

# **SWP Cobra Stealth Fume Extraction Unit Instruction Manual**

Home » SWP » SWP Cobra Stealth Fume Extraction Unit Instruction Manual

### **Contents**

- 1 SWP Cobra Stealth Fume Extraction Unit
- **2 Product Usage Instructions**
- **3 DECLARATION OF CONFORMITY**
- **4 SAFETY**
- **5 GENERAL**
- **6 TECHNICAL SPECIFICATIONS**
- **7 GENERAL RULES**
- **8 SAFETY LABELS**
- 9 DELIVERY TRANSPORT AND

### **INSTALLATION**

- 10 METHODS OF USE
- 11 MAINTENANCE
- 12 DECOMMISSIONING
- 13 SPARE PARTS
- **14 TROUBLESHOOTING**
- **15 CONTACTS**
- 16 FAQ
- 17 Documents / Resources
  - 17.1 References





# **Specifications**

• Model: COBRA STEALTH

• Manufacturer: Specialised Welding Products Limited

• Power Options: WFE-006 (110V), WFE-007 (240V)

• Country of Origin: Italy

# **Product Usage Instructions**

# **Safety Warnings:**

It is crucial to read the Use and Maintenance Manual carefully before operating the Fume Extraction Unit. In case of any queries, contact the Authorised Local Dealer only.

# Safety

- ELECTRIC RISK: Indicates potentially dangerous situations involving live parts.
- **HIGH TEMPERATURE:** Warns about high-temperature parts during operation.
- CONTACT WITH MOVING PARTS: Highlights the risk of contact with moving components.
- HAZARD: Indicates situations that may pose a safety risk.
- ATTENTION: Draws attention to machine efficiency issues not related to safety.

- **IMPORTANT:** Provides important general information not directly related to safety.
- ENVIRONMENT: Draws attention to environmentally friendly practices during machine use.
- USER: Refers to trained end users or staff responsible for machine use and maintenance.
- QUALIFIED STAFF: Refers to professionals like electricians or installers.

# **DECLARATION OF CONFORMITY**

#### Directives 2006/42/CE, 2014/35/UE, 2014/30/UE, 2014/53/UE-2011/65/UE

We, the undersigned Specialised Welding Products Limited (SWP Ltd) based at SWP Sales & Distribution Centre, Unit 1, Withins Point, Withins Road, Haydock Industrial Centre, Haydock, WA11 9UD, UK in the person of our legal representative, Mr. Jeremy Packer, hereby declare under our sole responsibility that the machine:

### WHEELED UNIT FOR WELDING FUME EXTRACTION

**COBRA STEALTH** 

# To which this declaration refers, complies with the requirements of the directives

- 2006/42/EC "Machinery Directive" of 17 May 2006
- 2014/35/EU "Low Voltage Directive (LVD)" of 26 February 2014
- 2014/30/EU "Electromagnetic Compatibility (EMC) Directive" of 26 February 2014
- 2011/65/EU "RoHS Directive" of 8 June 2011

# Please also note that:

- A copy of the technical construction file, as required by the Directive, is kept at our company, and is made available by our legal representative;
- The year of manufacture is printed on the label (with CE mark) located on the machine;
- The serial number is reported directly on the label and at the bottom of this declaration.



# Jeremy Packer Managing Director



Apply Matrix with Model and Serial number
WFE-006 - 110V Fume Extraction Unit WFE-007 - 240V Fume Extraction Unit

#### **SAFETY**

# **Specialised Welding Products Limited (SWP Ltd)**

Thanks you for purchasing a product from its range and kindly asks you to read this manual. Inside you will find all the information necessary for using the purchased machine properly; therefore please follow the instructions contained in it carefully and read it in its entirety. Please also store the manual in a suitable place to ensure it is kept intact. The contents of this manual may be changed without prior notice and without further obligations, in order to incorporate changes and improvements into previously shipped units. Reproduction or translation of any part of this manual without written permission of the owner is forbidden.

# **WARNINGS**

- Please read this Use and Maintenance Manual carefully.
- If necessary, please contact the Authorised Local Dealer only.
- CE
  The product has been tested according to European legislation in force.

### SYMBOLS AND STAFF

Below is a brief key of the symbols (the symbols shown are the most commonly used in this manual; the remaining symbols are nevertheless easy to understand).

4	<b>ELECTRIC RISK:</b> this draws attention to dangerous situations where accidental contact with live parts is possible, with subsequent personal harm.
	<b>HIGH TEMPERATURE:</b> this draws attention to dangerous situations stemming from the high temperatures of some parts of the machine during operation.
	CONTACT WITH MOVING PARTS: draws attention to the possibility of coming into contact with moving parts
<u>^</u>	<b>HAZARD:</b> this draws attention to situations or problems that may affect the safety of people due to injury or risk of death.
$\triangle$	<b>ATTENTION:</b> this draws attention to situations and problems relating to the efficiency of the machine that does not affect the safety of people.
!	IMPORTANT: this draws attention to important general information that does not involve personal safety or correct machine operation.
i	<b>ENVIRONMENT:</b> this draws attention to conduct and procedures that limit the impact on the environment linked to machine use.
U	<b>USER:</b> this refers to the machine's end user or their staff who has been specifically trained in the use and maintenance of the machine.
PQ	QUALIFIED STAFF: this refers to staff engaged in professional activities pertaining to the plant such as, for example, electrician, plumber, installer, etc.
TA	<b>AUTHORISED TECHNICIAN:</b> this refers to specialised technical staff authorised by SWP Ltd. to work on the machine (see Contacts and Numbers).

#### **IMAGES AND REPRESENTATIONS**

The images and figures used herein are provided purely as a guideline and may differ from the supplied unit. SWP Ltd. reserves the right to modify the machine without prior notice.

**NOTE:** that for the sake of visibility and clarity, some images illustrate the machine without guards or with an incorrect configuration.

### **SAFETY WARNINGS**

# **OPERATING ENVIRONMENT**

- Install and use the machine in a dry environment, which is not subject to the condensation of atmospheric humidity and is protected from direct exposure to atmospheric agents and sunlight.
- Do not install the machine in areas subject to severe environmental conditions: the environmental temperature must be between 5°C and 40°C, with a level of humidity below 80%.
- Always use the machine in suitable lighting conditions. The operating environment must be well ventilated and comply with the applicable standards on hygiene and safety at work.
- Never leave the machine unattended and take all necessary precautions to prevent unauthorised people from working on it.
- Do not use the machine and suction system connected to it in areas where there is an explosion or fire hazard.

#### PRELIMINARY CHECKS

- Make sure that the machine's electrical power supply system is up to standard and equipped with suitable protection devices against current leakage and short circuits.
- Only power the machine if it is completely closed and only when you are sure it is intact and connected correctly to the power supply system.
- Only operate the machine after checking that the filters are in good condition.
- The product can be used after receiving adequate staff training and reading this manual.

