

# ATO

Fume Extractor

## Fume Extractor User Manual

ATO-FE-C100/C200 series



## 1. Use of knowledge

Thank you for buying ATO fume extractor, indicating that your understanding of environmental protection and contribution to a higher level. Please pay attention to the following items when using:

### Security rules

This product is prohibited in high temperature, high humidity, storage or use of flammable, explosive and strong electromagnetic environment.

Do not use a long time, should disconnect the power switch is in the closed state machine.

The product within a high pressure, non professional personnel are prohibited from disassembly and maintenance.

The forbidden access to the high-speed rotation of the impeller by hand or object, so as to avoid mechanical damage.

### Use attention

1. The distance between the smoking hood and the smoke producing point directly affects the effect of smoking. Many tests show that it is appropriate to keep distance in 10-15cm.
2. The flow rate of the air around the smoking hood is fast, which leads to the worse effect of smoking. The fan gear needs to be reduced or

closed.

3. The longer the length of the smoking pipe, the weaker the smoking effect.

The more corners of the smoking pipe, the worse the smoking effect.

Suggestion: as far as possible to reduce the pipe bending, if the bend can not be avoided, and as much as possible to increase the amplitude of the bending.

4. Air volume regulation

According to the size of the smoke, adjust the knob to ensure that the smoke and dust can be fully inhaled as appropriate, and not necessarily to the maximum air volume. Otherwise, it not only increases the noise, but also reduces the filtering effect.

Filter core replacement

The product relies on all kinds of filter core components to filter the smoke, odor and toxic substances. Therefore, the filter core component to eliminate the consumables, with the amount of saturation, should be replaced regularly.

Filter life: primary filter 7 ~ 30 days, intermediate filter 3 ~ 6 months, advanced filter 6 ~ 12 months.

The amount of pollution generated by the different places are different,

so the replacement cycle depending on the actual situation to prevail! Please use the filter core components produced by the original factory. I would like to invite you to pay special attention to the use and maintenance of the equipment according to the above rules, and regularly replace the filter element assembly. Otherwise, the suction will be smaller, the equipment will be damaged, the filter core will be scrapped in advance, and the pollution and injury to human body and environment, and safety accidents will not be responsible for us.

## Packing list

After opening the packing box to remove the machine, please check if the following accessories are missing or damaged. If any lack or damage is found, please contact our customer consulting service center or distributor.

Name	Quantity	Spec	Note
Mainframe of purifier	1PCS	AT0-FE-C100/C200	
External power line	1 PCS	L1. 5m	
Slub smoking tube	1PCS	caliber $\phi$ 75mmxL1. 4m	C200 The model is 2
Smoke collecting cover	1 PCS	$\phi$ 75mmInterface	C200 The model is 2

Instructions	1 PCS		
Warranty card	1 PCS	CX01	Installed in high efficiency filter core
First effect filter cotton	1 PCS	ZX01	Installed in high efficiency filter core
Medium effect filter core	1 PCS	GX01	

### Remarks:

1. Smoking pipe standard for smoking of bamboo type 75mm\*L1.4m tube, can according to customer requirements

The bamboo tube or other type of smoking 55mm\*L1.3m tube length can be changed.

2. The smoke hood is marked with a silica gel horn, and other types of smoking cover can be configured according to the requirements of the customer.

3. Mobile casters can be selected

4. Air volume regulating valve selection and fittings

This product color may have a variety of forms, the specification can be used.

## 2. Product overview

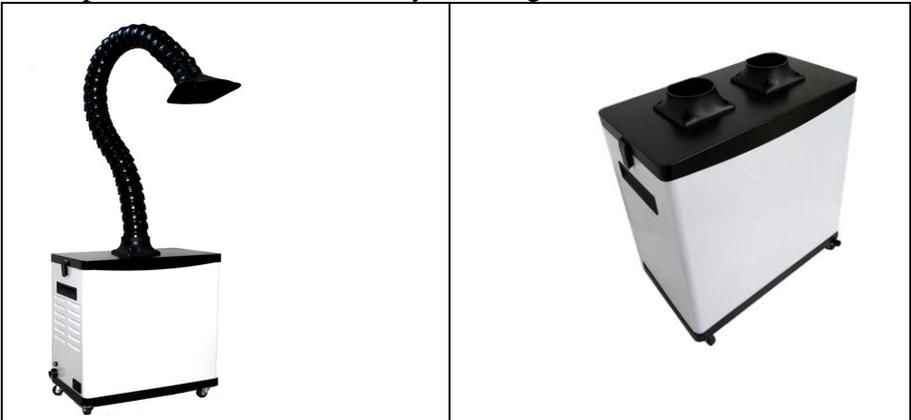
ATO-FE-C100/C200 series of dust purifier is our company's first research and development of production, representing the industry high-end level, leading the smoke and dust purification industry benchmarking products.

