

# BORASCO<sup>3</sup>

Advanced Ecological Systems



## MOBILE COOKING STATION



## USER MANUAL

## 1.Safety precautions and warnings

### 1.1 DANGER

During the operation of the equipment, non professional electricians are not allowed to open the equipment door panel to avoid human injury and life-threatening situations. Please carefully read the relevant safety tips, warnings, and reminders in this manual and follow the standard procedures for maintenance and upkeep. If the consequences are caused by non professionals and illegal operations, the relevant parties will bear the responsibility, and our company will not be held responsible.

Do not install this product in a working environment with a temperature greater than 50 degrees.

Do not purify flammable, explosive, and corrosive gases such as gasoline, nitroglycerin, sulfuric acid, etc. with this product. Do not install this product in places with high humidity, such as large amounts of water vapor.

### 1.2 WARNING

For the equipment in operation and use, the operating status of the equipment and the oil pollution of the internal electric field should be checked regularly. According to the operating environment and operating load, regular oil discharge and cleaning and maintenance of the equipment and electric field.

The equipment that has not been inspected and cleaned and maintained for a long time will not only fail to play the purification performance of the equipment, but also will cause the danger of failure and fire. If you have any doubts about the relevant cleaning and maintenance aspects, you can directly consult the local equipment supplier or call our company directly (refer to the equipment maintenance).

It is recommended that the equipment be cleaned and maintained every two months. The waste liquid and waste residue produced by cleaning should be treated in accordance with local laws or regulations. Pay attention to the future cleaning and maintenance space of the equipment on site installation (see the equipment installation and system instructions for details)

## 2.Equipment introduction

### 2.1 WORKING PRINCIPLE OF THE INTEGRATED EQUIPMENT FOR LAMPBLACK PURIFICATION

**\*Custom Design Two-Stage Turbulence Oil Filter: (95% efficiency for particle sizes of 10 microns and above)** This combination is highly effective at cleaning medium-sized particles.

**\*ESP Filter: (Electrostatic Precipitator, 95% efficiency for particle sizes of 3 microns and above)** It creates an electrostatic charge on particles, and thanks to the generated magnetic field, it is highly effective at capturing oil particles and vapor, as well as fine particles.

**\*Ozone Technology:** The air absorbed by the capture technology reaches its first stage through ozone application in the intake channels. Ozone technology significantly reduces oil accumulation in the channels. Ozone chemically reacts with oil and odor particles, disrupting their particle structure.

**\*Carbon Filter:** Some of the air passing through the ESP carries oil vapors. The remaining odor is absorbed by passing through a carbon filter before being released into the environment.

### 2.2 PRODUCT CHARACTERISTICS

**High efficiency :** the purification efficiency exceeds the national catering industry lampblack emission standard GB 18483

**Environmental protection :** %99 extreme purification efficiency,%90 flavor removal rate,in line with the national standards and the most stringent local standards.

**Energy Saving:**integrated design,space saving,no land occupation,independent operation,low operation cost.

**Note:** The use of gas-powered equipment is strictly prohibited.

### 3.Structural diagram



Poz	Body Parts	Alan Adı
1	Case Body	<i>Kasa Gövdesi</i>
2	Exhaust Buffer	<i>Duman egzoz toplama alanı</i>
3	Electric Cabinet	<i>Elektrik Donamım Kabini</i>
4	Electrostatic Filters	<i>Elektrostatik Filtreler</i>
5	Fan	<i>Fan</i>
6	Exhaust Hood Body	<i>Davlumbaz Gövdesi</i>
7	Primary filter	<i>Ön filtre kanopisi</i>
8	Grease Flinger	<i>Yağ Ayrıştırıcı Alanı</i>
9	Display Screen	<i>Dijital Kontrol</i>

Models	C3
Processing Efficiency of %	90-98
Crushing (Pa)	< 120
Overall Dimensions(mm)	1490x800x1000
Input Voltage (V)	380
Power (W)	15000
Reserve space at the door (mm)	650

## 4. Transportation and storage methods

### 4 .1. TRANSPORTATION AND STORAGE

- Unloading of equipment packaging, transportation of packaging to the assembly site, and transportation of product modules to the installation site. It should be implemented by

professional personnel without collision to avoid damage to the surface of the equipment shell.

