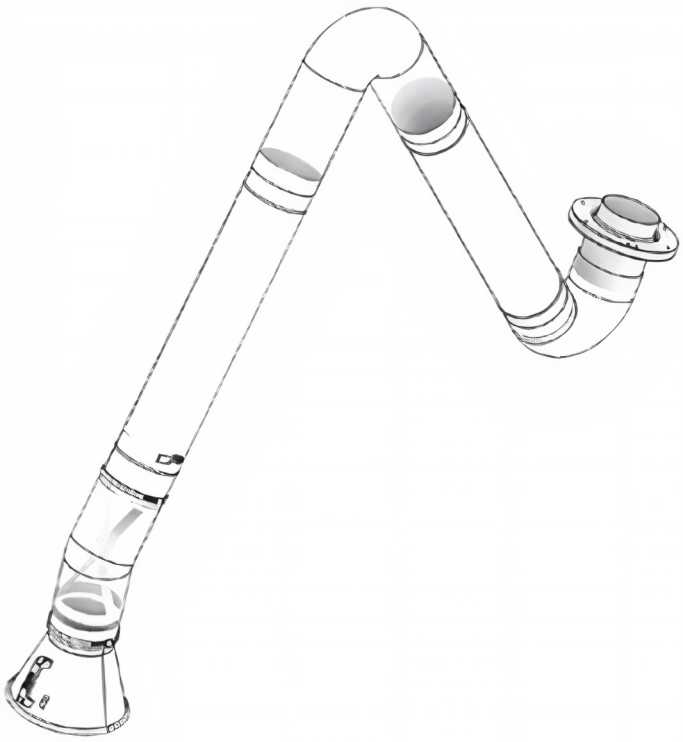
MW7500 HD Arm with Fan

The Welders' Ultimate Choice

MW7500



User Manual for Arm & Fan Installation

MasterWeld

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1. GENERAL INFORMATION

1.1. PURPOSE OF THE MANUAL

The manual has the purpose of providing the machine installer, operator and maintenance technician, the instructions for use, prevention and reduction of risks during man-machine interaction.

OPERATOR	CHAPTERS OF THE MANUAL THAT MUST BE KNOWN
INSTALLER	• General information • Safety information • Handling, assembly and installation information • Technical information • Information on replacements
OPERATOR	• General information • Safety information • Information on use
MECHANICAL	• General information • Safety information • Handling, assembly and installation information • Information on use • Information on adjustments • Maintenance information • Information on troubleshooting • Information on replacements

The information was drawn-up by the Manufacturer in its original language and it can also be made available in other languages, in order to meet the legal and/or business requirements.

The documentation must be kept by the person in charge, in a suitable place, so that it is always available for consultation in the best state of preservation. If lost or worn, request replacement documentation directly from the Manufacturer.

Consult the table of contents to easily locate the specific topics of interest.

Some information may not fully correspond to the effective configuration of the delivered machine.

Any additional information that may be inserted, will not affect legibility and does not jeopardise the safety level.

The Manufacturer reserves the right to change the information without being obliged to notify it in advance, as long as such changes do not alter the safety level.

Any report by the recipients may be an important contribution for the improvement of after-sales services that the Manufacturer intends offering its customers.Some symbols, the meanings of which are described below, are used to highlight some text or indicate significantly important specifications.

1.2. KEY OF SYMBOLS USED

SYMBOL	DESCRIPTION
	**Danger - Warning** The symbol indicates situations of serious danger that, if neglected, may place the health and safety of people seriously at risk.
	**Danger - Warning** The symbol indicates situations of serious danger that, if neglected, may cause fires and place the health and safety of people seriously at risk.
	**Danger - Warning** This symbol refers exclusively to apparatuses compliant with directive 94/9/EC. The operations shown with the following symbol must be performed only by qualified personal with specific training in working safely in areas with potentially explosive atmospheres.

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SYMBOL	DESCRIPTION
	**Explosion hazard** This symbol indicates situations of serious danger that, if neglected, may cause explosions and seriously place the health and safety of people at risk.
	**Caution - Warning** The symbol indicates the need to adopt adequate behaviour to avoid placing the health and safety of people at risk and not cause economic damages.
	**Important** The symbol indicates significantly important technical and operational information that must not be neglected.
	Use protective gloves.
	Wear safety footwear.
	Use protective mask.
	Use acoustic protection.
	Use protective eye-wear.
	Use a safety helmet.
	Use the harness for operations at a certain height.

1.3. DEFINITION OF THE OPERATORS' QUALIFICATIONS

Some terms that are frequently used within the manual are described in order to uniquely determine their meaning.

OPERATOR QUALIFICATION	DESCRIPTION
Qualified personnel	Personnel who have attended specialisation, educational and training courses and have experience concerning the installation, commissioning and maintenance of the plants.
Experienced maintenance technician	Technician chosen and authorised from among those having the qualifications, skills and information, to perform routine and extraordinary maintenance interventions.

1.4. GLOSSARY

DEFINITION	DESCRIPTION
Extraction Fan Compliance	Machine or partly-completed machine, built with Extraction fan components, intended for use in Zone 22 and ST1 non-conductive dusts.
Filter	It is the main filtration element, that can be of sleeve or cartridge type.
Pmax	Maximum explosion pressure
Circuit breaker switch	Is a safety device able to interrupt the flow of electrical current in an electrical circuit of an electrical system in the event of over-current.

1.5. ATTACHED DOCUMENTATION

Below is a description of the documents supplied with the machine and not present inside this manual.

- ***CE Declaration of conformity***
- ***Overall and exploded assembly drawing***

1.6. WARRANTY

- the packaging must be opened and the installation performed by the Manufacturer's authorised and/or enabled technicians;
- The commissioning of the installed machine must be performed according to the instructions listed in this manual. (For technical assistance contact MasterWeld);
- the machine must be used within the limits stated in the contract and as indicated in the technical and/or business documentation;
- maintenance must be performed within the time and under the conditions provided by this manual, using original spare parts of **MasterWeld** and entrusting the work to qualified personnel.

The warranty **becomes void** in the event of:

- failure to comply with the safety standards;
- removal or tampering with the control and safety devices (guards, photocells, sensors, micro switches, etc.);changes to the safety conditions established by the Manufacturer;
- improper use of the machine;
- use of the machine by untrained and/or unauthorised personnel, or non-compliance with the operators' skills, as specified in the manual;
- changes or repairs made by the user without the Manufacturer's written authorisation;
- partial or total non-compliance of instructions;
- energy power supply failures (electric, compressed air, etc.);
- lack in maintenance;
- use of non-original spare parts;
- extraordinary events like floods, fires (unless caused by the machines).

The warranty **does not cover**:

- materials such as: oils, cartridges for filters, lubricating grease;
- parts damaged by bad or improper use, by incorrect operator intervention, by unauthorised repair and tampering performed by the customer or by third party, or use of spare parts not supplied by **MasterWeld.**

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2. SAFETY INFORMATION

Carefully read the instructions in this manual and those applied directly on the machine.

2.1. RESIDUAL RISKS

RESIDUAL RISK	DESCRIPTION
Voltage hazard	Maintenance operations performed on live machine electrical parts entail the risk of electrocution.
Danger of crushing upper limbs	Closing mobile elements with cam locks poses the risk of crushing fingers.
Dust inhalation danger	Maintenance operations performed inside the machine entail the risk of inhaling potentially carcinogenic dust.
Fire risk	Routine operations performed despite the prohibition expressed in **"7.1. RECOMMENDATIONS FOR MAINTENANCE INTERVENTIONS"**. Maintenance operations operations performed despite the prohibition expressed in **"7.1. RECOMMENDATIONS FOR MAINTENANCE INTERVENTIONS".**
Explosion risk	Routine operations performed despite the prohibition expressed in **"7.1. RECOMMENDATIONS FOR MAINTENANCE INTERVENTIONS"**. Maintenance operations operations performed despite the prohibition expressed in **"7.1. RECOMMENDATIONS FOR MAINTENANCE INTERVENTIONS".**
Cutting hazard	Maintenance operation performed without the use of protective gloves for the removal of moving sheet metal parts entails the risk of cutting fingers.