Purification has good filtering effect due to the soldering tin, tin tin dipping, laser marking, laser medical cosmetology, moxibustion and chemical experiment, a small amount of dust, smoke places smell, toxic and harmful gases. The product is suitable for point to point to

absorb pollutants.

Working on these occasions, there will be a large number of harmful smoke, gas and materials that are harmful to the human body. For example, the most common use of soldering, in different materials, different additives and different welding temperature will produce different toxins and carcinogens are moderate. This series of purification equipment is the first choice to protect the health of the operator.

The product adopts multi-layer filtration device, including initial effect filter, medium efficiency and high efficiency filter element (composed of HEPA efficient filtration part and gas filtration part). It can make stepless precise adjustment of air volume according to the amount of pollutant production. It can effectively filter and intercept contaminated particles on 0.5 micron m and absorb toxic gases, and the rate of filtration and purification can reach 99.99%. The clean air after purification can be directly discharged indoors.



<p>C100 single station Suitable for single station, filter solder, laser marking smoke. The fuselage is light and easy to move. It can be used without installation and takes up small space.</p>	<p>C200 double station It can be used at two workplaces at the same time to filter solder and laser marking smoke. Light body, no need to install can be used, occupying a small space.</p>
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### 3. Product Characteristics

#### 1. Appearance and structure

The appearance of simple and elegant, sedate and elegant. The integrated design of the fuselage adopts the metal frame structure and the high quality cold rolled steel plate electrostatic spray technology, which is durable and durable.

Simple, economical and practical.

The handle is installed on the two sides of high-quality plastic, feels smooth, stable and reliable, easy to handle.

The inlet flange shape curve of unique design, more in line with the principle of fluid dynamics.

Humanization of stepless speed - installation, adjustable air volume and the size of the suction.

The product has the advantages of small volume, no installation, is conducive to the work space clean and beautiful, easy to move.

#### 2. Fan

It adopts German brushless motor with built-in controller, form, performance, quality is guaranteed.

The stable operation, low noise, high efficiency, low energy consumption, long working time. There is no need for regular maintenance and lower cost.

The wind wheel adopts vortex to design, special alloy material,

effectively prevent the corrosion of the wind wheel. The unique dynamic balance correction technology makes the running of the wind wheel more stable and reliable. High wind, large suction, and higher filtration rate.

### 3. Filter system

It adopts four filter design. Layer by layer filter to ensure that the harmful smoke and dust are filtered more thoroughly. The purification rate is up to 99.99%.

The modular design, the layers of protection. The initial, middle and high efficiency can be replaced separately, the filter core service life is longer, and the replacement cost is lower.

The unique internal sealing structure, sealing material in addition to the special, the harmful substances can be all through the filtering system, filtering efficiency is higher.

The built-in circulating active filter, avoid the interior cooling / heating from outside, the temperature and humidity of the environment does not destroy the operation range.

### 4. Smoke collecting device

The machine with universal smoking arm, free to change, location (the length can be customized according to customer requirements). The end is equipped with a new type of smoke collecting cover, which is unique in shape and more efficient in smoking.

The installation is simple, easy to use, without additional laying pipeline.

### 5. Safety certification and design standards, national patents

We meet **CE, UL, WHO certification**, safe and reliable.

It depends on the design standards: indoor air quality standards, GB21551.1- 2008, GB/T 18801.

The design patent and the structure of the utility model patent counterfeiting promulgated by the state.

## Specification parameters

Model Parameters	C100 single station	C200 double station
Inlet air interface	∅ 75mm	∅ 75mm*2
input voltage	110V 220V 50Hz-60Hz	110V 220V 50Hz-60Hz
Rated power	100W	200W
Wind speed	17m/s	2×12 m/s
Filtering effect	0.5 μ m 99.99%	0.5 μ m 99.99%
noise	<55dB	<60dB
Smoking tube (marking)	∅ 75mm*L1.4M	∅ 75mm*L1.4M
Air volume	260m <sup>3</sup> /h	380m <sup>3</sup> /h
Fuselage size (mm)	W420×T240×H450	W420×T240×H480
Fuselage weight (no smoking arm)	17kg	19kg

Note:

1. the type, length and size of the smoking tube can be provided according to the requirements of the customer.
2. C200 models can also be replaced with single inlet.

