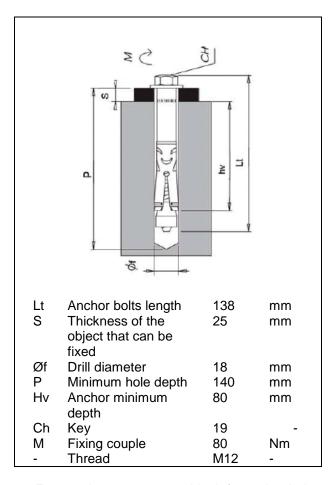
Steel anchor bolt

Tools necessary for the installation are:

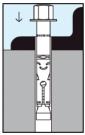
- Hammer or electro-pneumatic drill
- Hammer
- Pump for cleaning
- Brush
- Dynamometrical spanner

To correctly fix the machine, please follow the below instructions:

- Make a concrete base which need to be well anchored to the floor, respect the technical data sheet specification;
- Be sure that the concrete base is well set to the ground, the surface need to be perfectly in level.
- Move the machine from the pallet to its final position on the concrete base.
- Through the open panels, mark on the concrete base the position of the anchor screws.
- Move the machine to free the area and to hole correctly the concrete base.
- Hole the concrete base in correspondence of the marks and respecting the data of the next table.



- Extract the concrete residual from the hole using a brush, using a pump make free the hole from the residual dust.
- Place again the machine, the washer base holes must match with the concrete base holes.
- Introduce the anchor bolts through the washing machine base holes inside the concrete base holes



 Using a dynamometric spanner close the anchor screw following the data in the above table.



#### ATTENTION!

Each hard mounted installed washer must be tested with a full load spin cycle (maximum speed, nominal load) to be sure that:

- there are no vibration at all;
- there are no noises;
- there are no contact points or sliding

between drum and outer drum.

IMPORTANT: if one of the above listed problems occurs, then the machine is not correctly installed. Check if:

- The concrete base is correctly at level
- The concrete base is well set to the floor
- The iron anchor screws are correctly closed.

#### 9. ELECTRIC CONNECTION

The electric connection must be operated only by qualified personnel and must be in compliance with the local and national regulation in force.



# **ATTENTION**

Be sure that the supplied tension matches with the one indicated on the machine label.

To connect the machine use a H05 VV – F cable or superior, it must be correctly dimensioned following the data label.

Install before the machine a omnipolar disconnecting device (i.e.: a circuit breaker) which need to have a contact opening that allows the complete disconnection in case one of the conditions of the over tension III category is verified. This device must comply with the subject regulation in force.

Check the main switch, it must be in position "0". Open the electric supply door. Pass the electric supply cable through the cable holder supplied with the machine. The cable must be correctly dimensioned (check the following table).

The electric supply cables must be operated on the knife switch mounted on the machine.

Following the kind of supply required by the machine serial number plate, connect the cable to the knife switch as indicated below:



L1, L2, L3: Phases

N: neutral

At the installation, or in case of replacing, the ground cable must be at least 5 cm longer than the others.



#### **ATTENTION!**

The machine must be connected to an efficient ground system: the manufacturer refuse all responsibility in case this connection is not made following the subject regulation in force.

Before to start any service, cut the electric supply to the machine: for maintenance refer to the electric diagram inside the machine. The electric diagram can be retrieved from manufacturer web site

Minimum section for supply cable or ground cables, expressed in mm<sup>2</sup> are the following:

CAPACITY		1ph 208V-240V	3ph 208V-240V	3ph 380V-440V	
Hard mounted	6	6		1	
Soft mounted	8	0	-	4	
Hard mounted	11	10	6	4	
Soft mounted	14	10	6	4	
Hard mounted	18	16			
Soft mounted	10	NO	10	6	
Hard mounted	23	16	10	0	
Soft mounted	23				
Hard mounted	30		16		
Soft mounted	30		10	10	
Hard mounted	40	40 NO		10	
Soft mounted	40				
Hard mounted	55		25		
Soft mounted	70 85			16	

Electric or steam/electric heating (mm<sup>2</sup>)

