



# ***INSTRUCTION MANUAL***

## **X-306 FumeXtract**

### **Fume Extraction System designed for X-Reflow306LF**

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## X-306 FumeXtract (Fume Extraction System)

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### I. INTRODUCTION

A cost effective unit capable of extracting fumes from X-Reflow306 Batch Oven and also from a single iron fume extraction tube.

The unit can be supplied from 208-240V and when used to extract fumes from a batch oven can be connected to the outlet provided for this purpose and located on the back panel of X-Reflow306 oven.



FIG 1. VIEW OF THE SYSTEM

## X-306 FumeXtract Fume Extraction System

### SAFETY

The purpose of this "SAFETY" section is to inform the users of the heading guidelines used in this manual to indicate special Notes, Cautions, Warnings or Dangers. Also included are precautions, which must be observed when operating or servicing this product.

These "NOTES", "CAUTIONS", "WARNINGS" and "DANGERS" are inserted in this manual whenever deemed necessary. They appear in a blocked off form with outline and a shaded background to highlight the information as shown below.

|  |
|--|
| <b>NOTE</b>  |
| XX |

#### NOTE

Used to indicate a statement of company recommendation or policy. The message may relate directly or indirectly to the safety of personnel or protection of property. NOTE is not associated directly with a hazard or hazardous situation and is not used in place of "CAUTION", "WARNING" or "DANGER".

#### CAUTION

Used to indicate a hazardous situation, which may result in minor or moderate injury. May also be used to alert personnel to conditions, procedures and practices which, if not observed, could result in damage to or destruction of the product or other equipment.

#### WARNING

Used to define additional information, that if not closely followed may result in serious damage to equipment and represent a potential for serious personnel injury.

#### DANGER

Defines additional information, that if not closely followed may result in severe personnel injury or death. Danger is not used for property damage unless personal injury risk is present.

### PRECAUTIONS

The following are general safety precautions, which personnel must understand and follow when using or servicing this product. These precautions may or may not be included elsewhere in this manual.

XTRACTOR Fume Extraction systems are designed to reduce the level of harmful contaminants from the work environment and to assist in the achievement of recommended health and safety requirements for local exhaust ventilation and contaminant removal. Be sure to follow all Application and Maintenance guidelines contained herein and precautions contained in other relevant product safety literature (i.e., Material Safety Data Sheets) provided with the substances and equipment producing the fumes to be extracted.

### DISCLAIMER

Bokar International hereby disclaims all responsibility for any personal injury, property damage, fine, citation or penalty imposed by any government or private entity which results from any use, misuse or mis-application of this product, failure of the user to regularly maintain the product according to the recommended guidelines, or failure to adequately monitor fume extraction exhaust air and the ambient workplace air for the presence of harmful levels of gases, fumes and particulates.

## X-306 FumeXtract Fume Extraction System

Compliance with all applicable environmental and personnel safety regulations is the sole responsibility of the user and adequate self-monitoring of exhaust air released into the atmosphere or the workplace as well as monitoring of the ambient workplace air is strongly recommended.

### WARNING

FAILURE TO COMPLY WITH THE APPLICATION AND MAINTENANCE GUIDELINES, FILTER REPLACEMENT SCHEDULES, MONITORING RECOMMENDATIONS AND SAFETY GUIDELINES CONTAINED HEREIN AND IN OTHER RELEVANT PRODUCT SAFETY LITERATURE (I.E., MATERIAL SAFETY DATA SHEETS) PROVIDED WITH THE SUBSTANCES AND EQUIPMENT PRODUCING THE FUMES TO BE EXTRACTED COULD RESULT IN RISK OF SERIOUS INJURY, FIRE OR EXPLOSION.

To insure continued effective performance, the following guidelines must be followed.

### Filter Cartridge

The X-306 FumeXtract is equipped with the Filter Cartridge P/N **XHF-306FX** which has been designed to capture particulates and gases with odors that are present in the oven chamber. Over time, the HEPA filter will gradually become clogged, impeding air flow through the system, and the capacity of the gas filter will be reached, reducing its ability to continue to neutralize and adsorb noxious gases and odors.

**XHF-306FX must be replaced at regular intervals** to ensure that the fume extraction system is operating effectively. These intervals will vary depending on the type of work being performed, the level of use, and the amount and composition of airborne contaminants produced.

As a rule of thumb, if the oven is used, changing the filter at least once every 6 months is not a bad idea.

### CAUTION

To ensure the highest level of performance, use only XTRACTOR replacement filters in your XF-300 Series Fume Extractors Systems.

