



FULLY AUTOMATIC WASHING MACHINE

INSTRUCTIONS FOR USE MAINTENANCE AND INSTALLATION

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CODE: W-M-50



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Safety instructions



DANGER!



WARNING

FOR YOUR SAFETY THE INFORMATION IN THIS MANUAL MUST BE FOLLOWED TO MINIMIZE THE RISK OF FIRE OR EXPLOSION OR TO PREVENT PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Clear the room, building or area of all occupants.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

The following "**FOR YOUR SAFETY**" caution must be posted near the dryer in a prominent location:

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.



IMPORTANT NOTE TO PURCHASER

Post in a prominent location instructions to be followed in the event the user smells gas. The information to be posted shall be obtained by consulting with the local gas supplier.

IMPORTANT SAFETY INSTRUCTIONS

1. Read all instructions before using the appliance.
2. Keep all instructions in an easily accessible place in order to resolve any queries, and in case of loss request a new one from your dealer.
3. Do not dry linen that has been previously treated or washed in petrol, dry cleaning solvents or other flammable or explosive substances. These substances give off vapours that could ignite or explode.
4. Do not allow children to play with or inside the machine. Do not allow children to play on or in the appliance. Close supervision of children is necessary when the appliance is used near children.
5. Before the appliance is removed from service or discarded, remove the door to the drying compartment.
6. Do not reach into the appliance if the drum is moving.
7. Do not install or store this appliance where it will be exposed to the weather.
8. Do not tamper with controls.
9. Do not repair or replace any part of the appliance or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that you understand and have the skills to carry out.
10. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
11. Do not use heat to dry articles containing foam rubber or similarly textured rubber-like materials.
12. Clean lint screen before or after each load.
13. Keep area around the exhaust opening and adjacent surrounding areas free from the accumulation of lint, dust, and dirt.
14. The interior of the appliance and exhaust duct should be cleaned periodically by qualified service personnel.
15. Do not place items exposed to cooking oils in your dryer. Items contaminated with cooking oils may contribute to a chemical reaction that could cause a load to catch fire.
16. **DO NOT REMOVE** any safety device **OR MODIFY OR MANIPULATE** any component or part of the machine. **DO NOT INSTALL** any extra elements inside the machine.
17. Any part of the machine that is replaced may affect its operation and the user's safety. For this reason, **USE ONLY THE MANUFACTURER'S ORIGINAL SPARE PARTS**. Failure to comply with this warning can cause serious accidents, malfunctions and the loss of the machine's guarantee and certifications.
18. Failure to comply with or observe the legislation and regulations covering health, safety and prevention of risks in the workplace applicable in the country where the machine has been installed, or actions contrary to common sense, **MAY CAUSE** personal injury or even death to the user.
19. The machine should only be used for those purposes established by the manufacturer and following the instructions for use set out in the instruction manuals. Any use not specified in the manuals may lead to additional risks. Pay special attention to information headed DANGER, WARNING and PRECAUTION.
20. The room where the machine is located **MUST** comply with the environmental conditions (air venting, temperature, humidity, etc.) specified in the technical specifications table. **NEVER INSTALL THE MACHINE IN ENVIRONMENTS** where it will be splashed with water or where there is a very high level of humidity in the atmosphere.
21. Clearly mark out danger areas and **PREVENT** public access to them when the machine is operating. Do not expose yourself to drainage areas or to vapour, condensation, combustion gas or ventilation outlets.
22. All machines working at temperatures present a fire risk. Take **EXTREME** care: **CLEAN** the machine of inflammable materials: lint, fluff, soot, etc. on a regular basis. **KEEP** the environment free of combustible materials and **PLACE** suitable extinguishers near the machine in easily accessible places.
23. All installations required for the proper operation of the machine **MUST** be carried out by a duly accredited Registered Installation Contractors (see Note 3), in compliance with the legal regulations applicable in the country of use.
24. The machine **MUST** be commissioned by the Authorised Technical Service in the presence of the Customer Technical Service (see Notes 2 and 4) or a responsible person appointed by the customer.

25. This machine **MUST BE USED** by personnel who are properly trained in how to use it (see Note 1).
26. **NEVER START THE MACHINE, OR USE IT, IF THE FOLLOWING ARE ABSENT, INCORRECTLY POSITIONED OR MALFUNCTIONING:**
 - COVERS (GUARDS) AND PROTECTIVE DEVICES
 - SAFETY DEVICES
 - CONTROL ELEMENTS
27. **DO NOT USE** the machine if you notice any abnormal noise or smell or if you suspect that the machine is faulty or defective.
28. On completion of the day's work, **TURN OFF** the manual fluid supply valves and **DISCONNECT** the electrical power. To avoid the risk of fire, **DO NOT** leave **HOT AND DRY** linen inside the dryers.
29. The inspections required by the regulations applicable to the country where the machine is being used must be carried out. It is advisable to request an overall, detailed service of the machine by the Authorised Technical Service every year (see Note 2).

30.  **WARNING!!**
INSPECTION, MAINTENANCE OR REPAIR OPERATIONS

Before carrying out any action on the machine:

- Close and mechanically lock the manual fluid supply valves.
- Check that the bath has **COMPLETELY** drained, that no part of the machine is at a high temperature and that no circuits or containers are under pressure.
- Check that all the machine's moving parts are halted or in their rest position. Securely fix all the machine's moving parts that could cause an accident.

To reduce the risk of electric shock:









- **COMPLETELY** disconnect the machine from the mains power supply and take steps to prevent accidental reconnection. **TURNING OFF THE ON SWITCH OR PRESSING THE STOP KEY IS NOT ENOUGH.**
- Disconnect the electrical connection of any circuit external to the machine; for example external dosing equipment, central vending units, linen feeders or folders, etc. The electrical connection for these circuits is independent of the machine's electrical connection.
- To prevent the risk of electrical discharge caused by residual voltage, wait at least five minutes before removing any guard or cover from the machine.