CAPACITY		1ph 208V-240V	3ph 208V-240V	3ph 380V-440V	
Hard mounted	6 8				
Soft mounted	11 14	2,5			
Hard mounted	18		2,	,5	
Soft mounted	10	NO			
Hard mounted	23	2,5			
Soft mounted	23				
Hard mounted	30				
Soft mounted	30		2	1	
Hard mounted	40				
Soft mounted	40				
Hard mounted	55	NO	6		
Soft mounted				_	
Hard mounted	70			6	
Soft mounted	10				
Hard mounted	85		10		
Soft mounted	100 125				

Steam or hot water heating (mm<sup>2</sup>)



# **ATTENTION!**

The minimum sections written in the above tables can be change in function of the cable length. For cable longer than 5 mt, increase proportionally the section in respect of the additional length.



# ATTENTION!

The machine connection must always be done on the base of the serial number label (power, supplied tension, frequency). For supplied tension different from the one provided, please contact the manufacturer.



# ATTENTION!

All washing machines are equipped by a speed control operated by an inverter: a protection through RCD – B kind device must be provided (sensitive to average current value).



In case the electrical supply come from a diesel generator, then the inverter ask for the application of an additional inductor.

#### 10. HYDRAULIC CONNECTION: LOAD

The washing machines are equipped with electrovalve for the cold and hot water loading (in case it is requested, the machine is equipped with a third electrovalve for hard water). Each water inlet is identified, for connection quotes refer to technical data sheet.

At the beginning of each hydraulic supply a gate valve must be provided to cut the water supply to the machine at any moment, in case of emergency or in case of service.

At the beginning of each water inlet an inspect filter must be provided. It is necessary, also, to control the machine inlet valve filter after a short time of use, overall the hydraulic system is old or not used from a long time.



#### ATTENTION!

All the inlet valve must <u>always</u> be connected! If in the supply system it is not available the hot water, connect cold water also to the inlet valve called "HOT WATER".

When more washing machine are connected to the same water line, the water line must have a diameter sufficient to grand a water flow enough to supply all the machine in case all of them are loading water.

A minimum pressure of 0,4 atm is necessary to load the water: if the supplied pressure is lower, the water loading time are longer.

Maximum water loading pressure is 8 Atm (the minimum and maximum values are taking in consideration all the kind of valve mounted on the different machine size).

# 11. HYDRAULIC CONNECTION: DRAIN

The electric drain valve used are a normally open kind, it means that the water is drained in case of black out.

In case of more washing machines connected to the same drain line, it must be enough to allow the correct water flow in case all the machines are draining water at the same time.

Drain collector must avoid that the water drained by one machine enter in the next one.

The washing machine drain is for gravity, the drain tube must not present sinking or counter slope. A 2% slope must be provided to allow a correct water flow.

The drain system must satisfy the local or national laws and regulation in force.

#### 12. STEAM CONNECTION

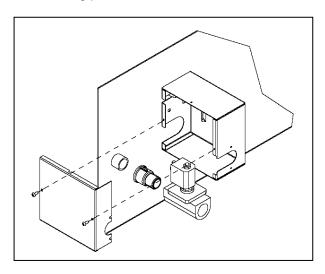
In case of machine steam heated a steam connection must be provided.

The steam connection must be operated by qualified personnel and must satisfy the local and national rules in force. Check that the steam has the same characteristics written in the technical data sheet and that all the system parts are certified.

The steam trap is delivered with the machine, but not mounted on the machine: the steam trap electrical and hydraulic connection is at installer charge.



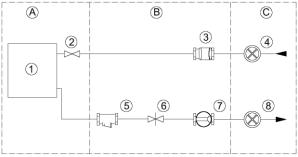
Once the steam trap is connected to the machine, it must be protected by the supplied iron box: see the following picture



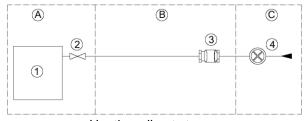
The supply steam system must be realized following the next diagram.

Each connection between the system and the equipment must be tightness tested.

- A) machine
- B) external system
- C) steam supply system



Heating: undirect steam



Heating: direct steam

System elements are identified as follow:

- 1) washing machine
- 2) inlet steam valve(supplied with the machine)
- 3) filter
- 4) inlet steam gate valve
- 5) steam trap
- 6) check valve
- 7) flow control
- 8) exit gate valve



The machine can work with a steam pressure between 0,5bar and 9 bar. Lower is the steam pressure, longer is the heating time.

