



## INDUSTRIAL DRYER MACHINE

### INSTRUCTIONS FOR USE MAINTENANCE AND INSTALLATION

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# 0 Introduction

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## 0.1 Overview

Thank you for choosing our HQ series fire protection clothing dryer. This new series of equipment is manufactured by advanced production technology. Each piece of equipment has been strictly tested and adjusted before leaving the factory, and all the main performance parameters of the equipment have reached national or industry standards.

Before installing and using this equipment, please read this manual carefully and follow the details of its instructions to ensure safe use, prolong the service life of the machine, and make your selected equipment in the best working condition.

This manual serves as a guide for the installation, use, and maintenance of the machine. Please keep it properly during the use of the machine and do not lose it; it must be stored in a cool, dry environment. All operators and maintenance personnel should know where to find this manual. The location for storing the manual must be convenient for operators and maintenance personnel to access. Under no circumstances should you move, tie up, or write on the manual for any reason. If the manual is damaged or lost and affects its use, please contact the manufacturer or local dealer to obtain or purchase a replacement.

## 0.2 Composition of the manual

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

- Chapter 1: Safety Matters
- Chapter 2: Introduction to machine systems
- Chapter 3: Installation
- Chapter 4: Control system usage interface
- Chapter 5: Operation instructions
- Chapter 6: Daily maintenance
- Chapter 7: Troubleshooting

## 0.3 Common labels and icons in the manual

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### Warnings, cautions and notices

Warnings, cautions and notices in this manual are warnings of danger or important information provided to the operators and maintenance personnel who operate and handle the equipment. This information will be in boxes to draw the reader's attention.

Warning — In this manual, the operator is reminded that failure to follow the requirements of the warning may cause personal injury or even death. Warning statements will be displayed in reverse white, as shown in the following example:

## A typical warning message is displayed

Note: In the first chapter, some safety information also reaches the warning level, but the form of performance does not adopt the above consistent method. All operation and maintenance personnel must thoroughly understand the safety requirements in the first chapter.

Warning: ---In this manual, it is a reminder to the operator that failure to follow the warning requirements may cause damage to the machine or personal injury. The warning is

shown

**Warning: A typical warning message is displayed**

below in bold type within the box

Note: ---is additional important information that follows the procedure or topic being described. Note that the box is shown in italics as shown in the figure below.

0.4

*Note: A typical attention prompt message*

### Technical assistance

If your equipment requires any technical assistance in the future, please contact the after-sales service department

### 0.5 Solemn declaration

The company reserves the right to modify and improve this manual and related materials

The Company shall not be liable for any failure or personal injury caused by any maintenance operation not mentioned in this manual or incorrect operation of equipment

## 1. Safety matters

### 1.1 Safe use environment

HQ series fire protection clothing dryer is mainly used for drying fabrics. The working environment temperature range of the machine is 5°C-40°C

### 1.2 Safety overview

#### 1.2.1 Enclosed protection

The manufacturing and production of the HQ series fire protection clothing dryer of our

company is in full accordance with the special sealing requirements for moving parts mentioned in the national safety standards to protect operators from injury. These sealed protections may only be opened with specific tools.

### 1.22 Loading door

The loading door of the HQ series fire protection clothing dryer is equipped with a small travel switch to protect the user from personal injury. If the loading door is opened during machine operation, the machine will automatically stop.

**Warning: Do not open the loading door during drying**

**Warning: Before attempting to open these closed protections, you must turn off the power and wait for the machine to come to a complete stop**

### 1.2.3 Safe installation

The installation of the machine must comply with the provisions of Chapter 3 of this manual, and the place where the machine is placed must fully comply with the requirements of this manual and local regulations. If these provisions and installation procedures are not followed, the company shall not be responsible for any consequences arising therefrom.

## 1.3 Use safety

The following preventive requirements must be strictly followed.

1. Important note: The installation, debugging and maintenance must be carried out by professionals familiar with the operation of the machine. If personal injury or equipment damage is caused by violating the warning, the product warranty will be invalid.
2. Do not dry anything other than the fabric.
  - Fabric that has been soaked in oil and is prohibited from being dried can cause an explosion.
  - Do not dry machine parts, otherwise the inner tank will be seriously damaged.
  - Children are not allowed to play around the machine, please take care of children and animals when the door is open.
3. Ensure that the machine is installed on a solid level foundation, and leave enough space (no less than one meter) around the machine for inspection and maintenance.
4. Please note that the edge of the door may cause injury when the door is opened.
- 5. Check the door interlock device before operating the machine. Do not open the garment door handle and insert it into the inner tank until the machine has completely stopped.**
6. Before maintenance, please cut off the power supply first. Only professional electrical personnel familiar with the machine can carry out maintenance.
7. Ensure that the grounding terminal of the electrical box of the machine is reliably grounded, otherwise it may cause electric shock and machine failure.
8. During the installation, maintenance and repair of the machine, warning signs must be placed at the control panel or main power switch of the machine to ensure the personal safety of relevant personnel. The warning signs must be standardized. For example

**Warning! Do not approach-maintenance personnel are working**

9、 Provide a sufficiently

large

exhaust channel. If more than one machine shares an exhaust channel, the exhaust main pipe should meet the flow requirements for simultaneous exhaust.