Failure to follow these warnings may cause a serious accident.

31. **CONTACT** the Installation Contractors or the Authorised Technical Service (see Notes 3 and 2) in the event of any doubt, anomaly or problem.
32. It is advisable to copy and enlarge the **SAFETY INSTRUCTIONS** and place them in a visible place in the laundry.
33. **THE MANUFACTURER ACCEPTS NO RESPONSIBILITY IF THESE SAFETY INSTRUCTIONS AND ALL THE INFORMATION IN THE CORRESPONDING MANUALS ARE NOT FOLLOWED.**

SAVE THESE INSTRUCTIONS.

SYMBOLS USED IN MACHINE LABELLING

	Electrical risk Protective guard for elements carrying an electric current.		High temperature risk Handle with caution. Use adequate protection.
	Mechanical risk Protective guard for moving parts.		Risk of inhaling harmful or irritant vapours Keep the doors/covers closed. Use adequate protection.
	Flame risk (only on some machines) Protective guard for flame.		Risk of falling Use proper access and safety methods.
	Access prohibited		Refer to instruction manual/booklet

SYMBOLS USED IN THIS MANUAL

	Symbol used to highlight a possible HAZARD, WARNING or NOTE.		This symbol is used to emphasise a particular explanation.
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TRANSLATION OF THE ORIGINAL MANUAL

NOTES:

- (1) **Trained personnel** refers to those who have read and understood the Instruction Manual, who have been trained by the Authorised Technical Service or by a representative of the customer present at the start-up who is familiar with the operation of the machine and is authorised to use it.
- (2) **Authorised Technical Service (ATS)** is one that has been recognised under contract and properly trained by the manufacturer.
- (3) **Registered Installation Contractors** are those officially approved by the government of the country the machine is to be installed.
- (4) **Customer Technical Service (CTS)** is one that has been authorised by the customer and which has sufficient basic technical knowledge to correctly interpret and carry out the actions attributed to it in this manual. The manufacturer strongly recommends that the customer should have its own technical service, particularly in laundries with large-scale machinery installations.

IMPORTANT INSTRUCTIONS FOR USE AND PRESERVATION

1. **INTENDED USE OF THE MACHINE AND INAPPROPRIATE USE.** This machine is designed and intended solely for processing fabrics washed in a water bath or that have been previously treated in these conditions. Any use other than this is contraindicated without written authorisation from the manufacturer.
2. Maximum output, performance, reliability and durability are achieved when the machine is installed, used and maintained correctly, and if a comprehensive and detailed service is carried out annually by the Authorised Technical Service.
3. The machine's **MATERIALS** that are in direct contact with the chemical products involved in treating the linen are detailed in the manual.
4. The user must consult the supplier of the chemical products **USED THROUGHOUT THE WHOLE LINEN TREATMENT PROCESS** regarding the risks associated with its products and their combination. It must be confirmed that the products are not flammable, **ARE MUTUALLY COMPATIBLE**, and that they will not cause oxidisation or deterioration of the machine or any injury to the people using them.
It should be noted that, under certain conditions of use, hypochlorite (bleach) generates chlorine gas. Chlorine is a corrosive, oxidising substance which, at high concentrations and temperatures, damages stainless steel and elastomers.
This same effect can also be caused by other strongly oxidising agents, including ozone.
5. **FOLLOW** the treatment recommendations for each fabric indicated by its manufacturer. **THE MANUFACTURER OF THE MACHINE accepts no responsibility for damage caused by inappropriate treatment of a fabric.**
6. Periodically **CLEAN** the outside of the machine to prevent damage to its metal parts. This will improve safety and extend its life. To clean the machine, use water and detergent. Rinse with a damp cloth and then dry off. To remove accumulated lint, use a suitable vacuum cleaner. **Water jet or pressurised steam cleaning is prohibited.**
7. **NEVER** use aggressive products to clean the machine or the premises. There are products on the market that give off highly corrosive vapours.
8. If the machine is left idle for long periods of time, it must be thoroughly **PROTECTED** from humidity and temperature variations.
9. Faults arising from improper machine operation may **VOID THE WARRANTY.**
10. When asking for information on your machine, **MENTION** the model and serial number. This information can be found on the specification nameplate incorporated into the machine.

With every machine, the manufacturer provides all the necessary technical information and documents required for its use. **KEEP IT IN GOOD CONDITION.**

0 Preface

0.1 Overview

Thank you for choosing the fully automatic industrial washing machine produced by our company. This series of new products are the equipment manufactured by advanced production technology. Each equipment has undergone strict quality inspection and debugging before leaving the factory, and the main performance parameters of the equipment have reached the national or industry standards.

Before installing and using the equipment, please read the manual carefully according to the detailed instructions to ensure safe use, extend the service life of the machine, and make the equipment to the best working condition.

This manual is a guide for the installation, use and maintenance of the machine. Please keep the machine during the use of not lost, must be kept in an insulated, dry environment. For all the operation and maintenance personnel. To know where the manual is placed. The manual must be placed for easy operation. Do not move, tie the manual, or write on it. If the manual is damaged or lost, affecting its use, please contact the manufacturer or the local dealer to obtain or purchase the manual.

0.2 Composition of the manual

For ease of use, this manual is divided into the following sections:

Section 1: Safety matters

Section 2: Introduction to the machine system

Chapter 3: Installation

Section 4: Control system use interface

Section 5: Operating instructions

Section 6: Routine maintenance

Section 7: Troubleshooting

0.3 Common annotation and common icon in the manual

Warnings, warnings, and attention

The "warning", "warning" and "attention" in this manual are dangerous or important information tips for the operation and maintenance staff who operate and handle the equipment. This information will be in a box to attract your attention.