#### **USE AND MAINTENANCE**

- The machine may only be used for the purpose specified in this "Use and Maintenance Manual" (extraction and deodorisation of welding fumes) and is not suitable for the extraction of fumes deriving from operations such as deburring, sanding, grinding and for the extraction of flammable vapours or liquids.
- The machine must only be used by a responsible and adult operator.
- Periodically check the efficiency of the filtering system and replace the filters on a regular basis to avoid toxic, harmful or potentially hazardous substances from building up.
- During maintenance operations, use gloves, goggles and a face mask to protect yourself from dust and pollutants accumulated in the filter box, filters and pipes of the machine.
- Strictly follow the instructions in this Use and Maintenance Manual for commissioning, setting and servicing the machine.
- Do not perform any repairs or changes to the product that may alter its operation or jeopardise its integrity. Do not perform maintenance while the machine is in operation. To clean the machine do not use detergents that are corrosive or harmful to people's health.

If the machine and/or the system connected to it is faulty or malfunctions DO NOT USE IT AND CLEARLY DISPLAY THAT IT IS OUT OF SERVICE. For repairs please contact our Technical Support Service and request the use of original spare parts.

Wear suitable personal protective equipment (PPE) during machine maintenance and cleaning:

Gloves, Glasses and Face mask.

• During cleaning and maintenance operations, do not release any of the collected dust and pollutants or other residues into the environment, but comply with the standards in force.

Failure to comply with the safety instructions may compromise the safety of the machine and the personnel using it.

### MANUFACTURER AND USER RESPONSIBILITY

The manufacturer, Specialised Welding Products Limited (SWP Ltd) disclaims any liability arising from incorrect use or misuse of the machine, from any damage caused by the use of non-original spare parts, from the consequences of maintenance carried out incorrectly and from tampering with the product, its control circuits or the system software.

The personnel in charge of using and handling the machine are responsible for the application of the safety

instructions contained in this manual. The user's personnel must be suitably trained and informed of the risks involved in using the machine, with particular reference to residual risks. The user must also scrupulously monitor compliance with the prescriptions contained in this document and the general safety regulations applicable to the machine.

Failure to follow the safety standards may cause damage and injury, including serious, to staff, and damage to the product.

#### **CERTIFICATIONS**

- The machine was built in compliance with the pertinent and applicable Community Directives at the time it was placed on the market.
- $\bullet$  For this reason, the machine is marked  $oldsymbol{\xi}$  and has a declaration of conformity in this manual.

### **GENERAL**

#### PRODUCT DESCRIPTION

The machines of the COBRA STEALTH family, produced by SWP Ltd., are mobile extraction filter machines that enable the extraction and deodorisation of welding fumes. They are made of sturdy painted sheet metal, with inspection panels for easy filter maintenance. Extraction, via a fully articulated arm fitted with a suction cap, depends on an electric fan driven by an electric motor.

Polluted air is filtered through a battery of filters; the type and number of filters installed depend on the configuration of the machine purchased (see par.1.2 for a more detailed description). The filtered air is then expelled from the lower part of the machine. In the various configurations, the machines may differ in the number and type of filters installed, in the type of arm supplied (it is possible to purchase the machine without an arm) and, on request, in the power supply to be provided to the machine itself.

# **MODEL NAME**

 This "Use and Maintenance Manual" refers to the COBRA STEALTH mobile extracting filter machine, manufactured by SWP Ltd.

### **COBRA STEALTH**

• Mobile extracting filter machine with Ø150 TECHNO arm. Mechanical filtration by means of a filter set consisting of a metal filter, prefilter, high efficiency filter and 4.5 kg activated carbon septum.

### **INTENDED USE**

The machines of the COBRA STEALTH family, produced by SWP Ltd., are equipment designed for the
extraction and filtration of fumes produced during welding operations in the mechanical industry, the workshop
and the body shop.

# **PROHIBITED USE**

• Failure to comply with the following requirements may compromise the safety of the operators and the integrity of the machine; therefore, it is recommended to carefully read and evaluate before proceeding with the

commissioning of the machine.

- SWP Ltd. will not be held liable whatsoever for damage to property or people due to improper or incorrect use of the machine connected to it.
- If it is necessary to use the machine in conditions other than those expressly allowed, we recommend preventively contacting SWP Ltd.

The COBRA STEALTH machine indicated in par.1.2, has been designed exclusively for the extraction and filtration of fumes produced during welding operations in the mechanical industry, in the workshop and in the body shop. Its use is therefore forbidden for any other application outside of what is expressly allowed in previous paragraph 1.3 on the Intended Use of the Product; in particular it is forbidden to use it for the extraction of:

- Flammable or explosive dust (wood, aluminium, magnesium, carbon fibre, flour, etc.);
- Fine, toxic or harmful dust (asbestos, talc, toner, etc.)
- Vapours or aerosol, especially if flammable (petrol vapour, alcohol, trilene, solvents, etc.);
- Dust that is incandescent or contains sparks (grinding, sanding, metal cutting, etc.);
- Liquids or damp dust (Cleaning damp mats);
- Heavy or voluminous objects, especially if in large quantities (sand, gravel, paper, fabric, etc.);
- Exhaust gas, vapours produced from battery recharging, oily mists.

The COBRA STEALTH machines are not designed to operate in the presence of a potentially explosive atmosphere, accordingly its use is forbidden in work environments where there is a risk of fire or explosion. The use, during welding operations, of flammable sprays, abrasive wheels or other tools that cause sparks or open flames, may cause the filter fabric to catch fire.

The COBRA STEALTH machine is not designed for use in heavy duty work environments, in terms of temperature and humidity, or exposed to the elements.

### TECHNICAL DOCUMENTATION PROVIDED WITH THE PRODUCT

- The machines of the COBRA STEALTH family are accompanied by this Use and Maintenance Manual which provides all the technical information, pictures, instructions for installation, use and maintenance and the necessary safety warnings for correct product use.
- The Use and Maintenance Manual must accompany the machine for its entire service life cycle, even in the event of sale or transfer of ownership; it must be stored to ensure its integrity and must be easily available for consultation in case of need (we recommend keeping a copy near the machine).
- The purpose of this document is to provide the necessary information for competent and safe use of the product and accordingly, it must be made available to the any user of the machine.
- If this manual is lost or damaged, we recommend asking SWP Ltd. directly for a new copy. (Tel. +44-01942-719930)
- The technical information, illustrations and diagrams contained in this document are owned by SWP Ltd. and must be considered confidential.

#### **WARRANTY**

The warranty period is 12 months for mechanical components and 6 months for electrical parts from the date of receipt of the product. The warranty only covers the replacement of parts defective in origin. The warranty is no longer valid if the machine is used incorrectly or tampered with by people who have not been authorised by us or if

non-compliant components or techniques are used. The use of non-original parts will immediately void the warranty. The warranty only covers parts of the machine built or assembled by SWP Ltd. The warranty does not cover parts subject to wear and consumables.

# **CONTRACT AGREEMENTS**

It is the responsibility of the customer to carry out the installation and/or commissioning of the machine within the agreed timeframe.

Unless agreed otherwise by contract, the following works and set-ups are the responsibility of the Customer:

• Electrical power supply line compliant with the regulations in force in the country of use.