- 10、 Do not operate the machine unattended.
- 11、 Do not place the machine in a very humid or particularly hot or cold place.
- 12、 Do not place the machine in a place with corrosive substances or easy to produce corrosive gases.
- 13、 At the end of each day's drying work, please cut off electricity, compressed air and steam.
- 14、 At the end of each day's drying work, please clean the fleece collector.
- 15、 The drying temperature must be selected according to the fabric material.
- 16、 The machine can only operate when all the protective devices are working properly.
- 17、 It is forbidden to open the door and take clothes while the machine is running, so that the arm will be entangled, resulting in safety accidents.
- 18、 It is strictly prohibited to open the door and touch the fabric by hand to judge whether the fabric has been dried during the drying operation, which will cause safety accidents.
- 19、 After drying each car, cold air must be used to take the clothes when the temperature drops below 40°C, otherwise it will cause burns to the arms.
- 20、 After drying (cooling), the fabric should be removed in time to prevent the potential risk of spontaneous combustion.
- 21、 When the machine power fails, the fabric should be removed to prevent the potential risk of spontaneous combustion.
- 22、 Do not dry chemical fabrics that may be corrosive or decompose, which can damage the machine or produce a dangerous amount of harmful gas

**Warning: Do not short circuit any safety device**

**Warning: The door opening point function is a special function designed for the convenience of customers to take clothes. When operating, the operator is strictly prohibited to contact the rotating clothes in any way!**

## 1.4 Lifting and storage

### 1.4.1 Machine packaging

Machine packaging can be customized according to user requirements, using either simple wooden crates or plastic film wrapping. When using wooden crates, appropriate padding must be provided inside to protect against moisture, and the machine should be securely fastened to the crate bottom. The machine and the surrounding areas above the crate should be firmly padded with wooden blocks, ensuring there is no looseness.

## **1.4.2 Lifting of machines**

HG series automatic industrial dryer can be lifted or directly transported by forklift. The steel wire rope should be connected with the lifting ring of the dryer frame. The steel wire rope should be padded with isolation soft material between the dryer and the steel wire rope; when using forklift, it should be scooped at the bottom of the machine, and the foot of the scoop should extend beyond the projection of the bottom of the machine.

## **1.4.3 Transportation of machines**

The products must be tightly bundled during transportation. The packaged products should not be wet, exposed to the sun, inverted or impacted.

## **1.4.4 Machine storage**

In the process of storage, it should be placed in a dry and non-exposure environment, and should not be mixed with corrosive articles or articles that are likely to produce corrosive gases.

# **2 Introduction of machine system**

## **2.1 Overview**

The HQ series fire protection suit dryer boasts stable performance and a long service life. This machine combines aesthetic design, compact footprint, and easy maintenance. The large garment opening makes it very convenient to load and unload clothes. The air duct is well-designed, ensuring high thermal efficiency. The high density of the rotating cage holes ensures good airflow. The heater has a large specification, providing ample heat, rapid temperature rise, high drying capacity, and short drying time. The drawer-type velvet collector makes cleaning very convenient. The machine can be installed side by side or against a wall on one side, increasing the utilization rate of the laundry room. It uses computer program control with five automatic programs for quick selection. Users can set and store different drying temperatures, drying times, cooling times, and other settings according to the type of fabric, allowing for flexible choice during use. Both unidirectional and bidirectional operation modes are available, enabling users to choose based on the size of the clothes to improve drying efficiency. The machine is easy to operate and completes the entire process automatically. The rotating cage and contact parts are made of stainless steel with excellent corrosion resistance, while the panel can be coated or made of stainless steel, extending the machine's lifespan. The door lock protection device enhances safety. These advanced designs and features make our dryer better suited to meet the needs of hotels, hospitals, and laundries. It is suitable for drying various items such as sheets, blankets, towels, tablecloths, and other similar fabrics

### **2.1.1 Main components**

It is mainly composed of frame, rotating cage, garment door, transmission structure, heater, fan and electrical control.

#### **body frame:**

The rack is a rigid frame structure, the rear wall plate of the frame is formed by integral hot rolled plate, the steel reinforcement is used, and the outer side of the shell enclosure plate is coated with an insulation layer to reduce heat loss

#### **Turntable:**

The rotating cage is used to hold the clothes that need to be dried. All parts in contact with the clothes are made of stainless steel. The outer ring of the rotating cage is made with high density perforation, which has a high ventilation rate and makes the clothes dry faster. The rotating cage is fixed on the frame by the main shaft.

**Clothing door:**

The garment door is installed in front of the machine for loading and unloading dried clothes. The machine uses a large-sized door to make the loading and unloading of clothes more convenient. For safety protection, an interlock device is installed on the outer door. When the outer door is opened, the machine cannot start; if the outer door is opened while the machine is operating, it will automatically shut down.

**gear:**

The transmission mechanism is located at the rear side of the machine, which is transmitted by the motor and the secondary triangular belt. It has a large transmission capacity and good wear resistance.

**calorifier:**

This series of products comes in three heating modes: steam, electric, and gas. The heaters are installed at the top of the machine. For the steam heating model, a steam valve is installed at the air inlet to control the operation of the heater. A 20-mesh filter is mounted on top to prevent dust from clogging. During operation, the fan draws in hot air from the heater into the rotating drum, drying the clothes.