#### 13. COMPRESSED AIR CONNECTION

Connection to compressed air is necessary only for some model: check the technical data sheet. System must be performed by qualified personnel in compliance with national and local rules in force. Each connection between the system and the equipment must be tightness tested; use a leak finder spray, if there is any leak, it needs to be repaired.

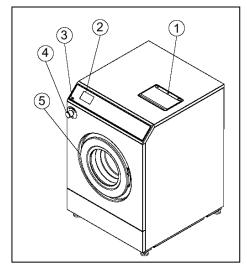
# 14. MACHINE START AND FINAL TEST

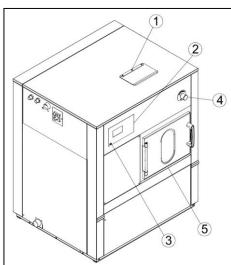
Once the machine is installed, and all connections are made, it must be started following the provided instructions. Each machine part must be tested: start a program and check at least one complete program. The machine must be fully loaded and, in case of high spin machines, the unbalance end switch position must be controlled.

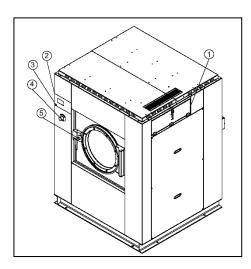
# 15. HOW TO USE THE WASHING MACHINE

Some machine parts must be known before to use the machine for the first time.

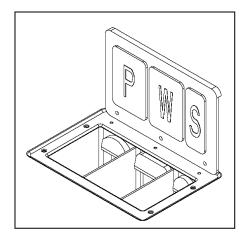
The following generic pictures are resuming the possible configuration.







Point 1: detergent box access door. In the lower capacity machines, the three compartment prewash (P), wash (W), softner (S) are marked on the rubber cover inside.



In the bigger capacity machines, the load of powder or liquid detergent can be made using the four carafes covered by the detergent box metal door. Detergent loading, and the corresponding inlet valve activation, ca be programmed.

Point 2: computer display.

Point 3: USB door (A type).

Point 4: emergency stop button



# **ATTENTION!**

When the emergency stop button is pressed (if present), the electrical supply to machine control is cut.

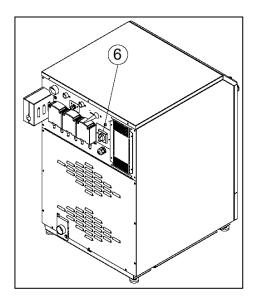
The display switch off and the cycle is automatically interrupted: the turning drum is stopping because of inertia and the tank is emptied.

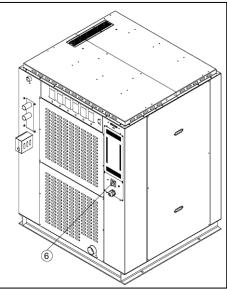
Emergency stop button must be pressed only in case of danger.

When the emergency situation is pressed, the stop button need to be turned right to be armed again. The display switch one and the cycle stand by waiting for the START.

Point 5: machine door. In the following paragraphs are described the different kind of locking system which could equipping the different models.

Point 6: main switch.





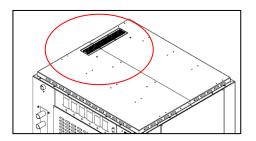
When the main switch is in position "I", the machine is electrically supplied.

When the main switch is in position "0" the machine is not electrically supplied.



# ATTENTION!

The air inlet on the machine back, and possibly also on the machine upper panel, must always kept free. Air pass must not be stopped or limited!



#### 16. HOW TO PREPARE THE LINEN

Machine must be loaded on the base of the serial number plate: it must not be loaded with a weight higher than the one written in the technical data sheet or in the serial number plate.

Before to choose the most suitable program, the linen need to be sorted into groups homogeneous for fibers and fabrics, in order to have a uniform washing for the whole load.

Before to put the linen into the washing machine, be sure that the linen label is authorizing the machine washing; always stick to linen manufacturer indication.

Here below the meaning of the most common International symbols:



Maximum temperature: 70°; Mechanical action: midle.