- Outdoor packaging must be stored in a solid, dry and no danger of falling objects. A solid surface is a flat, horizontal and solid surface that will not affect the trait by climate conditions.
- unpacking attention: the equipment should be carefully removed when unpacking, check whether there is paint damage on the surface of the equipment, check the packing list to check whether the accessories are complete, and accept the certificate, operation manual, etc. If the equipment is found to be damaged, the accessories are not uniform phenomenon. Please contact the supplier in time, otherwise Gastrotek Mühendislik Ltd. will not be liable for any loss caused thereby.

### 4 .2 STORAGE CONDITIONS

- Relative humidity: <80%. And t(temperature) =20°C ambient
  - temperature: 20~60°C
  - The equipment shall be kept away from any corrosive dust, gas and other chemicals with corrosive
  - effects on the unit and components · Any damage caused by improper transportation, unloading or storage is not covered by the warranty,
- and we shall not be responsible for any compensation caused by the above reasons.

## 5. Installation instructions of the equipment

### 5 .1 NOTES FOR THE INSTALLATION OF THE EQUIPMENT

- ★ Check whether the components are complete and intact before installation:
- ★ All installation work must be performed by qualified personnel:
- ★ The power supply of the equipment must be AC 220V / 50 HZ of the grounding wire, and the grounding must be reliable (grounding resistance<20)
- ★ When the equipment works with high voltage inside, do not energize the equipment before the equipment installation

### 5.2 WARNINGS

- ★ If the user has doubts about the installation of the equipment, please contact our technical personnel to prevent the problems caused by improper installation:+90 549 654 7551
- ★ If the unqualified installation equipment, will not be able to achieve the performance of the equipment, and cause rework and other consequences;
- ★ If the unqualified installation of equipment, it will cause economic losses, property losses, and even human body injury to the user.

### 5.3 INSTALLATION REQUIREMENTS

- (1) The installation of the equipment must be operated by professionals to ensure the stability and safety:
- (2) The equipment shall be installed horizontally, with the back end 1600mm from the wall and the front end 1920mm from the ground:
- (3) To ensure personal safety, the equipment must have a reliable grounding:
- (4) After the equipment is installed, the site test machine must be carried out to test the operation of each component to ensure the normal operation of the equipment
- (5) In order to ensure the exhaust effect of the equipment, the connection between the static electricity box and the smoke hood should be sealed;
- (6) To ensure the purification effect of the equipment, the smoke hood shall work under negative pressure:
- (7) In order to ensure the maintenance and maintenance space of the equipment, the ceiling shall be higher than the equipment, and shall not hinder the opening of the maintenance door.

### 5.4 INSTALLATION INSTRUCTIONS

Warning; each device must be equipped with motor protector (overload protection, short circuit protection, phase protection and leakage protection device and good grounding protection to ensure the safety of operators and the normal operation of the equipment. Avoid direct burning over an open fire. The equipment cannot be started during the gas leakage. The connection between the purification box and the fan should be sealed with to prevent ultraviolet light from shooting out. If there is residual protective film in the smoke cap and the main body, it should be removed

## 6. Control Panel



Press the A button to turn on the device.

Press and hold the C button to start the system.

Set the time using X1-X2.

Adjust the speed levels using D1-D2.