2.2. GENERAL SAFETY WARNINGS

Personnel performing any type of intervention throughout the machine life-span, must have precise technical skills, special abilities due to acquired and recognised experience in the specific sector, be trained on how to use the necessary work tools and appropriate personal protective equipment, with reference to the applicable laws and in force in the place of use of the machine. Lacking these requirements may cause damage to people's health and safety. Use the personal protective equipment indicated in the manual.

In the EXTRACTION FAN version
The machine contains potentially explosive dust deposits and/or gases, therefore it is forbidden to approach or introduce in the machine any possible ignition source:

- Naked flames
- Hot surfaces
- Sparks
- Gas
- Live electrical parts
- Electrostatic charges

2.3. SAFETY WARNINGS FOR HANDLING, ASSEMBLY AND INSTALLATION

Use adequate lifting equipment for handling and adopt all the safety precautions designed for activities carried out in the work site.

In the EXTRACTION FAN version
The electrostatic charge accumulated by the flexible pipes might ignite a fire. Therefore, they must have electrical conductivity and be earthed.

In the EXTRACTION FAN version
The machine must be installed in an area where there is no explosive atmosphere.

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The maximum allowable tightening values, beyond which the screws lose their mechanical resistance features, are shown in the tables.
The tightening torques must be applied slowly and constantly using a torque wrench. Said values must be decreased by 10% when using impact drivers.
The table refers to class 4.8 and 8.8 screws respectively.

DIAMETER PER PITCH	SCREW SECTION [mm²]	SCREW TIGHTENING TORQUES [Nm]
6 x 1	20	3,5
8 x 1,25	36	8
10 x 1,5	58	17
12 x 1,75	84	28

DIAMETER PER PITCH	SCREW SECTION [mm²]	SCREW TIGHTENING TORQUES [Nm]
6 x 1	20	10,4
8 x 1,25	36	25
10 x 1,5	58	50
12 x 1,75	84	87

2.4. SAFETY WARNINGS FOR INTENDED USE

The machine was designed to work within the limits prescribed and indicated in the manual.

The machine was designed with an IP55 protection rating.

Using the machine to obtain production levels other than those described in this manual, shall be regarded as **"INTENDED USE/IMPROPER USE"**.

Carefully read the instructions in paragraph **"INTENDED USE/IMPROPER USE"**.

To be prepared for emergencies, carefully read the instructions in the section titled **"INTENDED USE/IMPROPER USE".**

2.5. SAFETY WARNINGS FOR ADJUSTMENT/MAINTENANCE

Perform routine maintenance as provided for in this manual.

Disconnect the machine from all energy sources prior to performing maintenance operations.

Discharge the pneumatic system compressed air tank before performing any maintenance operations.

During adjustment and maintenance operations, potentially explosive atmospheres may occur, therefore it is forbidden to approach or introduce in the machine any possible ignition source:

- Naked flames
- Hot surfaces
- Sparks
- Gas
- Live electrical parts
- Electrostatic charges

2.6. SAFETY WARNINGS FOR ENVIRONMENTAL IMPACT

Before using the machine, operators must be provided with information, instructions and training on the substances the machine is to be used for, including how to safely remove and dispose of the collected pollutant.

Do not disperse polluting material in the environment. Perform disposal in compliance with the relative laws in force.

Incorrect cleaning or not replacing the filters may cause the polluting agent to be dispersed in the external environment.

2.7. SAFETY SIGNS PLACED ON THE MACHINE

There are no safety signs on the machine.

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3. HANDLING, ASSEMBLY AND INSTALLATION INFORMATION

3.1. HANDLING, STORAGE AND PACKAGING

The standard MasterWeld packaging does not guarantee protection against rain. The machine must be stored in an enclosed environment with a relative humidity below 70%.

The machine must be stored in temperatures between -10°C and +50°C inclusive.

When handling materials, use suitable lifting devices and adopt all of the safety precautions required for the work site activities, also consult the technical data for the packaging described in the Packing List.

On pallet

	PACKAGING DIMENSIONS (a) x (b) x (h) [mm]	WEIGHT [Kg]
EXTRACTION FAN	See the packing list accompanying the shipment	See section "**3.2. Directions for machine assembly**"

Provide a delimited and adequate area, with level floor or surface, for unloading and depositing packs.
It is always advisable to keep the packs horizontal during handling in order to avoid losing stability and/or them overturning.

For lifting, please refer to the paragraph "3.3. MOVING THE MACHINE".

3.2. DIRECTIONS FOR MACHINE ASSEMBLY

Before assembly, visually inspect the material to make sure it was not damaged during transportation. If there are signs of damage, inform the seller within 10 days from delivery.

Before proceeding with assembly, read paragraph "3.4. MACHINE INSTALLATION MODE".

For transport reasons and/or due to particular agreements stipulated between the customer and the supplier, the parts required to assemble the machine may be different than those described in the assembly phases.

Prior to opening the packaging, tilt the cage to prevent the material from overturning. Do not exceed the maximum angle indicated in the figure.

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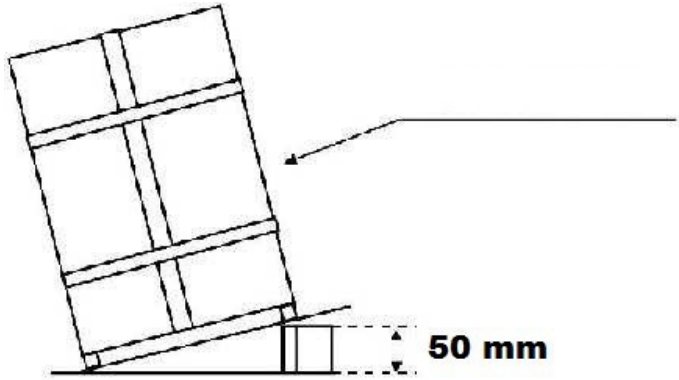

Due to the technical constructive complexity of the machine, assembly must be performed by qualified staff that have completed specific training courses.

During assembly, installation and maintenance, the screws must be tightened according to the values provided in the table. The tightening torques must be applied slowly and constantly using a torque wrench. Said values must be decreased by 10% when using impact drivers.
The table refers to class 4.8 screws.

DIAMETER PER PITCH	SCREW SECTION [mm²]	SCREW TIGHTENING TORQUES [Nm]
6 x 1	20	3,5
8 x 1,25	36	8
10 x 1,5	58	17
12 x 1,75	84	28

The table refers to class 8.8 screws.

DIAMETER PER PITCH	SCREW SECTION [mm²]	SCREW TIGHTENING TORQUES [Nm]
6 x 1	20	10,4
8 x 1,25	36	25
10 x 1,5	58	50
12 x 1,75	84	87

Prior to assembly, it is necessary to determine the weight of the preassembled components in Para "4.4. TECHNICAL DATA" .

For the lifting of the individual sub-assemblies, see section "3.3. MOVING THE MACHINE".

To handle components, proceed as follows:

- **Locate the lifting pick-up points, as shown in the assembly steps, and use slings and hooks.**
- **Prepare for lifting with cranes (gantry crane or forklift truck).**
- **Make a first, very slow lifting manoeuvre, keeping the component as close as possible to the ground to ensure that the load is balanced.**

The Extraction Fan arms can be installed on wall shelf, stand and on trolley machines.