**fan:**

The fan is installed on the lower side of the machine behind, and the impeller is directly connected to the fan shaft. The upper impeller of the fan is a customized dust discharge impeller. During operation, it is not easy to block between the blades, and the fan is fixed on the frame by the bracket.

**Fur collector:**

A wool collector is installed on the air duct at the bottom of the machine shell. The wool collector of this machine adopts a drawer type, with a large area of wool filter screen, small air flow resistance, strong filtration capacity and very convenient maintenance. The cleaning work can be carried out by opening the front door panel.

**Computer controller:**

Fully automatic liquid crystal controller, sufficient display content, can choose drying temperature, time and special cold air circulation time at will, save manpower, improve production efficiency. Please refer to the dryer computer controller user manual.

**2.1.2 Delivery inspection**

Check the nameplate and label on the machine, which contains instructions and marks for the whole machine or major components.

**2.2 Main technical parameters****2.2.1 Main technical parameters**


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technical parameter	Maximum drying weight	Roller size mm × mm	Trough volume Lit	Drying speed r/min	Overall weight kg
product model	kg				

AD-C-15	15	Φ 780×500	34	1000	260
AD-C-20	20	Φ 900×650	34	1400	280
AD-C-25	25	Φ 980×640	34	1600	400
AD-C-35	35	Φ 970×900	34	2200	520
AD-C-50	50	Φ 1150×970	34	3000	600
AD-C-100	100	Φ 1450×1220	34	6300	1200

## Installation conditions

condition model	Electrical parameters				steam conditions	
	source	fan	any power-generating or power-driven machine	heating power (Heating type)	Compressed air pressure MPa	vapour tension MPa
AD-C-15	380V/50Hz/3P	0.55	0.55	14	0.3-0.6	0.4-0.6
AD-C-20	380V/50Hz/3P	0.55	0.75	18	0.3-0.6	0.4-0.6
AD-C-25	380V/50Hz/3P	0.75	0.75	24	0.3-0.6	0.4-0.6
AD-C-35	380V/50Hz/3P	0.75	0.75	32	0.3-0.6	0.4-0.6
AD-C-50	380V/50Hz/3P	1.5	1.1	39	0.3-0.6	0.4-0.6
AD-C-100	380V/50Hz/3P	1.5	2.2	78	0.3-0.6	0.4-0.6

**Note 1 The power supply is three-phase four-wire + ground wire.**

**Note 2 Steam type, gas type and electric heating type should be specified when ordering.**

### 2.2.3 Interface size of the model

The electric heating machine only needs to connect the power supply and exhaust port, gas heating needs to connect the pipeline gas, steam heating machine needs to connect the additional drainage valve.

joggl e model	1	2	3	4	5	6
	air outlet	Power port	Gas outlet	Steam vents	Compressed air port	Drainage port
AD-C-15	140	φ 20	Φ8	DN15	Φ8	DN40
AD-C-20	170	φ 20	Φ8	DN15	Φ8	DN40
AD-C-25	170	φ 20	Φ8	DN15	Φ8	DN40
AD-C-35	210	φ 20	Φ8	DN25	Φ8	DN40
AD-C-50	210	φ 20	Φ8	DN25	Φ8	DN40
AD-C-100	275*360	φ 20	Φ8	DN25	Φ8	DN40

