

# Operating Instruction

## IRONING TABLE MODEL:TDZG-Q3

Before operating this oven,

Please read these instructions completely.

## Overview

Piano type ironing table is the one widely used for the ironing and repair ironing of various type finished dresses, in particular, the light and thin toilets. The ironing tables of our company have stable and reliable quality, attractive appearance, excellent performance, easy operation, wide varieties of accessories, broad applicability and low price, which enable our products to win extensive welcome and recognition. The newly developed TDZG-Q3 piano type ironing table with boiler (see Figure 1 and 2) is the new energy saving ironing table basing on the original TDZG-Q3 piano type ironing table. The frame is provided independent electrically heated boiler inside to allow the electric heating steam iron to perform ironing on this table directly, without relying on other steam sources. This boiler is highly easy to purchase, install and use, especially suitable for the configuration of required processes of the production line, as well as for the individual consumer.

This ironing table has the following structural features and function settings:

1. The base frame is equipped with mopboard at the lower front to control the run or stop of suction fan inside the frame through holdTo-run control to achieve the dehumidification of floor or die head. This mopboard is easy to operate and control and saves energy.

2. The floor is equipped with air duct suction switch handle at the lower to expediently achieve the switch of floor/die head suction, reduce the unnecessary suction volume or regulate the suction volume and reduce the unnecessary power consumption.

3. The floor internal chamber is equipped with electric heating device to allow temperature setting between room temperature and 120℃ and automatic control over the heating temperature through the temperature controller at the right side of frame, keeping the floor inside, ironing felt and table cloth dry and ensuring the clothing ironing quality.

4. The frame is equipped with dedicated electric heating steam boiler inside to achieve fully automatic control over the steam pressure and water level and guarantee the steam pressure and steam volume required by the iron. In case the steam pressure is too high, the safety valve will discharge the steam automatically to avoid accidents caused by too high steam pressure. The pressure gauge is provided at the right of the frame to allow frequent monitoring over the operation conditions of the boiler.

5. This ironing table is equipped with electric heating steam iron. The iron bracket (stand) at the right side of floor is used to hold the iron and the spring

stay bar is used to support the steam hose and cable of iron. The steam supply solenoid valve is mounted at the back of frame. By using the inching switch on the iron handle, the user can control the solenoid valve to supply steam to the iron and then spray the steam to the clothing under ironing through the steam vent at the front part of the iron to facilitate the heating and shaping of clothing. As this ironing table is suitable for matching electric heating steam iron, it can fully satisfy and guarantee the post-finish process requirements of leveling, dehumidification, shaping, repair ironing and tidying of clothing, in particular, of suit-dresses.

6. This ironing table is also equipped with rotatable rocker arm and die head and dedicated lighting fixtures and telescopic lifting tool above to suspend the steam hose and cable of iron. There is a layer of racks under the floor to hold the clothing, which make the clothing and work-piece arrangement more convenient during ironing table operation.

This ironing table is supplied by single-phase 220V power. Where three-phase 380V power is required, the user should indicate this in the order. In addition, the daylight lamp, bracket and spring scale lifting tool at the upper part are optional.

Figure 1 TDZG-Q III piano type ironing table with boiler (front)

Figure 2 TDZG-Q III piano type ironing table with boiler (back)

### **Main Technical Parameters**

Floor dimensions (mm):	400×1200
Floor height (mm):	930
Floor electric heating tube power (W):	1300
Die head electric heating tube power (W):	350
Boiler electric heating tube power (W):	3000
Boiler feed water pump power (W):	370
Lighting power (W):	40
Suction motor power (W):	550
Suction pressure (Pa) :	<-150
Power voltage (V):	Single-phase 220V
Rated pressure of boiler (MPa):	0.4
Boiler steam output (kg/h):	4.5
Excessive high water level capacity (L):	5.4
Overall dimensions (mm):	1560×575×1900
Total weight (kg):	~ 105

## Installation Instructions

1. After unpacking, the user should count the attached parts according to the packing list before installation.

The electric heating steam iron should be purchased by the user; where iron, lamp tube, spring scale lifting tool and bracket are required, it should be indicated in advance upon purchase.

2. After placing the ironing table in position, make the feet at the four corners of ironing table base frame level first, and adjust them to contact the ground if necessary. Secondly, mount the rest components in the following sequence (refer to Figure 1 and 2).

a. Cling the castings of lamp tube and lifting tool bracket to the right end of ironing table, fit the castings to the right end through bolts first, and then fit the double ears at lower end of bracket pillar to the right end plate according to the height of lamp tube. There are 4 height gears available. In the end, tighten the set screw of hand wheel (handle knob) to fix it. After installation, connect the power plug to the outlet at right end (refer to 16 of Figure 1).

b. Insert the die head and rocker arm components into the rocker arm support and suction tube at the back of ironing table (refer to 4 of Figure 2) and make them rotate freely. And then connect the die head heating power plug to the die head heating power outlet (refer to 6 of Figure 2) at the back.