There are two different supports: rounded (zinc-coated and painted) and squared (stainless steel) For further

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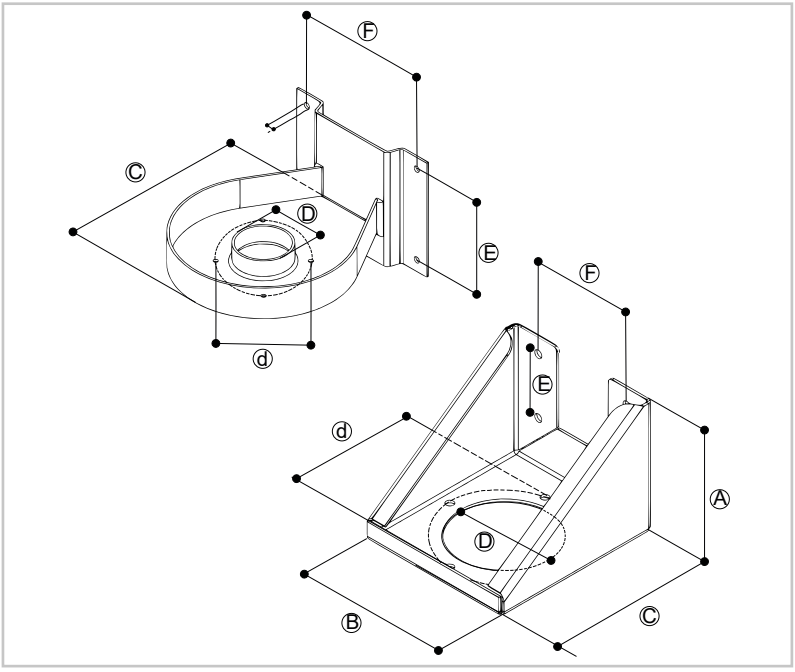
information refer to the next table.

WALL SHELF		
Ø ARM	**ROUNDED PAINTED**	**SQUARE STAINLESS**
100	3000033237	300000615401 WALL SHELF 300000682101 FLANGE
125	3000025354	300000670102
150	3000033177	300002535501
180	3000033241	300002535601
200	3000033243	300002535701
250	3000025363	



WALL SHELF DIMENSIONS									
Ø ARM	**A**	**B**	**C**	**D**	**d**	**N° fori**	**O**	**E**	**F**
100	**153**	**186**	**206**	**120**	**150**	**4**		**75**	**170**
125		**306**	**296**	**160**	**216**	**8**			**170**
150	**253**			**142**			**12**	**175**	**170/190/210**
180									**230**
200		**346**	**336**	**206**	**268**	**12**			**230**

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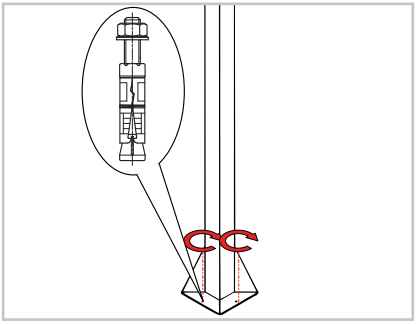
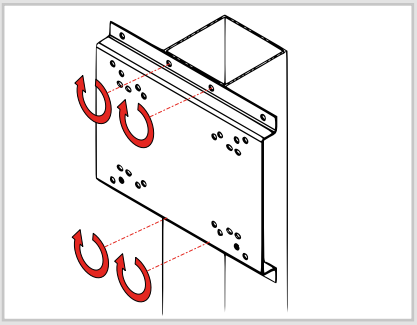
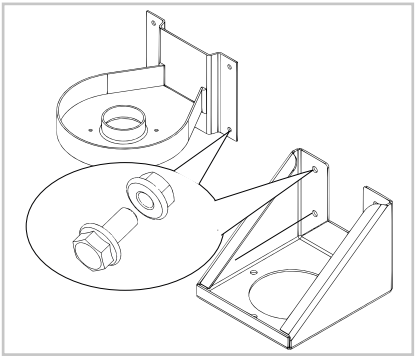
3.2.1. On stand assembling

ON STAND ASSEMBLING

ON STAND ASSEMBLING		
STEP	**ACTION**	**IMAGE**
1	Fasten the stand in the required position with appropriate bolts (the bolts are not provided by MasterWeld).	
2	Fasten the MasterWeld shelf holder plate.	
3	Fasten the MasterWeld shelf to the shelf holder plate with **ØM8x40**	
4	Proceed with the installation according to the instructions “Assembling the wall-mounted shelf”.	-

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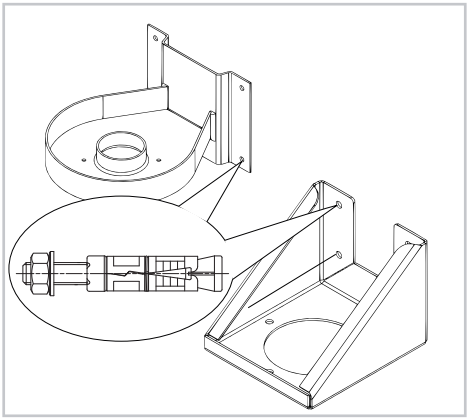
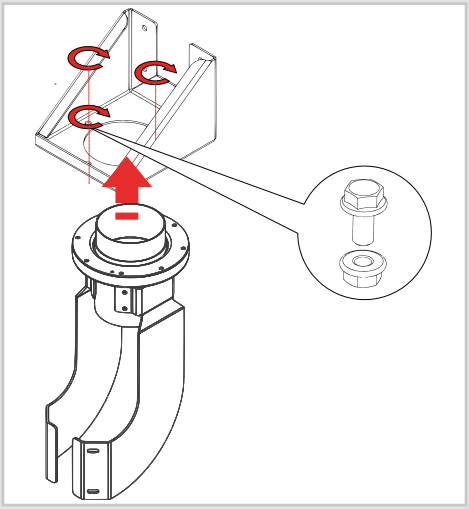
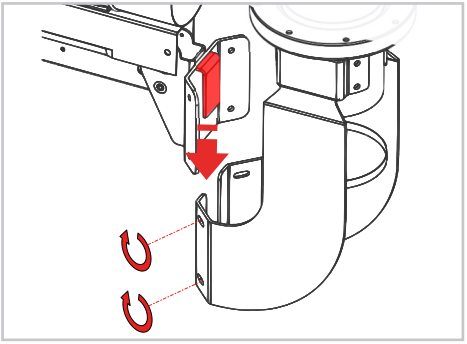
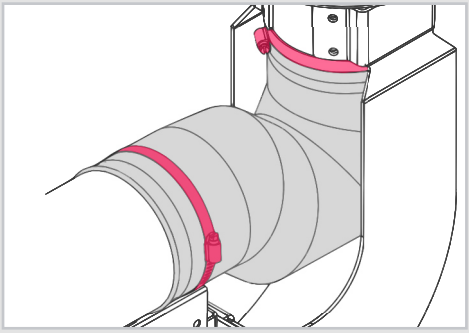
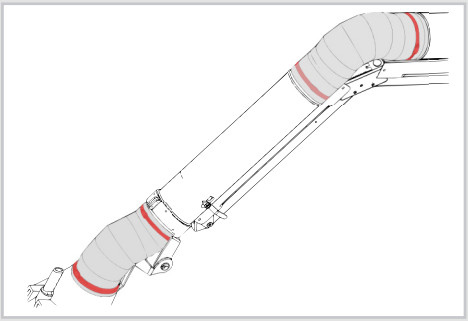
3.2.2. Assembly on wall shelf

ASSEMBLY ON WALL SHELF

Prepare an sufficiently large area free of obstructions to allow for the arm's installation. Verify the maximum encumbrance dimensions on the attached designs, and allow extra space for a temporary support structure.