## 2.2.4 Machine shape and drawing

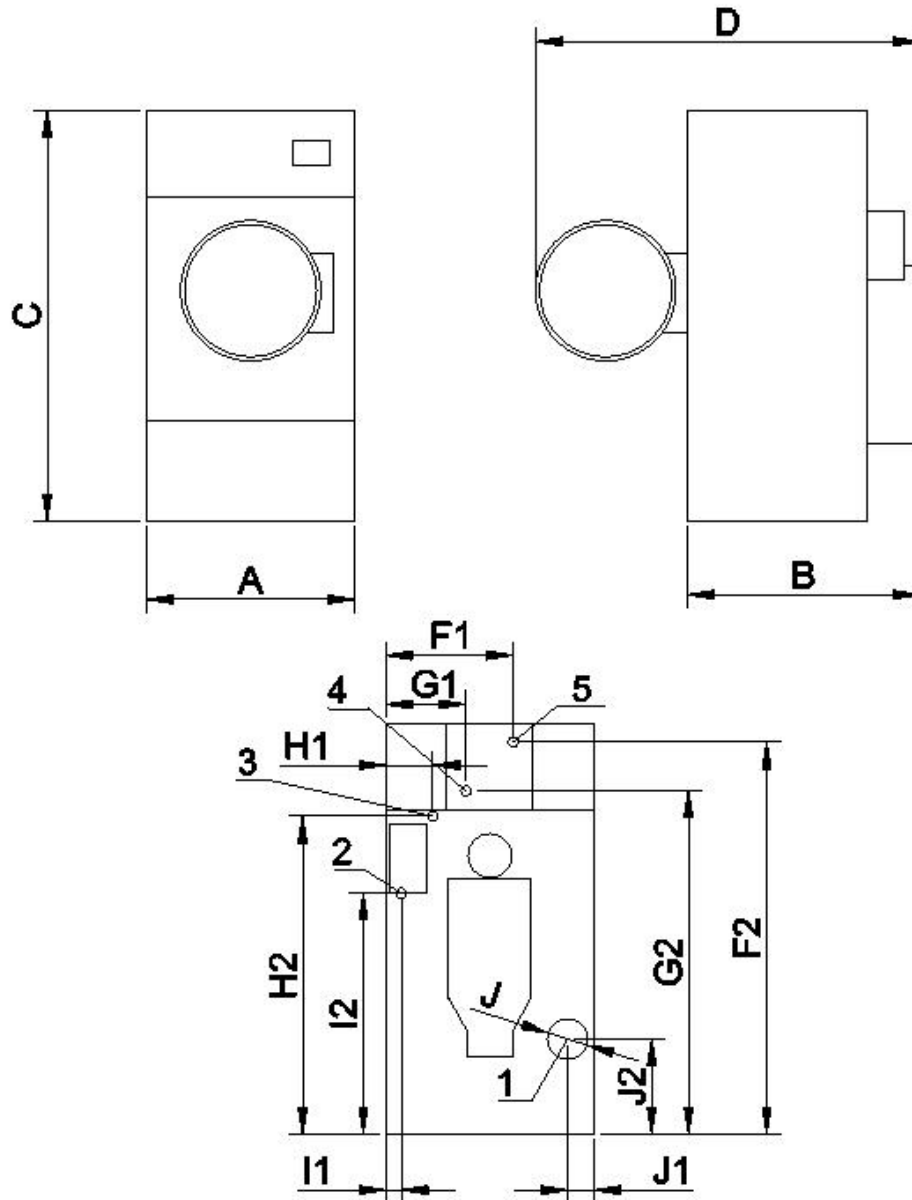


### ★★★ Main technical parameters

Model	Unit	AD-C-50
Dry cleaning capacity	kg	50
Heating method	Electric	
Drum size	φ mm	1150*970
Electrical machinery	KW	1.1+1.5
Electric-heating power	KW	32
Rated voltage	V	380/50Hz
Exhaust diameter	φ mm	170
Length	mm	1240
Width	mm	1600
Height	mm	1100
Overall weight	kg	700

\* 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

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## 3.2 Positioning

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In the process of packaging, transportation, loading and unloading, parts may be lost and damaged by the machine. Therefore, the following checks should be made before installation:

Check whether the parts of the machine are complete according to the packing list;  
Whether the pipes and joints are loose; whether the electrical lines are loose or fallen off;  
Whether there is any damage

### 1. Ambient temperature

When the ambient temperature is below zero degrees, the water in the machine heater will freeze. When the ambient temperature exceeds 50°C, it will cause the motor to overheat, some electronic components may fail, and the transmission belt wear will accelerate, 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% (temperature is 25°C), electrical or motor failure may occur, and grounding failure may also occur. Some parts of the machine may corrode.

### 3. Ventilation

Because the hot air temperature discharged by the fire protection clothing dryer is high, it is necessary to connect the machine exhaust port to the outside, so that the laundry room must have an air inlet to supplement the air discharged, 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 water on the  
Causes electrical short circuit and serious damage.

#### **Important note:**

Do not put flammable and volatile liquids in the machine, and do not use acetone, gasoline, benzene and other flammable and volatile liquids to clean the machine. If so, it will cause serious personal injury or damage to the machine.

**Warning: Do not make any alterations to the original parts of the machine due to the addition of accessories (such as changing flanges, drilling holes, or repairs). Our company is not responsible for any faults or other consequences caused by unauthorized installation of parts or modifications. Any proposals for changes to the machine must be submitted to the company's after-sales service department and can only be implemented with their**

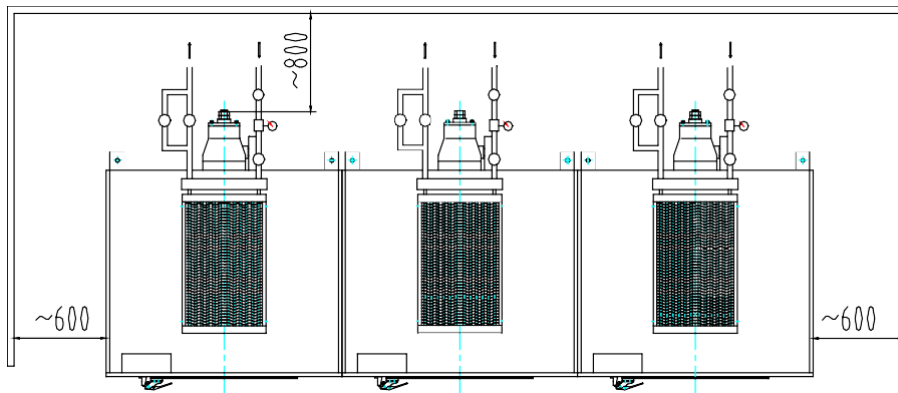
approval.

