

SIP Industrial Products Limited

Gelders Hall Road  
Shepshed  
Loughborough

Leicestershire  
LE12 9NH  
United Kingdom



## SIP FX200 Welding Fume Extractor



*SIP Code 05813*

For help or advice please contact  
your distributor, or sip directly on:

Tel.: 01509 500400

Email:

[sales@sip-group.com](mailto:sales@sip-group.com)

or

[customerservice@sip-group.com](mailto:customerservice@sip-group.com)

[www.sip-group.com](http://www.sip-group.com)

Please read and fully understand the instructions in this manual before  
operation. Keep this manual safe for future reference.



<i>Page</i>	<i>Description</i>
4 - 9	Safety Instructions
10	Guarantee
11	Technical Specification
12 - 14	Getting To Know Your Fume Extractor
15 - 17	Operating Instructions
18 - 20	Maintenance
21	Troubleshooting
22	Exploded Drawing
23	Parts List
26	UK Declaration Of Conformity
28	EU Declaration Of Conformity

## SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL

	<b>Danger / Caution:</b> Risk of electrical injury or damage.
	<b>Danger / Caution:</b> Risk of injury or damage.
	<b>Danger / Caution:</b> Risk of personal injury and / or the possibility of damage.
	<b>ATTENTION:</b> draws attention to situations and problems associated with the efficiency of the machine that do not affect the safety of people.
	<b>Note:</b> Supplementary information
	<b>ENVIRONMENT:</b> draws attention to behaviors and procedures to limit the environmental impact related to the use of the machine.

## SAFETY INSTRUCTIONS

- Do not use the machine in places where there is a risk of explosion or fire. Do not approach the machine with naked flames or other.
- Use the machine in a dry environment, not subject to condensation phenomena of atmospheric humidity and protected from direct exposure to atmospheric agents and sunlight.
- Always use the machine in adequate lighting conditions. The environment of use must be well ventilated and in compliance with the regulations in force on hygiene and safety at work.
- Do not use the machine in harsh environmental conditions: the ambient temperature must be between 5 ° C and 40 ° C, with a humidity level less than 80%.
- Check that the electrical power supply system of the machine is up to standard and equipped with appropriate protection devices against current leakage and short circuit.
- The use of the product must be preceded by adequate staff training and by reading this User Manual.
- The machine can be used as a portable unit for the extraction, filtration and deodorisation of welding fumes in the electronics industry in general, in body shop departments and for small welds.
- The use of the machine is allowed only to adult and responsible operators, properly trained.
- The machine must be handled with caution, respecting the rules given in this manual.
- After use, do not leave the flexible hose unattended on the ground, as it maybe a trip hazard or get damaged.
- Handle the hose and the cap using protective gloves in order to avoid burns due to the high temperatures that can be reached in conditions of prolonged use.
- Do not carry out repairs or modifications to the machine.
- Do not carry out maintenance when the machine is running. To clean the machine, do not use corrosive or harmful detergents.

## SAFETY INSTRUCTIONS

- In case of breakdown or malfunction of the machine DO NOT USE IT AND CLEARLY LABEL IT AS OUT OF THE SERVICE. Contact our Customer Service for any repairs.
- Wear suitable personal protective equipment (PPE) during use, maintenance and cleaning of the machine.
- During the maintenance phases, do not disperse any residues in the surrounding environment, but comply with the current regulations.

### WELDING

- The intended use of the machine is the suction of welding fumes in industry and automotive workshops: it is forbidden to use it to suck up other substances (dust, liquids, vapors, etc.), especially if flammable, explosive, corrosive, etc
- The machine must only be used in a work environment protected from atmospheric agents.
- The machine must be used with caution, making sure that the power supply cable and flexible hose are not placed in dangerous areas or where they can hinder other operators.
- The machine was not designed to be used in a potentially explosive atmosphere: its use in environments where there is a risk of fire or explosion is prohibited.
- It is forbidden to use it with systems for capturing and conveying the flow rate that do not allow the entry of air at room temperature as prescribed.
- SIP Industrial Products disclaims any liability for damage to the machine itself, to people or property caused by the incorrect use of the collection cap or the use of inappropriate hoods.