# **TECHNICAL SPECIFICATIONS**

#### **MACHINE DESCRIPTION**

The machines of the COBRA STEALTH family described in this manual are mobile units for the extraction and filtration of welding fumes in the mechanical industry in general. The machine is equipped with a manually operated extraction arm to ensure that the welding fumes are captured in the immediate vicinity of the bench or workplace on which the work is carried out. Extraction is provided by a fan integrated into the machine, while filtration is mechanical and is carried out by a set of filters which differs from machine model to model (see par. 2.5 "Equipment").

Some models provide for the installation of a set of activated carbon on the air outlet side of the machine (bottom side) for deodorising the outlet air. The operation of the machine is managed by a control panel that controls the motor of the electric fan and monitors the total working hours of the machine to allow for routine maintenance of the machine, such as the periodic replacement of filters.

# MAIN LIST OF COMPONENTS

The following diagram shows the main components of the COBRA STEALTH machine

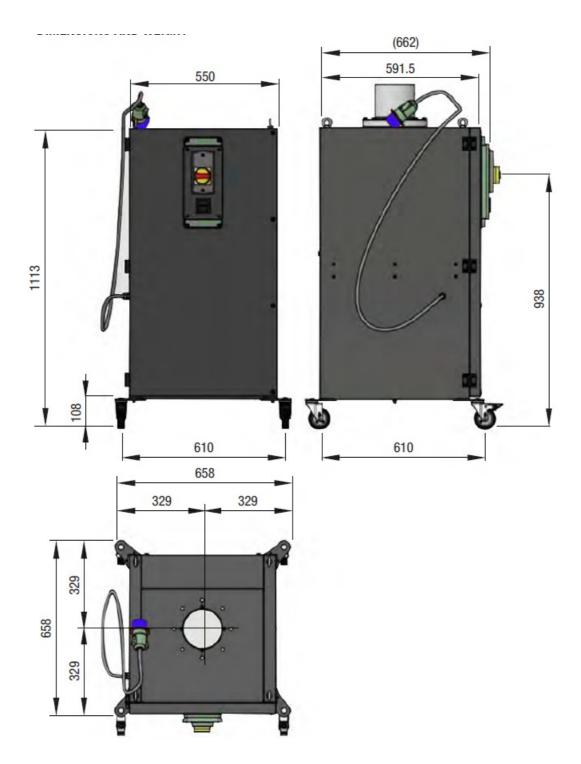
Machine Diagram	Pos	Component
	1	Machine body
	2	Lifting eyebolts
	3	Rear wheels
	4	Front wheels with brake
	5	Filter sets (*)
	6	Fan nut
10 (5)	7	Fan motor
9	8	Activated Carbon Set (**)
	9	Front panel
	10	Control panel
	11	Power cable and plug
3		Extraction arm (***)
(*) Filter set differs from model to model. Refer to the equipment described in Par. 2.5.		

(\*\*)

The activated carbon set differs from model to model and may not be included. Refer to the equipment described in Par. 2.5.

(\*\*\*) The extraction arm differs from model to model. Refer to the equipment described in Par. 2.5.

# **DIMENSIONS AND WEIGHT**



Model	Weight	Weight (Without Arm)
110V – WFE-006	94KG	82KG
240V – WFE-007	94KG	82KG

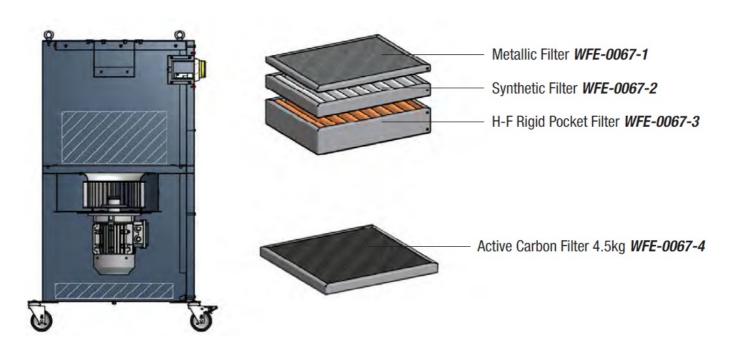
# **WARNING**

- The weight of the machine includes the articulated arm. The "weight without arm" refers only to the wheeled machine without both arm and cap. The machine is delivered with the mobile cart in a separate package from the arm and cap.
- The above image does not show the extraction arm. For the relevant characteristics please refer to par. 2.7 "Articulated Arms".

# **TECHNICAL FEATURES**

Characteristics	Cobra Stealth Fume 110V – WFE-006 / 240V – WFE-007
Nominal air flow without arm (mc/h)	1400
Hood air flow (mc/h)	1300
Power (HP/KW)	1.5/1.1
Noise (dBA)	75
Carbon quantity (kg)	4.5
Filtering surface (m2)	500 x 500 x 75
Dimensions (cm)	93.6 x 55 x H 63.5
Arm length (m)	3
Arm diameter (mm)	150
Weight (kg)	82
Safety device	Hour Counter and Cut Out Switch

# **EQUIPMENT**



**Important:** when servicing machines equipped with panel filters, strictly follow the sequence of filters shown in the diagram.

SWP Ltd. declines all responsibility for damage to property or persons due to improper use of the machine and/or incorrect positioning of the filters within the machine.

# **FILTERS**

Model	Function	Classification	Dimensions
Metallic Filter WFE-0067-1 Flat metal panel filter 400x500x22 Galvanised sheet metal frame with aluminium braided filter media.	Anti-grease and anti-spark filtration.	Classification (EN799-2012): G2 Classification (ISO 16890): coarse 30% Flame behaviour: non-flammable	22 007
Synthetic Filter WFE-0067-2 Sfiltering=0.34m2 Synthetic panel prefilter 400x500x48 Galvanised sheet metal frame with polyester filter media.	Pre-filtration and separation of coarse and fine dust. Prefiltration for high efficiency filters.	Classification (EN799-2012): G3 Classification (ISO 16890): coarse 50% Flame behaviour: F1 - DIN.53438	500
H-F Rigid Pocket Filter WFE-0067-3 Panel filter 400x500x98 – Sfiltering=1.24m2 Galvanised sheet metal frame with glass microfibre filter media.	Filtration. Elimination of most solid particles.	Classification (EN799-2012): F9 Classification (ISO 16890): ePM1 85% Flame behaviour: 2 (U.L.)	500
Active Carbon Filter  WFE-0067-4  Flat cell filter 500x500x35 4.5kg of Activated Carbon	Air purification and odour removal.	4 mm cylinders for good adsorption (CTC 45%)	500

# **ARTICULATED ARMS**



- The machines of the COBRA STEALTH family are supplied with an articulated arm for the extraction of welding fumes.
- The TECHNO3/C is a 3 metre long Ø150 self-supporting articulated arm. For correct installation of the arm on the machine and correct use, please refer to the relevant Use and Maintenance Manual "LU067IT02"
- The arm is supplied disassembled and in a separate package from the cart belonging to the COBRA STEALTH family of machines.

