

The most efficient solution

Smart Fume Extractor



The most efficient solution. It only works when soldering and features a unique system integrated into the stand

JBC takes fume extractors to a higher level with its new smart Fume Extractor FAE2-5A. Designed for electronics soldering applications, it is capable of removing fumes safely and efficiently.



#### Aspiration in use

The fume extractor starts up when the tool is lifted from the stand.

This function saves power and extends the life of the equipment and the filters.



# Aspiration on the stand

An innovative vacuum system integrated into the stand detects when the tool is returned to the stand. The vent absorbs the fumes automatically when the tool is at rest.

#### 4 working modes

#### Station

The valve in the working area opens when the tool is lifted from the stand.

Once the tool is returned to the stand and enters sleep mode, the valve in the work area closes and the stand valve opens. After a period of inactivity on both ports, the unit stops.

#### Robot

You can also manage the fume extractor using a robotic system by means of the RJ12 connector.

#### Pedal

You can activate the vacuum system with the pedal without being connected to a JBC station.

#### Continuous mode

The fume extractor works in continuous mode with the four valves opened.

#### JBC Net

By using the USB port, you can control and manage the unit remotely from your PC.



Robust unit fitted with wheels

and brakes so it can be easily

moved around.

## Intelligent control when connected to the Excellence range stations

#### 2 separate aspiration inlets

It can be used simultaneously in two work areas.

#### 4 levels of aspiration

depending on requirements: low, medium, high & custom.

#### Auto-control of the airflow

depending on the number of aspiration tubes in use and filter saturation.

# workbench 1 workbench 2 Aspiration Aspiration tube tube Aspiration Aspiration tubes for up to 4 stands tubes for up to 4 stands The unit has a LED warning to know when it's time to replace the pre-filter If the unit is connected to a station,

#### Process Screen

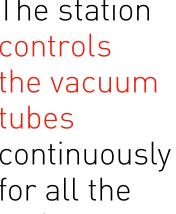
Filter saturation indicator

the warning message will also appear on the station's display.

or the compact filter.

You can control the equipment via Excellence stations, a robotic system or a PC. The unit's sensors provide information about filters saturation. There are many connection posibilities to suit your working needs.

### The station controls the vacuum tubes continuously for all the tools





#### Accessory for stand aspiration

This robust unit can be used simultaneously in two work areas. You can also connect up to 4 tool stands per port to avoid solder fumes when the



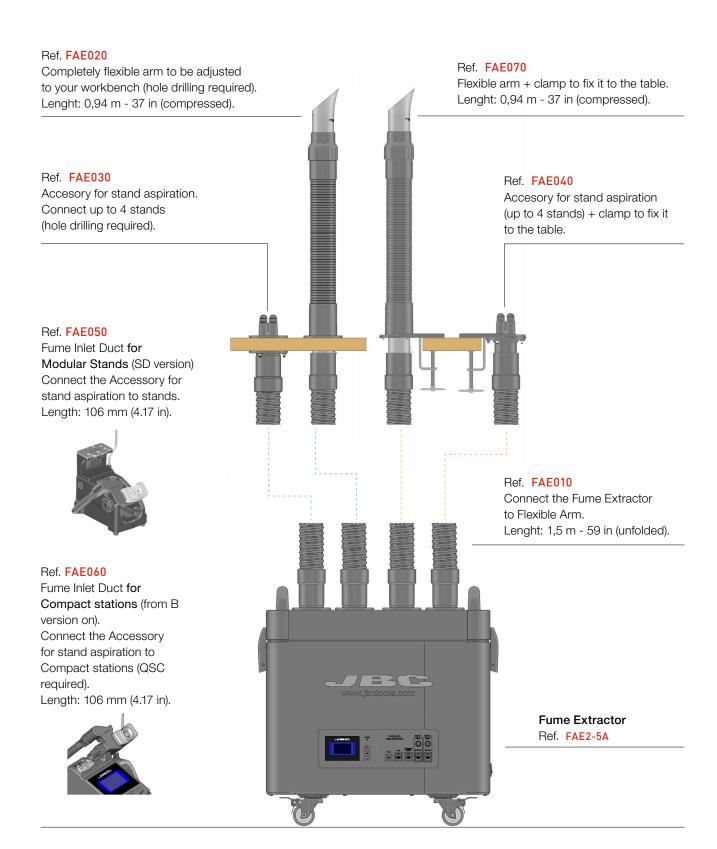
The fume extractor automatically regulates the airflow depending on the number of aspiration tubes in use and the filter saturation.