ASSEMBLY ON WALL SHELF		
STEP	**ACTION**	**IMAGE**
1	Fasten the wall shelf in the required position with appropriate bolts (the bolts are not provided by MasterWeld).	
2	Take the slewing bearing from the previously opened box and fasten it to the shelf on the wall using the **ØM8x40** screws and **M8** nuts and washers provided with the arm.	

ASSEMBLY ON WALL SHELF		
STEP	**ACTION**	**IMAGE**
3	Lift the arm carefully and fasten it to the slewing bearing with support hook and fasten with screws **ØM8x16** and nuts **M8.**	
4	Fasten the hose to the slewing bearing with the clip provided with the arm.	
6	Fix the cap as described in paragraph **"3.2.4. Hood assembly"**.	-
7	Fix the flexible to the cap and to the upper joint, using the bands supplied with the arm.	
8	Carry on the regulations as described in paragraph **"3.7. CUSTOMISED CALIBRATION"**	-

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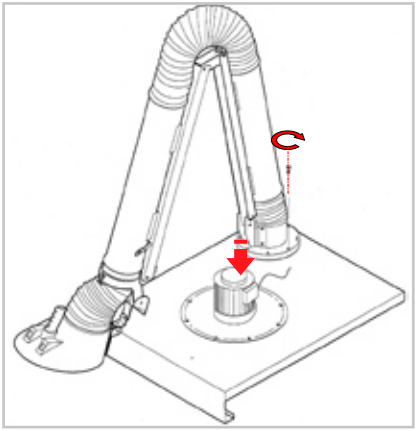
ASSEMBLY ON TROLLEY		
STEP	**ACTION**	**IMAGE**
1	Take the Extraction Fan arm from the previously opened box and fasten it to the trolley using the M8x40 screws provided with the arm.	
2	Proceed with the installation according to the instructions **"Assembling the wall-mounted shelf"**.	-

3.2.4. Hood assembly

HOOD ASSEMBLY

Different types of hood can be installed on the Extraction fan arm, as shown in the table below.

	ARMS HOODS							
Ø ARM	**WING HOOD**		**PAINTED**		**ALU**		**STAINLESS**	
	STD	**LIGHT**	**STD**	**LIGHT**	**STD**	**LIGHT**	**STD**	**LIGHT**
100	-	-	-	-	√	-	√	-
125	-	-	√	√	-	-	√	-
150	√	√	√	√	-	-	√	-
180	-	-	-	-	√	√	-	-
200	-	-	-	-	√	√	-	-
250	-	-	-	-	√	-	-	-

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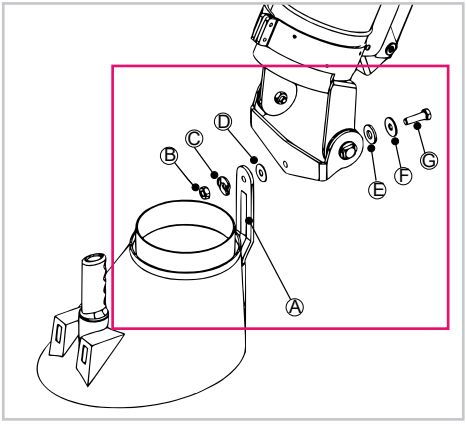
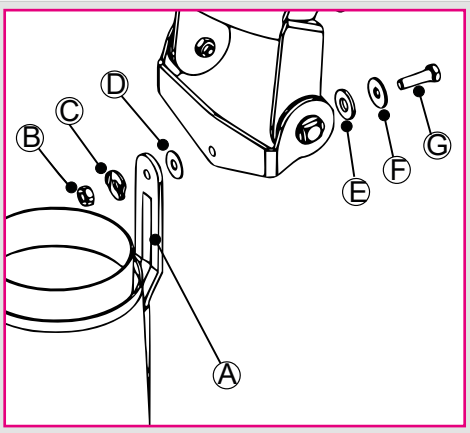
HOOD ASSEMBLY		
STEP	**ACTION**	**IMAGE**
1	Fix the hood **(A)** to the arm using the M10 nut **(B)** with profiled washer **(C)**, placing the Teflon washer **(D)** on the front side, and screws ***ØM10x35 (G)*** and Teflon **(E)** and flat **(F)** washers .	 

3.3. MOVING THE MACHINE

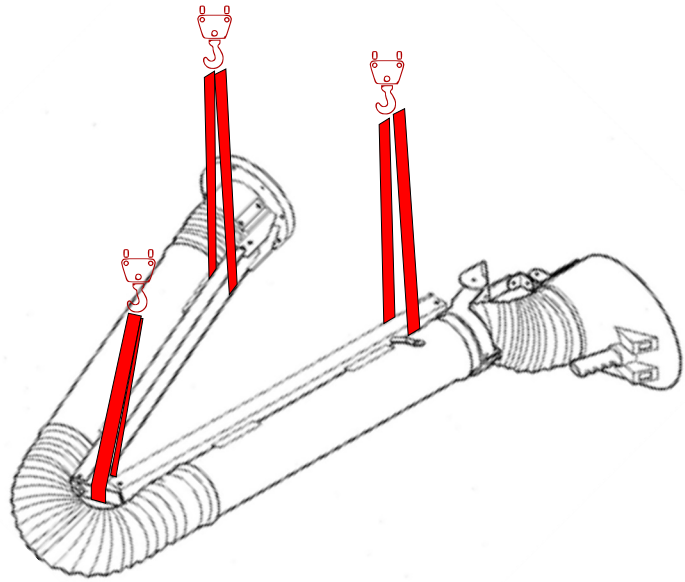
Before handling the machine, check that the overall dimensions and weights required to perform work and maintenance are without constraint. See paragraph "4.6. DESCRIPTION OF PERIMETER AREAS" e "4.4. TECHNICAL DATA".

To handle components, proceed as follows:

- **Locate the lifting pick-up points, as shown in the assembly steps, and use slings and hooks.**
- **Prepare for lifting with cranes (gantry crane or forklift truck).**
- **Make a first, very slow lifting manoeuvre, keeping the component as close as possible to the ground to ensure that the load is balanced.**

Refer to the diagrams below for indications regarding the lifting points.

Example of lifting the complete arm.



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3.4. MACHINE INSTALLATION MODE

Before proceeding with installation, ensure the distance between the machine and work areas is sufficient to minimise the risk of inhaling dusts emitted during the collection tank discharge phase. See section "4.6. DESCRIPTION OF PERIMETER AREAS".

To install the machine and size the suction line properly, please contact the MasterWeld Technical Department in advance.

The machine must be connected to the rigid piping of suitably sized capitation system using flexible tubes.

Please consult the table below for the size of the plug to be used to fix bases or shelves.

WEDGE ANCHORS - Concrete						
Ø x length [mm]	**Depth hole h2[mm]**	**Ø Hole d0[mm]**	**Fastening length l [mm]**	**Anchorage depth min / max [mm]**	**Coupling torque T_{inst} [Nm]**	**Admissible load under traction/ Cut [kN]**
M8 x 39	66	8	71	30	15	2,9 / 7,1
				40		6,1 / 7, 6
M10 x 66	98	10	106	40	30	6,1 / 12
				50		8,5 / 12
M12 x 69	105	12	116	50	50	8,5 / 17,9
				65		12,6 / 17,9
M16 x 105	154	16	170	65	100	12,6 / 29
				80		17,2 / 31,5

CHEMICAL FIXING (STEEL 5.8) - Concrete						
Ø rod [mm]	**Rod insertion length [mm]**	**Ø Hole [mm]**	**Hole Depth [mm]**	**Coupling torque T_{inst} [Nm]**	**Admissible load under traction [kN]**	**Admissible load under cut [kN]**
M12	**110**	**14**	**110**	**40**	**7,4**	**12**
M16	**125**	**18**	**125**	**60**	**11,2**	**22,3**
M20	**170**	**24**	**170**	**120**	**19,1**	**34,9**

For assembly/disassembly, see **"9.4. LIST OF REPLACEABLE COMPONENTS"**.