# **GENERAL RULES**

# **GENERAL RULES OF WORK AND SAFETY**

The Safety Manager of the workplace where the machine of the COBRA STEALTH family is operating must train personnel appointed to machine use and inform them of the risks connected to its use, so that they are able to protect themselves and others.

Failure to observe the Safety Requirements provided below and the warnings contained in the Safety Labels applied to the product, can cause hazardous situations, including serious, for the operator and for the people in the vicinity of the machine. SWP Ltd. will not be held liable in any case for any accidents or damage caused by improper use of the product or by inadequately trained staff or the failure to observe, including partial, the work safety rules and intervention procedures contained herein.

#### **SAFETY REQUIREMENTS**

The directions provided below play an essential role in the prevention of any danger that one may encounter when working with a machine from the COBRA STEALTH family. However, they must always be complemented by the expertise and common sense of those working on the machine.

- Adult and well-trained individuals only are allowed to use this machine.
- This machine must always be used after receiving adequate information and reading this manual.
- This machine is suitable for industrial use only, e.g. factories, workshops, body shops, etc.
- This machine is not designed to be used in environments where there is a risk of fire or explosion.
- Do not use to extract toxic, corrosive or flammable substances.

- Do not extract lit cigarettes butts or incandescent bodies that could ignite the filter.
- Make sure that the electrical power supply line is suitable and compliant with the regulations in force.
- Before use, make sure that the machine's inspection doors are closed and that the power cable is not damaged.
- Do not touch electrical cables, switches, buttons or other electrical parts with wet hands.
- Do not use the machine if there are evident signs of malfunctioning or structural damage.
- During repair and maintenance work, disconnect the electrical power supply.
- For any repair work only request the use of original spare parts.
- Never use the machine incomplete (e.g. with filter panel or motor panel removed).
- Do not start the machine without a filter or with the extraction arm removed.
- Keep the machine clean and clear of any objects that could obstruct the air outlet.
- Avoid using open flames or sources of heat in the vicinity; provide suitable ventilation.
- Avoid the use of flammable or toxic solvents such as petrol, ethers or alcohol for cleaning.
- Do not open the filter panel or the motor panel while the extraction is running.
- It is forbidden to climb onto the machine's metalwork.
- The machine must always be moved with the extraction arm in the collected position (not extended) and with the power plug disconnected.
- Do not move the machine using the extraction arm or the cap.
- Do not place or use the machine on sloping surfaces.
- If equipment not supplied by SWP Ltd. is connected to the machine, make sure the safety requirements set forth in Directive 2006/42/EC are maintained.
- Any type of repair or modification that may alter the operation and safety of the machine must be authorised by SWP Ltd. Otherwise, SWP Ltd. will not be held liable for any damage.

**ATTENTION:** The machine may contain pollutants and dust (welding fume residue) that are harmful to health. Machine repair, maintenance and cleaning must be carried out by duly trained staff equipped with suitable personal protective equipment (PPE).

ATTENTION: Parts of the machine can become very hot. During operation, the motor and nut can reach 90°C; in case of maintenance or repairs, switch the machine off and wait at least 30 minutes before working on the internal parts of the machine.

**ATTENTION:** The machines may have moving parts that could come into contact with the operator, ensure that all guards are intact and fitted before using or servicing the machine.

# **RESIDUAL RISKS**

The Risk Analysis conducted by SWP Ltd. on the product and contained in the Technical File has made it possible to eliminate all of the main sources of danger connected to machine use; nevertheless there are risks that cannot be eliminated, that are listed below:

#### **DUST HAZARD:**

Excessive clogging of the filters or damage to the filters can compromise the filtration efficiency of the machine

and cause the release of pollutants and harmful particles, a residue of the extracted welding fumes. The machine calculates the working hours of the filter, providing the necessary information for a correct maintenance plan on these components.

Perform the scheduled machine maintenance regularly, which entails replacing the filters.

#### **DUST HAZARD:**

- During routine maintenance, such as the replacement of filters, you are exposed to the inhalation and contact with fine, toxic or harmful dust, residue of the extracted welding fumes.
- When cleaning or servicing the machine, use personal protective equipment (PPE), such as goggles, gloves and a face filter mask.

# **ELECTRICAL RISK:**

- It is forbidden to perform repairs or maintenance on the machine when it is connected to the electrical power supply system; nevertheless, if it is necessary to work on a live machine, this task can only be carried out by Qualified Staff (PQ) with electro-technical skills, or by an Authorised Technician (TA) designated by SWP Ltd.
- Adopt all precautions required by the regulations in force when working on a live machine: Wear insulating
  gloves and footwear and use insulation mats and insulated tools.

# **RISK OF BURNS:**

- During operation, the electric fan can reach high temperatures, which may result in burns.
- Do not operate the machine with the motor panel open. Wear heat-resistant gloves during machine maintenance.

# **DANGER OF MOVING PARTS:**

- If the operator performs maintenance by inserting his hands into the fan nut where the fan is located, if the
  machine is not disconnected from the electrical power supply, potential outsiders may start the machine and
  cause injury.
- Always carry out routine and extraordinary maintenance operations with the machine disconnected from the power supply. Do not operate the machine with the motor panel open.

### **RISK OF FIRE OR EXPLOSION:**

• The high temperatures reached by some machine parts and the electrostatic charges that can accumulate on the surface of the filter can trigger an ignition due to a combustion process or explosion.

The machine must not be installed in environments where there is a fire or explosion hazard. Extraction cannot be used in environments containing flammable dust, gases or liquids. It is forbidden to store, even temporarily, potentially flammable or explosive substances in rooms where the exhaust gas extraction system is installed.

#### **RISK OF EXPLOSION:**

- In the event that, despite the clearly expressed prohibition in par. 1.4 "Prohibited use", the machine is used to extract elements which are flammable by nature or reaction, the risk of explosion remains.
- The COBRA STEALTH machines are not designed to operate in the presence of a potentially explosive atmosphere, accordingly its use is forbidden in work environments where there is a risk of fire or explosion.

#### **RISK OF FAULT OR MALFUNCTION:**

- Prolonged use of the machine in particularly severe environmental conditions (brackish environment, excessive temperature, formation of condensation, exposure to atmospheric agents, etc.) can cause malfunctions or faults that can compromise safety.
- Follow the instructions given in the "Safety Requirements" relating to the work environment in par.3.1 in this "Use and Maintenance Manual".

#### RISK OF INCORRECT INTERPRETATION OF THE SAFETY LABELS:

- After the main sources of danger were identified in the Risk Analysis, Safety Labels have been affixed to the
  machine, with unified symbols, designed to warn of these sources of danger. Over time these labels can
  become illegible or hard to understand due to age or wear.
- The user is required to immediately replace any Safety Labels should they no longer be legible due to age, wear or damage.

#### **RISK OF EXPLOSION:**

• In the event that, despite the clearly expressed prohibition in par. 1.4 "Prohibited use", the machine is used to extract elements which are flammable by nature or reaction, the risk of explosion remains.