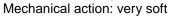


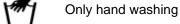
Maximum temperature: 60°C;

Mechanical action: soft



Maximum temperature: 40°C;







Do not clean with water

# 17. HOW TO LOAD THE MACHINE AND CLOSE THE DOOR

The machine must be loaded following the indication given in the serial number plate.

The label is stuck on the machine back.



# **ATTENTION!**

Machine must be loaded with linen, which is the most homogeneous possible. The weight of the loaded linen must not be higher than the one indicated in the technical data sheet and in the serial number sticker.

Before to load the linen, be sure that the drum is completely empty. When the machine is loaded, close the door.



#### ATTENTION!

Be sure that no linen parts are taken between the door and the machine front panel, while the door is going to be closed.

In case of machine without door handle, just press the door against the machine until it is locked.

In case of machine with handle or motorized door lock, the door must just set ajar the machine front, in this way the closing pin enters in the correct position on the machine front.

When the machine is started the computer will

give the command to lock the door.



#### ATTENTION!

In case of barrier washer (double door): before to close the external door, be sure that the drum door was correctly closed as explained in the notice supplied with the machine.

In case the inside door was not correctly closed, the program <u>MUST NOT</u> be started.

Be sure that the operators perfectly understood how to close the inside door!

#### 18. DOOR MANUAL OPENING

While the cycle is running, it could be necessary to open the door manually, without using the unlock function of the touch screen.

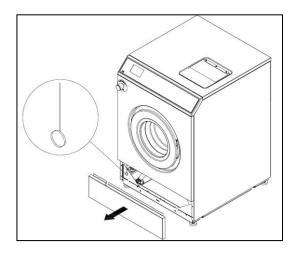


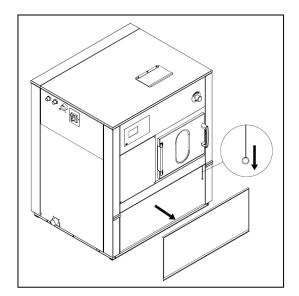
# ATTENTION!

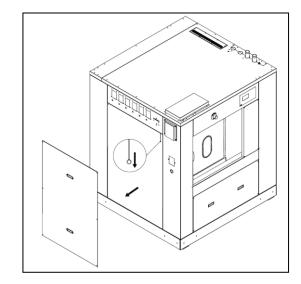
Before to open manually the door, cut the electricity supply to the machine using the main switch.

# Machine with impulse closing

Open the below panel (the one shown in the picture). To unlock the door, pull the lanyard with the small ring.

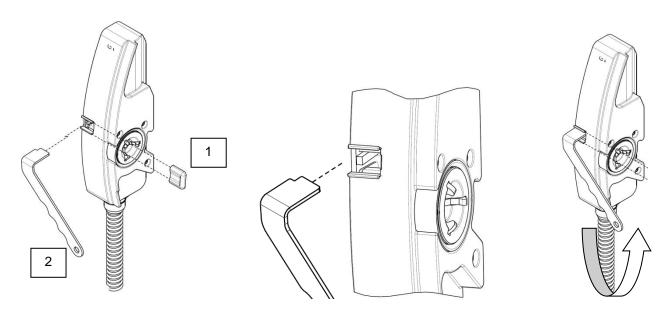






# Machines with motorized door lock

Remove the small plug (1) and insert the unlocking lever (2) in the door lock as show in the picture (on the above edge). The lever must be correctly positioned!



Turn the lever upward until the mechanism clicks.



When the motorize door locking is manually opened, the mechanism alignment procedure must be done as soon as the electricity is came back.



Before to supply again energy to the machine, all the protection must be placed again in the original position.

#### 19. HOW TO SWITCH ON THE MACHINE

Switch on the main switch, which supply the machine.

In case of steam heated machines: open the steam gate valve to allow the steam to enter.

To limit water hammering cases, the valve must be open slowly passing from the close position to open position in 1 minute time.

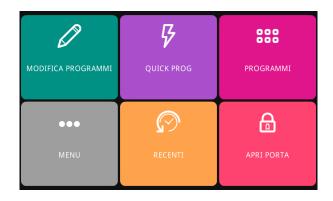
The emergency stop button must be in rest position; control that the emergency stop was not activated during the transport or before the machine was switched off last time.