c. Screw the thread end of round steel stay bar of spring stay bar components in the nut at the rear right corner of iron stand (refer to 11 of Figure 1), lock it with the nut to prevent the stay bar getting loose and then fit the spring stay bar over the round steel stay bar.

d. Connect the electric heating steam iron power cable with the wiring pile crown of dedicated plug. Please note: **the connection of each cable end and plug must be made according to the position and number indicated in the electrical schematic diagram!** Then connect the plug and outlet (refer to 7 of Figure 2). And then fit the union of iron steam supply hose and boiler steam discharging solenoid valve (refer to 5 of Figure 2) and lock them with anchor ear to prevent steam leakage or falling.

e. Finally, connect the power cable (refer to 17 of Figure 1) to the outlet under the isolating switch (the isolating switch and outlet should be supplied by the user and the capacity should not be less than 15A).

Debugging and sequential normal use are allowed after the above installation finishes.

## Use Method

The ironing table frame is equipped with operating panel (refer to 14 of Figure 1). The main power switch is on the top right corner of the panel, and to the left are three indicator lamps which in turn are for: fan running, boiler feed water pump running and boiler heating. The switches and fuses at the lower of panel from the left to the right are: suction fan power switch, boiler heating power switch, electric iron heating power switch and fuse. The following is the description of specific operating method and electrical schematic diagram (refer to Figure 3):

1. After mounting the ironing table, connect the power cable plug and outlet and supply the power. At the same time, connect the boiler water source (to the connecting pipe port at the lower right corner of ironing table back, refer to 12 of Figure 2). It's allowed to connect one section of hose to take water from the plastic tank---it's better to use softened water.

2. Turn on the main switch QF, connect the power and get ready to start.

3. Turn on the power switch AK1 (indicated by candle flame on the panel) of the electrically heated boiler and the indicator lamp inside will be on. Start the feed pump M2 to feed water to the boiler and then the indicator lamp HL1 marked with water faucet will be on to indicate the pump is running and feeding water to the boiler. When the water reaches the normal water level, the level controller will switch on the heating circuit, the indicator lamp marked with candle flame will be on and the contactor KM1 will be powered on to make the electric heating tube EH to heat and the water inside the boiler will be heated until steam is generated. When the pressure reaches 0.4MPa, the pressure controller PK will cut off the heating circuit automatically and the steam pressure will not increase any more. At this point, the steam can be supplied to the electric heating steam iron to allow ironing operation.

When the steam pressure drops to a certain level, the pressure controller PK will switch on the heating circuit to reheat and maintain the steam pressure around 0.4MPa to guarantee the steam supply quality without intended care. In general, it's sufficient to monitor the pressure gauge (refer to 15 of Figure 1) at the left of frame frequently.

4. Turn on the power switch AK2 of electric heating steam iron (iron is marked on the panel) and then the indicator lamp inside will be on to indicate the iron is powered on and heating and the ironing can start.

The iron panel is provided temperature switch (knob). Turn this knob to the proper position according to the metal features of clothing to be ironed and the required ironing temperature and then the iron will maintain the proper

operation temperature. When the iron requires steam spraying for ironing or shaping, press the inching switch at the front end of iron handle, and the switch will activate the steam solenoid valve YK2 (refer to 10 of Figure 1 and 5 of Figure 2) to make the steam flow to the iron from the boiler for spraying.

5. Where the clothing should be ironed on the floor or die head, close the suction fan power switch AK3 (marked with fan volute on the panel) first, and then touch the suction fan inching mopboard (refer to 9 of Figure 1) on the base frame by foot slightly to start the suction fan (M1) and generate suction force to remove the wet vapor and discharge the vapor through the air exit (refer to 10 of Figure 2) at the back of frame. When the mopboard is not touched any more, the fan will be powered off and stop to save energy.

6. This ironing table is provided with electric heating tube under the working floor. After powered on, the electric heating tube will keep the ironing felt and table cloth dry, in favor of maintaining certain temperature of clothing under ironing. Together with the heating of iron, the best ironing effect can be achieved. The left of frame is equipped with high quality TS-120S type temperature controller (refer to 13 of Figure 1). Turn the temperature knob to the required scale, and the temperature controller will keep the corresponding temperature automatically for steady operation. This temperature controller allows any setting of floor operating temperature below 120°C.

7. A handle (refer to 12 of Figure 1) to switch the flap is provided at the right lower corner of working floor. Turning this handle will switch working floor suction or die head suction to make the location requiring suction get sufficient suction force while the location that does not require suction will not suck to waste the fan capacity, which consequently saves more energy.