Warning — In this manual, it is to remind the operator that if not following the warning requirements, it may cause personal injury or even death. The warning statement is displayed as in the following example:

Warning that a typical warning message is displayed

Note: In the first section, some security information also reaches the warning level,

but the form of performance is not consistent with as described above. All operation and maintenance personnel must thoroughly understand the safety requirements in Chapter 1.

Warning: - - -In this manual, it is used to remind the operator not to follow the warning requirements, which may cause damage or personal injury to the machine.

Warning: A typical warning information display

The warning is shown below, and appears in bold in the box

Note: — - -is additional important information immediately after the procedure or topic. Note that as shown in the figure below, the box is shown in oblique font.

Note: A typical attention prompt message

0.4 Technical assistance

If you have any future technical assistance requirements for your equipment, please contact the after-sales service department

0.5 Make the record

The Company has the right to modify and improve this manual and related materials

We shall not be responsible for any failure or personal injury caused from any maintenance operation not mentioned in this manual or improperly operating equipment

1 Security matters

1.1 Safe use environment

XGQ series fully automatic industrial washing machine are mainly used for washing fabrics. The operating environment temperature of the machine range is 5°C -40°C

1.2 Safety overview

1.2.1 Closed and protection

The manufacturing and production of X-G-Q series fully automatic industrial washing machines are fully in accordance with the requirements of the special closure of the moving parts mentioned in the national safety standards, so as to protect the operators from injury. These closed guards may only be opened with specific tools.

Warning: Before trying to turn on these closures, you must turn off the power supply and wait until the machine stops completely

1.2.2 Loading door

The loading door of the XGQ series fully automatic industrial washing machine is

equipped with a small travel switch to protect the user from personal injury. During the operation of the machine, the loading door is opened and the machine will be shut down automatically.

Warning: Never open the loading door during washing

1.2.3 Safe installation

The machine must be installed in accordance with the provisions of Chapter 3 of this manual. Where the machine is placed, the requirements of this manual and the local regulations must be fully installed. Without following these regulations and installation procedures, the Company will not be responsible for all the consequences arising therefrom.

1.3 Use safety

The following preventive requirements must be strictly followed.

1, Important tips: must be familiar with the machine operation of the professional installation, debugging and maintenance. Personal injury or equipment damage caused by the violation of the warning. The product warranty will expire.

2. Do not wash anything other than the fabric.

Prohibit the washing of oil-soaked fabrics, which could lead to an explosion.

Do not washing machine parts, otherwise the inner liner will be seriously damaged.

Children do not play around the machine. Take care of the children and animals when the door opens.

3. Ensure that the machine is installed on a solid level foundation, and should leave enough space (not less than one meter) around the machine to facilitate inspection and maintenance.

4. Note that the edge of the door may cause damage when the garment door is opened.

5. Before operating the machine, please check the door interlocking device first. Do not open the coat door until the machine is completely stopped.

6. Before repairing the machine, please cut off the power supply first. Only the professional electrical personnel familiar with the machine can carry out maintenance and maintenance.

7. Ensure that the grounding terminal of the electrical box of the machine is reliably grounded, otherwise it may cause personnel electric shock and machine failure.

8. It is forbidden to disconnect or short circuit the overshock switch. If the machine is in the state of overshock, it will cause serious damage.

9. When it is possible to contact the steam line, please turn off the steam first and then let it cool. Because these pipes are particularly hot, they may cause severe burns.

10. Provide a large enough sink and drainage pipe to meet the displacement. If multiple machines share a drainage channel, the drainage header should meet the flow requirements of simultaneous drainage.

11. Do not operate the machine unattended and confirm that all damaged or lost parts have been replaced.

12. It is recommended that the machine be installed by professional technicians.
13. Do not place the machine in a very wet or very high or low temperature place.
14. After the washing, cut off the water, electricity, gas and steam.
15. Always consider the washing instructions on the clothing label, and the washing chemicals used should follow the GB or EU regulations.
16. The machine can only operate if all the protection devices operate normally.
17. When the thermal protection measures of the machine are cancelled, there may be a heat danger.
- 18, please be sure to keep the atmospheric balance line unobstructed. The drainage pipe should not be immersed in the water, otherwise it will lead to poor drainage, exhaust, and even the possibility of water overflow from the soap liquid box.
19. When the machine is running and the steam is heated, it is forbidden to open the door of the soap liquid box to avoid steam or water burns.
20. During the installation, maintenance and repair of the machine, warning signs must be placed at the control panel or the main switch of the machine to ensure the safety of relevant personnel. The warning sign must be a normalized mark.for instance

warn! Stay approach-maintenance personnel are at work

Warning: No short circuit of any safety device

Warning: The door opening function is a special function designed for the convenience of customers to take their clothes. During the operation, operators are strictly prohibited to contact the rotating clothes in any way!

1.4 Lifting and storage

1.4.1 Machine packaging

Machine packaging can be conducted according to the user requirements, can be simple wooden box packaging or plastic film packaging. When packing with wooden boxes, there must be appropriate liners in the wooden boxes for moisture protection, and the machine should be fixed with the bottom plate of the wooden box. The machine and wooden box around the wooden block pad, can not have loose phenomenon.

1.4.2 Shipping of the machine

This series of automatic frequency conversion elution machines is generally shipped by forklift, and steel wire rope can be lifted without damaging the outer package. When hoisting, it shall strictly refer to the hoisting instructions attached to the machine.

1.4.3 Transportation of machines

The binding must be strong when the product is transported. Packaging products are not wet, not exposure, not inverted, avoid impact, etc.

1.4.4 Storage of the machines

During the storage process, attention should be placed in a dry environment without

exposure, and should not mix with corrosive articles or articles prone to produce corrosive gases.