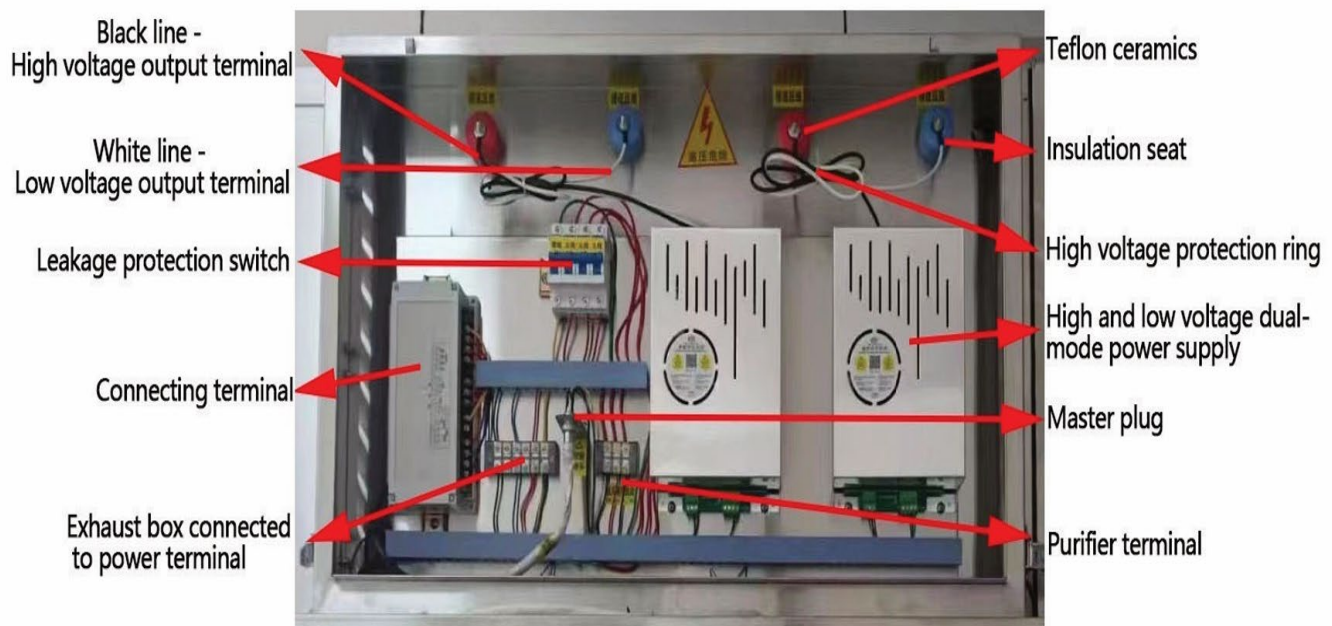
Press the G button to activate the ESP filtration system.

#### Optional Buttons:

O: Automatic Electrical Discharge Button

B: Automatic Filter Cleaning Button

## 7. Schematic Diagram of the high-voltage generator and electrical appliances



**Note:**the writing should pay attention to the direction of inlet and outlet. For example, the wiring above wiring is the lamp black exhaust gas left air, the right air, the black high voltage line connects to the left air inlet wiring insulation seat, if the right inlet air and the left air, the wiring position will be exchanged.

**Attached:** High voltage generator voltage regulation method (as shown in the figure below)

## 8. PLANT MAINTNANCE

### 8.1 MAINTNANCE SPECIFICATION

The operator must cut off the power supply before maintaining the equipment. If the equipment is with UV photolysis, please wear goggles and gloves to prevent the damage of UV body to the human body.

### 8.2 MAINTENANCE CYCLE ARRANGEMENT

**Note:** Only through effective maintenance of the equipment can users ensure long-term and stable operation and maintain efficient purification efficiency.

Cycle	Maintenance
Everyday	Keep the equipment surface clean, clean the primary cyclone separation oil baffle plate
Weekly	Wipe the ESP to ensure good odor removal efficiency