## 5. Machine placement

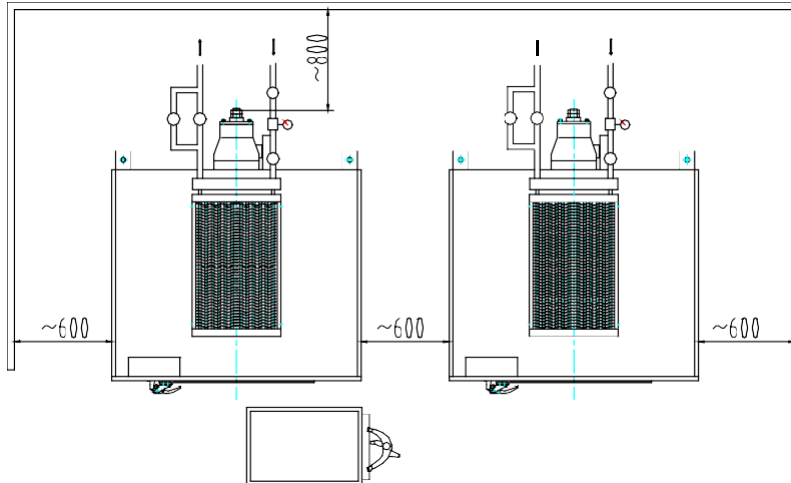
In order to facilitate the connection and maintenance of the machine's piping, the distance between the machine's placement and the wall is required as shown in the figure below,

Before installation, the foundation should be leveled and then laid with floor tiles. More than 0.6 meters should be left on both sides, and more than 1.5 meters should be left at the rear of the machine (reserved space for maintenance).

*Note! This product should be installed by a professional*



**Schematic diagram of the installation of the combined emission machine**



**Installation diagram of non-discharge machine**

### **3.3 Installation**

#### **3.3.1 Adjust the level**

In order to reduce the vibration and noise of the machine, please place the machine on a solid foundation and calibrate the machine level, otherwise it may lead to unstable operation of the machine and subsequent damage to the machine related parts. When calibrating, just use the four corners of the front and back bottom of the machine to press against the ground with shims, so that all the bottom of the machine is in contact with the ground.

#### **3.3.2 Steam pipeline connection (steam heating type)**

The steam inlet is located on the heater above the machine. The pipe diameter for the connection is listed in the technical parameters table. The normal operating steam pressure ranges from 0.4~0.6MPa, with a temperature below 180°C. If the steam pressure exceeds 0.6MPa, a pressure reducing valve must be installed; otherwise, it could cause damage to the machine and pose a risk of personal injury. When connecting the steam piping, users

should install a shut-off valve on the steam inlet pipe for easy maintenance and a filter valve at the steam inlet connected to the machine. A drain valve, a check valve, and a bypass shut-off valve should be installed on the return steam pipe. To ensure effective drainage, a reliable float-type drain valve should be selected. For the supply steam piping of the laundry room, the branch pipes connected to the machine and those using high-level condensate recovery must be raised about 300 mm above the main pipe before connecting to the machine. During installation, maintenance and repair considerations should be taken into account, and appropriate elbows should be installed on the pipes.

Important note: Users must follow relevant standards and specifications when arranging the steam pipeline in the laundry room to avoid the occurrence of steam and water, water hammer, condensate, etc., as well as the backflow of condensate in the return steam pipeline, which will reduce the quality of the supplied steam and affect the use effect of the machine.

Important note: all steam pipelines connected to the machine must use steam conveying pipes that meet the relevant national safety requirements and regulations, and take thermal insulation protection to avoid scalding operators.

Important note: Do not touch the steam piping inside and outside the machine. The surface temperature of the piping is very high, which can cause serious burns. If you come into contact with the piping, turn off the steam first and let it cool down.

### **3.3.3 Compressed air (steam heating type)**

Except for the electric heating type, the steam valve of the steam type in this series is controlled by pneumatic control. The compressed air inlet is located at the rear of the machine

The technical parameters of the inlet pipe are seen. After the gas source is connected, the working pressure is adjusted to 0.4-0.6MPa

### **3.3.4 Connection of air ducts**

**In order to ensure the indoor working environment, users should connect the fan outlet duct to the outside. When connecting, connect the user's exhaust pipe with the machine exhaust port and fix it with screws (Note: When connecting, try to reduce the number of bends in the duct, otherwise it will increase the wind resistance and affect the drying speed)**

### **3.3.5 Power connection**

The main power terminal should be connected to the main power supply. Please connect through the electrical box located on the left side of the machine. The terminals are labeled L1, L2, L3, N, and PE. The grounding terminal must be reliably grounded or connected to the ground wire located at the rear right of the machine. Before the machine operates, the main switch and fuse

must be installed. It is prohibited to connect the ground wire to the neutral line at the power input end. The electrical inlet connectors are located at the bottom of the electrical box. The machine must be connected to the power supply according to the electrical parameters on the nameplate. The machine must have a separate power line and cannot share a line with other equipment or lighting power. According to the electrical parameter table, use wires of the specified gauge, fitted with waterproof flexible insulation sleeves. The wiring must be done by a professional electrician based on the wiring diagram provided with the machine.