For mounting optional components, please see the paragraph **"3.6. METHODS FOR INSTALLING OPTIONAL PARTS"**.

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3.5. ELECTRICAL CONNECTION MODE

Version with fan (optional).

The arm can be supplied with a suction fan.

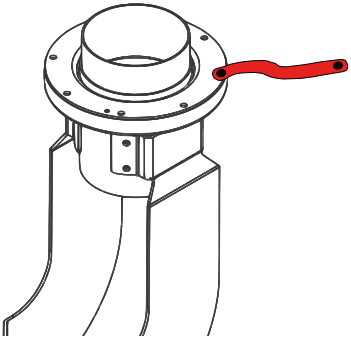
Please consult the wiring diagram below for the power connections.

Verify the correct power supply before making the electrical connections.

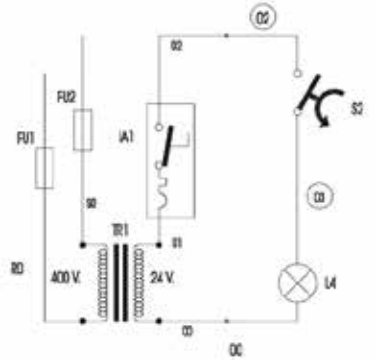
The electrical connections must be made by qualified personnel.

Connect the machine to the grounding conductor using a copper braid, in accordance with the current regulations in the country where the filter is installed.
The braid can be connected to the fifth wheel.

<u>In the EXTRACTION FAN version</u>
Power continuity is ensured by the flexible tubes, Extraction certified and conductive.
The arm must be grounded by means of a copper braid connected to the machine through a bolt applied to one of the holes of the structure.



Version with light kit
The arm can be delivered with hood complete with light.
Please consult the wiring diagram below for the power connections.



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3.6. METHODS FOR INSTALLING OPTIONAL PARTS

The optional Parts that are difficult to assemble are not described in the manual, and the MasterWeld Technical Department must be contacted for any information that may be required.

The machine can be delivered with the following optional:

- Fan
- Sparkle separating mesh kit
- Light Kit
- Wing hood
- Painted hood
- Aluminium hood
- Stainless hood
- TRIAXE junction for arm Ø150

FAN ASSEMBLY

Different types of fan can be installed on the Extraction Fan arm, as shown in the table below.

Ø ARM [mm]	length. ARM [m]	FANS POWER [kW] 0,37	0,55	0,75	1,1	1,47	2,2
100	2,1	√	-	-	-	-	-
	2,7	√	-	-	-	-	-
125	3	-	√	√	-	-	-
	4	-	√	√	-	-	-
150	3	-	-	√	√	√	-
	4	-	-	√	√	√	-
180	3	-	-	-	√	√	√
	4	-	-	-	√	√	√
200	3	-	-	-	-	√	√
	4	-	-	-	-	√	√
250	3	-	-	-	-	-	√
	4	-	-	-	-	-	√

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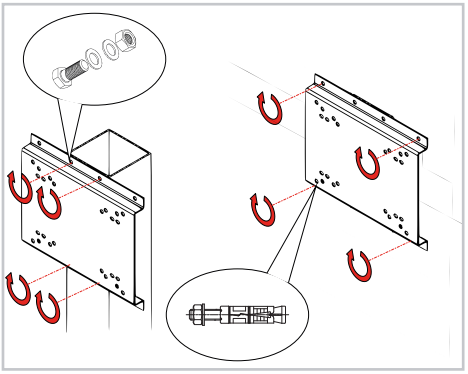
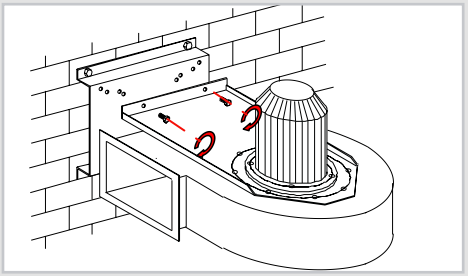
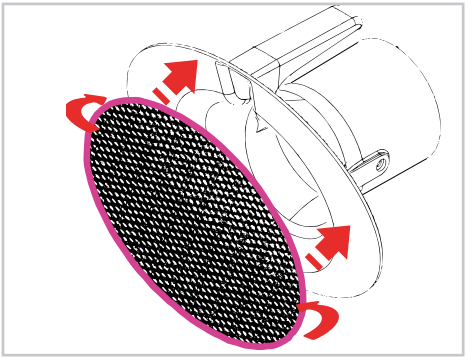
FAN ASSEMBLY		
STEP	**ACTION**	**IMAGE**
1	Fasten the wall shelf in the required position with appropriate bolts (the bolts are not provided by MasterWeld). See table in Para **3.4 "Machine installation mode"**	
2	Assembly the fan on the wall shelf previously described.	
3	Assembly the slewing bearing and the arm as described in **"WALL SHELF ASSEMBLY" in Para "3.2 DIRECTIONS FOR MACHINE ASSEMBLY".**	

SPARK SEPARATING MESH ASSEMBLY

SPARK SEPARATING MESH ASSEMBLY		
STEP	**ACTION**	**IMAGE**
WING HOOD	1) Disassemble the hood according to the procedure described in the paragraph, in the reverse order **"3.2 DIRECTIONS FOR MACHINE ASSEMBLY"** **2)** Apply the plastic gasket provided to the edge of the mesh. **3)** Push the mesh into its seat until it is locked in place 4) Reassemble the hood as described in the paragraph **"3.2 DIRECTIONS FOR MACHINE ASSEMBLY"**	