## 4. Appearance structure and working principle



4.1 ATO-FE-C100

4.2 ATO-FE-C200

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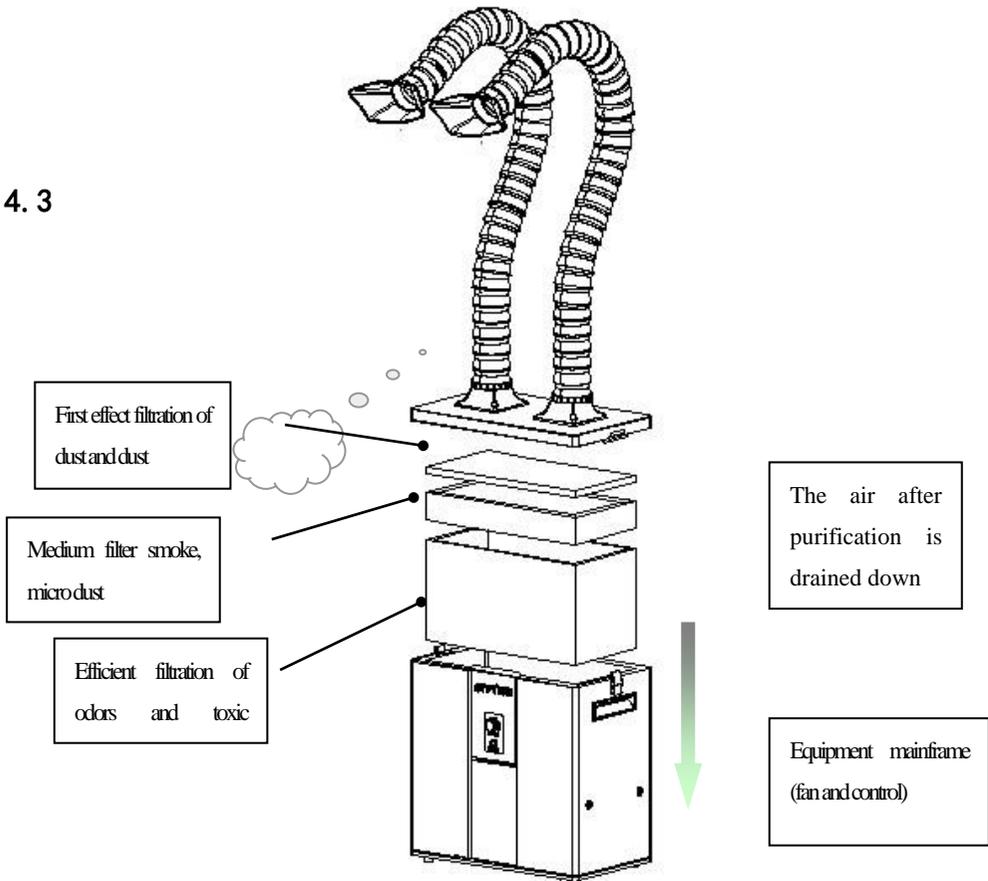
Fume Extractor



The principle of ATO Fume Extractor

The purification equipment adopts physical active purification and filtration, and is in vortex centrifugal fan. After purifying by multilayer filter, clean air is discharged directly indoors.

### 4.3



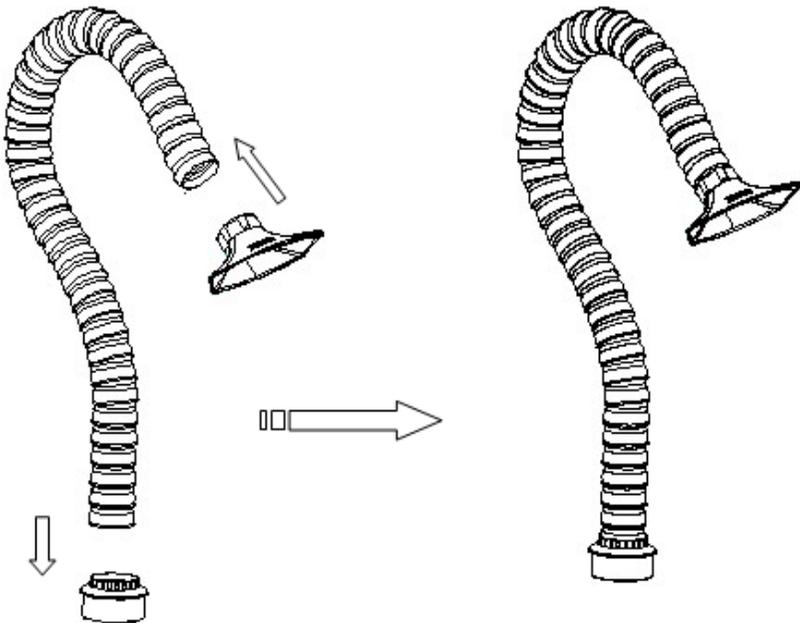
## 5. Instructions for operation and use

Open the packing box, first remove the smoking pipe on both sides of the packaging bag (with the 75mm index of bamboo, and then remove the front tube) placed at the beginning of the effect of cotton bags, and finally put forward the cleaner body.