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

**Warning: All electrical connections should be made by a qualified electrician**

For the safety of people and the normal operation of machines, according to the relevant regulations, the industrial dryer must be reliably grounded. And the grounding wire shall not be connected to the water pipe or other pipes

**Warning: There is a dangerous voltage in the motor junction box and electrical control box. Only electrical professionals who are familiar with the electrical test steps, testing equipment and safety warnings can repair the machine. Before attempting to repair and open the electrical control box, the power must be cut off first.**

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

## **4 Control system**

The operation of this product is mainly realized through the computer controller. Please refer to the computer control instructions attached with the product for setting and operation

## **5 Operation instructions**

### **5.1 Operation tips**

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**Read the following warnings before operating or maintaining this machine.**

**Attention! The operator must be qualified after training and familiar with the machine. Non-staff members are not allowed to start the machine at will!**

**Important note: This equipment is designed according to the maximum capacity of clothes it can dry, and the loading capacity of drying fabrics should not exceed the rated load of the equipment**

### *General fabric drying temperature*

<b>Dry the material</b>	<b>Set the temperature °C</b>
<b>Various mixed thick fabrics</b>	<b>~ 85</b>
<b>Cotton and linen products</b>	<b>~ 78</b>
<b>Synthetic fiber and wool mixed fabric</b>	<b>~ 65</b>
<b>Purified fiber and fine wool products</b>	<b>~ 50</b>
<b>silk cloth</b>	<b>~ 40</b>

**Warning! The lint collector door must always be closed during normal operation of the fire protection clothing dryer, otherwise it may cause serious consequences such as fire!!!**

## **5.2 Preparations before starting up**

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### **Check the conditions for starting up**

- ① Turn on the main power switch (outside the machine)
- ② Turn on the compressed air switch (outside the machine) to keep the pressure at 0.4-0.6MPa
- ④ Open the steam switch (outside the machine) and adjust the steam pressure to 0.4-0.6MPa

- ⑤ Prepare the dried fabric.
- ⑥ Turn on the main power of the machine (in the electrical box)

## 6 daily maintenance

### 6.1 Safety requirements

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During transportation, installation, use, maintenance and repair, skilled workers must follow the instructions and requirements of this manual.

Do not adjust or set any moving parts. Before adjusting or setting these moving parts, disconnect the power supply, steam source, water source and air source, and make sure that no one will start the machine during maintenance.

During maintenance, only one maintenance person is responsible for adjusting the safety device and should ensure that others are away from the machine.

During all maintenance, repair or operation Settings, a warning sign must be placed in front of the machine's control panel or main power switch as required. The warning sign should read as follows:

**Warning! Do not touch during machine maintenance**

### 6.2 Daily maintenance

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

#### 6.2.1 Drain condensate (steam heating type)

When the steam heating dryer is first started for drying every day, the condensate must be drained from the heater and steam pipe by opening the condensate bypass valve first, and then close the condensate bypass valve

#### 6.2.2 Cleaning of the fleece collector

After each drying, clean the velvet collector to ensure the drying efficiency. Open the drawer of the velvet collector; brush off the velvet attached to the collector with a soft brush; then clean it, and put the velvet collector back in place after cleaning

**Warning! Be sure to clean the fleece every 2-3 cars of drying. It is strictly prohibited to open the fleece collector door during the drying operation, otherwise it may cause serious**

**consequences such as fire**

### **6.2.3 Regular maintenance and maintenance**

1. Check the tension and wear of the transmission belt frequently, and adjust or replace the transmission belt in time.
2. Check the air inlet mesh of the heater frequently, and clean it in time if the wool is blocked to ensure the smooth air duct.
3. Check whether the steam trap works normally frequently, and repair or replace it in time if any problem is found.
4. For machines used for a long time, lubricating oil should be added to the bearings regularly. 2# lithium-based grease is recommended for lubricating oil. The interval between each oil injection is 5~7 days.
5. If the drying efficiency decreases, the drying time becomes longer. The machine air duct and fan impeller should be cleaned, and the steam trap at the return steam port should be checked.

**Warning! If you do not follow the above recommended methods, you will be personally responsible for all consequences arising therefrom**

# Warning! Before using the fire protection clothing dryer every day, be sure to check and clean the down collector

## 7 troubleshooting

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### 7.1 Overview

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

- 1、 Confirm that all operations of the machine are appropriate and that all piping connections of the machine are intact.
- 2、 Before maintenance, disconnect the power supply of the machine.
- 3、 Check that the wires or connectors of the machine are not loose, any loosening will affect the use of the machine.
- 4、 When checking the power characteristics of the parts, confirm that the electrical insulation performance is good

### 7.2 Common troubleshooting

#### Fault phenomenon 1:

The machine cannot start

<i>cause:</i>	<i>resolvent:</i>
▲ The door to the wardrobe is not closed properly	▲ close the door
▲ The door switch is not adjusted properly	▲ Open the front door and adjust the door control switch
▲ Door switch failure	▲ Replace the door switch
▲ The fuse is burnt out	▲ Replace the fuse
▲ The transmission belt is loose or damaged	▲ Adjust the transmission belt to tighten or replace the belt