To limit these risks it is advisable to follow all the instructions given in this Use and Maintenance Manual, not to force or inhibit the machine safety devices and wear the provided personal protective equipment (PPE). Please note that all staff involved in using and servicing the machine and the system in which it operates must be aware of its safety standards.

# **SAFETY LABELS**

Labels with symbols and/or messages are applied on the machine, which draw attention to the main sources of danger.

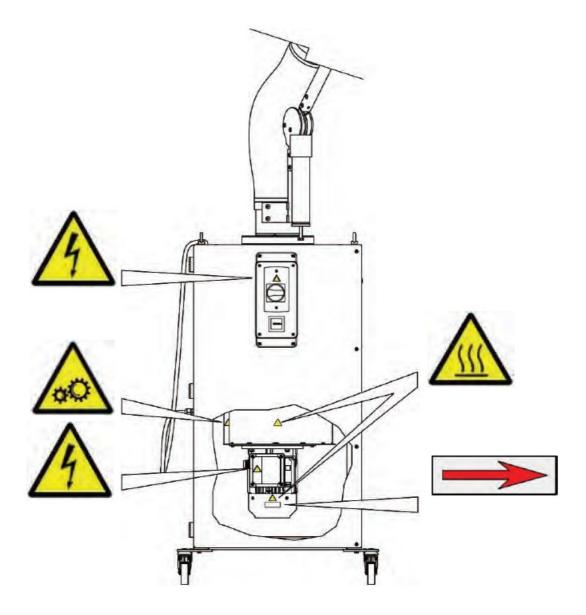
Some of these labels provide information on correct machine use so as to prevent faults or malfunctions that could generate new sources of danger. The following table shows these labels with the description of their meaning and location:

Model	Function
	ELECTROCUTION HAZARD
4	Indicates the presence of live parts; it is applied to the machine's Control Panel and motor terminal board.
	- Only Qualified Staff (PQ) are allowed to intervene on the electrical components of the machine. In case of fire, do not use water to put out the flames.
	BURN HAZARD
	Indicates the presence of surfaces which, after prolonged use of the machine, may reach temperatures exceeding 90°C; it is applied to the motor and the electric fan nut.
111	<ul> <li>Only Qualified Staff (PQ) are allowed to maintain the internal components of the machine. Use appropriate personal protective equipment (PPE) for any maintenance work.</li> </ul>
•	RISK OF CRUSHING AND IMPACT WITH MOVING PARTS
	The presence of moving parts in relation to each other creates a risk of crushing that cannot be eliminated. It is fitted at the impeller's exhaust outlet.
TAW.	Only Qualified Staff (PQ) are allowed to maintain the internal components of the machine. Use appropriate personal protective equipment (PPE) for any maintenance work.
	INDICATION OF CORRECT DIRECTION
<b>—</b>	Indicates the correct direction of rotation of the motor of the electric fan and the correct direction of the extracted air flow; it is applied to the fan cover of the motor.
	- Check the direction of rotation of the motor.

# **WARNING**

- It is strictly forbidden to remove the Safety Labels and the Identification Plate (Serial Number) applied to the Machine and/or its parts SWP Ltd. will not be held liable for safety aspects in relation to the Machine if this warning is not observed.
- Ensure that the safety labels are intact and legible; to clean, do not use solvents, alcohol or gasoline.
- Replace illegible plates by asking SWP Ltd. for new ones.

The following images indicate the location where the labels are applied on the machine:



# **NOISE LEVEL**

The phonometric tests carried out on various models of the mobile Extraction Filter Machine of the COBRA STEALTH family show that

- A maximum sound pressure level of 75 dB(A) in the workplace;
- A sound power level of less than 80dB.

**WARNING:** The measured noise level refers to the machine alone. The user may detect values other than those indicated depending on the environment. This is why it is advisable to assess the noise level in the work environment, with the extraction system running.

• For noise levels above 80 dB(A), workers must be informed of the risks arising from prolonged exposure to the noise and must be equipped with appropriate personal protective equipment (PPE).

# **DELIVERY TRANSPORT AND INSTALLATION**

# PRELIMINARY CHECKS

• When the goods are received, check that the packaging is intact and that there are no signs of possible

damage from shipping; if necessary, before opening the packaging, document any problems by taking pictures.

- If the product is damaged, do not go ahead with its installation and report what happened to SWP Ltd. to establish any necessary actions.
- Prepare a place, protected against the elements to store the product until installation, if this is carried out at a later time.

#### **WARNING**

- The product cannot be exposed to the elements; it must therefore be temporarily stored in a protected area, pending final installation.
- If the product gets damaged during transport, do not go ahead with its installation and contact your local Authorised Dealer or our Technical Support Service.

#### TRANSPORT AND HANDLING

The product is shipped in three separate packages:

- The first consists of a wooden pallet to which the cart of the extraction filter unit is fixed by means of plastic straps. A cardboard cover ensures product protection.
- The second, containing the arm, consists of a cardboard measuring 1830mmx290mmx580mm in the case of a TECHNO3/C arm or 1330mmx220mmx220mm in the case of an ARMFLEX arm
- The third, containing the cap, consists of a cardboard box measuring 420mmx420mmx420mm. Unload and move the product with suitable lifting equipment, operated by authorised staff, and keeping the goods in their original packaging until the time of installation.

Before unloading and/or handling the product, check that the packaging is intact, that the machine is strapped to the pallet and that there are no other objects on the packages being handled that may move or fall.

#### **WARNING**

- The loading, unloading and subsequent handling operations must be performed keeping the machine in the original packaging and using suitable lifting equipment.
- Make sure that the lifting equipment is suitable for the weight of the machine (product weights and overall
  dimensions are given in the Dimensional tables in Par. 2.2) and perform the handling operations safely in
  accordance with the legislation in force.
- Staff not involved in the operation should stay at a safe distance. Check that there are no objects resting on the machine and that any components that can move have been fastened. The floor must be flat, clean and free of debris.

Position the machine near its final location and unpack it, removing the protective cardboards and cutting the plastic straps that secure the cart to the pallet.

Lift the cart from the pallet using a suitable machine with a load capacity commensurate with its weight. Use the lifting eyebolts on the top of the cart for this purpose. Remove the pallet used for shipping and lay the cart on the ground.

If the machine needs to be handled and shipped again, put it back in its original packaging.

Do not leave the packaging materials (cellophane, wood, cardboard, etc.) within the reach of children, as they are potential sources of danger.

• Dispose of the packaging materials responsibly. Packaging materials must be disposed of according to the standards in force.

# **INSTALLATION**

The following is a description of the steps required to install and commission a machine from the COBRA STEALTH family.

