

A WORLD LEADER IN FUME EXTRACTION TECHNOLOGY



**USER MANUAL** 



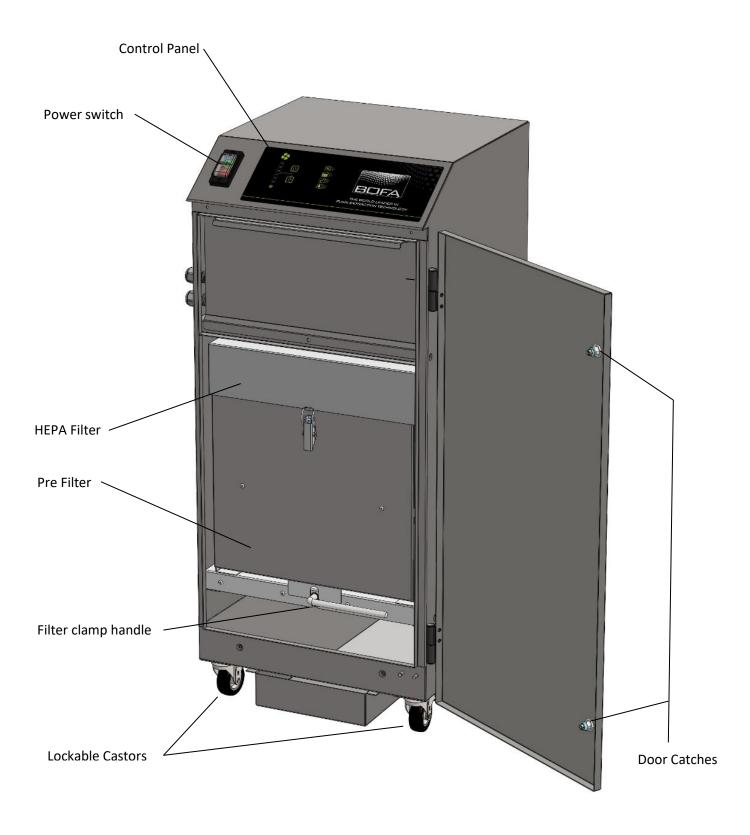


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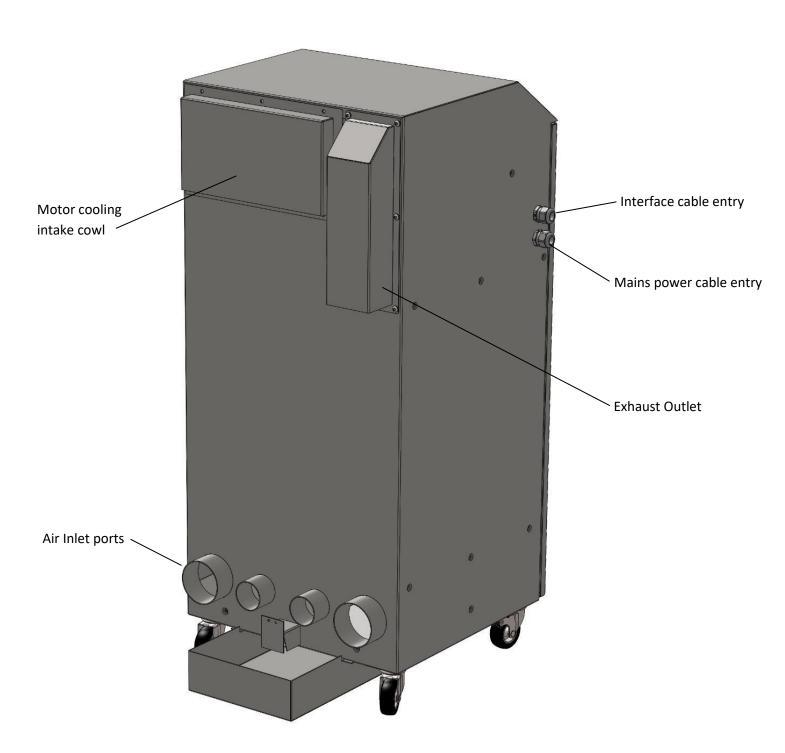
# Overview