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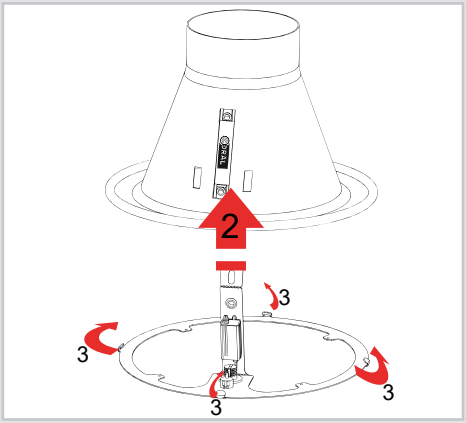
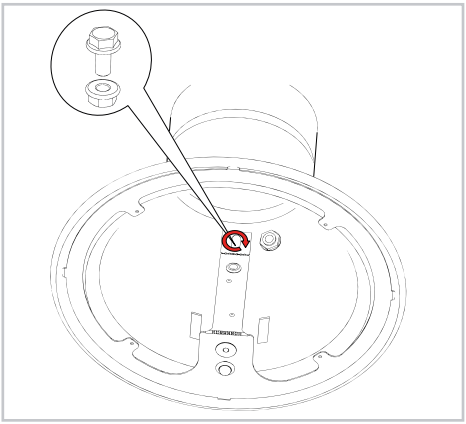
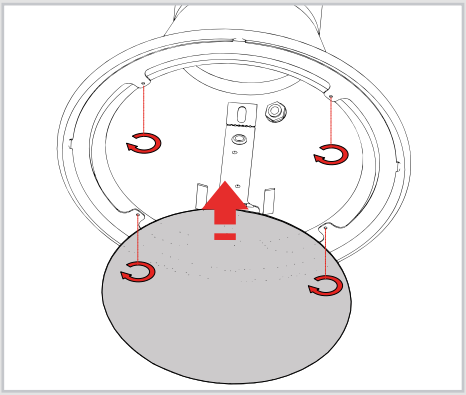
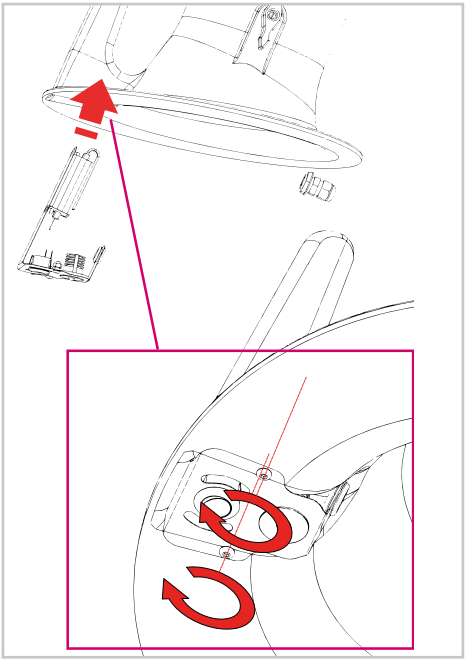
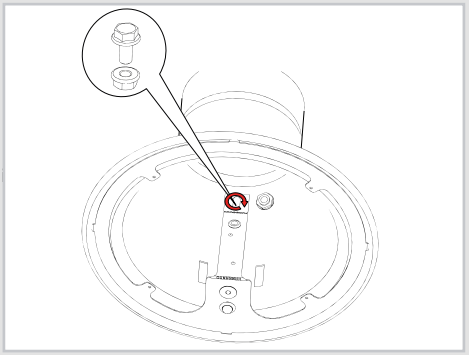
SPARK SEPARATING MESH ASSEMBLY		
STEP	**ACTION**	**IMAGE**
ALUMINIUM / INOX	**1)** Disassemble the hood according to the procedure described in the paragraph, in the reverse order **"3.2 DIRECTIONS FOR MACHINE ASSEMBLY"** **2)** Place the metal support frame on the edge of the hood. **3)** Bend the flaps of the frame	
	4) Fix the inner support of the frame with the handle fixing nut	
ALUMINIUM / STAINLESS / INOX	**5)** Apply the mesh to the frame using the 4 screws supplied.	

LIGHT KIT ASSEMBLY

LIGHT KIT ASSEMBLY

	ACTION	IMAGE
WING HOOD	**With plastic hood** **WING HOOD Ø150** **1)** Disassemble the hood according to the procedure described in the paragraph, in the reverse order **"3.2 DIRECTIONS FOR MACHINE ASSEMBLY"** 2) Insert the light kit inside the hood handle, drill 2 holes and fix with the screws 3) Pass the power cord along the structure of the arm, fix it to the tubular structure with the bands, and introduce it in the hood (through the hole), using the feed through strip provided, after removing the protection hood. 4) Connect the power cord installed at point 3) with the kit connector	
ALUMINIUM / INOX	**1)** Assemble the support structure of the light kit as described in the previous table, following points from 1 to 4 2) Pass the power cord along the structure of the arm, fix it to the tubular structure with the bands, and introduce in the cap (through the hole), using the feed through strip provided, after removing the protection cap. 3) Connect the power cord installed at point 2) with the kit connector	

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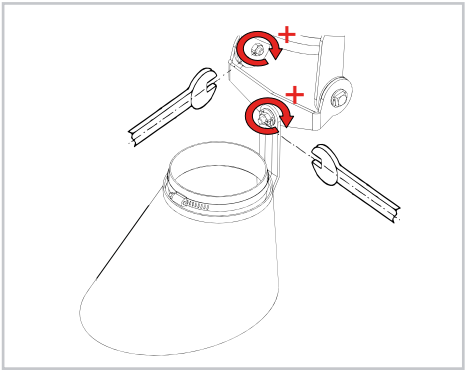
3.7. CUSTOMISED CALIBRATION

The mobile parts of the arm do not need to be calibrated before use but some standard calibrations may be performed directly by the user to customise the device.

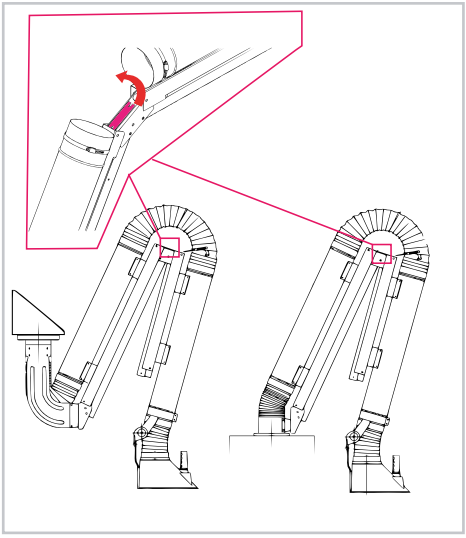
3.7.1. Hood calibration

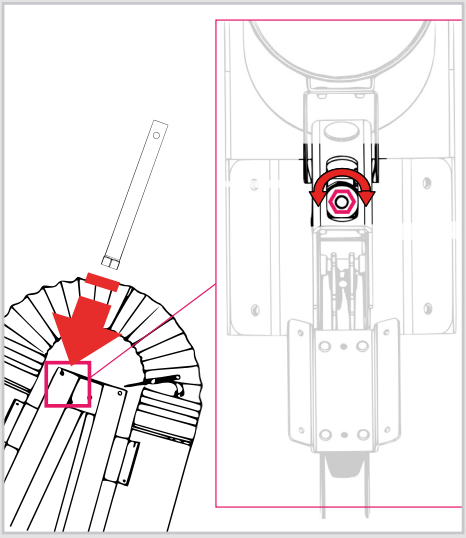
Adjust the brake pressure delicately as shown below.



3.7.2. Joint calibration

JOINT 1 CALIBRATION

JOINT 1 CALIBRATION	
ACTION	**IMAGE**
Position the arm as shown in figure and remove the spring cover on the upper part of joint 1 using a flat tip screwdriver as shown in figure.	

JOINT 1 CALIBRATION		
	ACTION	**IMAGE**
	Move the hose connecting the two sections of the arm (if required, remove a fastening clip and remove the hose from one of the pipe ends); Insert the socket spanner (dwg. 2) in the recess housing the spring and fit it on the calibration nut. Insert a screwdriver from the side through the socket spanner and follow the instructions below.	
	Turn the calibration tool **CLOCKWISE**. 	To **INCREASE** the effort required by the operator to take the arm to the **EXTENDED** position and **DECREASE** the effort required by the operator to return the arm to the **RETRACTED** position at the same time.
	Turn the calibration tool **ANTI-CLOCKWISE** 	To **INCREASE** the effort required by the operator to take the arm to the **RETRACTED** position and to **DECREASE** the effort required by the operator to return the arm to the **EXTENDED** position at the same time.