- Do not use the machine in a place with severe environmental conditions or exposed to atmospheric agents, in compliance with the "Safety Requirements" in par.3.1 of this Use and Maintenance Manual.
- The machine must not be used in environments where there is a fire or explosion hazard. Extraction cannot be
  used in environments containing flammable dust, gases or liquids. It is forbidden to store flammable or
  explosive substances, even temporarily, in the areas where the machine is used, especially if these are highly
  volatile (for example: alcohol, petrol, solvents).
- The environment where the machine will be commissioned must be suitably sized to guarantee convenient access to the Control Panel; furthermore, the entire perimeter of the machine must be clear of any obstructions (partitions, walls, other machines, etc.) to guarantee good air circulation that is required for correct fan cooling.
- Installation operations must be carried out by Qualified Staff (PQ) with appropriate means and in compliance with the occupational health and safety regulations in force.
- In case of doubts or problems during the installation and testing of the machine, stop the activities and contact our Technical Support Service.
- If you need to adapt the operation of the machine to special working conditions, only contact our Technical Support Service and ask for the intervention of one of our Authorised Technicians (TA).

All of the operations described must be performed by Qualified Staff (PQ).

**NOTE:** The installation of the machine and the provision of electrical connections for its power supply are the responsibility of the customer, unless otherwise agreed in the contract.

#### **REMOVING EYEBOLTS**

• After removing the machine from its original packaging and taking it off the pallet, remove the 4 handling eyebolts (par.2.2, pos.2) and replace them with 4 blackened ISO7380-M6x20 screws supplied.

# **ARM ASSEMBLY**

 For the correct assembly of the TECHNO3/C arm on the machine, refer to the relevant Use and Maintenance Manuals.

#### **ELECTRICAL POWER SUPPLY CONNECTION**

The machines of the COBRA STEALTH family are supplied with a 5 metre long Power Cable and an IEC 309 standard industrial plug. A dedicated power line and an interlocked wall socket with the following characteristics are required to power the machine:

Electrical Power Supply Line	110V/210V with differential circuit breaker protection
Circuit Breaker Protection	In 16A – Curve C
Differential Protection	I∆n ≤ 30mA – Type AC

**NOTE:** Set the wall socket near the working area of the machine so that you can connect the plug without having to use extension cables.

After having set up the power line with the wall socket for the machine power supply, you can proceed with the first start-up to verify the direction of rotation of the fan:

- Connect the mains plug of the machine to the electrical socket provided for this purpose, ensuring that the position of the cable cannot cause danger or damage of any kind;
- Open the motor compartment and operate the machine for a short time (see par. 6.3 "Using the machine");
- Using a mirror, check that the motor rotation is as indicated by the red arrow sticker on the motor fan cover, described in paragraph 4;
- If the motor rotates in the opposite direction to that indicated when it is first switched on, it will be necessary to restore the correct phase sequence by adjusting the power plug;
- Close the motor compartment with the panel previously removed.

# Warning

- Only Qualified Staff (PQ) are allowed to intervene on the electrical components of the machine.
- Only Qualified Personnel (PQ) are permitted to carry out any work with the inspection doors open or removed.

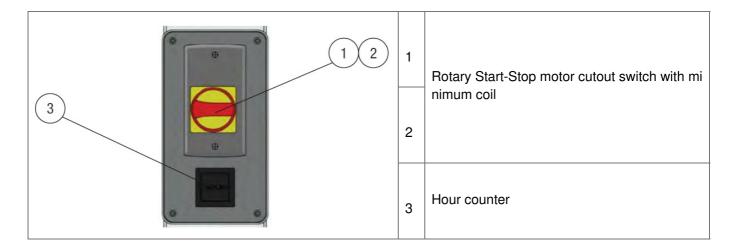
# **CHECKS AFTER INSTALLATION**

After making the electrical connections

- Open the filter box and check that their arrangement is correct as indicated in par. 2.5;
- Tighten the filter box and check that its closing screws are correctly tightened;
- Check that the motor box closing screws are tightened correctly;
- Ensure that the machine's ejection flange (bottom side) is free of any foreign bodies that could obstruct the escape of air;
- Check that the articulated arm is properly secured.

# **METHODS OF USE**

#### **DESCRIPTION OF THE CONTROL PANEL**



# PRELIMINARY CHECKS

Before each start-up of a machine in the COBRA STEALTH family, it is advisable to carry out a quick check on the machine:

- Check the integrity of the power cable;
- Ensure that the power cable is located in an area where it cannot create an obstruction or hazard;
- Check that there are no foreign bodies obstructing the discharge, which is located at the bottom of the machine;
- · Check the status of the filters;
- Check that the machine has properly closed inspection panels;
- Make sure that there are no objects or people within the range of the extraction arm during the work process, in order to prevent impacts if it is moved;
- Ensure that the machine is properly positioned in relation to the working area and that the arm reach covers the entire working area. If it is necessary to move the machine, avoid moving it by means of the arm.

# **USING THE MACHINE**

The machine switch-on and off procedures are described below, which refer to the components found on the Control Panel, described in the previous par. 6.1 "Description of the Control Panel".



- Position the extraction hood of the arm near the working point where extraction is to be carried out;
- Check that the arm damper is open: the lever must be parallel to the axis of the arm;
- Start the extraction by turning the rotary switch clockwise (par.6.1, pos.1)
- When work is finished, stop extraction by turning the rotary switch anti-clockwise;
- Close the arm by bringing it back to the collected position (elbow closed and arm upright);
- Disconnect the electrical plug (par.6.1 pos.4) from the wall socket and wind up the cable, placing it on the machine casing.
- Position the machine so that it does not obstruct or endanger normal operation.

The hour meter on the machine's control panel (par.6.1 pos.3) allows you to check the status of the machine and filters.

### **MAINTENANCE**

Perform maintenance and cleaning with the machine switched off and only when it is disconnected from the electrical system.

The operations described below must solely be carried out by staff who have received adequate training on the tasks to be performed and who strictly conform to the provisions in this Use and Maintenance Manual. Do not use water or aggressive detergents to clean the machine. If dust accumulates, remove it by vacuuming it and then wipe with a dry cloth or dry compressed air.

- ATTENTION: The machine may contain pollutants and dust (welding fume residue) that are harmful to health.

  Machine repair, maintenance and cleaning must be carried out by duly trained staff equipped with suitable personal protective equipment (PPE)
- ATTENTION: Parts of the machine can become very hot. During operation, the motor and nut can reach 90°C; in case of maintenance or repairs, switch the electrical panel off and wait at least 30 minutes before working on the internal parts of the machine.
- ATTENTION: The machines may have live parts, disconnect the machine from the mains before working on it.
- **ATTENTION:** The machines may have moving parts, disconnect the machine from the mains before working on it.

#### **ROUTINE MAINTENANCE**

The machine requires some routine maintenance to be performed periodically. The following table lists the suggested interventions, the type of staff authorised to perform them and the frequency they must be performed at:

Intervention – Staff		
Check the condition of the power cable	U	Monthly
Check that the screws securing the articulated arm to the machine are tightened correctly	U	Monthly
Check that the 4 wheels are properly secured	U	Monthly
Check the condition of the filters and clean or replace them if necessary (1)	U	Weekly
Check the condition of the articulated arm, its movement systems, joints and clutches (2)	U	Monthly
(1) See par. 7.2 "Filter maintenance"		
(2) See the relevant Use and maintenance manuals.		