### DANGER

XTRACTOR FUME EXTRACTORS ARE NOT INTENDED TO BE USED AS A SUBSTITUTE FOR DEVICES SUCH AS PERSONAL PROTECTIVE RESPIRATORS THAT ARE DESIGNED TO REMOVE POORLY ADSORBED SUBSTANCES INCLUDING CARBON MONOXIDE, METHANE, HYDROGEN, ACETYLENE AND OTHER GASES. RISK OF SERIOUS INJURY OR DEATH, FIRE OR EXPLOSION MAY RESULT FROM IMPROPER USE. IF IN DOUBT, CONSULT WITH YOUR INDUSTRIAL HYGIENIST.

When disposing of used filters, care must be taken to comply with all applicable environmental regulations. Carefully consult the MSDS supplied with the material(s) producing the fumes. If in doubt, check with your local Environmental Authority.

### DANGER

NEVER USE XTRACTOR FUME EXTRACTION SYSTEMS TO EXTRACT FUMES FROM HIGHLY FLAMMABLE LIQUIDS AND GASES SUCH AS ETHER, GASOLINE (PETROL) AND OTHERS. RISK OF SERIOUS INJURY, DEATH, FIRE OR EXPLOSION MAY RESULT.

CERTAIN AIRBORNE CONTAMINANTS SUCH AS METHYL ETHYL KETONE, CYCLOHEXONE, OZONE AND OTHERS, WHEN CONTACTED WITH ACTIVATED CARBON, CAN UNDERGO OXIDATION, DECOMPOSITION OR POLYMERIZATION RESULTING IN EXOTHERMIC REACTIONS OR HEAT GENERATION. PACE FUME EXTRACTION SYSTEMS MUST NOT BE USED TO EXTRACT FUMES FROM THESE SUBSTANCES.

## X-306 FumeXtract Fume Extraction System

### WARNING

Use with inappropriate chemicals or substances, failure to provide regular maintenance or other misuse of your Fume Extraction System may result in contaminated air being re-circulated into the work environment.

### CAUTIONS

Utilize all standard electrical safety precautions when using this or any other electrical equipment.

### DANGER

POTENTIAL SHOCK HAZARD – All repairs made on this product should be performed by qualified service personnel only. Line voltage parts will be exposed when equipment is disassembled. Service personnel must avoid contact with these parts when troubleshooting.

### NOTES

To insure continued peak performance, use genuine XTRACTOR replacement parts.

## II. PACKAGING

The box contains as follows:

1. **X-306 FumeXtract Unit** – Base with **XHF-306FX** filter and a power cord
2. Manual
3. Guarantee card

## III. UNPACKING

Prior to use of the system, please check if the system is complete. Should you notice that any items are missing, please notify us, giving the details of model number, voltage, date of purchase, where purchased and what is missing. Missing items must be reported within 7 days from the date of purchase.

### WARNING

When unpacking, please be careful and read the manual prior to turning the system "ON". Please check that the voltage of the System corresponds with the voltage of your available supply. Connection to incorrect voltage supply may cause damage to the System!

## **IV. SET-UP AND INSTALLATION**

### **PLACEMENT**

Three considerations need to be addressed for proper placement of the Xtractor unit.

- **Exhaust Port:** The exhaust is located on the bottom of the filtration unit. When positioning the unit, make sure that the unit is standing on its feet. Additionally, place the unit in such a way so that the On/Off switch (located on the front of the filtration unit) is readily accessible.
- **Unit Location:** The filtration unit should be located in a way so that it will not block aisles or impede normal operating traffic or material handling pathways. It is important to position the unit in such a way that allows for proper view of the On/Off switch.
- **Proximity to the Oven:** The filtration unit should be placed in the close proximity of the Oven. A flex hose, to connect to the exhaust port of the Oven is made relatively short on purpose to limit restrictions in extracting fumes from the Oven and, if possible should not be extended. Do not kink or create any sharp bends in the flex hose, as this will reduce airflow.

### **POWER**

The X-306 FumeXtract will plug into a blue socket located on the back panel of the Oven which is controlled by the Oven Program powering the X-306 FumeXtract when the unit should operate.

### **FILTERS**

Before operating the unit, make sure that the filter is correctly positioned and tighten in place to assure good seal on both sides of the filter. The direction of the airflow is clearly marked on the filter cartridge. Airflow is always in an upward direction for the filter. The pump is pulling the fumes to be cleaned from the top of the filter.