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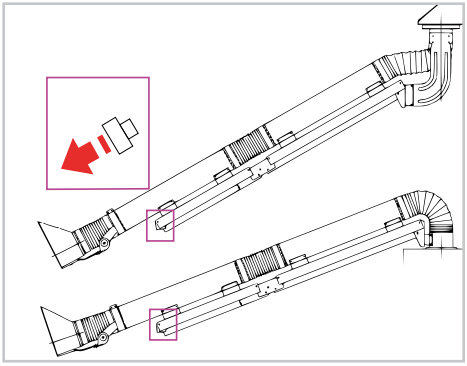
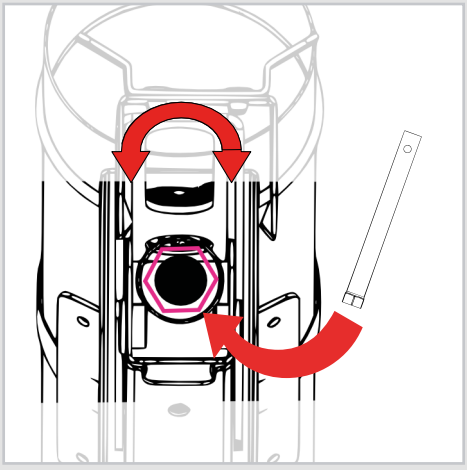
3.7.3. Joint 2 calibration

JOINT 2 CALIBRATION

JOINT 2 CALIBRATION	
ACTION	**IMAGE**
Place the arm in its fully extended position (according to the illustration) and remove the spring cap located in the lower part of joint 2, using an ordinary screwdriver.	
Insert the socket spanner in the recess housing the spring and fit it on the calibration nut. Insert a screwdriver from the side through the socket spanner and follow the instructions below.	
Turn the calibration tool **CLOCKWISE**. 	To **INCREASE** the effort required by the operator to take the arm to the **EXTENDED** position and **DECREASE** the effort required by the operator to return the arm to the **RETRACTED** position at the same time.
Turn the calibration tool **ANTI-CLOCKWISE** 	To **INCREASE** the effort required by the operator to take the arm to the **RETRACTED** position and to **DECREASE** the effort required by the operator to return the arm to the **EXTENDED** position at the same time.

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3.8. START-UP

Do not start the machine without installing the pipes of the suction system from the collection utilities to the machine.

For information on starting and stopping the machine, see "Starting and stopping".

Connect the machine to the grounding conductor using a copper braid, in accordance with the current regulations in the country where the arm is installed.

Check the tightness of the bolts

Make sure the work range of the arm is free from obstacles.

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4. TECHNICAL INFORMATION

4.1. MANUFACTURER AND MACHINE IDENTIFICATION

The manufacturer's identification is stated on the identification plate and on the declaration of conformity. The table states the machine function and the models.

	MODEL	MAX FLOW @ MAX LOSS
Ø 100/2,1 A **	2090000039	800 [m^3/h] @ 92 mmH_2O
Ø 100/2,1 P **	2090000036	800 [m^3/h] @ 92 mmH_2O
Ø 100/2,1 I **	2090000042	800 [m^3/h] @ 92 mmH_2O
Ø 100/2,7 A **	2090000040	800 [m^3/h] @ 97 mmH_2O
Ø 100/2,7 P **	2090000037	800 [m^3/h] @ 97 mmH_2O
Ø 100/2,7 I **	2090000043	800 [m^3/h] @ 97 mmH_2O
Ø 125/3 P	2090000049	1250 [m^3/h] @ 90 mmH_2O
Ø 125/3 A	2090000028	1250 [m^3/h] @ 90 mmH_2O
Ø 125/3 I	2090000057	1250 [m^3/h] @ 90 mmH_2O
Ø 125/4 P	2090000052	1250 [m^3/h] @ 97 mmH_2O
Ø 125/4 A	2090000030	1250 [m^3/h] @ 97 mmH_2O
Ø 125/4 I	2090000059	1250 [m^3/h] @ 97 mmH_2O
Ø 150/3 P *	2090000008	1780 [m^3/h] @ 84 mmH_2O
Ø 150/3 A *	2090000010	1780 [m^3/h] @ 84 mmH_2O
Ø 150/3 I *	2090000045	1800 [m^3/h] @ 84 mmH_2O
Ø 150/4 P *	2090000017	1800 [m^3/h] @ 91 mmH_2O
Ø 150/4 A *	2090000019	1800 [m^3/h] @ 91 mmH_2O
Ø 150/4 I *	2090000047	1800 [m^3/h] @ 91 mmH_2O
Ø 180/3 A **	2090000020	2600 [m^3/h] @ 89 mmH_2O
Ø 180/4 A **	2090000021	2600 [m^3/h] @ 81 mmH_2O
Ø 200/3 A **	2090000024	3200 [m^3/h] @ 84 mmH_2O
Ø 200/4 A **	2090000026	3200 [m^3/h] @ 80 mmH_2O
Ø 250/3 A	2090000164	3200 [m^3/h] @ 80 mmH_2O
Ø 250/4 A	2090000165	3200 [m^3/h] @ 78 mmH_2O
EXTR Ø 100/2,1	209000022301	800 [m^3/h] @ 92 mmH_2O
EXTR Ø 100/2,7	209000004403	800 [m^3/h] @ 97 mmH_2O
EXTR Ø 125/3	209000005804	1250 [m^3/h] @ 90 mmH_2O
EXTR Ø 125/4	209000006003	1250 [m^3/h] @ 97 mmH_2O
EXTR Ø 150/3	209000004612	1780 [m^3/h] @ 91 mmH_2O
EXTR Ø 150/4	209000004803	1800 [m^3/h] @ 84 mmH_2O
EXTR Ø 180/3	2090000244	2600 [m^3/h] @ 89 mmH_2O
EXTR Ø 180/4	2090000245	2600 [m^3/h] @ 81 mmH_2O
EXTR Ø 200/3	209000002509	3200 [m^3/h] @ 80 mmH_2O
EXTR Ø 200/4	2090000213	3200 [m^3/h] @ 78 mmH_2O

A= aluminium P= coated| I= stainless| * = Wing hood| ** aluminium Wing Hood

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4.1.1. Declaration of conformity

Declaration of incorporation of the partly completed machine

MasterWeld here by declares that the partly completed machinery is in conformity with attachment II, part 1, section B of machine directive 2006/42/CE and declares that it has filled in the technical documentation required by attachment VII B. The manufacturer is committed to transmitting, upon motivated request by national authorities, any information regarding the partly completed machinery. The above mentioned partly completed machinery cannot be put in motion before the machine or system to which it is incorporated have been declared in conformity with the dispositions contained in directive 2006/42/EC. The technical file is kept by MasterWeld.

Declaration of incorporation of the partly completed machine Extraction Fan Arm

MasterWeld here with declares that the partly completed machine complies with the enclosed II, part I section B and respects following base requirements of the Machine Directive 2006/42/CE: 1.1.2.; 1.1.3.; 1.1.5.; 1.3.1.; 1.3.2.; 1.4.1.; 1.4.2.1.; 1.4.2.2.; 1.5.2.; 1.7.1.; 1.7.1.1.; 1.7.2.; 1.7.4.; the relevant technical documentation has been written up following the enclosed VII B. The manufacturer shall provide all of the pertinent information regarding this partly completed machine upon receiving reasonable requests from the national authorities. The partly completed machine indicated above may not be put into operation before the machine or system into which it is to be incorporated has been declared compliant with the provisions contained in Directive 2006/42/EC. The technical file is held by MasterWeld.

