

# **MANUAL**

Of Portable Dental  
Suction System

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# DIRECTORY

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## 1、 Overview

Thank you for purchasing the foshan Philippine medical portable dental suction system, the product is our company launched a dental equipment, in order to you can as soon as possible familiar with this product, please read this instruction manual.

### 1.1 contents of the operation manual

This manual includes an overview of the operating instructions, maintenance and precautions of the portable dental suction system. You can view the relevant content as needed and get help.

### 1.2 crystal structure and composition

The portable dental suction system consists of air pump, filter, air - liquid separation device and control switch.

### 1.3 scope of application

The portable dental suction system is suitable for assisting saliva aspiration during dental treatment.

### 1.4 safety information

#### 1.4.1 power safety

- the power supply in the operating environment of this product must have a good grounding device and ensure a good grounding of this product.
- before electrifying this product, please confirm that the power you provide can meet the input power information identified near the power input port of this product.
- do not share sockets with other electrical appliances in case of damage to the product due to unstable voltage.
- when maintaining/repairing or cleaning this product, please be sure to cut off the power supply to ensure that the product is completely powered off before operation.
- regularly check whether the power cord is damaged and confirm that it is not compressed by other items.

#### 1.4.2 product cleaning

Please keep this product clean. Before cleaning this product, please disconnect the power supply, rub the outer surface of the product with neutral detergent and then clean it with damp soft cloth.

Caution: do not use liquid or inflammable detergent warning: do not damage the power cord when moving this product.

#### 1.4.3 other security information

1.4.3.1 "caution" and "warning" contain important information about safe operation and use of the equipment. Please do not operate the equipment until you have read and understood the instructions. If you do not understand the hazards, precautions, warnings and instructions of operation before using the equipment, please contact the manufacturer or the authorized service provider to avoid any harm.

When using this electrical equipment, the safety rules must be followed, including the following:

- 1) the power switch is not safety power switch, the power plug is the safety of the power device, is intended to set isolation method, so you must guarantee to the operation of the power plug from the wall outlet set aside) convenient.

**Note:**in order to avoid the danger of electric shock, only one power cord with protective grounding is connected to each other. Incorrect grounding plug will cause the risk of electric shock.

- 2) only trained and skilled medical personnel can operate the equipment. Improper use will bring serious personal injury.
- 3) it is not allowed to be used together with inflammable and explosive materials.
- 4) under the following circumstances, please do not use the equipment, and do not open the equipment or replace the parts without permission. Only the manufacturer or the authorized service provider can repair it.
  - the power plug wire is damaged.
  - the equipment cannot work normally.
  - the equipment was damaged.
  - water inlet of the equipment.
  - the operation of the equipment is loud or has sharp and piercing sound, the output air is overheated, and the smell is unpleasant. Circuit diagram, parts list, product introduction, operation manual, technical specification and other useful information, etc. shall be provided when the technical personnel of the authorized service provider repair.
- 5) the operator should unplug the power when leaving.
- 6) do not use and store equipment outside the specified environmental requirements.
- 7) in order to avoid damage to machinery and electrical equipment, the attachment shall be strictly prevented from falling.
- 8) in order not to affect the operation, the power cord shall not fall off during the treatment and the safety of the power cord shall be ensured.
- 9) please use the attachment recommended by the manual.
- 10) install the equipment in a ventilated and dry place.

#### 1.4.3.2 periodic safety inspection

Clean the power cord at least once a year. Too much dust can cause a fire on the power plug.

The following items are inspected at least once a year by personnel with relevant knowledge, experience or training:

- check the mechanical and functional status of equipment and accessories.
- check whether the label related to security is clear.
- check whether the fuse conforms to rated current and fuse characteristics.
- check whether the performance of the equipment conforms to the description of the specification.

Fill in the test data in the equipment operation diary. If the above experiment fails or the equipment cannot work normally, the equipment must be repaired.

#### 1.5 product information

Product name: dental electric suction machine. Product model: fm-xx

## 2、 Technical Parameters:

1. Model:
2. Input power: 220V / 50HZ110V / 60HZ
3. Power: 280W
4. Current: 2,0a
5. Output power:
- 6.Noise: less than or equal to 50dB
7. Maximum vacuum: -110nbar
- 8.ambient temperature: 5c-40 "C
9. Gross weight: 23kg
10. Package size: 48x44x84cm