### ELECTRICAL

- **ELECTRICAL RISK:**
- It is forbidden to perform repairs or maintenance on the machine when it is connected to the electrical power system; however, should it be necessary to operate with the machine powered on, this practice can only be carried out by Qualified Personnel, with expertise in the electrotechnical field, or by SIP Industrial Products / SIP Service Agent.
- Adopt all the precautions according to the regulations in force if you have to operate with the machine powered on: wear insulating gloves and shoes and use insulating mats and insulated tools. Also check that the system to which the machine is connected is protected from leaks and short circuits, as required by current legislation
- **RISK OF FIRE OR EXPLOSION:**
- The machine cannot be used in environments with a high risk of fire or explosion. It is forbidden to store, even temporarily, potentially flammable or deflagrating substances in the rooms where the extraction system is installed.
- **RISK OF FAILURE OR MALFUNCTIONING:**
- Long use of the machine in particularly severe environmental conditions (brackish environment, excessive temperature, condensation, presence of dust, exposure to atmospheric agents, etc.), can cause malfunctions or failures of the product and compromise its safety.
- Respect the requirements indicated in the "Safety Warnings" relating to the work environment, reported in this User Manual.
- **RISK OF INCORRECT INTERPRETATION OF SAFETY LABELS:**
- Following the identification of the main sources of danger that emerged from the Risk Analysis, Safety Stickers, with unified symbols, were applied to the machine to signal these sources of danger. Over time, these stickers can become illegible or difficult to interpret due to aging or wear.
- The user is required to immediately replace the Safety Stickers that become illegible due to aging, wear or damage.

## SAFETY INSTRUCTIONS



**Danger:** Risk of Electric Shock. Electrocutation risk around the mains input and socket. Do not touch electrical parts. Do not extinguish electrical fires using water, use an appropriate extinguisher.



**Warning:** Always use appropriate personal protective equipment (PPE) .

### DOCUMENTATION

- The SIP FX200 machine is accompanied by this User Manual which contains the technical information, figures, instructions and warnings necessary for correct use of the product.
- The User Manual must accompany the machine throughout its life cycle, even in the event of sale or transfer; must be stored in such a way as to ensure its integrity and must be easily accessible in case of need (it is advisable to keep a copy near the machine).
- The purpose of this document is the transmission of the information necessary for the competent and safe use of the product and therefore must be made available to all personnel who work with the machine and its systems (Plant Manager, User, Maintenance Technician and Qualified Personnel machine installation, power supply and commissioning).
- In the event that this manual is lost or damaged, it is recommended to request a new copy directly from SIP Industrial Products Ltd or our website.

## SAFETY INSTRUCTIONS

### DELIVERY, TRANSPORT & HANDLING

- Upon delivery, the machine is contained in one package. Upon receipt of the goods, check that the packaging integrity and that there are no signs of possible damage suffered during transport; if necessary, before opening the package, document the problems encountered with some photographs.
- In the event that the product is damaged, do not use and report the incident to SIP Industrial Products .
- Arrange a place protected from bad weather to store the product waiting for the installation, in case installation is not immediate.
- The product cannot be exposed to bad weather, store and use it in a dry and covered room.
- In case of damage to the product during transport, do not proceed with use
- For the transport operation, the operator must unload the packaged machine using a suitable means for lifting.
- Remove the packaging only at the time of final commissioning of the machine and dispose of the materials in accordance with current regulations.
- The loading and unloading operations and subsequent handling must be performed keeping the machine in its original packaging and using an appropriate lifting device.
- Make sure that the lifting means are suitable for the weight of the machine and carry out handling in safe conditions, in accordance with the provisions of current legislation.
- Personnel not involved in the operation must keep a safe distance. Check that there are no objects resting on the machine and that the moving parts have been fixed. The floor must be flat, clean and free of residues
- When opening the packaging, the operator must check that all machine components are present and that they have not been damaged during transport. If not, contact our dealer.

## GUARANTEE

This SIP FX200 welding fume extractor is covered by a 24 month parts and labour warranty covering failure due to **manufacturers defects.** .

This does not cover failure due to **misuse** or **operating the extractor outside the scope of this manual** - any claims deemed to be outside the scope of the warranty may be subject to charges Including, but not limited to parts, labour and carriage costs.

Failure to regularly clean your extractor will shorten its working life and reduce performance.

Failure to clean and / or replace the filters regularly will impact the life of the motor, and excess ingress or damaged caused by ingress to the motor will not be covered under the warranty.