# For a basic working system





# Why use the JBC smart Fume Extractor?

Clean air

Contaminated air

Particulates

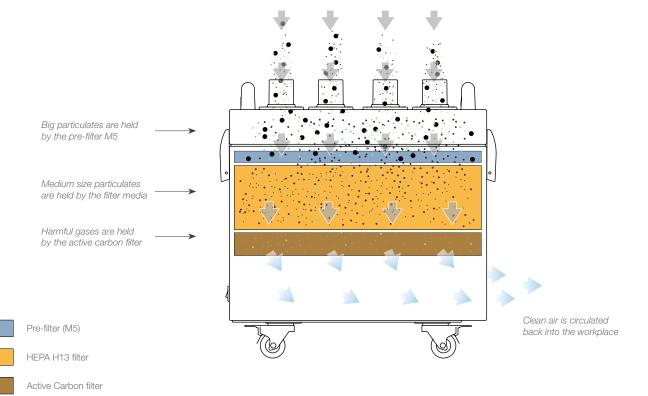
Harmful gases

# Avoid exposure to solder fumes

Health risks come with extended exposure to solder fumes, so it is important to use the correct safety equipment to remove these hazardous substances.

Depending on the particles size, the fume could affect different parts of the respiratory system.

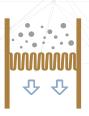
- This is one of the main causes of occupational asthma.
- It may cause eye and throat irritation.
- The flux may cause dermatological problems.



The solid particles represent almost the 90% of the total fumes. They contain sublimation of rosin and other substances of thermal decomposition, both predominant of diterpens acid mixture.

The remaining percentage corresponds to other gases, composed of low molecular weight organic compounds including acetone, methyl alcohol, aliphatic aldehydes and other hydrocarbons.





# High efficiency filters to remove even the smallest particles

The combination of the three-layered filter system reaches a certified **filtering efficiency** of the soldering fumes up to 99.95% in accordance with norm EN 1822-4.



#### Pre-filter M5

It retains the **large solid particles** in order to protect the H13 filter and extend its long lifetime.

Average efficiency for particles of 0.4  $\mu$ m: 40-60% (in accordance with EN 779).

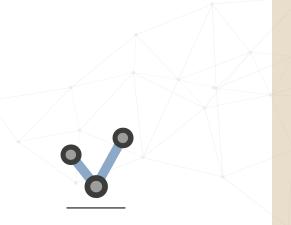
#### HEPA filter H13

The HEPA filter (High Efficiency Particulate Air) filters out the remaining solid particles. Efficiency for MPPS \* ≥99.95% (in accordance with EN 1822).

\* MPPS (Most Penetrating Particle Size) corresponds to the particle size at which the filter has a lower efficiency. The MPPS depends on the filter and the air flow, although usually lies between 0.1-0.3 µm.

#### Active Carbon filter The active carbon filter

absorbs those gas molecules which, due to their size, the HEPA filter is not able to filtrate. Active carbon is a good filter aid because of its highly porous structure. In order to improve efficiency, different factors have been taken into account. Generally, the lower the air flow rate, the more time the fumes will have to diffuse into a pore and be adsorbed.



### QSC Quality Station Controler

A compact device for connecting all your JBC stations to the FAE by using USB A-B cables.



#### Connectivity

#### Station

This new compact device makes possible connecting as many JBC Stations\* as desired to the fume extractor (FAE).

#### Software

The software makes easy configuring which of the two fume extractor ports will be opened when picking up any tool from its stand.

#### Configuration

You can configure the FAE directly on the QSC (requires a HDMI connected to a screen, a keyboard and a mouse) or from any computer in the same LAN as the QSC (connected by Wifi or Ethernet) by tipping the address in a Web Browser.

\*JBC stations featuring USB connectors are supported except for JT-D, TE-D and older hot air stations. PHB/PHS preheaters and older not supported.

#### Technical specifications

Long-life maintenance-free motor

558 x 292 x 562 mm (22 x 11.5 x 22.1 in)
33,6 Kg (74.08 lb)
<b>FAE2-5A</b> 100 V - 120 V - 230 V 50 / 60 Hz
500 W (120 - 230 V) 320 W (100V)
8 AT
Brushless

Max. Flow rate	290 m <sup>3</sup> / h (10241.25 f³/h)
Max. Vacuum	6,1 KPa (0.88 psi)
Filters	Pre-filter M5 (according to Norm EN 779)* HEPA H13 (according to Norm EN 1822)** Carbon
Work areas	2
Noise	54 dB

<sup>\*</sup>M5 Quality according to Norm EN779















<sup>\*\*</sup>Delivered with the test certificate according to Norm EN 1822-4