2. Introduction to the machine system

2.1 Overview

The XGQ series fully automatic industrial washing machine produced by our company has stable performance and long service life. The machine is beautiful, small in floor area and convenient for maintenance. Frequency conversion control drive ensures small dehydration vibration and better speed control. Computer control panel, advanced and friendly man-machine dialogue interface, easy to operate. A shock absorber system consisting of a damper and a powerful spring reduces the vibration of the machine during dehydration. The perfect soap addition system ensures that the machine can complete various washing procedures in order to perform different washing tasks. These advanced design and features enable our equipment to meet the needs of hotels, hospitals and institutions. Washing machine rollers and panels are made of stainless steel. Greatly extend the service life of the machine, and ensure the washing quality. A super shock switch is installed on the frame of the machine. When the machine is dehydrated, the clothes are not uniform and produce violent vibration. The super shock switch will send a signal to the computer to reduce the speed until it stops to protect the machine. A punching cage with V-shaped bars loads clothes, take the clothes on when washing and throw them down to complete the washing effect. High quality frequency converter controlled motor provides machine washing and dehydration. In the deceleration braking, by the frequency converter resistance brake device, to ensure that the machine operation is more convenient, low noise, maintenance free, environmental protection, service lifelong. The whole system is automatically controlled by a microcomputer and a pneumatic valve. The door lock protection device prevents the operator from opening the garment door when the machine is working and improves the safety of the machine

2.1.1 Main components

XGQ series automatic frequency conversion elution machine is mainly composed of the following components.

Electrical and control systems

Voltage: the computer input voltage is 220V, the output control loop is 24V, the signal indication is 6.3V, in line with international standards.

Outside the cylinder

Zinc spray process manufacturing, spacious clothing door (stainless steel), with door lock protection device to prevent the machine in running fashion clothing door is opened. Cleaning work is performed in the outer cylinder.

frequency transformer

Located in the back of the electric box, and the main motor directly, the main

function not only make the speed of the main motor to smooth control and conversion, and make the machine completely get rid of the traditional machine essential clutch device namely the clutch, simplify the mechanical structure of the machine, reliable transmission, help to reduce the machine running noise and improve the machine running smoothly. Increase the service life of the machine.

The shock absorber system

The shock absorber is located in the lower part of the machine to support the cylinder block of the washing machine. The hydraulic damping is located at the bottom of the machine and is distributed in a certain position. The laundry cylinder becomes fully floating in the middle. In the high yield, the shock absorber, damping cylinder can effectively play the role of shock absorption, shock absorption, noise reduction.

Front door locking device

The front door locking device is a safety chain mechanism, which can effectively protect the safety of the operator. When the front door operates normally, the machine is locked by the cylinder. When the water in the cylinder is exhausted and the machine stops, press the door button, and the locking device is opened, then open the front door.

In case of power failure, the cylinder cannot exit by itself. At this time, the cylinder can be forced through the open hole outside the front door plate before opening the door.

Liquid level control

The pressure sensor in the computer controller can detect the air pressure in the closed line and changes the level in the level tube connected to the outer cylinder.

Soap liquid box

The soap box is located on the upper right side of the machine, which should be prepared according to the amount of the detergent. At the same time, the detergent should be loaded into the material cup according to the working procedure of the machine, and the detergent should be flushed into the washing cylinder through the flushing of the filling valve. One or more feeding valves can be opened simultaneously by manual or automatic control.

Roll cage

It is made of stainless steel plate welding, and the outer circle is rolled with the washed mesh plate, and the front and rear cylinder plates are made of drawing depth. There are V-shaped tendons in the rolling cage, which are used to bring clothes to a certain height to strengthen the washing effect.

2.1.2 Delivery inspection

Check the nameplate and label on the machine with instructions and signs of

the whole machine or main parts.

2.2 Main technical parameters

2.2.1 Main technical parameters

technical parameter model	washing capacity kg	Internal bile size mm	Volume load ratio L/kg	Washing speed r/min	Medium speed dehydration speed r/min	High speed dehydration speed r/min	Water removal force G-Force
W-M- 15	15	Φ700×420	10.1	36	360	750	300
W-M- 20	20	Φ700×500	10.1	36	360	720	300
W-M- 25	25	Φ800×500	10.1	36	360	700	300
W-M- 30	30	Φ800×580	10.1	36	360	800	300
W-M- 50	50	Φ1080*610	10.1	36	300	680	300
W-M- 100	100	Φ1210×865	10.1	36	300	650	300
technical parameter model	power of motor kW	noise dB(A)	Ground load KN/m2	Maximum bulk piece through size (Wide and height) mm		net weight kg	Box weight kg
W-M- 15	1.5	≤80	10±0.5	1000×1000×1550		550	30
W-M- 20	1.5	≤80	10±0.5	1050×1000×1550		600	30
W-M- 25	2.2	≤80	10±0.5	1150×1150×1600		800	35
W-M- 30	3	≤80	13±0.7	1250×1250×1700		900	30
W-M- 50	5.5	≤80	13±1.2	1650×1680×1950		2500	70
W-M- 100	7.5	≤80	13±1.2	1780×2100×2050		3200	80

2.2.2 Installation conditions

Installation conditions model	water		compressed air		vapour				
	pressure MPa	consumption L / times	source V	Motor work rate kW	electrical heating power kW	pressure MPa	consumption L / times	pressure MPa	consumption kg / times
W-M- 15	0.2~0.4	300	220/38	1.5	6	0.4~0.7	10	0.4~0.6	—