The warranty does not cover consumable items such as hoses, filters etc and also components subject to normal wear & tear.



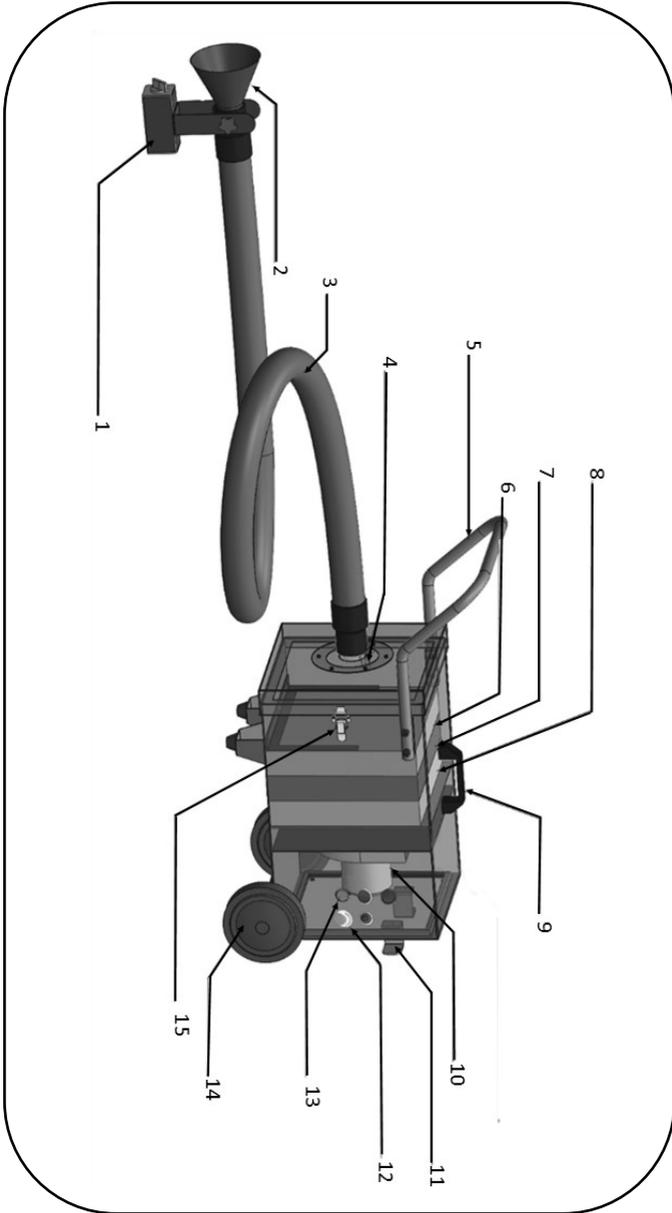
**NOTE:** Proof of purchase will be required before any warranty can be honoured. .

## TECHNICAL SPECIFICATION

<i>05813 SIP FX200 Welding Fume Extractor</i>	
<i>Supply Voltage</i>	230V / 50Hz
<i>Max Power</i>	300watt
<i>Motor Type</i>	200Watt Digital
<i>Control</i>	Variable Speed
<i>Weight</i>	25kg
<i>Maximum Flow Rate</i>	300m <sup>3</sup> /Hour
<i>Filter Accuracy</i>	0.3µm
<i>Sound</i>	75dBA
<i>Diameter of Suction Hose</i>	58mm
<i>Diameter of Hood</i>	125mm
<i>Hood Fixing / Support</i>	Switchable Magnet
<i>Length of Suction Hose</i>	2mtrs
<i>Filter 1</i>	Mesh Spark Arrestor
<i>Filter 2</i>	Polyester Fibre Filter
<i>Filter 3</i>	Polyester Fibre HEPA
<i>Dust Classification</i>	H13

- This portable unit is the ideal solution for the extraction and filtration of welding fumes from variable position work stations with non-continuous welding operations.
- The gases and fumes given off during welding are captured to prevent them from spreading throughout the workplace; the air containing the contaminants is thoroughly filtered and recycled back to the workplace.
- This unit is designed for the suction and treatment of dry fumes produced by work processes such as spot or non-continuous welding wire or electrode welding.