### 5.1 assembly of smoking tube

A. cigarette bag contains the following parts: slub pipe, slub joint, trumpet cover

The above parts are connected according to the following diagram:



Bamboo tube groove to force the card into the bamboo joint, clicked, indicating the firm connection.

In addition of 75mm bamboo tube in accordance with the above

connection, other types of smoking pipe in the factory has been installed into the finished product, no need to connect.

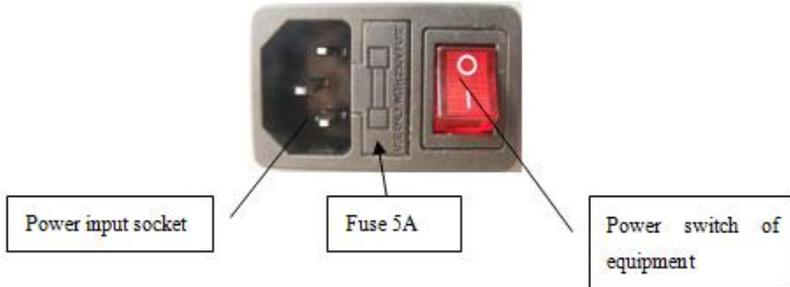
B. remove the purifier and place it on a flat surface or table (the machine with a foot wheel needs to lock the wheel brake) so as not to produce vibration.

C. inserts the slub pipe into the flange hole of the top of the machine; turns the tube body and points the hood to the smoke generating point.

\* Note: smoking pipe adjusting direction, try to keep the body gently curved horn; smoke hood with LOGO side, bell to being smoke, try to keep the distance within 20cm.

## 5.2 opening work

A. inserts the power line into the three in one socket on the back of the device, and the other end of the power outlet (AC110-220V 50-60Hz). Press the red switch, if the red light is on, the electricity is normal.



B. clockwise twists the knob on the operating panel, the green indicator lights up, and the machine starts to work.

If you continue to turn right, you will gradually increase the wind.

\* when working, the suction force can be adjusted to the appropriate size just smoke inhalation, instead of having to adjust to the maximum.

The greater the suction, the greater the noise and power consumption, and the filtering effect will be reduced



In the process of equipment work, it is strictly forbidden to cover the air inlet or outlet with the object. Otherwise, it will cause the machine to heat up at high speed, burn out the internal motor and circuit control board.

## 6. The replacement and maintenance of the filter device

Matters needing attention:

Because the purification equipment is mainly used in physical filtration, the filter is of rated saturation. When the equipment absorbs the rated saturation of the filter core, the filter core will clog and lose the purification function, and the new filter core must be replaced at this time.



### 6.1 filter core replacement judgment

The replacement cycles of various filter cores are recommended as follows (for reference only) on the basis of multiple test results when used in this equipment.

In the case of the following, it is basically considered that the filter core needs to be replaced.

Change characteristics of initial filter and medium effect filter core of A.

The suction of the equipment is weakened.

The filter is yellow or black, and the surface area has many particles.

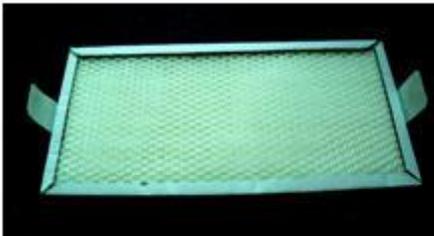
Regular replacement according to the cycle of working conditions.



Before use



After use



Before use



After use

## Change characteristics of B. high efficiency filter core

When the suction of the equipment is weakened and the smell of the outlet is serious, it is necessary to check whether the primary effect and medium efficiency filter core need to be replaced. If the new primary and secondary effect is changed, the suction is still small, so we need to replace the new efficient filter.

