

## 工业自动吸尘器

Automatic Vacuum Cleaner for Industry

专用进口无刷电机, 高负压, 吸力强

Special brushless motor driving, with high negative pressure and absorbing capacity

高效吸纳, 多级过滤, 除尘除味

Efficiency extraction, multi-filtration system for dust and odor removal

专为激光加工量身定制, 噪音低, 简便易用

Customized for laser processing, low noise and easy to use

颜值高, 性价比更高

With nice appearance, and higher cost performance

既适合工业用途, 也适合实验室、办公室使用

Suitable for industrial use, as well as laboratory and office use

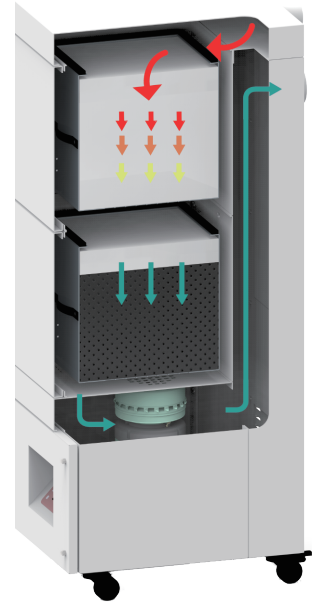


FIRST CLEANTECH  
弗斯特净化

## FIRST Vacuum Cleaner

Laser processing is used more and more widely in industrial fields. For metal or plastic parts welding, complex contours cutting, marking, engraving, cleaning and many other production processes, laser is playing an increasingly important role. Laser processing, through precise energy input and positioning, triggers thermal decomposition, flow, vaporization, melting, and sublimation of the molecular bonds of material processed. Some substances in the form of gas, odor or fume are released during the process, and some extremely fine dust is also released. Some of chemical components contained in these substances may cause harm to health of human beings. And it may also cause damage to machinery, products and working environment by building up firmly adhering layers of contamination. Thus, the extraction and filtration technology for laser processing faces demanding requirements. Laser processing equipment must be equipped with special vacuum system with high performance, which can filter extremely fine dust, gas and odor, in order to achieve triple protection of people, equipment and environment.

First vacuum cleaner is equipped with brushless high speed motor with high suction capacity, forming a high negative pressure environment. Under high negative pressure, the gas and dust generated during processing is accurately and efficiently collected and absorbed through the absorbing hood, pipe, and arm, etc., and then transferred from the pipeline to the filtration system. The filtration system is designed in different layers with prefilters and main filters. According to particle size of the pollutants, the multilayer filtering system retain pollutants contained in gases, fumes, and odors in the filters in different layers, effectively reducing the probability of filter plugging. And the purified air can be directly fed back into workshop or discharged to the outside, which effectively solves the air pollution problem in working environment. First vacuum cleaners are becoming an indispensable ideal partner for laser processing equipment.



### Application

- Laser processing (cutting, drilling, marking, welding, etc.)
- Dust and smoke removal during soldering
- Processing for various vacuum adsorption materials
- Other processes that require dust and odor removal



### Modular design, flexible configuration options

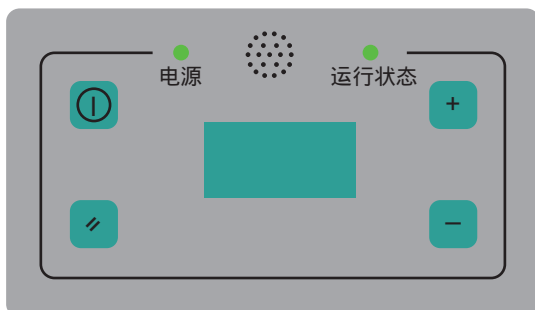
First vacuum cleaners have a variety of options for users depending on the power of absorption and air capacity. The product range extends from small movable vacuum cleaners for single workstation to high performance vacuum systems that can be used in automated or semi-automated production lines.

With modular design, users can flexibly choose different models and different specifications of filter elements to freely combine according to the needs of the application. The HEPA 13-level filter element is standard configuration, and the filtration efficiency of particles above 0.3 microns can reach 99.95%. Selection for different levels of HEPA high efficiency filter cartridges is available to meet different filtering needs. For example, HEPA 14-level filter cartridges can be selected to meet the requirements of dust-free environments.

For gaseous pollutants, physical adsorption is achieved through a standard activated carbon filter. Users can choose a zeolite material filter according to the characteristics of the pollutants. The chemical substances deposited on zeolite materials can react with specific gaseous substances to achieve chemical adsorption. The combination of physical and chemical adsorption, can more effectively remove harmful substances and odors in the gas, and better meet customers' needs for health protection.

### Display interface

- Start, standby status display;
- Real-time pressure display, over limit automatic warning;
- Performance setting and running time display;
- System warning and error information display;
- Delay shutdown setting;
- Filter saturation monitoring and warning;
- Customized function development.



### Easy operation and maintenance

First vacuum cleaner has castors so that it can be moved and locked easily and work at different place.

First vacuum cleaner has negative pressure detection and running time recording. It has filter life warning function. Users don't have to worry about filter oversaturation.

Tools-less filter change and maintenance:  
when the filter element needs to be cleaned or replaced, just open the side panel of the vacuum cleaner, directly remove the filter cartridge, clean up the dust or install a new filter cartridge. It requires no special skills or tools, simple and fast.

### Control port

Equipped with pressure sensor, real-time monitoring the negative pressure, taking into account the needs of different environments.

With remote control port, electronic control start/top, control instruction can be generated by host such as laser equipment; or directly integrated in the production line, controlled by MES system.

Real-time speed adjustment on different processing needs.

Precisely adjust the speed of blower with PWM to control the air volume.

Convenient electrical control system, simple and convenient signal acquisition and remote control.

### Energy saving and noise reduction

First vacuum cleaner is considerably designed on noise reducing.

It is equipped with energy-saving and noise reducing motor to reduce energy consumption and lower noise. The motor is separated in an individual module, which not only ensures the hermetic seal of the equipment, improves the efficiency of dust and odor removal, but also helps control noise at a lower level.

First vacuum cleaner, keep you away from air pollution, at the same time, keep you away from noise pollution. It is suitable not only for workshop, but also suitable for laboratories, offices and other environments.

Technical Data	FCT220	FCT220-Pro	FCT350-Pro	FCT220D	FCT HF750
Air flow (m³/h)	220	220	350	440	750
Pressure(Pa)	27000	27000	22000	27000	3000
Voltage (V)	220	220	220	220	220
Rated power	1.3	1.3	1.8	2*1.3	0.35
Noice(db)	<67	<67	<70	<70	<60
Filtration efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
HEPA filter size (mm)	305*305*200	305*305*300			305*305*200
Activated carbon filter(mm)	305*305*100	305*305*300			305*305*100
Air inlet size(mm)	50	50	50	50	50
Air outlet size(mm)	75	75	75	75	75
Size(W*D*H, mm)	365*510*850	365*510*1205	365*510*1205	365*825*1205	365*510*850
Weight(kg)	60	100	100	170	60



First CleanTech Co.,Ltd.  
Room 05/06, 3rd floor, Building A, No.5 XingHan Street, Suzhou industry Park, JiangSu Province  
Phone: 0512 85180699  
Fax: 0512-85180700  
Email:sales@firstcleantech.com