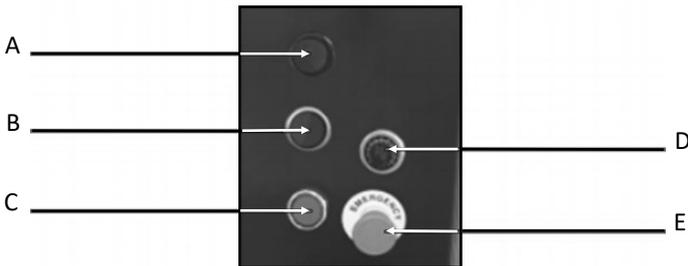
# GETTING TO KNOW YOUR FUME EXTRACTOR



## GETTING TO KNOW YOUR FUME EXTRACTOR

<i>Item</i>	<i>Description</i>	<i>Item</i>	<i>Description</i>
1	Switchable Magnet	9	Lift Handle
2	Hood 125mm $\phi$	10	Suction Fan Motor Assy
3	Suction Hose	11	Mains Cable Tidy Brackets
4	Hose Flange	12	Emergency Stop
5	Pull Handle	13	Control Panel
6	Spark Arrestor	14	Wheel
7	Primary Filter	15	Stainless Steel Catch
8	HEPA Filter		

### CONTROL PANEL



<i>Item No</i>	<i>Description</i>
A	Power Indicator Light
B	Stop Button
C	Start Button
D	Variable Suction Speed Adjuster
E	Emergency Stop Button

# GETTING TO KNOW YOUR FUME EXTRACTOR

## DIMENSIONS

SIZE (mm) -not including handles		
Width	Height	Length
500	300	300
Weight	GW 32kg	NW 30kg



## OPERATING INSTRUCTION

### INSTALLATION

The extractor is supplied partially assembled.  
Follow the steps below to install.

Main Unit:

- Remove the extractor from the packaging
- Visually check for damage
- The wheels and lifting handle are pre-assembled.
- Slide the push handle to the 2 spigots and tighten.

Hose & Hood:

- The hose assembly is supplied with connectors on each end.
- Push one end into the hose flange.
- Push the other end into the suction hood.
- The hood is fitted with a magnet to enable it to be placed close to the welding area.
- On the front of the magnet is a switch. This can be used to switch the magnetic force on & off.



**WARNING:** Tidy up the suction hose and mains input cable after use.  
This will prevent any trip hazards occurring



**NOTE:** Visually inspect the condition on the mains input cable and also the extraction hose prior to use. Ensure that neither are damaged.

## OPERATING INSTRUCTIONS

### ELECTRICAL CONNECTION

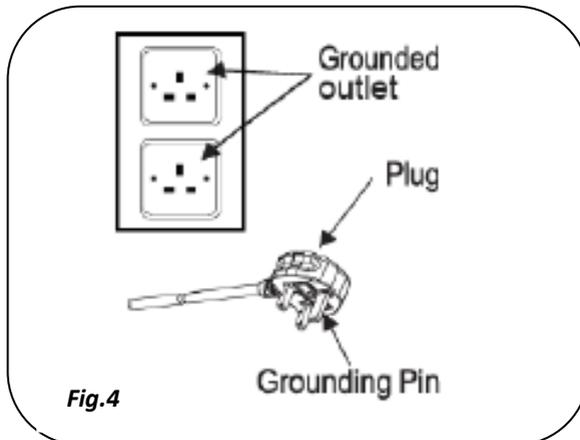


**Warning** Read these electrical safety instructions thoroughly before connecting the product to the mains supply.

This extractor is for use with a 230V UK domestic socket and should be grounded/earthed. Make sure that the product is connected to an outlet that has the same configuration as the plug (see Fig. 4). If an extension lead is used, make sure the cable size is sufficient as to be able to take the current of the extractor.

Check with a qualified electrician if the grounding instructions are not understood or there is doubt as to whether the product is properly grounded. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

Improper installation of the grounding plug will result in a risk of electric shock. If repair or replacement of the cable or plug is necessary, consult a qualified electrician.



We strongly recommend that this machine is connected to the mains supply through a Residual Current Device (RCD).

If you are not sure, consult a qualified electrician. DO NOT try to do any repairs.