### 6.2 Filter core replacement operation steps

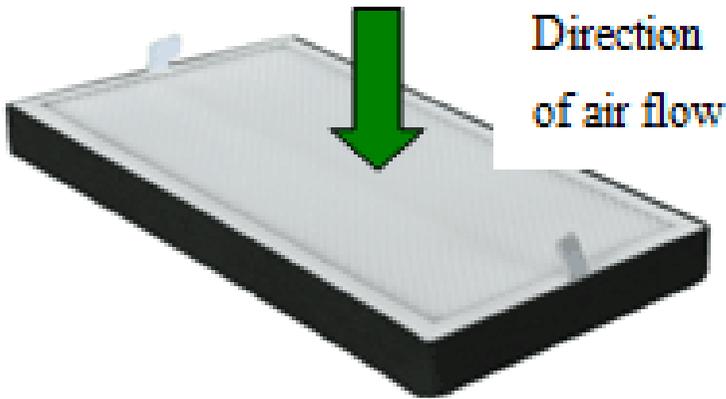
A. closes the equipment in the work, cuts off the external power supply, and unplug the smoking tube device.

B. pull up the buckle on both sides of the machine and take the upper cover.

Initial filtering cotton replacement:

Directly remove the old cotton, and put the new flattening in the high - efficiency filter core.

Medium effect filter core replacement:



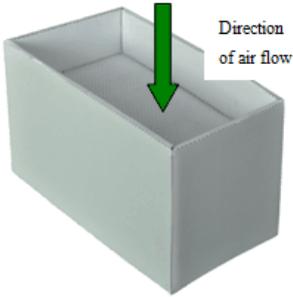
Hold the hand of the old medium filter core and pull it out slowly the high efficiency filter core.

The new medium efficiency filter flat slowly pressed into the efficient filter, with the beat to the bottom.

High efficiency filter core replacement:

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According to the above, remove the primary filtering effect of the filter cotton, the

If the pressure is too large, please press the lid and pull the button down, and you can not force it to pull down. The smoking tube is

inserted, the direction is adjusted according to the foregoing way, and then the machine is opened.

We must use the original filter, otherwise the resulting machine failure, the company shall not be responsible for!

The smoking arm to regularly clean (time, generally 1-2 months depending on the specific work environment).

The installation and disassembly of the filter, should be holding his hands around the border, slowly into and out, handling cannot be used when the head or hand on top of the filter inside, in order to avoid the media deformation or damage, affect the filtering effect.

## 7. Failure and maintenance



Because of the high pressure and strong current inside the equipment, please make sure to cut off the power first before checking and maintaining the equipment.

Non professional personnel, prohibit the dismantling of the equipment! So as not to cause a safety accident.

1. failure phenomenon: the system is still working, the noise is aggravating, but the air volume is weak, and the inhalation force is greatly reduced.

The reason may be: 1. The inlet or outlet is blocked

The filter core has reached saturation failure and formed blockage

Treatment: Turn off the power supply, open the top, check whether there is a foreign body plugging into the tuyere, and then check whether the tuyere is blocked.

If the inspection and treatment are not different, reopen the machine, if the air volume is small, then the filter core should be replaced.

2. Failure phenomenon: Immediately after the machine starts to turn off automatically, again open and repeat the above phenomenon

The reason may be: the internal airflow is not through, the filter core resistance is too large, leading to the fan starting current is too large, the system automatically protects the shutdown.

Processing method: Turn off the power supply, open the top cover, check whether there is foreign matter plugging into the air inlet. If there is no abnormal inspection and disposal, turn the air volume knob to the minimum, then restart the machine, and turn the knob to the right air volume position.

3. Fault phenomenon: The equipment is not working

The reason may be: 1. The power switch on the back of the machine is not open. 2. Fuse breaking in three in one switch

The knob of the operating panel is not opened in clockwise direction

Treatment: check whether the power line is plugged and the red switch on the back is pressed

If the red light on the back is bright, it indicates that the equipment is energized. Open the front knob again. If the green work indicator lights up, the device circuit is out of control. Please contact the manufacturer to deal with it at this time

If the back of the red light is not bright, take out the fuse in the three in one switch to see if it is burned.

If the fuse is broken, replace the spare fuse and turn on again.

If the above inspection and maintenance can not be troubleshooting, please contact the manufacturer or distributor

## 8. Selection of parts and consumables

Name	Mode 1	Explain	Pictures
First effect filter cotton	CN100-11	Mainly filter the larger particles and wool	
Medium effect filter core	CN100-12	Used to filter fine dust and smoke	
High efficiency filter core	CN100-13	It is used to filter the odor, toxic substances, two particles	
Winding tube	Ø50	The size, length and direction of the adjustable tube (without support, up to 1.5 meters long)	
Corrugated hose	Ø50	The maximum length of 4 times the length can be lengthened and flexed according to the needs	
Air flow regulating valve	Ø50 Ø75	It is easy to adjust the size of the air volume in a bamboo tube	
Trumpet smoking hood	Ø50 Ø75	Soft silica gel material, high temperature resistance, antistatic W190*H90mm Smoking size:	