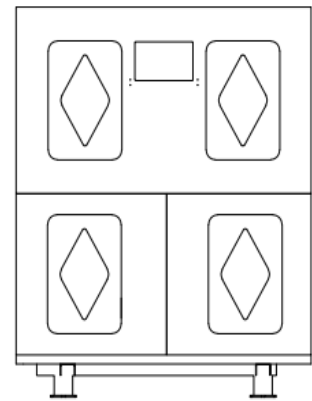
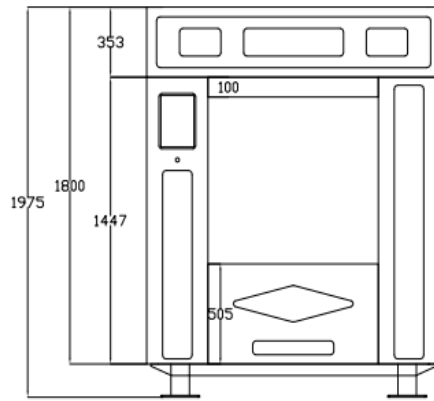
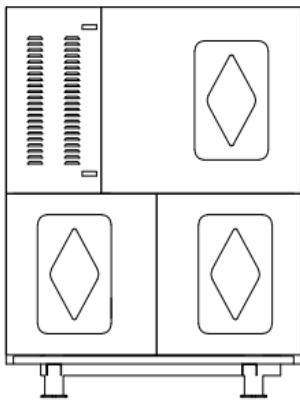
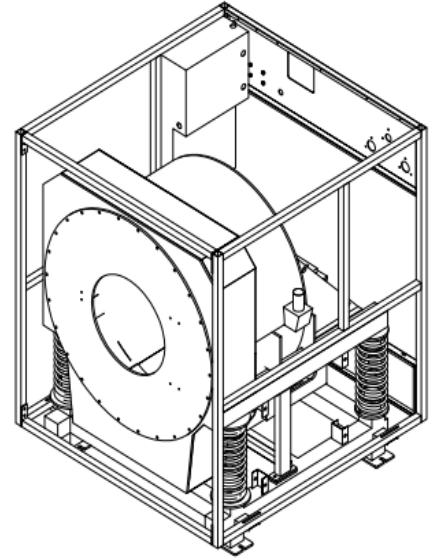
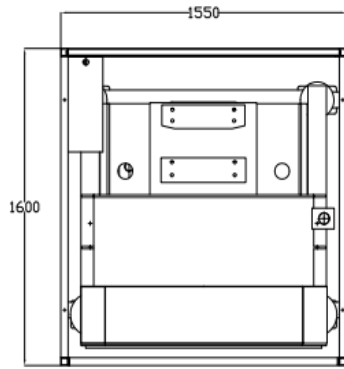
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W-M- 20	0.2~0.4	400	220/380	1.5	6	0.4~0.7	10	0.4~0.6	—
W-M- 25	0.2~0.4	500	220/380	2.2	9	0.4~0.7	10	0.4~0.6	—
W-M- 30	0.2~0.4	450	380V	3	30	0.4~0.7	10	0.4~0.6	42
W-M- 50	0.2~0.4	1090	380V	5.5	36	0.4~0.7	10	0.4~0.6	60
W-M- 100	0.2~0.4	1530	380V	7.5	54	0.4~0.7	10	0.4~0.6	78

Note 1 water consumption is calculated as the washing process of 1 prewash, 1 main wash and 3 rinsing.

Note 2 Power consumption is calculated based on the standard washing process of steam type and the reference heating power for electric heating.

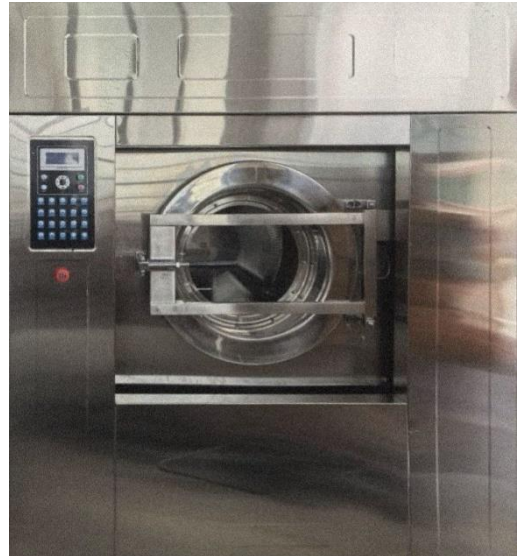
Note 3 Steam type and electric heating type shall be indicated when ordering. Note voltage for small equipment.

2.2.3 Outline and foundation drawing of the machine



Front view Washing Machine

Stainless-Steel Cover &
Stainless Steel Drum



Front view with Soap Reserve

Shock Absorbers , Spring Holders
&Heaters

Back view with Main fly wheel Input &Output of water



Soap Reserve

3types



Electric Panel

Solenoid Valves



Air Pressure

Regulator



Chase with Spring

Shock Absorber



Fly Wheel



Output Drain

Fully automatic industrial washing machine for laundry equipment



★★★ Main features of the product

- ★ Adopting a fully suspended shock absorption structure, it is a truly groundless aircraft model;
- ★ The use of imported seals, valves, and shock absorbers ensures the reliability of machine operation;
- ★ PLC operating system, with optional automatic/manual control, the washing program is clear at a glance;
- ★ The whole machine is made of stainless steel, making it durable and long-lasting;
- ★ The large caliber loading door reduces the labor intensity of operators, conforms to human mechanics, and reduces the labor intensity of equipment maintenance;



★★★ Main technical parameters

Model	Unit	W-M- 50
Washing capacity	kg	40-60
Drum volume	L	523
Drum size	ϕ mm	1070*610
speed	Rpm/min	36-680
Rated voltage	V	AC/380/50-60Hz
Motor power	KW	5.5
Frequency converter power	KW	7.5
Electric heating power	KW	36
Steam pipe diameter	DN	25
Cold/hot water pipe diameter	DN	40
Drainage outlet diameter	ϕ mm	110
Length	mm	1600
Width	mm	1630
Height	mm	1950
Overall weight	kg	2500

* Due to continuous updates and upgrades of product technology, some parameters may change without further notice. Please confirm the details before purchasing!