## OPERATING INSTRUCTIONS

### START / STOP

To start & stop the extractor. ( see **Control Panel** page 13)

- Plug in the mains plug into a socket and switch on.
- The power indication light will illuminate.
- Place the suction hose close to the weld area. Keep the distance between the hood and the workpiece to less than 100mm.
- Press the Green ON button.
- The extractor will now suck up and extract the welding fumes.
- By using the adjuster knob the suction volume can be regulated.
- Turn the knob anti-clockwise for less suction & clockwise for more suction.
- On completion of the welding, press the Red OFF button to turn off.
- Switch off at the mains supply.



**NOTE:** Prior to every use check the suction hood. There is a fine metal mesh, ensure that it is not clogged / obstructed so that the welding fume can be extracted unhindered.



**NOTE:** Visually inspect the condition on the mains input cable and also the extraction hose prior to use. Ensure that neither are damaged.



**WARNING:** Do not allow the extraction hose to come into contact with the weld being performed as the high temperature will cause damage.



**WARNING:** Tidy up the suction hose and mains input cable after use. This will prevent any trip hazards occurring

## MAINTENANCE

The replacement of the filters, which implies clogging / air flow restriction, can vary in terms of frequency and duration of time according to the type of use.

Factors to be taken into consideration are:

- Material to be welded (each material and each alloy produces different fumes / micro-dust);
- Type of welding (each method to perform MIG, TIG, MMA, etc);
- Elements in contact (for example oil, grease, paint, etc. make the generated smoke more “aggressive”):

The extractor is fitted with 3 filters:-

- 1: Mesh Spark Arrestor
- 2: Primary Filter
3. High Efficiency Filter

### FILTER ACCESS & REPLACEMENT

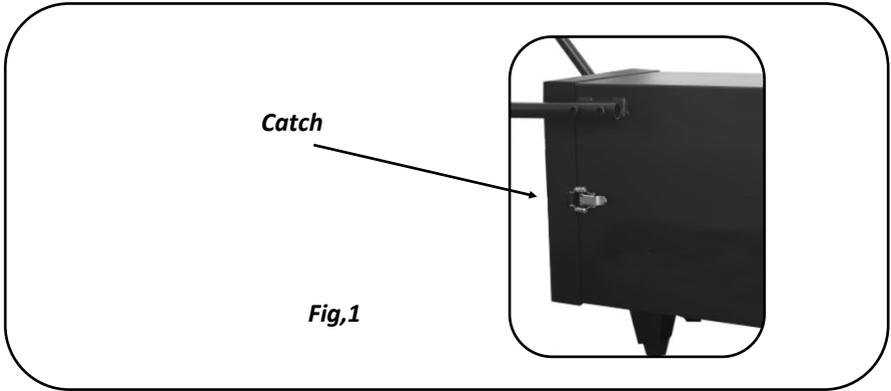
Access to the filter is simple and straight forward:

- Remove the suction hose from the inlet flange.
- Undo both the flange assembly catches to access the filters. Fig.1
- Remove the front flange assembly / cover.
- Remove the retaining bracket.
- Slide out each filter in turn.



**ATTENTION:** The machine could contain dusts which is harmful to health. Repair, maintenance, filter replacement cleaning operations must be carried out by suitably trained personnel equipped with adequate personal protective equipment (PPE): Gloves, Goggles and Facial filter mask.

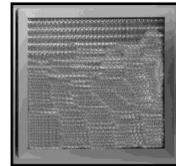
## MAINTENANCE



### **FIRST STAGE FILTRATION:**

Mesh Spark Arrestor  
SIP Part Number: WE08-00100

<i>Filter Material</i>	Aluminium Mesh
<i>Regeneration</i>	Yes; washable

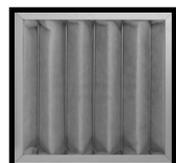


**NOTE:** Filter should be cleaned weekly.

### **SECOND STAGE FILTRATION:**

Primary Filter  
SIP Part Number: WE08-00098

<i>Filter Material</i>	Polyester Fibre
<i>Regeneration</i>	No



## MAINTENANCE



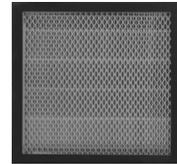
**NOTE:** Filter should be cleaned bi-weekly (fortnightly) to maintain optimum performance.