**Fault phenomenon 2**  
**The dryer is running but not heating**

<p><i>cause:</i></p> <p><b>Steam heating type</b></p> <ul style="list-style-type: none"> <li>▲ Steam is not available</li> <li>▲ The steam valve is not open or cannot be opened</li> <li>▲ The power supply of the pneumatic solenoid valve is not on or cannot be opened</li> <li>▲ The water trap is blocked</li> <li>▲ The temperature controller is out of order</li> </ul> <p><b>Electric heating type</b></p> <ul style="list-style-type: none"> <li>▲ The heater power supply is not connected properly</li> <li>▲ The electric heating tube of the heater is burnt out</li> <li>▲ The AC contactor is not working</li> <li>▲ The temperature controller is out of order</li> </ul>	<p><i>resolvent:</i></p> <p><b>Steam heating type</b></p> <ul style="list-style-type: none"> <li>▲ Open the steam line</li> <li>▲ Open or overhaul the steam valve</li> <li>▲ Connect the power supply or overhaul the pneumatic solenoid valve</li> <li>▲ Repair or replace the steam trap</li> <li>▲ Replace the temperature controller</li> </ul> <p><b>Electric heating type</b></p> <ul style="list-style-type: none"> <li>▲ Check the heater circuit</li> <li>▲ Replace the heater heating tube</li> <li>▲ Overhaul the AC contactor or replace it</li> <li>▲ Replace the temperature controller</li> </ul>
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### Fault phenomenon 3

The dryer overheated

<p><b>cause:</b></p> <ul style="list-style-type: none"><li>▲ Insufficient air supply</li><li>▲ Too much fluff</li><li>▲ The temperature controller is out of order</li><li>▲ The exhaust system is blocked or the discharge pipe is too small</li><li>▲ Fan reverses</li></ul>	<p><b>resolvent:</b></p> <ul style="list-style-type: none"><li>▲ Clean the blockage in the air inlet of the heat exchanger</li><li>▲ Clean the fleece collector</li><li>▲ Replace the temperature controller</li><li>▲ Clean the blockage or increase the exhaust pipe</li><li>▲ Check the fan direction</li></ul>
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### Fault phenomenon 4

The main bearing has abnormal sound and the bearing is seriously overheated

<p><b>cause:</b></p> <ul style="list-style-type: none"><li>▲ The bearing is short of oil</li><li>▲ bearing failure</li></ul>	<p><b>resolvent:</b></p> <ul style="list-style-type: none"><li>▲ Refuel in time</li><li>▲ Replace the bearing</li></ul>
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### Fault phenomenon 5

The rotating cage runs in one direction

<p><b>cause:</b></p> <ul style="list-style-type: none"><li>▲ The controller is not set for bidirectional operation</li></ul>	<p><b>resolvent:</b></p> <ul style="list-style-type: none"><li>▲ Controller reset</li></ul>
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### **Fault phenomenon 6**

The dryer is noisy

<p><b>cause:</b></p> <ul style="list-style-type: none"><li>▲ The fan is unbalanced</li><li>▲ The belt is excessively worn</li><li>▲ The position of the rotating cage is offset</li><li>▲ The machine is not placed horizontally</li></ul>	<p><b>resolvent:</b></p> <ul style="list-style-type: none"><li>▲ The fan impeller is damaged, replace the fan impeller</li><li>▲ Replace the belt</li><li>▲ Adjust the turn ring to make the door gap uniform</li><li>▲ Adjust the machine level</li></ul>
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### **Fault phenomenon 7**

No steam in

<p><b>cause:</b></p> <ul style="list-style-type: none"><li>▲ There is a foreign body in the valve</li><li>▲ Valve seal ring is damaged</li></ul>	<p><b>resolvent:</b></p> <ul style="list-style-type: none"><li>▲ Remove foreign bodies</li><li>▲ Replace the seal</li></ul>
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### **Fault phenomenon 8**

The machine is shut down

<p><b>cause:</b></p> <ul style="list-style-type: none"><li>▲ The overload protector of the motor trips</li><li>▲ blown fuse</li></ul>	<p><b>resolvent:</b></p> <ul style="list-style-type: none"><li>▲ Open the door of the electrical box and reset the tripping overload protector</li><li>▲ Replace the fuse of the same type</li></ul>
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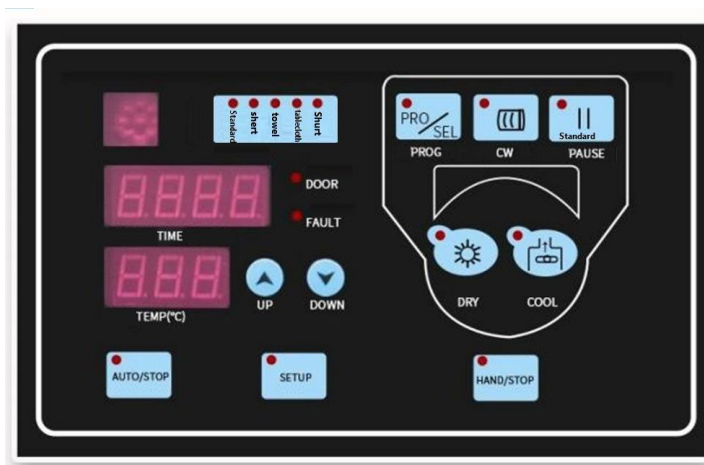
**Note! If the fault occurs again in a short period of time, compare the rated value on the motor nameplate with the setting of the overload protector, and recheck the current limiting value set by the overload protector.**

## Fault phenomenon 9

Motor noise is high

<p><b>cause:</b></p> <ul style="list-style-type: none"><li>▲ Bearing aging</li><li>▲ Motor noise</li></ul>	<p><b>resolvent:</b></p> <ul style="list-style-type: none"><li>▲ Replace the bearing</li><li>▲ Drive motor: Check the drive motor belt, if the belt is loose, the motor bearing will be damaged in a short period of time</li></ul>
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## I. Main button function Controller Description