#### **NOTE**

- The indicated maintenance frequency is purely a guideline and refers to standard conditions of use.
- If the machine is used in particular conditions or in a particularly harsh environment, contact our Technical Support Service.

# **FILTER CLEANING**

The intervals given in this paragraph are indicative and refer to standard conditions of use. To find the ideal maintenance intervals for the COBRA STEALTH model you have purchased, we recommend the following procedure:

- 1. After the first 40 operating hours or as soon as a decrease in the suction capacity is felt, check the status of all filters; refer to the installed hour meter;
- 2. If one or more filters are clogged, proceed according to the instructions in the following paragraphs;
- 3. Thereafter, check the filters every 20 operating hours or each time the suction capacity decreases, until all filters have been cleaned or replaced;
- 4. Note the maintenance intervals for the filters installed on your machine in the conditions in which it is used on the table in paragraph 7.3 of this manual;
- 5. Carry out filter maintenance according to the intervals noted.

### Warning

Perform maintenance and cleaning with the machine switched off and only when it is disconnected from the electrical system.

Do not use flammable liquids to clean the filters.

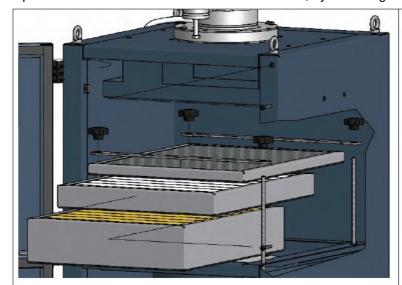
If replacement is necessary, please contact the Authorised Local Dealer.

- Wear suitable personal protective equipment (PPE) during machine maintenance and cleaning: Gloves, Glasses and Face mask.
- During cleaning and maintenance operations, do not release any of the collected dust and pollutants or other residues into the environment, but comply with the standards in force.

**Note:** Only use original spare parts. The use of non-original parts will void the warranty immediately. SWP Ltd. disclaims any liability for damage to people or property caused by the use of unauthorised parts.

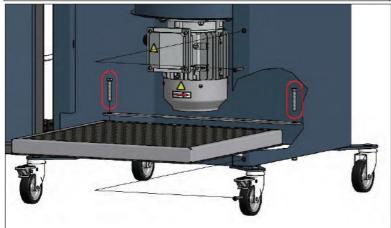
# To check and maintain the filters, follow the instructions below:

1. Open the door that allows access to the filter unit, by removing the 2 fixing screws, and extract the filters.



In the case of panel filters, loosen the 4 knobs so that the 2 filter fixing crossbars can be raised.

At this point, remove the filters, taking care not to allow them to rub against each other or against the metalwork of the machine, so as not to damage the gasket on the underside.



In the case of activated carbon filters, located in the lower compartment of the machine, loosen the 2 fixing screws shown in the figure so that the filter holding crossbar can be raised. Now lift the filter and remove it from its compartment.

- 2. Check the condition of the filters and clean them if necessary. Detailed instructions are contained in the following paragraphs; please refer to the periodicities noted in the previous instructions;
- 3. After servicing the various filter components, reinsert them in the correct order (see par.2.5);
- 4. Close the hatch and tighten the 2 fixing screws.

### **METALLIC FILTER WFE-0067-1**

To clean the metal prefilter, simply wash it with detergent or blow it out with compressed air. If the filter is
particularly clogged, replacement is recommended. As a guide, cleaning should be carried out at least every 65
working hours.

# **SYNTHETIC FILTER WFE-0067-2**

- Use dry compressed air to clean the filter. Careful maintenance of this element allows it to have a longer life.
   When the performance of the filter starts to deteriorate and the filter needs to be cleaned more frequently, replacement is recommended.
- As a guide, cleaning should be carried out at least every 65 working hours.

#### H-F RIGID POCKET FILTER WFE-0067-3

Due to the characteristics of the filter, it is recommended to replace it periodically, instead of cleaning it. Its duration is variable and depends on:

- · Type of welding;
- · Type of material used;
- Effectiveness of the filtering action of previous filtration stages.

The filter should be replaced approximately every 800 operating hours

#### MAINTENANCE INTERVAL RECORDING TABLE

FILTER MAINTENANCE INTERVALS			
Filter		Cleaning (working hours)	Replacement (working hours)
	METALLIC FILTER WFE-0067-1		
PANEL FIL TERS	SYNTHETIC FILTER WFE-0067-2	Filter	
	H-F RIGID POCKET FILTER WFE-0067-3	replacement only	
ACTIVATE D CARBON	Active Carbon Filter 4.5kg WFE-0067-4	replacement only	

# REPAIRS AND EXTRAORDINARY MAINTENANCE

If the machine and/or the system connected to it malfunctions DO NOT USE IT AND CLEARLY DISPLAY THAT IT IS OUT OF SERVICE.

For any repairs contact our Technical Support Service and request the intervention of an Authorised Technician (TA).

Only use original spare parts for repairs or extraordinary maintenance of the machine. Any use of non-original parts will void the warranty immediately SWP Ltd. disclaims any liability for damage to people or property caused by the use of non-original parts.

# Warning

- Repairs and extraordinary maintenance must solely be performed by a SWP Ltd. Authorised Technician (TA).
- Perform repairs and extraordinary maintenance with the machine disconnected from the electric sources.
- Wait for the electric fan to cool down before working on the internal parts of the machine.
- Do not perform any repairs or changes to the product that may alter its operation or jeopardise its integrity.
- Do not change the motor cutout switch setting parameters without prior authorisation from SWP Ltd.

Contact our Technical Support Service on +44-01942-719930 for all repairs, extraordinary maintenance or replacement of worn or damaged machine components, and request the intervention of an Authorised Technician.

### **DECOMMISSIONING**

#### PRELIMINARY OPERATIONS

During processing, the machine collects dust, pollutants and debris, extracted welding fume residues, which can potentially be harmful to health; these substances must be removed before decommissioning the machine and must be disposed of according to the Laws in force in the country where demolition is carried out.

Before proceeding with machine demolition, remove used Filters and clean any dust and debris from the Filtering Chamber and ducts inside the machine.

**ATTENTION:** The machine may contain pollutants and dust (welding fume residue) that are harmful to health. Removal of filter and internal cleaning of the machine should only be carried out by specialised personnel wearing appropriate personal protective equipment: Gloves, Glasses and Face mask.

During the disassembly and demolition of the machine, wear the specific personal protective equipment (PPE) for the operations being performed: Gloves, Goggles and Mask

# **MACHINE DEMOLITION**

When scrapping the machine, its components must not be disposed of with domestic or similar waste, but must be disposed of separately in compliance with the standards in force in the country where it is being scrapped.

At the time of demolition it is necessary to separate the machine parts according to type, for example: plastic, hazardous liquids, metal, WEEE (Waste Electric and Electronic Equipment); these are then disposed of separately using collection systems, both public or private, as required by local law.