1 01

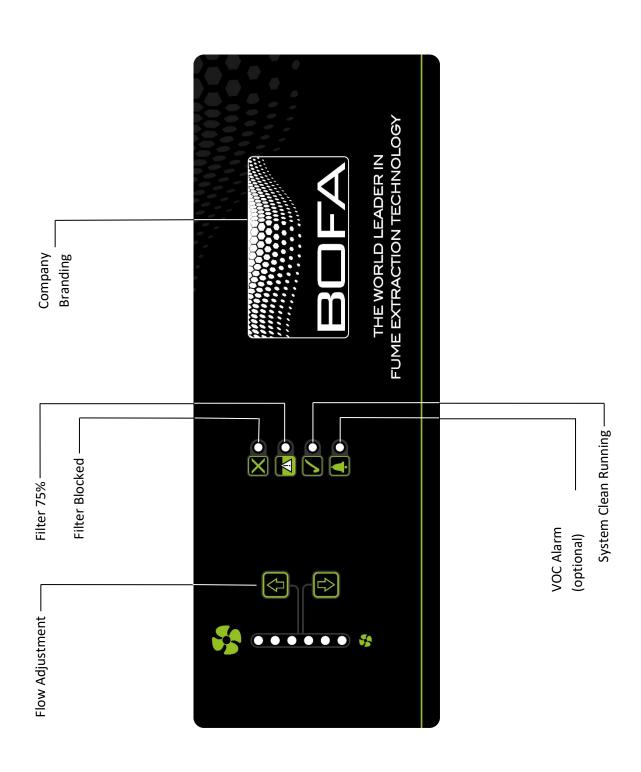


# Overview

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03



# **Safety Instructions**



01

# Important safety notes

Concerning symbols used on the extraction unit and referred to within this manual.



Danger

Refers to an immediately impending danger. If the danger is not avoided, it could result in death or severe (crippling) injury. Please consult the manual when this symbol is displayed.



Warning

Refers to a possibly dangerous situation. If not avoided it could result in death or severe injury. Please consult the manual when this symbol is displayed.



Caution

Refers to a possibly harmful situation. If not avoided, damage could be caused to the product or something in its environment.



Important (Refer to manual)

Refers to handling tip and other particularly useful information. This does not signify a dangerous or harmful situation. Refer to manual when this symbol is displayed.

# **Electrical Safety**

The unit has been designed to meet the essential Health and Safety requirements of the Machinery Directive 2006/42/EC

### Warning

When working with the pump/motor housing open, Live 230/115 volt mains components are accessible. Ensure that the rules and regulations for work on live components are always observed.

# Important

To reduce the risk of fire, electric shock or injury:

- Always isolate the system from the mains power supply before removing the pump/motor access panel.
- 2. Use only as described in this manual.
- 3. Connect the system to a properly grounded outlet.

### Dangers to eyes, breathing and skin

Once used, the filters within the PrintPro Oracle DS system may contain a mixture of particulates, some of which may be sub-micron size. When the used filters are moved it may agitate some of this particulate, which could get into the breathing zone and eyes of the operative. Additionally, depending on the materials being used, the particulate may be an irritant to the skin.

This unit should not be used on processes with sparks of flammable materials or with explosive dusts and gases, without implementation of additional precautions.

Caution: When changing used filters always wear a mask, safety shoes, goggles and gloves.

## Carbon selection

Please note that the media within the filter fitted in the PrintPro Oracle DS is capable of adsorbing a wide range of organic compounds. However, it is the responsibility of the user to ensure it is suitable for the particular application it is being used on.

# **BOFA Technical Service**

If problems arises with your PrintPro Oracle DS unit or if it displays a fault code, please contact us:

- Visit our website at <u>www.bofa.co.uk</u> for on-line help.
- Or contact the helpline on +44 (0) 1202 699 444,
  Mon-Fri, 9am-5pm.