### **(1) Automatic/stop key [AUTO/STOP]:**

- A. Press this key, the light is on, and the automatic program runs;
- b. Press the key again, the light goes out and the automatic program stops running;

### **(2) Set the key [SETUP]:**

The button is valid when the equipment is not in the stopped state. The function of the button is to switch the parameters of drying time, cooling time and drying temperature;

### **(3) ▲ [UP] and ▼[DOWN] keys:**

- A. After pressing the setup key [SETUP], when starting the setup

function, pressing the  $\Delta$  and  $\nabla$  keys can increase or decrease the settings value. Alternatively, holding down the  $\Delta$  and  $\nabla$  keys for a long time will automatically and quickly increase or decrease the value. B. When running effectively, if the run time is too short or too long, pressing the  $\Delta$  and  $\nabla$  keys can increase or decrease the run time (without changing the set parameters).

#### **(4) Manual key [HAND/STOP]:**

A. When the key is automatically valid, it is invalid. When the key is manually valid, the light is on, and manual operation can be performed by pressing the drying key and the fan key; when the manual key is pressed again, the light is off, and manual operation is withdrawn

#### **(5) Drying key [DRY]:**

A. It is valid when the manual lamp is on, and invalid when automatic operation and setting are valid;

b. When the LED light on the drying key is on, the forward and reverse operation will run in a cycle for the following time and the heating (temperature control) and fan will be opened:

**25 seconds positive and 5 seconds stop and and 25 seconds anti and 5 seconds stop**

Cycle Operation ,Open Heat and Fan

#### **(6) Program PROG selection key [PRO/SEL]:**

- a、 It is valid when stopped. Select the automatic operation program.
- b、 By pressing this key, you can select five automatic running programs:

standard, sheet, towel, tablecloth and shirt. Different programs can be set to different parameters through automatic Settings.

**(7) Unidirectional CW key:**

- a、 The LED light of the key is not on by default: the device will run in both directions
- b、 When the LED light is on, the device runs without forward or reverse rotation, but only one-way rotation.

**(8) Pause the [APUSE] key:**

- a、 The LED light of the key is not on by default,
- b、 During the operation of the equipment, the LED light is on and the drum rotation is paused when this key is pressed
- c、 When the drum stops rotating, pressing this key again will turn off the LED light and the drum will return to normal rotation.

**(9) The COOL [COOL] key**

- A. In the manual operation state, press this key to start the cooling function and the heating does not work
- B. Then press the key to turn off the light and turn off the cooling function

2、 Automatic operation [parameter Settings]

- a、 When the machine is in the stopped state, press the PROG selection key [PRO/SEL] to select any of the following five automatic running programs: standard, sheet, towel, tablecloth and shirt. Modify and save

the three parameters "drying time", "drying temperature" and "cooling time" in the program;

b、 Enter parameter modification by pressing the set key: press the set key, the set light is on, and the digital tube displays "XX-H", enter the drying time setting, adjust the drying time by pressing the  $\Delta$  and  $\nabla$  keys [the recommended drying time is about 40min];

c、 Press the set key again, the digital tube displays "XX-L" to enter the cooling time setting, press  $\Delta$  and  $\nabla$  keys to adjust the cooling time [the cooling time is generally recommended to be set 8-15min];

d、 Press the set button again, and the temperature digital tube flashes into the drying control temperature setting. Press  $\Delta$  and  $\nabla$  keys to adjust the drying temperature [the drying temperature is generally recommended to be set at 60-80°C].

e、 After completing the settings, press the set button to check if the time is correct. If there are any errors, you can reset them. The set parameters will be automatically saved in the selected program. You can save settings for five programs in sequence. It is recommended to save different drying temperatures, drying times, and cooling times for these five programs so that you can choose different programs for different fabrics later.

After the above five program parameters are set, in the use process, after the device is powered on, press the program key to select one of the five programs, and press the automatic key to execute the program.

### 3、 Manual operation [Parameter Settings]

a、 Under manual operation, only the drying temperature can be set, and the drying time and cooling time need to be stopped manually. Press the manual button (light on). Press the set button, the temperature digital tube flashes, press the  $\Delta$  and  $\nabla$  keys to adjust the control temperature, press the set button again to exit the manual temperature setting.

#### b、 Manual operation steps

1、 Press the manual key [HAND/STOP]

2、 Press the dry button [DRY]

3、 Press the COOL [COOL] key

There is no absolute value for the three variable parameters of "drying time", "drying temperature" and "cooling time" in both manual and automatic operation. Customers can adjust them according to the different conditions of the items to be dried.

The following is a reference data, which can be adjusted appropriately

Programme mode	Drying time (minute)	Cooling-off time (minute)	Controlled temperature (°C)
Standard	55	10	58
Sheet	60	12	60
Towel	50	9	55
Tablecloth	40	7	48
Underclothes	45	8	50

**Special reminder:**

**1、 When wiring the machine, you must pay attention to the forward and reverse rotation of the motor. The motor line is consistent with the indicator arrow. If the motor reverses, you can swap any two live wires.**

**2、 The exhaust port must be smooth, the velvet must be cleaned in time, and the drying must be cooled every time**

**If you have any other questions during the use, please contact the business personnel in time.**