Before to start the machine always check the safety system (refer to the related paragraph).

When the machine is switched on, the software version, as well as its release date, appear on the screen for a while.

The software loading could take a minute time, more or less.

The display shows:



Load the machine and close the door following the

instruction given in the previous paragraphs.

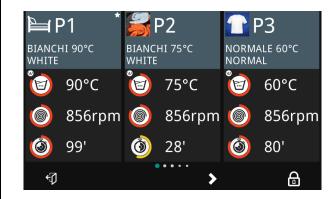
# 20. HOW TO SELECT A PROGRAM

When the machine is loaded and the door is closed, the touch screen shows:



Touch the icon "PROGRAMS" to display the program list.

The display shows:



The program list can be scrolled left and right using the corresponding arrows.

When the wished program is visualized, just touch it to select it. The selected program has a blow background (in the example: program n. 2).



Touch "▶" to confirm the selection and run the program. The display shows the start window of the selected program.

#### 21. RECENT PROGRAMS

From the main menu, touching the icon "RECENT" it is possible to acceed to two programs list:

- The list of the last executed programs
- The list of the stared programs.

The program selection can be made as explained in the previous paragraph. To set the stared program, please look at the on-line manual.

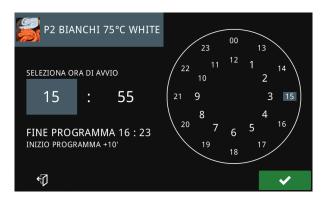


#### 22. DELAYED START

To delay a program start, first of all select the wished program as explained in the previous paragraphs.

When de program is selected, do not touch the "START" icon but the "COUNT" icon.

The display shows:



It is possible to fix the starting time using the key "+" and "-". To exit from this menu touch the icon "BACK". When the wished time is visualized on the screen, confirm it touching OK.

The display shows:



Below the indication of delayed start, a countdown is showing how many hours and minutes are missing to the automatic start.

The countdown can be interrupted at any time touching the icon "STOP".

At the end of the countdown, the cycle will start automatically.

#### 23. RUNNING THE PROGRAM

After the program was selected, as explained in the previous paragraph, the program can be started touching the icon "START".

In case the machine is equipped with a motorized closing system, the program starts with the door locking (it takes tens of seconds).

While the program is running, the display shows:



Displayed information enables the user to understand the machine working conditions while the program is running.

All parameters can be changed while the program is running just touching the relative icon.

These modifications stay valid only for the running program. For more information about this function, please refer to online documents.



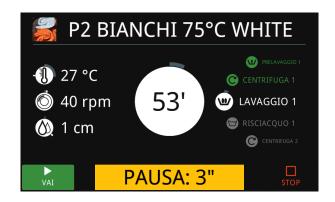
In case of anticipated conclusion of the cycle, pay attention, the linen temperature may be very high!



In case of not correct machine working, switch off the equipment and call the authorized service center!

# 24. PROGRAM PAUSE

While the program is running, it is possible to put in stand by for a controlled pause. To interrupt the program for a certain time, touch the icon "PAUSE". The screen shows:



It is highlighting the soak step and its length.

Soak can be interrupted and the cycle started again touching the icon "START".

During the soak, the cycle can be interrupted at any moment touching "STOP".

# 25. RAPID ADVANCE

To move fast inside the cycle touch the icon

">>FFWD".

While the machine is in standby, the screen shows:



Here below the symbol meaning:

"I ■" Fast back per cycle

"■■" Slow back per step

"■ " Start again the cycle

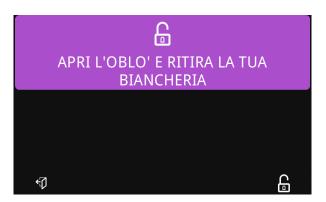
"■ " Slow advance per step

"■ | " Rapid advance per cycle

The number written in the middle of the advancing bar represent the reached percentage of the program taking in consideration the program total length.

#### **26. PROGRAM END**

When a program is ended, please open the door and unload the machine.



Before to open the door, be sure that there is no water into the drum and that the temperature is not too high.

In case of barrier washer (double door), to unlock the door press the apposite key near the clean side display.

After the machine unloading and the inside door closing, on the dirty side display appears "CALL BACK DRUM".