Email: Technical@bofa.co.uk

## **Serial Number**

For future reference, fill in your system details in the space provided. The serial number is on the rating label located on the side/rear of the unit.

Serial Number:

# **Safety Instructions**



02

# Warning and Information labels

The following list details labels used on your PrintPro Oracle DS unit.

# Goggles, Gloves & Mask Label



Location: Front face of filter.

Meaning: Goggles, Gloves and Masks should be worn while handling used filters.

### Do Not Cover Label



Location: Rear lower access panel.

Meaning: Do not cover any louvers or holes adjacent to the

label.

# **Electrical Danger**



Location: Front Internal Electrical Panel & Rear

**Electrical Panel** 

Meaning: Removal of panels with this label attached will

allow access to potentially live components.

# **Warning Label**



Location: Next to release clips.

Meaning: Power should be isolated before the panel with

this label attached is opened/removed.

#### Serial Number Label



Location: Next to mains inlet.

Meaning: This label contains a variety of information about the extraction unit, including.

- Company name, Address & Contact number
- Extractor model
- Unit serial number
- Operating voltage range
- Maximum current load
- Operating frequency
- Year of Manufacture
- Relevant approval markings/ logos

**PLEASE NOTE:** If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment maybe compromised.

## Fire Risk Warning

In the very rare event that a burning ember or spark is drawn into the fume extraction unit, it may be possible that the filters will ignite.

Whilst any resultant fire would typically be retained within the fume extraction unit, the damage to the extractor would be significant.

It is therefore essential to minimise this risk by undertaking an appropriate assessment to determine:-

- a) Whether additional fire protection equipment should be installed.
- Appropriate maintenance procedures to prevent the risk of build-up of debris which could potentially combust.

# **Safety Instructions**



# Packaging Removal & Unit Placement

Before installation, check the extraction unit for damage. All packaging must be removed before the unit is connected to the power supply.

Please read all instructions in this manual before using this extractor.

1. Move the unit to the location where it is going to be installed and remove the outer packaging. This unit should be installed in a well-ventilated area.

Ensure that 500 mm space is available around any vented panels on the extractor to ensure adequate airflow.

Note: Do not use the two handles on the top of the lid to carry the complete unit. These handles are intended for lifting and transporting the unit lid only.

- 2. With the unit in position lock the 2 front castors.
- 3. Check the filter is located in its correct position before replacing the lid and securing the clips

# Due to the weight of the extractor suitable lifting equipment should be used and with regard to appropriate safety precautions. (See Appendix for product weight

details)

#### Caution

Do not block or cover the cooling vents on the unit, as this severely restricts airflow and may cause damage to the unit.

## Caution

Under no circumstances should the exhaust outlet/s be covered as this will restrict the airflow and cause overheating.

# Installation



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# **Connection to Power Supply**

Please follow the specification at the rear of this manual when selecting the power supply outlet for the PrintPro Oracle DS system, ensure the power supply is suitable before connecting the system.

Check the Integrity of the electrical power cable, if the supply cord is damaged the extraction unit should not be connected to the mains. The supply cord should only be replaced by a BOFA engineer as an electrical safety test may be required after replacement.

The PrintPro Oracle DS **MUST** be connected to a properly earthed outlet.

Should your PrintPro Oracle DS system was ordered with any optional extras please read section 4.03 before the power connection is made as additional connections may be required before power is connected to the extractor.



Connect the power cable to an isolated electrical

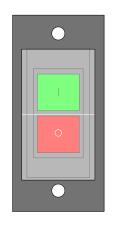
The mains socket should be installed near the extractor it should be easily accessible and able to be switched On/ Off. The cable run should be arranged so as not to create a trip hazard.

# Operation



# Turning extraction unit On

Press the main switch to the "On" position (Refer to section 1 for switch location) by depressing the 'I' side of the switch.



# Setting the desired airflow

The PrintPro Oracle DS features autoflow controls. This enables the user to set the required airflow rate. Over time as the filters begin to block the unit will increase the motor speed to ensure the correct flow is maintained to compensate for any loss in performance caused by the added restriction of the partially blocked filters.