8. The electrically heated boiler inside this ironing table frame is under fully automatic operation, namely, a. The pressure controller PK will control the working pressure of boiler around 0.4MPa automatically (the pressure was set to 0.37 ~ 0.4MPa upon delivery). When the pressure increases to 0.4MPa, the heating power will be cut off to prevent over-pressure. When the pressure drops to 0.37 ~ 0.38MPa, the heating power will be connected to continue heating and generating steam. b. In addition, the boiler is equipped with safety valve, which will discharge the steam automatically to prevent over-pressure when the steam pressure reaches 0.43MPa due to unexpected reasons. c. It's sufficient to monitor the pressure gauge on the frame frequently during operation. d. The boiler water level will be maintained between the maximum and minimum safe water level for continuous normal operation without reaching full water level due to too high water level or water shortage due to too low water level. Besides, the water level controller YK will disable heating upon

water supply and disable water supply upon heating. e. Pay attention to the water source or water supply tank for water break during boiler operation. The water supplied to the boiler must be softened water subjected to treatment. Where the water supplied to the boiler is tap water with dosing treatment, it must meet the following criteria:

Turbidity / FTU	Hardness/(mmol/L)	pH (25℃)	Oil/(mg/L)
≤20.0	≤4.0	7.0~10.0	≤2.0

f. Each time after use, wait the steam pressure drops to be ≤0.1MPa, stop monitoring the pressure and stop the boiler for the next use. Alternatively, discharge the water inside the boiler through the drainage valve (refer to 9 of Figure 2).

9. Turn the switch flap (refer to 12 of Figure 1) to die head position with die head running, then the floor section will stop suction while the die head suction will be enhanced, in favor of die head operation (the die head is normally open, namely, the die head will suck as well even the flap is turned to floor suction position, however, the suction force will be weak).

### Maintenance and Precautions

1. The floor and die head are covered with sponge and floor cloth which cannot be knocked; do not place heavy goods on them; do not place objects with burr on them; do not place hot iron on them so as to prevent burning the floor cloth and sponge.

2. Never allow the electric heating tube under the floor and die head powered on and heating without starting the suction fan for ironing; otherwise, the ironing felt may be damaged and even result in other hazards.

3. After use, cut off the power and disconnect the main switch to prevent unexpected hazards and damage.

4. The dust, fiber flocculation, steam, high temperature and water accumulation which may get the internal chamber of ironing table polluted, corroded and aged should be removed periodically. The ironing felt and floor cloth should be replaced in time according to the aging degree.

5. The water supplied to the boiler must be softened water or distilled water subjected to treatment. Do not use tapping pipe as water supply directly; otherwise, too high tap water pressure will cause too high water level inside the boiler body and even full water. Where tap water is used as water source, add dedicated softening agent to the water. For the specific dose and method, refer to the operating instructions of softening agent.

6. Clean the boiler internal chamber and water level probe with detergent and remove the scale periodically. According to the operation instructions of

detergent, prepare solution in a bucket, feed the solution to the boiler through feed pump, heat it properly and then cut off the power and settle for 2h to allow the scale to dissolve and fall. Then open the drainage valve to discharge the sewage and clean the boiler with clean water for several times to restore the original state.

7. The boiler water level probe is the sensitive element of water level control system. If the probe surface is covered with scale, it will result in malfunction of water level control. Therefore, it's necessary to clean the probe surface periodically. Do not mistake the position and wiring joints of probe during removal and installation.

8. The frame is equipped with boiler feed pump inside. There should be no air inside the water pump and supply pipe forming "air chamber" at any time. Discharge the air through opening the water pump discharging switch (valve) (refer to 11 of Figure 2) where necessary. If the water is supplied through bucket, the bucket should be above the water pump and the water should be replenished in time.

### **Constant Faults and Solution**

Fault Description	Fault Cause	Solution
Power switch is on while the indicator lamp is not on	The power is not connected No power supply after main switch is turned on Blown FUSE Damage of indicator lamp inside the switch Indicator lamp damage	Check the power and confirm it's switched on Operate the main switch repeatedly or check and repair Replace the fuse Replace the switch or indicator lamp Replace the indicator lamp
Suction fan not rotate	Poor contact of switch Poor contact of inching switch Motor malfunction	Replace the switch Adjust the position of mopboard and travel switch or replace the travel switch Repair or replace the motor
Weak suction force	Wrong position of switch flap Impeller malfunction	Use the flap correctly or repair it Clean or replace the impeller



Floor and die head electric heating tube not hot or adjustment malfunction	Temperature controller malfunction Electric heating tube damage	Check and repair the temperature controller or replace it Replace the electric heating tube
Boiler steam pressure not increase	Pressure controller malfunction Clogging of pressure controller connecting pipe Electric heating tube damage AC contactor malfunction	Service or replace Remove and clean it Replace it Repair or replace
Abnormal discharge of safety valve	Improper adjustment Foreign body attached to the valve flap Safety valve malfunction	Re-adjust Disassemble and clean it Service or replace
Drainage valve cannot operate	Clogging of pipeline by foreign body Handle looseness Sticky due to long time out of use Sealing element damage	Remove and clean it Service or replace Dismount, clean and service Replace the valve