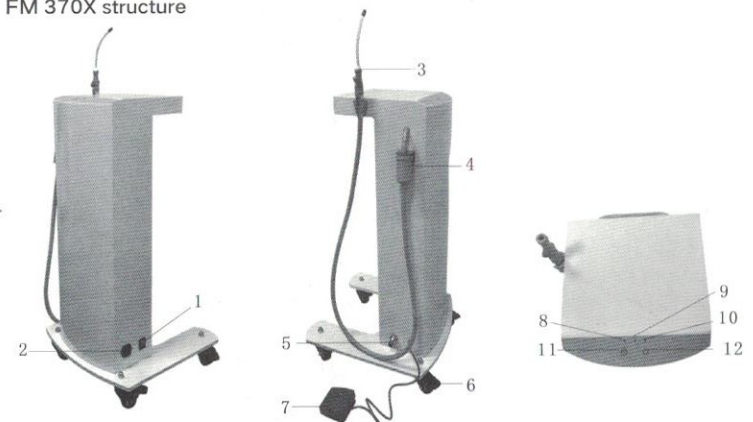
▲ Note: please use the unit in strict accordance with the specified power supply voltage, because unstable voltage will cause damage to the suction machine.

## 3、 Directions for use

- 1.Plug in the power and turn on the "1" power switch
  - 2.Press the start button or use the pedal switch to work
  - 3.The equipment has its own sewage storage container, and it is recommended to empty the sewage and discharge key on the equipment before work every day
- The machine with excessive waste water saving will automatically alarm and stop working, and it will still be used normally after emptying

## 4、 Structure and working principle

### 4.1 FM 370X structure



1. The power switch	2. Power cord socket	3. The absorption of salivary handle	4. The filter
5. outlet	6.thousand wheel	7. Foot switch	8. Work indicator light
9. Standby light	10. Water level limit indicator	11. Start button	12.Blowdown buttons



4.2 the whole machine working principle: after turning on the power supply, portable dental suction system of salivary absorption from the shelf, the suction machine suction startup, the foreign body and discharge through the attractor in the patient's mouth to the filter, the filter will be drawn from the mouth of the solid and dirty blood, secretions, separation, JiCun (should be cleaned regularly on the solid particles in the filter). Dirty blood, secretions, after separation into the accumulated dirt inside the bottle, by gas liquid separator will be dirty blood, secretions and air separation, dirty blood, secretions, retained within the drainage bottle, to ensure clean air into the vortex air pump, ensure the pump impeller from corrosion damage. When the sewage in the sludge bottle reaches a certain height, the suction system will stop automatically and no suction will be generated. The sewage in the sludge bottle should be emptied and the suction system should be started again.

### 5、Installation And Debugging

5.1 operating environment requirements:

Ambient temperature: 10 °C, 40 °C

Relative humidity: less than or equal to 80%

Atmospheric pressure: 500hpa-1060hpa

5.2 power installation:

5.2.1 plug the power cord of the portable dental suction system into a power socket with a ground wire. (the power supply voltage shall be consistent with the marked voltage of the device nameplate)

5.2.2 turn on the power, turn on the main power switch, and the power indicator light will be on, indicating that the power supply is normal and the equipment can work normally. 5.3 debugging:

5.3.1 saliva suction switch: turn on the power supply, turn on the main power switch, press the start key or use the foot control switch, and the suction system starts to work.

5.3.2 automatic shutdown: turn on the power, turn on the main power switch, pick up the I siphon from the hanger frame, and draw water (about 3L). When the fouling bottle is full, the system automatically beeps and alarms to stop working.

5.3.3 sewage discharge: when the pollutant storage bottle is full, the equipment will stop automatically. Open the sewage discharge switch according to the prompt label and empty the pollutant storage bottle.

### Maintenance and maintenance

Regular maintenance and maintenance of equipment can effectively reduce the occurrence of failure and keep your equipment in good condition Good working condition, extend service life, when cleaning and maintenance, operators must wear masks and waterproof gloves to operate.

6.1 after each use, in order to avoid bad smell and reduce the possibility of infection, a glass of water should be inhaled after the completion of treatment. 6.2 in order to avoid bad smell and reduce the possibility of infection after a day's use, non-foaming detergent and disinfectant should be used to clean the equipment pipeline.

6.3 clean the particles or debris in the filter at least twice a month to avoid the reduction of suction.

### 6、Fault Analysis And Elimination

No	problem	cause	solution
1	Machine not running	The power is not connected,the power connection is not correct or the power supply problem	Check the main power and fuse
2	The noise is big	Solid particles or debris enter the equipment motor	Disassemble the motor and clean the impeller
3	Vibration is big	Motor impeller damaged or impeller dirty	Disassemble the motor and clean the impeller
4	The machine is overheating	The voltage is too low and the inlet is blocked	Clean the filter and check all lines, hoses and joints
5	Suction reduced	The air inlet is blocked and the pipeline leaks	Clean the filter and check all lines, hoses and joints
6	Motor overload	The voltage is too low	Check the power voltage and power line specifications