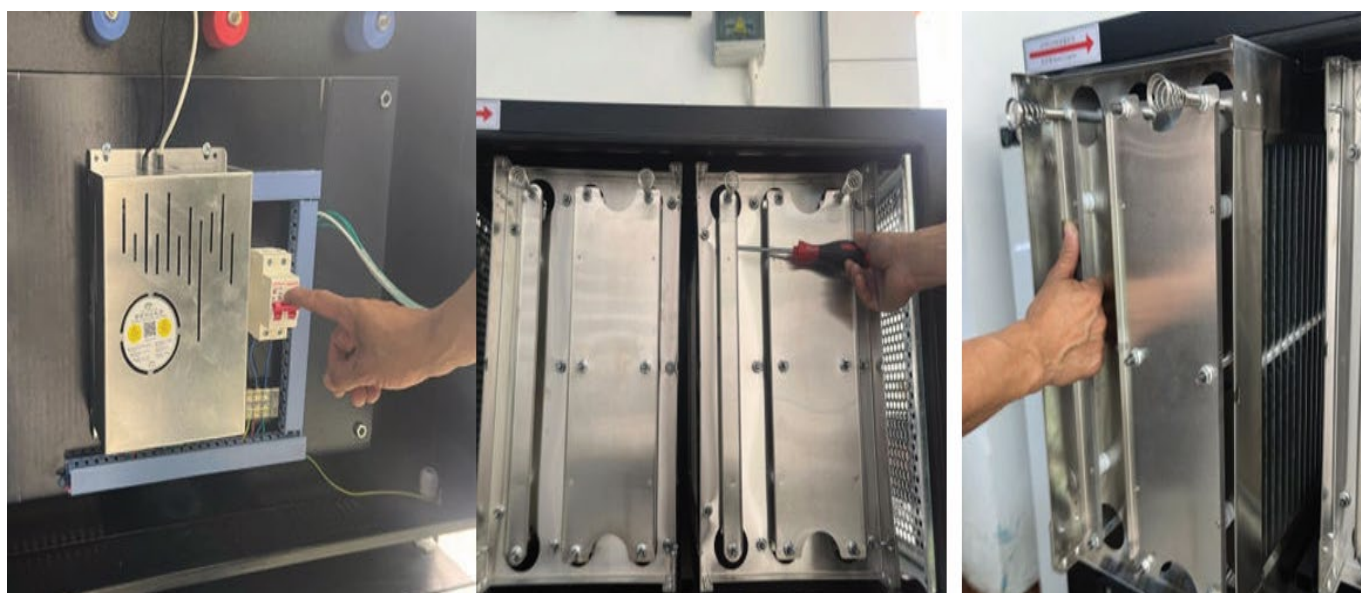


### 8.3 MAINTENANCE METHODS

Cleaning Parts	Operation method and description	Maintenance cycle
Oil Baffle	The surface was sprayed with detergent and wiped with a wet cloth after 5 minutes	Everyday
Oil Trap	Though the control valve,the waste oil of the oil collecting tank is discharged though the oil pipe	Everyday
Steel wire filter	In the shoutdown state,remove the oil net and spray with washing or solvent containing 10 caustic soda shooting to the net disk,5 minutes later with wet clothor wire wire ball mesh wire direction scrub,can also net take off the disk cleaning,pay special attention to the net disk to carefully scrub,can not let the net disk deformation	Monthly
Electrical field maintenance	In case of cutting off the main power supply,open the electric box door and drain the residual plate with a screwdriver of the charge,remove the electric field into the cleaning pool to add more than 70C of hot water and %10 caustic soda stir uniate,soak in the electric field for 10-20 minutes,remove and spray with high pressure water gun,dry and pack into the box	3-6 Months

### 8.4 PERIODIC MAINTENANCE STEPS OF THE ELECTRIC FIELD

Turn off the power switch of the equipment ,but there may still be electricity in the electric box,so before maintenance,be sure to turn off the main switch of the power supply outside the equipment.Open the Access door of the equipment ,and first use the screwdriver to the discharge the residual charge in the electrode plate(figüre).The sepecific operation is to hold the insulated handle of the screwdriver.and connect one of the the following plates with the metal part of the screwdriver.During the above operation ,do not collide with the electric field or the insulation parts on the box,otherwise replace,Users should strictly clean up the oil pollution in the equipment on time to prevent potential fire hazards.





## 8.5 CLEAN THE ELECTRIC FIELD

After soaking the electric field for detergent or lye for 5 minutes, then rinse the attached dirt with water (as shown in the figure)



## 8.6 AFTER CLEANING, DETECT THE POLE PLATE AND INSTALL IT BACK TO THE ELECTRIC FIELD.

Maintenance method: check whether the plate is deformed, if so, use the tip pliers to adjust it gradually.	
Install back the electric field: after the electric field cleaning, install back the electric field and lock the electric box door.	