Touch the notice: the drum turn until the inside door is placed in correspondence of the dirty side

door, ready for the next washing program.



#### ATTENTION!

In case of barrier washer (double door): before to close the outside door, be always sure that the drum door is correctly closed, as indicated on the notice on the machine.

In case the drum door is not correctly closed, the cycle <u>MUST NOT</u> be started.

Be sure that the operator perfectly understood the inside door closing instruction as per the notice on the machine.

#### 27. END OF THE WORKING DAY

At the end of the working day, the machine must be brought at the end of the cycle and switch off: the drum must be cleaned and no linen must be left inside.

Cut any supply to the machine using the suitable switch/knife switch: electricity, steam and compressed air.

Leave the door open.

#### 28. PROGRAMMING

Program function allows to modify the existing program or to create new programs.

Please check all the procedures in online documentation.

# 29. SELF DIAGNOSTICS

The computer supply a complete diagnostics both in case of not correct working and in case of simple reports.

The following table refer to a list of messages

which could appear on the screen.

It is suggested to contact the authorized service center in case one of the following messages would appear.

COD	DESCRIPTION	WHAT IS HAPPEN, WHAT TO DO
1	MOTOR OVERHEATING	The display shows: "ALARM !!! 01 Motor overheating". The machine stops, a buzzer is activated for 15 seconds. When the screen is touched, the alarm is reset and the door opens. A motor overheating occurred: wait until the motor cool down and start again the cycle. If the alarm appears often, please contact the authorized service center.
2	DOOR OPEN	The display shows: "ALARM !!! 02 Door open". The machine stops, a buzzer is activated for 15 seconds. When the screen is touched, the alarm is reset and the door opens. The door opens while the washing program was running, please contact the authorized service center.
3	TEMPERATURE PROBE	The display shows: "ALARM !!! 03 Temperature probe" (following the kind of temperature probe, the displayed temperature passed from 237°C to 0°C). The machine do not stop, but all the heating step are skipped. When the screen is touched, the alarm is reset.  Temperature probe is damaged, contact the authorized service center.
4	LOAD WDT	The display shows: "ALARM !!! 04 Load timeout". The machine stops, a buzzer is activated for 15 seconds. When the screen is touched, the alarm is reset and the door opens. The maximum time fixed for water loading is expired. Control if the water taps are opened, the filters are clean and there are no water leakage. If the alarm appears often, please contact the Authorized Service Center.
5	DRAIN WDT	The display shows: "ALLARM !!! 05 drain timeout". The machine stops, a buzzer is activated for 15 seconds. When the screen is touched, the alarm is reset and the door opens. The maximum time to drain the water is expired. Check if the drain system is clean. If the alarm appears often, please contact the Authorized Service Center.
6	COIN BLOCKED	If a payment input is longer than 6 second, the display shows:  "ALLARME !!! 06 Coin blocked". The alarm stays until the payment system is unblocked.  When the payment system works again correctly, the main screen appear.
7	UNBALANCE	During the spin cycle, the drum was gone out of balance. A balancing cycle starts and the machine attempt again the spin.

COD	DESCRIPTION	WHAT IS HAPPEN, WHAT TO DO
8	TRIPLE UNBALANCE	During the same spin, more unbalance occurs: the spin cycle is left and the program pass to the next cycle.  If the problem occurs often, be sure that the drum is correctly load (nominal capacity, homogeneity of the load).
9	INVERTER LOCK	The display shows: "ALARM !!! 09 Inverter Lock". A inverter lock occurred. The cycle is not interrupted, but the drum does not turn. The alarm is reset when the screen is touched. NOTE: the message could contain the inverter alarm code. Please contact the Authorized Service Center
11	HEATING WDT	The display shows: "ALARM !!! 03 heating timeout". The maximum time to heat the water is expired. The cycle does not stop, but the heating steps are skipped. When the screen is touched, the alarm is reset. Please contact the Authorized Service Center.
12	WATER DURING THE SPIN	Even if the drum speed should increase, the value stops to 100rpm. In this case it is not a warning, but the intervention of a safety system when the water level at the spin start is not below the set point.  Please contact the Authorized Service Center.
13	OVERHEATING	The display shows: "ALARM !!! 13 Overheating". The water temperature is above 110°C. The heating system is deactivate and the next heating steps are skipped. Please contact the Authorized Service Center.
14	MAINTENANCE	The display shows "Maintenance request". It is achieved the number of cycles necessary for the maintenance request. Please contact the Authorized Service Center.
15	ZERO MOTOR WDT	The display shows "WDT Zero Motor". The maximum time for the door opening is expired, please contact the Authorized Service Center.
16	DOOR CLOSING WDT	The display shows "WDT Door closing". The maximum time for the door closing is expired, please contact the Authorized Service Center.
17	DOOR OPENING WDT	The display shows "WDT Door opening". The maximum time for the door closing is expired, please contact the Authorized Service Center.
18	WDT INFLATION SEAL	The display shows "ALARM !!! 18 Expired WDT inflation seal" The maximum time to complete the inflation of the door seal is expired: please contact the Authorized Service Center.