3 Installation

3.1 Machine inspection

3.2 Positioning

The machine may cause the loss and damage of spare parts during the packaging, transportation, loading and unloading process, so the following inspection shall be made before installation:

- Check whether the parts of the machine are complete according to the packing list;
- Whether all kinds of pipelines and interfaces are loose phenomenon;
- Whether the electrical line is loose or fall off;
- Whether there are other damaged phenomena

1. Environmental temperature

When the ambient temperature is below zero, the water in the machine heater free. When the ambient temperature exceeds 50°C, it will cause the motor to overheating, some electronic components may

fail, and the wear of the transmission belt is accelerated, so it is necessary to take heat dissipation and cooling measures for the working environment.

2. Environmental humidity

When the ambient relative humidity exceeds 95% (25°C), it can cause electrical or motor failure and may also fail the ground. Some parts of the machine will produce corrosion.

3. Ventilation

Because the hot air temperature discharged by the dryer is high, it is necessary for the machine exhaust outlet to be connected to the outdoor, so that the laundry room must have an air inlet to supplement the discharged air, and the size of the air inlet should be determined according to the total exhaust volume of the equipment used.

4. Waterproof

Please do not spray the machine with water, otherwise it will cause electrical short circuit and serious damage.

Important note:

Inflammable and volatile liquids shall not be placed in the machine, and it is forbidden to clean the machine with flammable, volatile liquids such as acetone, gasoline and benzene. If done so, it can cause serious personal injury or damage to the machine.

Warning: Do not make any changes to the original parts of the machine (such as changing flange, punching, repair) by adding additional devices. The Company shall not be responsible for any failure or other consequences caused by the unauthorized installation of additional parts or modifications. Any proposal for machine change must be submitted to the after-sales service department of the company and approved before implementation.

5. Machine placement

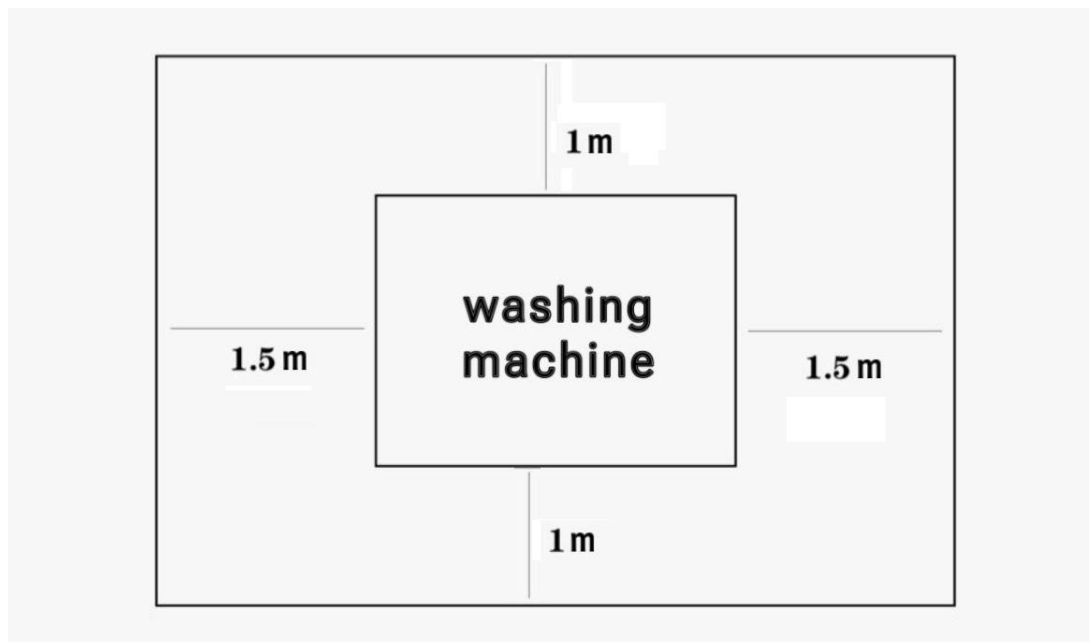
To make the room layout to facilitate the machine pipe connection and maintenance operation, the distance requirement between the location of the machine and the wall is shown in the figure below,

Before installation, the foundation should be leveled and laid with floor tiles. The left and right sides should be left more than 1 meters, and the rear of the machine should be left more than 1.5 meters.(Reserved for maintenance space)

Shock
3.3
In

pay attention to! This product shall be installed by the professionals

Absorber
Installation



In order to reduce the vibration and noise of the machine work, please put the machine on a solid foundation, and calibration level of machine, otherwise may cause the machine work unstable, then the damage of machine related parts, calibration as long as the machine at the bottom of the corner with pad iron and the ground, make the bottom of the machine around contact with the ground.

3.3.2 Installation of the foundation

XGQ series of automatic industrial washing machine does not need to be special foundation, only placed on the horizontal cement floor or concrete floor, can not be directly placed on the ceramic tile surface smooth ground (tile floor recommended 4 mat rubber damping cushion)

The user shall ensure that the overs hock switch is not cancelled, shall not shift the safety switch or overshock switch, timely replacement and repair,

If the above requirements cannot be achieved or the customer situation is special, the foundation may be made according to the following requirements:

The foundation is required to be horizontal, and to be able to meet the dynamic pressure of the machine. Then level the machine, place the anchor bolts, pour the concrete, and tighten the nut after the concrete is fully solidified.