## V. SYSTEM DESCRIPTION and APPLICATION

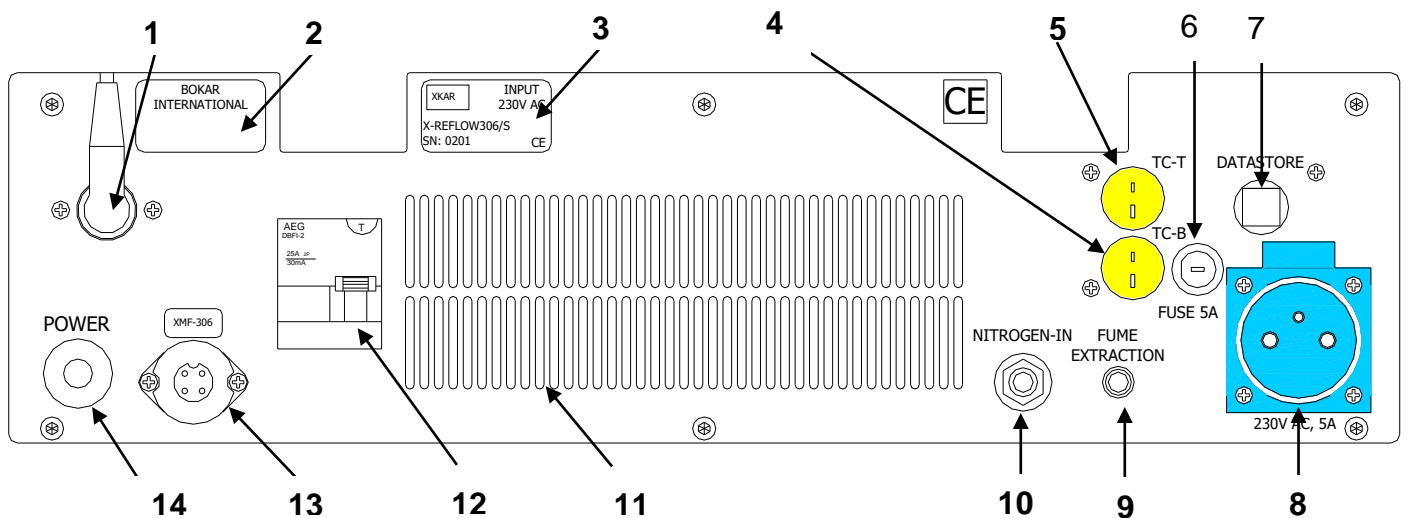
1. Place the unit next to (or below) the Oven Unit.
2. Connect the flexible hose connected at one side to the bottom of the X-306 FumeExtract unit to the port number 8 on the X-Reflow306 Oven (drawing of the back panel is shown below).
- 2) Connect the X-FumeExtract power cord to the Blue AC Outlet located on the Oven back panel in the right top corner (Number 4 on the back panel drawing below).
- 3) Turn the power switch of the X-FumeExtract unit ON.

The unit is now connected and ready to use.

The unit will extract the fumes from the Oven for as long as the power is applied to the external power outlet (Blue Outlet) on the back panel of the oven.

For proper programming of the fume extraction timing please see the X-Reflow306 manual.

This section of the programming is in the menu under Ventilation.



**Fig. 1 X-Reflow306/S rear panel**

1. Socket and connector to open Exhaust pipe
2. Bokar International Company Label
3. Unit Label (Model, Serial # and working Voltage)
4. External "K" Thermocouple Input TC-B (Bottom TC)
5. External 'K" Thermocouple Input TC-T (Top TC)
6. 5A Fuse limiting current available for an AC outlet (# 10 on the above drawing)
7. DATASTORE Socket to connect to a PC via X485-USB Converter for firmware upgrades and/or use of X306 Oven Monitor
8. 230V AC Power Outlet to supply and turn ON and OFF X306 FumeXtract (or equivalent)
9. Connection for Fume Extractor to vacuum fumes generated during the heating process
10. N2 Inlet Port
11. Louvers to provide ambient air for cooling the oven subsystems
12. Residual leakage circuit braker
13. Electrical connector to connect XMF-306 Controller
14. Power cord

## X-306 FumeXtract Fume Extraction System

### VI. TECHNICAL SPECIFICATIONS

| X-306 FUMEXTRACT         |   |
|--------------------------|---|
| Input Voltage            | 208- 240V AC  |
| Fuse                     | 1A<br>Slow-Blow 5mm x 20mm                          |
| Air Flow                 | 28 l/min  |
| Vacuum                   | 5" of Hg (127mmHg)                                  |
| Connection Pipe diameter | 1/4" ID x 3/8" OD                                   |
| Filter P/N XHF-306FX     | HEPA FILTER WITH 99.97%<br>EFFICIENCY AT 0.3 MICRON |
| Weight                   | 6kg (13.26 lbs)                                     |
| System dimensions        | 305mm x 177mm x 252mm<br>(12" x 7" x 9.9")          |
| Packaged weight          | 7 kg (15.5 lbs)                                     |

Available filter:

| Part Number   | Description |
|---------------|-------------|
| P/N XHF-306FX | HEPA filter |



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**Latest Additions:** [www.PCBprototypingRobot.com](http://www.PCBprototypingRobot.com) [www.ProportionAir.com](http://www.ProportionAir.com)

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