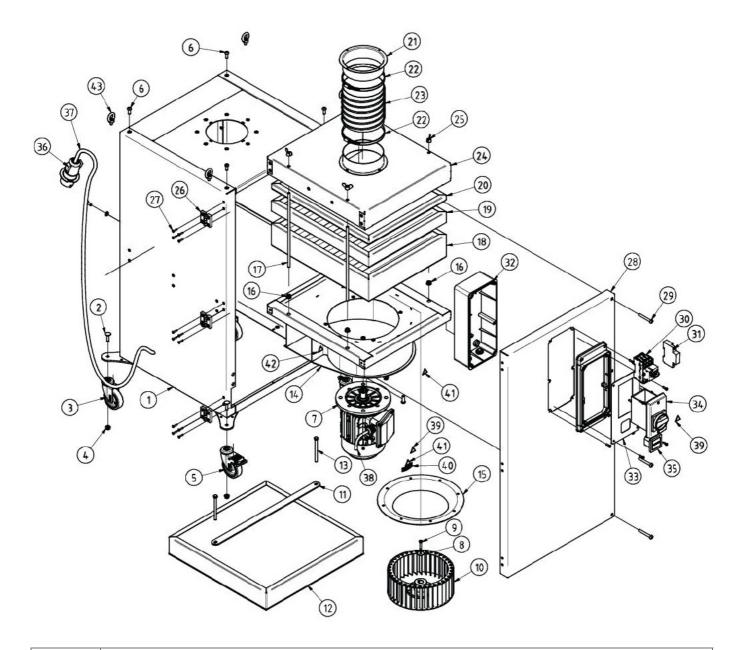
- In the event of scrapping, all components of the machine must be disposed of responsibly in accordance with current legislation
- The electric and electronic parts of this product must be disposed of in compliance with the laws in force on WEEE (Waste Electric and Electronic Equipment).
- Plastic, glass, aluminium, steel, etc machine parts must be handed over to designated authorised collection centres for recycling, in accordance with the laws in force in the country where product decommissioning is carried out.

**Warning:** Machine demolition must be carried out by Qualified Staff (PQ), using adequate equipment for the operations being performed.

• During the disassembly and demolition of the machine, wear the specific personal protective equipment (PPE) for the operations being performed: Gloves, Goggles and Mask

# **SPARE PARTS**

Spare parts for the machines in the COBRA STEALTH family can be ordered by contacting our Authorised Dealer in your area or by contacting the Technical Support Service of SWP Ltd. (See the "Contacts and Numbers" section).



Pos.	Only use original spare parts. The use of non-original parts will void the warranty immediately. SWP Ltd. disclaims any liability for damage to people or property caused by the use of non-original parts.  Description
1	Inserted machine body

2	Hex head screw with Underhead Square M8x30
3	Swivel wheel
4	M10 flanged nut
5	Swivel wheel with brake
6	Hexagon socket button head screw M6x20
7	Three-phase 2-pole motor 1.1Kw/1.5HP V230/400 – 50Hz
8	Wide Washer Ø6,4×24 – Galvanised Steel
9	HH Screw M6x30 – Galvanised Steel
10	Impeller
11	Crossbar for Activated Carbon
12	Activated carbon filter
13	Hex head screw M8x50
14	Nut Assembly drawing
15	Nozzle
16	M8 flanged nut
17	Threaded bar
18	Flat metal filter
19	Synthetic prefilter
20	Filter
21	Sleeve
22	Cable tie
23	Hose
24	Upper Box
25	Wing nut

26	Hinge
27	Countersunk screw M4x20
28	Front Panel
29	Hexagon socket button head screw M8
30	Motor cutout switch 3P-400V – 2.5-4A
31	Minimum voltage coil
32	Electric Box
33	EP sheet metal
34	Built-in container
35	Hour counter
36	Plug 400V 16A 3P+E
37	Electric cable 4×2.5 sq mm
38	Electric cable 4×2.5 sq mm
39	Power on sticker
40	'Red Arrow' label for direction of rotation
41	Yellow 'Burn Hazard' label
42	Yellow 'Risk of collision with moving parts' label
43	Male Eyebolt M8
l	!

# **TROUBLESHOOTING**

The table below reports the most common faults that can occur when using the Machine, accompanied by an analysis of the possible causes and the respective solutions to fix the problems. The last column on the table specifies the qualification required of the operator authorised to perform the work, according to the symbol described in the preface of this Use and Maintenance Manual.

PROBLEMS	CAUSES	SOLUTIONS – (PERSONAL)	
	There are problems on the electrical power supply line.	Make sure the power reaches the ends o f the power supply socket.	PQ
The machine did not s witch on.	Damaged or broken power supply ca ble or plug.	Make sure voltage reaches the ends of m ain switch QL.	PQ
	Problems with the electric motor.	Check the component. Replace it if nece ssary.	ТА
The machine switches on but does not extrac t.	Arm damper closed.	Open the arm damper.	U
	Clogged or dirty filters.	Check the condition of the filters and clea n them or replace them if they cannot be regenerated.	U
The machine does not develop sufficient extraction capacity.	The fan runs in reverse.	Check the direction of rotation of the mot or (sticker showing the correct direction o f the motor). If necessary, reverse two ph ases in the end plug of the cable.	ТА
	A foreign body has been aspirated a nd is clogging the extraction duct.	Check and clear the extraction duct.	PQ
	Problems with the electric motor.	Check the component. Replace it if nece ssary.	TA
Problems with position ing or movement of the arm	Incorrect adjustment of arm-joint ele ments	Adjust the arm with reference to TECHN O3/C	TA

IN CASE YOU CANNOT SOLVE SOME OF THE ABOVE-MENTIONED PROBLEMS. PLEASE CALL OUR AFTERSALES SERVICE AT THIS PHONE NUMBER. +44-01942-719930

# **CONTACTS**

• T: 01942 719930

• E: sales@specialisedwelding.co.uk

• W: www.specialisedwelding.co.uk

# **Sales & Distribution Centre**

• Unit 1, Withins Point, Withins Road, Haydock Industrial Centre, Haydock, WA11 9UD, UK

# **Customer Service**

- **T** +44 (0) 1420 588180
- E sales@specialisedwelding.co.uk
- W www.specialisedwelding.co.uk

Social Media: Find us on Facebook, Instagram and LinkedIn - just search Specialised Welding Products Ltd

# **FAQ**

- Q: Where can I find the year of manufacture and serial number of the unit?
  - **A:** The year of manufacture is printed on the CE labeled located on the machine. The serial number is also reported on the label and at the bottom of the declaration.
- Q: What are the power options available for the Cobra Stealth Fume Extraction Unit?
  - A: The Cobra Stealth Fume Extraction Unit is available in two power options: WFE-006 (110V) and WFE-007 (240V).

# **Documents / Resources**



SWP Cobra Stealth Fume Extraction Unit [pdf] Instruction Manual WFE-006, WFE-007, Cobra Stealth Fume Extraction Unit, Cobra Stealth, Fume Extraction Unit, Extraction Unit

# References

User Manual

Manuals+, Privacy Policy

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