### **THIRD STAGE FILTRATION:**

High Efficiency Filter

SIP Part Number: WE08-00099

<b>Filter Material</b>	Polyester Fibre
<b>Regeneration</b>	No



**NOTE:** Filter should be cleaned bi-weekly (fortnightly) to maintain optimum performance.



**NOTE:** It is advisable to replace all the filters in the extractor at least once a year to maintain the maximum performance in both suction & filtration

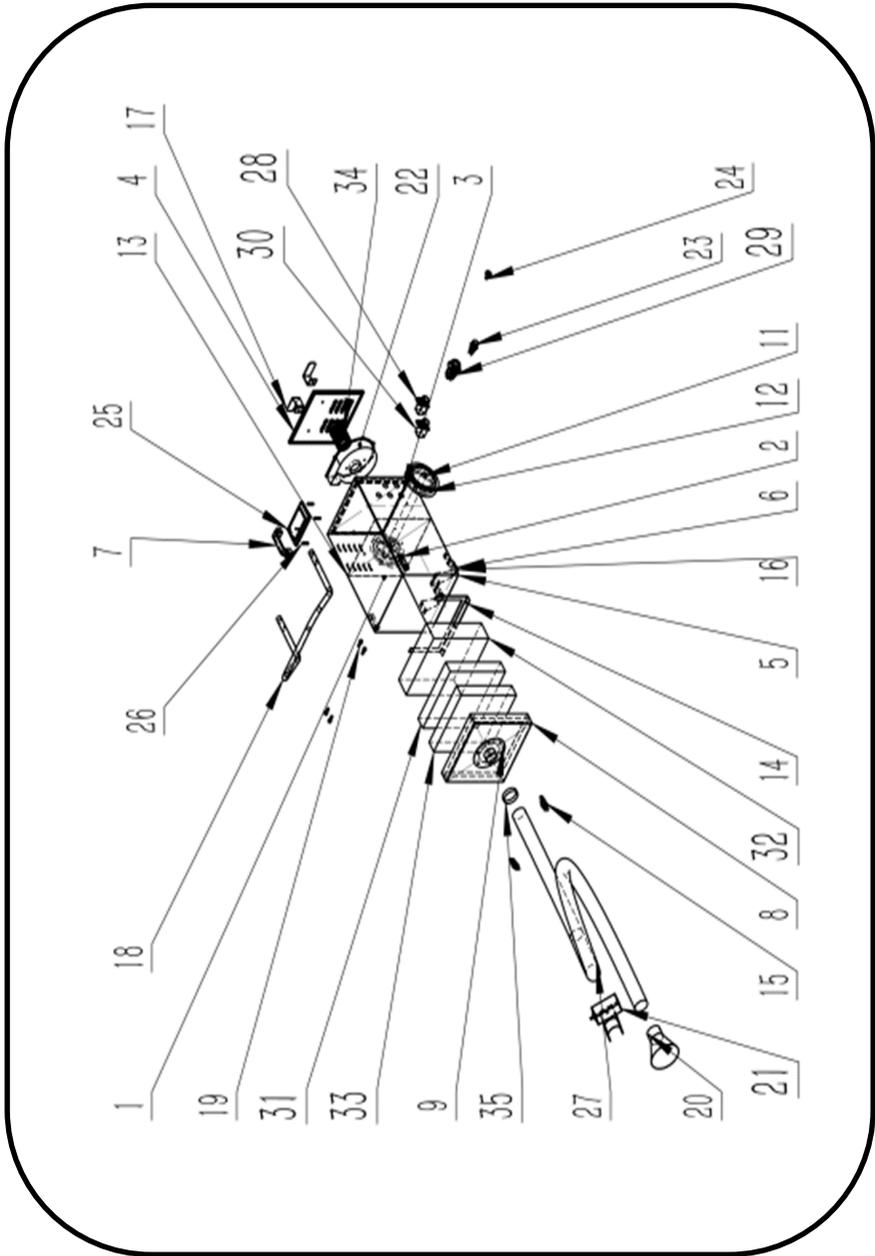


**NOTE:** Do not disperse the used filter dust into the environment. Deliver used filters to specialised disposal companies in accordance with current legislation.