3.3.3 Pipe connection Into the water pipe

A manual stop valve and filter valve should be installed between the machine body and the water inlet main pipe. If the water pressure is in (0.2-0.4MPa) and the water pressure is lower than the requirements, the water intake time will delay the use efficiency of the machine. If the water pressure exceeds the requirements, it may damage the machine and cause harm to personnel.

caution! Before using the machine, make sure that the water valve is opened, otherwise it will cause damage to the machine.

vapour line (if Available)

A control valve needs to switch the steam between the steam and the machine
There should be a control valve to adjust the steam pressure between the steam and the machine, which can meet the required working pressure 0.4-0.6MPa of the machine

outfall

If the drainage pipe is PVC or the cast iron pipe should be connected with the machine, the plastic pipe connected by the drainage outlet shall be resistant to high temperature, and the diameter shall not be less than the diameter of the drainage outlet of the machine itself

3.3.4 Compressed air

Connect the compressed gas generated by the air compressor to the air source two couplers, and inject appropriate 10 # turbine oil into the two coupling oil cups, then adjust the pressure reducing valve to keep the pressure of the compressed air at 0.4~0.6MPa.

3.3.5 Power supply connection

The main power terminal shall be connected to the main power supply through the electrical box on the rear side of the machine. The terminal shall be affixed with labels L1, L2, L3, N and PE, and the ground terminals must be reliably grounded or connected to the ground wire located in the rear right side of the machine. The main switch and fuse must be installed before the machine works. Do not connect the ground wire to the center line at the power supply input end. The appliance inlet connector is located at the bottom of the appliance box, and the machine must be connected to the power supply according to the electrical parameters on the nameplate. The machine must be wired individually, and not cowed with other equipment or lighting power sources. According to the requirements of the electrical parameter table, cover the wire with the specified wire diameter, and the flexible waterproof soft insulation hose must be wired by a professional electrician according to the wiring diagram attached to the machine.

For personal safety, and the normal operation of the machine, according to the relevant regulations, the industrial washing machines must be reliably grounded. Do not be grounded on water pipes or other pipes.

Warning: a regular electrician should complete all the electrical connections

4

Warning: Hazardous voltage in the motor terminal box and electrical control box. Only electrical professionals, familiar with electrical testing steps, test equipment and safety warnings can overhaul the machine. To try to repair and remove the power before opening the electrical control box.

Warning: Ensure that the grounding terminal of the electrical unit of the machine is reliably grounded and, if not properly grounded, it may cause personnel electric shock damage and machine failure.

Control system

The operation of this product is mainly realized through the computer controller. For specific details, please refer to the random attached computer control instructions for setting and operation

5 Operating instructions

5.1 Operation prompt

Read the warning below before operating or maintaining the machine.

pay attention to! Operators must be trained qualified, familiar with the machine staff, non-staff are not allowed to use at will!

Important tip: This equipment is designed according to the maximum capacity of clothes that can wash and dry, and the loading capacity of washing materials should not exceed the rated load capacity of the equipment

5.2 Preparation work before startup

Check the startup conditions

- ① Turn on the main power supply switch (outside the machine)
- ② Turn on the compressed air switch (outside) to keep the pressure at 0.4-0.6MPa
- ③ Open the inlet switch (outside)
- ④ Turn on the steam switch (outside) and adjust the steam pressure to 0.4-0.6MPa
- ⑤ Prepare washing and appropriate amount of low bubble washing powder (ordinary washing powder will overflow) each washing fabric is best the same size type, different size is easy to cause fabric winding, dehydrated water is badly cloth, violent vibration.
- ⑥ Turn on the main power supply of the machine (in the electrical appliance box)

5.2.1 Preparation

Prepare the fabric to be washed, put the rated washing fabric into the washing machine drum and close the door, and put the detergent in the soap liquid box!

5.2.2 Power-on to start

When the power is on, the control panel displays the current information and then presses the random computer controller instructions.

5.4 Operation precautions

- 1、 The compressed air pressure should be between 0.4-0.6MPa, and the gas source processor should be refueling and drained in time, otherwise the machine may not work properly.
- 2、 After the machine is started, the emergency stop key can only be pressed when an emergency stop is needed. In other cases, this key should not be pressed at will. However, it should be rotated and reset after troubleshooting.
- 3、 For manual operation, stop a certain state, and press the state key again.
- 4、 When the washing process is completed according to the automatic program, the washing effect is related to many factors. Such as steam pressure, washing, and the degree of dirt, it is suggested that users according to their actual situation, explore a set of ideal procedures, or through manual operation to make a variety of movements of time, washing water temperature through the computer to modify the program.
- 5、 Whether manual or automatic, when the program into the off or high, in 100 seconds before the start of domestic demand to observe the distribution of detergent in the drum, at the same time observe the shaking, the front door generally the front door without obvious shaking, but there are exceptions, if the machine vibration larger should stop off or high, back to the washing state, then restart dehydration.

6 Daily maintenance

6.1 Safety requirements

In the transportation, installation, use, maintenance and repair, skilled workers must be done in strict accordance with the instructions and requirements of this manual.

Do not adjust or set up any moving parts. Before adjusting and setting these moving components, disconnect the power, steam, water, and gas sources and ensure that no one will start the machine during maintenance.

During maintenance, only one maintenance person shall be responsible for regulating the safety device and others shall be kept away from the machine.

During all maintenance, repair or operation settings, always place a warning plate in front of the control panel or in front of the main power switch. The warning plate shall be shown as follows:

caution! Do not touch, during machine maintenance
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6.2 Daily maintenance

To keep the machine properly and delay service life as much as possible, maintain the machine regularly.

6.2.1 Daily maintenance and maintenance

- 1、 Clean the outer cylinder of the machine frequently to remove residues such as detergent.
2. Try to start the machine when the door is open, and the washing machine should not run when the door is open.
3. Check whether the machine has any mechanical cracks.
4. Rinse the detergent residues in the soap liquid box with hot water.
5. Clean the door sealing washer to remove detergent residues and other foreign bodies.
6. At the end of each day, please turn off the water and steam, and cut off the power supply. Once installed, do not change the setting of the boiler water inlet valve.
7. It is suggested that after using the machine, the clothes door and soap box door are open to make the machine ventilated.
8. Check the door interlock device before operating the machine.

caution! Because the frequency converter is required to be installed in a dry ventilation situation, the machine installation requires to have good ventilation facilities and clean the dust on the heat dissipation fan and heat sink of the frequency converter every month, to avoid overheating failure of the frequency converter and shorten the service life of the frequency converter.