The extractor and all pipe work must be fully installed and connected before the airflow is set.

# To set the airflow

Hold down the Up and Down arrows on the front panel for 5 seconds. The green LED will now start to flash, indicating that the machine is now in set mode. You can now increase or decrease the flow by holding down either the up or down arrow. The flow is indicated by a row of six blue LED's on the front panel, 6 being full speed and 1 being the lowest. Set the airflow on the lowest of the 6 LED's but still ensure that all of the fume is being removed. This will vary from application to application. Once you have set your speed, leave the controls for 10-20 seconds and the machine will return to operation mode. (This setup procedure should be carried out with all the ductwork connected and (if fitted) the stop/start signal present).





# Flashing LEDs

Flashing LEDs indicate a loss of vacuum inside the extraction unit.

Flashing LED's will appear when no start voltage is applied to the red/black cores of the signal cable.

If you have correct voltage applied and the LED's continue to flash then, please contact your local representative or Contact BOFA. Contact details are found at the back of this manual. This may also occur as the unit starts up.



# Maintenance



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# Maintenance UK

It is a legal requirement, under regulation 9 of the COSHH regulations that all local exhaust ventilation systems are thoroughly examined and tested at least once every 14 months (typically carried out annually). The approved code of practice recommends that a visual check should be carried out at least once a week.

COSHH requires the annual inspection and testing to be carried out by a competent person and specifies that documentation results are recorded in a log.

Contact the seller for more information about inspection and certification.

## Maintenance General

User maintenance is limited to cleaning the unit and filter replacement, only the manufacturers trained maintenance technicians are authorised to carry out component testing and replacement. Unauthorised work or the use of unauthorised replacement filters may result in a potentially dangerous situation and/or damage to the extractor unit and will invalidate the manufacturer's warranty.

# Cleaning the unit

The powder coat finish can be cleaned with a damp cloth and non-aggressive detergent, do not use an abrasive cleaning product as this will damage the finish.

The cooling inlets and outlets should be cleaned once a year to prevent build-up of dust and overheating of the unit.

## **Filter Information**

A log of filter changes should be maintained by the user. The filters require attention when the display shows the configuration shown on the next page or when the extractor no longer removes fume efficiently.

It is recommended that a spare set of filters are kept on site to avoid prolonged unit unavailability. Part numbers for replacement filters can be found on the filters fitted in your system.

To prevent overheating, units should not be run with a blocked filter condition, or with dust obstruction of Inlets / Outlets.

## Fire Risk Warning

In the very rare event that a burning ember or spark is drawn into the fume extraction unit, it may be possible that the filters will ignite.

Whilst any resultant fire would typically be retained within the fume extraction unit, the damage to the extractor would be significant.

It is therefore essential to minimise this risk by undertaking an appropriate assessment to determine:-

- a) Whether additional fire protection equipment should be installed.
- b) Appropriate maintenance procedures to prevent the risk of build-up of debris which could potentially combust

# Maintenance



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# Filter Replacement

During use, the PrintPro Oracle DS will alert the user when its filter needs replacing. The PrintPro Oracle DS will first inform the user when its filters are 75% full. At this point preparations should be made for filter replacement. When the filter needs to be changed, the LED to the left of the 'X' symbol will glow red.



If the VOC (Volatile Organic Compound) alarm option is installed in your PrintPro Oracle DS unit, the extractor will monitor and detect the level of VOC particles in the air. If the VOC level rises above a pre-set level then the LED to the right of the bell symbol will illuminate red. This requires the replacement of the Carbon filter.





### Filter removal

To remove and replace the Pre filter follow the procedure detailed below.

- 1. Isolate the electrical supply to the extractor
- 2. Undo the catches on the front of the unit and open the door.
- 3. The filter assembly is removed by rotating the lever below the filter through  $180^{\circ}$  to lower the filter camshelf.
- Removal the filter assembly from the unit being careful to support it as it comes free as it is heavy.