COD	DESCRIPTION	WHAT IS HAPPEN, WHAT TO DO
19	WDT DEFLATION SEAL	The display shows "ALLARM !!! 18 Expired WDT deflation seal" The maximum time to complete the deflation of the door seal is expired: please contact the Authorized Service Center.
21  28	TANK 18 FINISHED	The display shows "TANK 1 8 FINISHED".  One of the detergent tank (from 1 to 8) is finished. Replace or fill the relative tank.
-	POWER FAILURE	The display shows "POWER FAILURE".  While a program was running, the electrical supply was interrupted.  When the electrical supply come back, the machine wait for 40" while the alarm "POWER FAILURE" is flashing on the screen. Touching "START" the program resumes from the interruption point.

#### **30. FACTORY PROGRAMS**

The machine is delivered with a set of factory programs which can be freely modified.

NOTE: in case of hard mounted machines, the

maximum speed is always 450 rpm. The spin speed is indicative and can be modified according to the machine capacity (check the G Factor value on the technical data sheet).

Here below a short description of the programs.

	NAME	PREWASH	WASH	RINSES	SPIN
1	90°C WHITE	5', 40°C	3', 90°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
2	75°C WHITE	3', 40°C	3', 75°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
3	60°C NORMAL	3', 30°C	3', 60°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
4	40°C NORMAL	3', 30°C	3', 40°C, 24"/6"/24", 40rpm	3	2+1 (5', max rpm)
5	30°C WOOL	3'	3', 30°C, 2"/20"/2", 30rpm	3	1 (1', ½ max rpm)
6	60°C MICROFIBER	5'	5', 60°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
7	40°C MICROFIBER	5'	5', 40°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
8	40°C QUICK WASH	-	3', 40°C, 24"/6"/24", 40rpm	3	1 (5', max rpm)
9	60°C QUICK WASH	-	3', 60°C, 24"/6"/24", 40rpm	3	1; (5', max rpm)
10	SYNTHETIC	-	3', 40°C, 15"/15"/15", 40rpm	3	2+1 (2', max rpm)
11	90°C DISINFECTION	5', 40°C	3', 90°C, 24"/6"/24", 40rpm	2+3	5+1 (5', max rpm)
12	60°C DISINFECTION	5', 40°C	3', 60°C, 24"/6"/24", 40rpm	2+3	5+1 (5', max rpm)
13	30°C WOOL DISINF	3'	3', 35°C, 2"/20"/2", 30rpm	1+3	1 (1', ½ max rpm)
14	60°C STRONG	5', 40°C	10', 60°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
15	90°C STRONG	5', 40°C	10', 90°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
16	60°C COLOR	-	3', 60°C, 20"/10"/20", 40rpm	3	2+1 (5', max rpm)
17	40°C COLOR	-	3', 40°C, 20"/10"/20", 40rpm	3	2+1 (5', max rpm)
18	90°C INTENSIVE	5', 40°C	10', 90°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)

# **31. OTHER FUNCTIONS**

There are a lot of other functions which are available and which are updated very often. Enter the manufacturer's website restricted area to download the software updating files and to control the new implemented functions.

#### 32. WASHING MACHINE MAINTENANCE

Each ordinary or extraordinary maintenance must be operated by qualified personnel. Be sure that all the energy supply to the machier are cut before to operate on the washer.