## TROUBLESHOOTING

<i>Problem</i>	<i>Issue</i>	<i>Remedy</i>
Extractor fails to start	Power Off	Check Power & Switch
	Blown Fuse	Test Voltage.
	Mains Cable Issue	Check & Replace.
The power indicator is ON but fan does not start	Check if Start button has been pressed.	Check the condition & replace
	Internal fuse blown	Check and test fuses; replace if necessary. *Repair agents only
The extractor has poor / low suction	Clogged / Dirty Filters	Check the condition & replace
	Physical Obstructions	Remove any foreign bodies / obstructions
	Damaged Hose	Check hose and replace if necessary
	Suction hood more than 100mm away from work area	Check & set distance

EXPLODED DRAWING



## PARTS LIST

<i>Item No</i>	<i>Description</i>	<i>SIP Part No.</i>
1.	Fume extractor housing	WE08-00068
2.	Threaded bolts	WE08-00069
3.	Housing back plate	WE08-00070
4.	Housing backboard cover plate	WE08-00071
5.	Housing bottom plate	WE08-00072
6.	Feet	WE08-00073
7.	Handle	WE08-00074
8.	Housing front plate	WE08-00075
9.	Air intake flange O/D 60mm	WE08-00076
10.	Flange inside housing	WE08-00077
11.	Axle	WE08-00078
12.	Wheel	WE08-00079
13.	Motor fixing plate	WE08-00080
14.	Rubber Seal	WE08-00081
15.	Buckle	WE08-00082
16.	Shock absorber	WE08-00083
17.	Cable clamp	WE08-00084
18.	Pull rod	WE08-00085
19.	Hex Bolt M8*20	WE08-00086
20.	Vacuum Hood	WE08-00087
21.	Magnet Base with bracket	WE08-00088
22.	Fan	WE08-00089
23.	Indicator, Start, stop, E-stop button	WE08-00090
24.	Air volume adjustment knob	WE08-00091
25.	PCB	WE08-00092
26.	PCB Fixing bolt	WE08-00093
27.	Suction Hose +joints (2pcs)	WE08-00094
28.	Power indicator	WE08-00095
29.	Emergency stop	WE08-00096
30.	Stop Button	WE08-00097
31.	Primary Filter	WE08-00098
32.	High Efficiency Filter	WE08-00099
33.	Metal Pre-filter	WE08-00100
34.	Motor + Fan	WE08-00101
35.	Hose Joint	WE08-00102





# UK DECLARATION OF CONFORMITY

**We**

SIP (Industrial Products) Ltd  
Gelders Hall Road  
Shepshed Loughborough  
Leicestershire  
LE12 9NH  
England

**As the manufacturer within England, Scotland and Wales, we declare that the**  
SIP FX200 Welding Fume Extractor : SIP Code 05813

**Conforms to the requirements of the following regulation(s), as indicated:**

Electromagnetic Compatibility Regulations 2016  
Supply of Machinery (Safety) Regulations 2008  
Electrical Equipment (Safety) Regulations 2016  
The Restriction of the Use of Certain Hazardous Substances in  
Electrical & Electronic Equipment Regulations 2012

**And the following harmonised standard(s):**

BS EN ISO 12100:2010  
BS EN 60204-1:2018  
BS EN IEC 61000-6-2:2019  
BS EN IEC 61000-6-4:2019



Paul Ippaso
Managing Director
SIP (Industrial Products) Ltd
Date: 12 February 2024



# EU DECLARATION OF CONFORMITY

**We**

SIP Machinery Europe Ltd  
Quayside Business Park  
Dundalk  
County Louth  
Republic of Ireland

**As the manufacturer within England, Scotland and Wales, we declare that the**  
SIP FX200 Welding Fume Extractor : SIP Code 05813  
**Conforms to the requirements of the following directive(s), as indicated:**

EMC 2014/30/EU  
Machinery Directive 2006/42/EC  
Low Voltage Directive 2014/35/EU  
RoHS 2011/65/EU & 2015/863/EU

**And the following harmonised standard(s):**

EN ISO 12100:2010  
EN 60204-1:2018  
EN IEC 61000-6-2:2019  
EN IEC 61000-6-4:2019



Paul Ippaso
Managing Director
SIP (Machinery Europe) Ltd
Date: 12 February 2024



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.

Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised recycling agent. This will allow the recycling of raw materials and help protect the environment.



FOR HELP OR ADVICE ON THIS PRODUCT  
PLEASE CONTACT YOUR DISTRIBUTOR,  
OR SIP

DIRECTLY ON:  
TEL: 01509 500400

EMAIL:  
[sales@sip-group.com](mailto:sales@sip-group.com)

or

[customerservice@sip-group.com](mailto:customerservice@sip-group.com)  
[www.sip-group.com](http://www.sip-group.com)