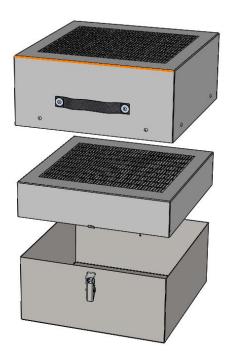
## Replacing the Carbon Filter element

- Where fitted, the carbon filter element is the uppermost section of the filter assembly
- 2. The carbon filter element should be lifted from the assembly.

# Replacing the Hydrophobic HEPA Filter element

To remove and replace the Hydrophobic HEPA filter follow the procedure detailed below.

- 1. The HEPA filter is located beneath the carbon filter
- In order to remove the HEPA, release the catches at the front and rear of the unit. Separate the HEPA filter from the lower filter casing.



# Replacing the Coalescing Foam element

1. The Coalescing Foam filter elements can be lifted from the housing.

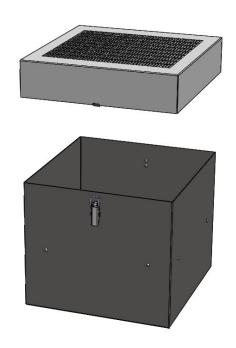
# Refitting the Carbon / HEPA filter assembly

- 1. Replace the filter elements as require ensuring that the HEPA filter catches are correctly located.
- 2. Rotate the camshelf lever back through  $180^{\circ}$  to raise the filter assembly into position.
- 3. Close the door and fasten the 2 latches

# Replacing the Hydrophobic HEPA Filter element (no carbon filter fitted)

To remove and replace the Hydrophobic HEPA filter follow the procedure detailed below.

- 1. The HEPA filter is located at the top of the filter assembly
- In order to remove the HEPA, release the catches at the front and rear of the unit. Separate the HEPA filter from the lower filter casing.



## Replacing the Coalescing Foam elements

- 1. The Coalescing Foam filter elements can be lifted from the housing.
- 2. The lower section must be compressed in order to remove it from the housing.

#### Note:

A complete filter assembly MUST be fitted when the extractor is in use.

# **Replacement Parts**



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# **Consumable Spares**

The PrintPro Oracle DS extraction system contains a series of filter elements. These should be replaced when instructed to do so by the Oracle system (see section 6 for replacing the filters)

To maintain performance it is important that the filters are replaced with identical BOFA filters. To re-order please refer to the Filter number printed on the filter installed in your extraction unit.

# **Maintenance Protocol**

Users can record changes in filter change intervals on the table below.

# Filter disposal

The DS Range of filters are manufactured from non-toxic materials. Filters are not re-usable, cleaning used filters is not recommended. The method of disposal of the used filters depends on the material deposited on them.

# For your guidance

Deposit	EWC Listing*	Comment
Non	15 02 03	Can be disposed of as non-
Hazardous		hazardous waste.
Hazardous	15 02 02M	The type of hazard needs to be identified and the associated risks defined. The thresholds for these risks can then be compared with the amount of material in the filters to see if they fall into the hazardous category, if so, the filters will need to be disposed of in line with the local/national regulations.

<sup>\*</sup>European Waste Catalogue

Unit Serial Number:						
Coalescing Foam Filter		HEPA Filter	HEPA Filter		Activated Carbon Filter	
Date	Engineer	Date	Engineer	Date	Engineer	

# **System Specifications**



Unit: PrintPro Oracle DS

Capacity: 380m³/h 223cfm Weight: 54.5Kg (120lbs) Motor: Centrifugal Fan

Output: 1100w

Electrical supply: 115-230V

Hertz: 50/60Hz

Full Load Current: 12.5A Noise Level: Below 6odB (A) (at typical operating speed)

# Size:

	Metric (mm)	Imperial (inches)
Height	980	32.2
Depth	552	21.7
Width	476	18.7

# Filters:

Filter Type	Surface area	Efficiency
Hydrophobic HEPA filter	7.5m²	99.997@ o.3micron

Environmental operating range:

Temperature:  $+5^{\circ}$ C to  $+40^{\circ}$ C Humidity: Max 80% RH up to  $31^{\circ}$ C

Max 50% RH at 40°C

# **Contact Information**

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