6.2.2 Periodic maintenance and maintenance

- 1、 After two to three months, the triangular belt should be tightened again, because the new belt is elastic, it is necessary to do so. Otherwise, the belt will slip, check whether the belt has been worn and broken, if necessary, please tighten the belt.
- 2、 Check the filter valve of the water inlet weekly for blockage by debris.
- 3、 If the drainage outlet is blocked, frequent shutdown will occur during dehydration to ensure the safe operation of the machine.
- 4、 The air source processing triple filter should release water regularly every month, and the oil cup of the oil mist device should be replenished in time. The oil specification is 10 # or 20 # mechanical oil.
- 5、 Check whether the lower water outlet of the main bearing seat is smooth every week to ensure that the bearing is free of water and extend the life of the bearing.
- 6、 Although the machine vibration is very small, it also causes bolts and loose connector, so it is necessary to check whether the bolts, screws and other connections are loose every month to ensure safety.
- 7、 Because the frequency converter needs to be installed in dry ventilation occasions, so the machine is required to install good ventilation facilities

8、 With a manual refueling pump, fill the lithium base grease containing 10 # oil on both ends of the bearing seat. Generally, press the manual oil pump two times every 500 hours of operation (a single shift is restricted for 3 months). Do not fill too frequently. Too much grease may cause the grease to be pressed into the washing cylinder and stain the detergent.

9、 Routine maintenance improves the operation efficiency of the machine, reduces the failure rate, extends the service life of the machine, and ensures the safe operation of the machine.

caution! If you do not follow the above proposed method, all the consequences are personally negative

6.2.3 Other maintenance

1, when the daily washing work is over, should cut off the power supply and turn off the steam, water, liquid valve to clean the machine and do a good job of environmental sanitation work.

2, each mirror glass such as macular, can be unscrewed scrub, please pay attention to uniform force, diagonal phase slowly tighten, sealing ring damage please replace new.

3, every year to carry out a comprehensive inspection of the machine, and make the necessary maintenance on the specific situation.

7 Troubleshooting

7.1 Overview

This chapter lists the possible faults and solutions during the effective service life of the machine. Before troubleshooting, check the following items:

- 1、 Confirm that all operations of the machine are appropriate and that all line connections of the machine are intact.
- 2、 Cut off the machine before making repairs.
- 3、 Check the wire or connection joint of the machine for loosening, any loosening will affect the use of the machine.
- 4、 When checking the power supply characteristics of the parts, confirm that the electrical insulation performance is good

7.2 Common Troubleshooting

Fault phenomenon 1:

Inlet water valve, steam valve, play is not open: drainage valve is not open

<p>cause:</p> <ul style="list-style-type: none"> ▲ Valve core corrosion or foreign body stuck ▲ Compressed air pressure is too low ▲ The airway on the valve is detached ▲ The corresponding solenoid valve is burned out 	<p>resolvent:</p> <ul style="list-style-type: none"> ▲ Lubricate the conduction valve core ▲ Check the operating pressure shall be greater than 0.4 ▲ check the gas route ▲ Replacement Solenoid Valve
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Fault phenomenon 2

The internal speed is lower than the original

cause: <ul style="list-style-type: none">▲ belt flabbyThe ▲ motor is damp	resolvent: <ul style="list-style-type: none">▲ tightening belt▲ Check the working environment and the motor to replace the motor if necessary
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Failure phenomenon 3

Unable not start, display door not closed

cause: <ul style="list-style-type: none">▲ The inner door limit switch is damaged▲ The door lock is not in place, and the limit switch does not signal	resolvent: <ul style="list-style-type: none">▲ Check the line replacement switch▲ Make sure that the limit switch is in place
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Failure phenomenon 4

The main bearing has abnormal sound, and the bearing fever is serious

cause: <ul style="list-style-type: none">▲ bearing is short of oil▲ bearing failure	resolvent: <ul style="list-style-type: none">▲ come on in time▲ Replacement Bearing
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Fault phenomenon 5

When adding water, the computer controller display panel corresponds to the water level indicator light is not on

cause: <ul style="list-style-type: none">▲ There is dirt in the trachea of the liquid level monitoring meter▲ The trachea and air pipe joint are not connected to leak▲ computer board fault	resolvent: <ul style="list-style-type: none">▲ Remove the dirt in the trachea▲ Reconnect the gas pipe with the connector and tighten it▲ replacement computer board
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Fault phenomenon 6

The door is leaking

cause: <ul style="list-style-type: none">▲ Door sealing ring is aging▲ Transportation vibration or washing vibration causes door loosening	resolvent: <ul style="list-style-type: none">▲ replacement seal ring▲ adjusts the door position
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Fault phenomenon 7

The drainage valve is closed

cause: There is a foreign body in the ▲ valve ▲ The valve is broken	resolvent: ▲ cleared the foreign body ▲ replacement seal ring
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Fault phenomenon 8

Machine shutdown

cause: ▲ Overload protector of the motor to trip ▲ blown fuse	resolvent: ▲ Open the electric box door and reset the trip overload protector ▲ Replace the fuse of the same model
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pay attention to! If the fault occurs again in a short term, compare the rating on the motor nameplate with the setting of the overload protector and re-check the current limit value of the set overload protector.

Fault phenomenon 9

The motor is noisy

cause: ▲ bearing aged	resolvent: ▲ Replacement Bearing ▲ Drive motor: check the drive motor belt, if the belt is loose, the motor bearing will be damaged in a short time
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When encountered a serious fault, and you can not solve, please contact the dealer immediately!