Here below the ordinary and extraordinary maintenance with the corresponding time table.

#### **EACH DAY**

- The machine must be kept clean using neutral detergent. Clean the machine external panel in order to eliminate any detergent stain, also from the detergent box.
- Door gaskets need to be cleaned.

- Air inlet and exhaust need to be cleaned.
- The drum cleanness condition need to be checked: be sure there are no deposits.
- At the end of the working day, the door must be left open to air the inside.
- At the end of the day cut any supply (energy or water) to the machine.

#### **EACH THREE MONTHS**

- Check the efficiency of the drum belts and the drum clearing: be sure that there are no deposit on the drum surface.
- Check the drain valve cleaning.
- Check the inlet valve, and the corresponding filter, cleaning.

#### **EACH YEAR**

The authorized service center must be contacted to:

- Clean the machine inside:
- Check the wiring contacts efficiency;
- Check the tightness and the integrity of the rubber parts;
- Grease the mechanical parts, the one which ask for this treatment.
- Clean the motor air inlet.



# ATTENTION!

In case of tilting machines, before to start any maintenance, be sure that the air circuit is completely release and that the pneumatic action mechanism cannot move, even in case of no electricity supply.

In case of maintenance in no-rest position of some parts, be sure that the pneumatic action mechanisms are mechanically locked.

#### 33. WASHING DEFECTS

In case the washing results are not satisfactory, please check the following table.

PROBLEM	Possible SOLUTION
	Check if the program ends with a spin.
Garments are still wet	It is possible that some unbalance error occurred, load correctly the linen and start a spin.
Garments have visible marks from the drum	Check the spin speed, maybe it is too high.

PROBLEM	Possible SOLUTION
	Check spin speed and the temperature of the used cycle.
Garments are felted	Check the linen washing instructions, as well as the program characteristics and if the washing machine use is allowed.

#### 34. TILTING MACHINE USE

In case the machine is equipped with the tilting system, the following instructions must be also observed. In this case programs are managed by a remote a control.



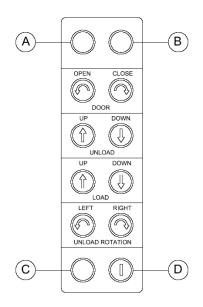
#### ATTENTION!

Before tilting the machine, be sure that the door has been properly secured!



# **ATTENTION!**

When the machine is tilting the user must not stay close to the machine. To control the machine use the suitable remote control.



Always wait for the program end before to action the tilting function. The remote control use is switched on or off using the switch (D).

When the remote control is activated, the microprocessor of the machine is deactivated.

The activation of the remote control is signaled by the green light (A).



# ATTENTION!

Tilting of the machine can be done, only if the cradle is locked.

The machine can run and wash, only if the cradle is unlocked.

#### 35. SAFETY DEVICES CONTROL

Switch on the machine; before to start the program, always control the perfect safety devices work.

The user must always follow the procedure in the below table:

ACTION	REACTION
Start a cycle and press STOP	the machine must stop and wait for a new start.
Press the emergency stop button	the drum must stop and the machine must switch off.



#### ATTENTION!

When the machine is switch on, before to start any program, alias control the perfect safety devices work.

#### 36. SCRAPPING

When the machine life cycle arrives to the end, please proceed with the machine scrapping following the country rules, keeping separate the metallic, the plastic, the glass, the electric/electronic parts.



The above symbol on the appliance or on the package means that at the end of its life cycle this product must be collected separately from other waste material.

For this appliance waste separation, follow the rules in force in the Country where the machine is installed.

A correct waste separation avoid dangerous impact on the environment and make easier the material recycling.

Unlawful disposal may cause application of administrative sanction, following the rules in force in the country where the dryer is installed.



# ATTENTION!

In case the machine should not be more used before the dryer disposal, make the door lock out of service, to avoid that somebody close himself inside risking his life.

#### 37. WARRANTY CONDITIONS

Please refer to the manufacturer official price list for the warranty conditions.



# ATTENTION!

To benefit of the manufacturer warranty condition, the manual instructions must be carefully followed. In particular:

- Work always respecting the dryer use limits;
- Maintenance must be always correctly operated;
- The dryer must be used only by well trained personnel:
- Use only original spare parts.