## 9. Common problems and treatment methods

### 9.1 Possible problems and solutions of the lampblack purification integrated equipment:

No	Fault Situation	Possible Cause	Process Mode
1	The device can not be turned on	Circuit breaker failure	Keep in repair
		High Voltage insulation wire is damaged or high voltage fails	Renewal
		The Fan signal is interrupted	Keep in repair
2	Electric field has sound, short circuit fire	Wrong electric field and wiring direction	Adjust the wiring direction
		Foreign body or collision deformation in the electric field	Clean up the foreign matter and the field integrity
		Electric field plate screws are loose or tax falls	Tighten or add the plate screws
		ESP is too dirty	Cleaning and maintenance
		ESP is too wet	Close the equipment, the fan air dry 15-20 points
		Poor grounding or business, poor joint	Keep in Repair
		Insulation terminals are damaged or detached	Replace the insulator
3	The effect of smoking removal is not made	The plate is too good	Take good care of one's health
		The output voltage is too low	Adjust
		The wing speed is too low	Adjust



4	The exhaust air is not alert	Initial filtration or average air net blockage	Take good care of one's health
		Air duct blockage	Clean up the foreign matter in the air duct
		Fan reverse operation	Re-exchange order
5	The dynamic purification turn table does not turn or rotate slowly	Line loose, leakage or wrong connection	Check the route again
		Damaged motor or capacitor	Replace the motor or the capacitor
		The fan fixing equipment is not fixed well	Retighten
		The whole equipment is not fixed well	Retighten
6	The equipment is loud and vibrate	The ESP disk has foreign bodies	remove foreign body
		In correct installation	Fullinstall
7	The fan can not start or starts abnormally	The fan impeller is damaged	Repair Fan
		Switch damage	Change the switch
		The motor burned	Replace the motor or the capacitor
		Power circuit missing phase	Detection Circuit

## Special Statement

- The equipment leaves the factory, and is not qualified until the installation is not standard, improper use or equipment cleaning and maintenance is not timely, the above phenomenon may occur.
- It is strictly prohibited to breathe into the equipment, causing the high exhaust gas temperature to raise the motor temperature or damage the motor, causing fire hazard.
- In the case of deformation or stop rotation of the overweight country wheel, the equipment will not be able to achieve the normal purification efficiency, and dare to greatly shorten the service life of the equipment.
- The equipment must be turned on before using the stove in any case. If the cleaning and maintenance of the equipment are not completed on time, the oil accumulation in the equipment will be greatly increased, which eventually leads to the difficulty of cleaning the oil accumulation in the equipment, which not only affects the exhaust effect, but also fails to achieve good purification efficiency.

## Precautions

- Turn off the power switch of the equipment, but it may still be charged in the electric box, so always turn off the main power supply switch outside the equipment before the equipment maintenance: After opening the maintenance door of the equipment, it should be shown that the screwdriver to discharge the residual charge in the electrode plate. The short connect the electric field skeleton with the metal part of the screwdriver.

➤ **Please have a professional electrician and technical employee.**

**GASTROTEK MÜHENDİSLİK HİZMETLERİ**

**İNŞ. TAAH. TUR. TİC. LTD. ŞTİ.**

Sales: +90 252 319 07 13-14

Greece: +30 22420-30060

Service : +90 542 740 66 33

Service Mail : [servis@borasco.net](mailto:servis@borasco.net)

Sales : [export@borasco.net](mailto:export@borasco.net)

Domestic Sales : [sales1@borasco.net](mailto:sales1@borasco.net)

**Store**

Atatürk Bulvarı

Protek İş Merkezi No 171-1

Konacık / Bodrum / Muğla

**Factory**

Atatürk Bulvarı

Protek İş Merkezi No 173-2

Konacık / Bodrum / Muğla

**Greece Branch**

Marmaroto / Kos / Dodecanese / Greece



[info@borasco.net](mailto:info@borasco.net)

[www.borasco.net](http://www.borasco.net)