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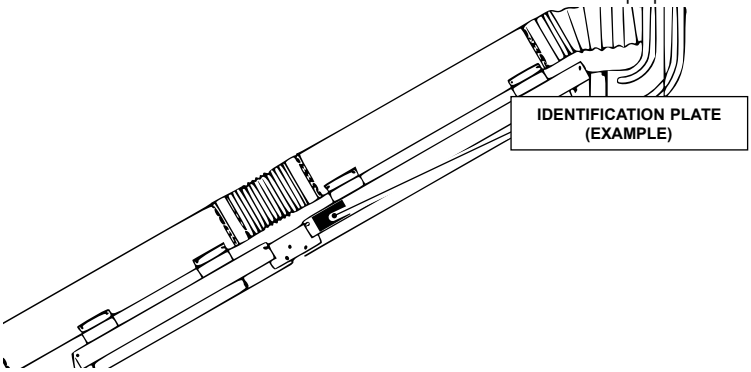
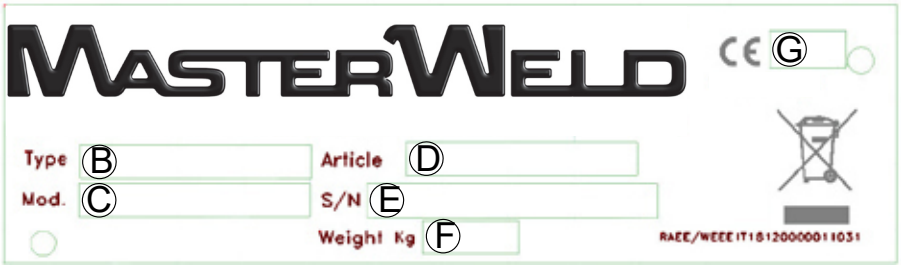
4.1.2. Machine Identification Plate

The plate indicates the Manufacturer's data and the technical references essential for proper and safe use.





POS.	DESCRIPTION
A	Manufacturer
B	Machine function
C	Machine model
D	Machine number code
E	Serial number
F	Weight
G	Manufacturing date

4.2. MACHINE DESCRIPTION

The arms fume extraction arms are designed to convey locally produced pollutants towards specific filtering and deodorising systems in potentially explosive atmospheres.

The arms stand alone (by equipping each with a fan) or form a centralised system fume extraction arms are designed to convey locally produced pollutants towards specific filtering and deodorising systems in potentially explosive atmospheres. The arms stand alone (by equipping each with a fan) or form a centralised system.

The EXTRACTION FAN ARM stands out for the absence of a second joint and for the possibility of changing the length of the arm by sliding the segment of tube between the cap and the fifth wheel. In this manner it is possible to reach a maximum work position of 90° on the vertical axis.

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The Extraction Fan arm differs from standard MasterWeld products for the following features:
- stainless steel stiff pipes, shutter and suction hood
- anti static flexible hoses (with $R<10^9$ Ohm, $-20°<T<90°$) and conductive tubes (do not required copper braids to connect the tube sections).
- earthing copper braid that must be connected to the wall shelf and the earthing system of the plant where the arm is installed.

4.3. OPERATING CYCLE DESCRIPTION

STAGE	DESCRIPTION
A	The air extracted through the piping is conveyed into the arm base (Optional).
B	The air is expelled through the output nozzles located on the upper part of the machine and conveyed into the connection piping.

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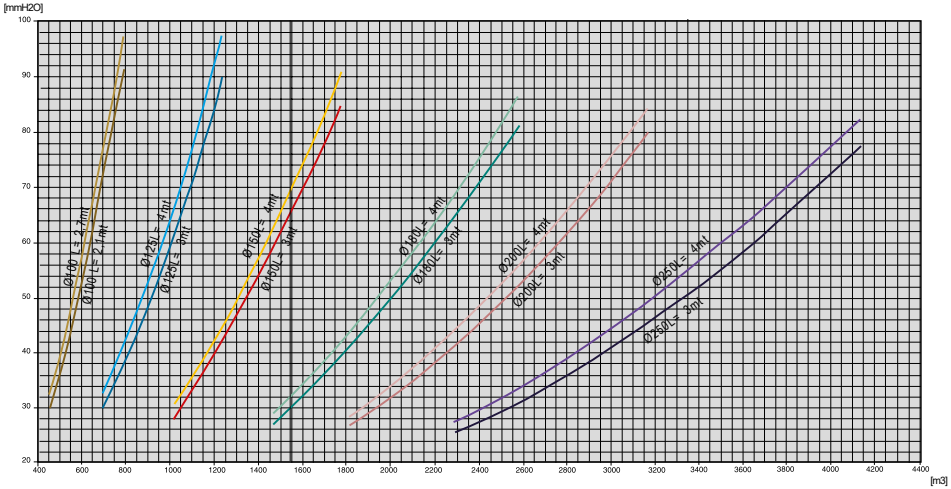
4.4. TECHNICAL DATA

4.4.1. Performances

EXTRACTION FAN - WALL SHELF												
Ø [mm]	**Ø100**	**Ø100**	**Ø125**	**Ø125**	**Ø150**	**Ø150**	**Ø180**	**Ø180**	**Ø200**	**Ø200**	**Ø250**	**Ø250**
length [m]	**2,1**	**2,7**	**3,0**	**4,0**	**3,0**	**4,0**	**3,0**	**4,0**	**3,0**	**4,0**	**3,0**	**4,0**
weight [kg]	**18**	**20**	**25**	**27**	**33**	**36**	**35**	**37**	**46**	**50**	**60**	**65**
MAX Flow [m³/h]	800	800	1250	1250	1800	1800	2600	2600	3100	3100	4000	4000
MAX Loss [mmH_2O]	92	97	90	97	84	91	89	81	84	80	78	80

EXTRACTION FAN - TROLLEY												
Ø [mm]	**Ø100**	**Ø100**	**Ø125**	**Ø125**	**Ø150**	**Ø150**	**Ø180**	**Ø180**	**Ø200**	**Ø200**	**Ø250**	**Ø250**
length [m]	**2,1**	**2,7**	**3,0**	**4,0**	**3,0**	**4,0**	**3,0**	**4,0**	**3,0**	**4,0**	**3,0**	**4,0**
weight [kg]	**18**	**20**	**25**	**27**	**33**	**36**	**35**	**37**	**46**	**50**	**60**	**65**
MAX Flow [m³/h]	800	800	1250	1250	1800	1800	2600	2600	3100	3100	4000	4000
MAX Loss [mmH_2O]	92	97	90	97	91	84	89	81	84	80	78	80

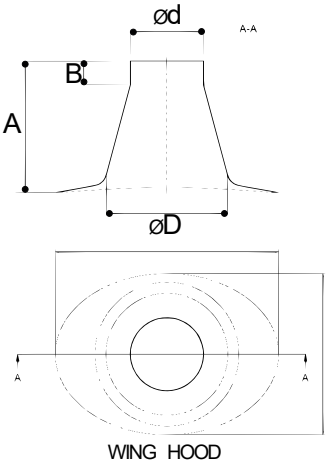


4.4.2. Inlet dimensions

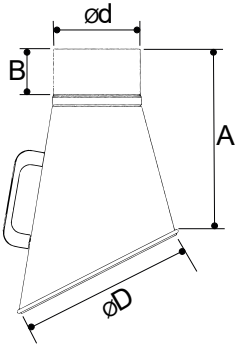
ARM HOODS DIMENSIONS

Ø ARM	WING HOOD				PAINTED / STAINLESS STEEL				ALUMINIUM			
	A	B	ød	ØD	A	B	ød	ØD	A	B	ød	ØD
100	-	-	-	-	216*	44*	100*	240*	216	44	100	240
125	-	-	-	-	241	65	125	250	216	63	125	250
150	271	49	150	250	288	65	150	300	216	63	150	300
180	-	-	-	-	-	-	-	-	216	63	180	400
200	-	-	-	-	-	-	-	-	260	75	200	420
250	-	-	-	-	-	-	-	-	323	60	250	450

*** = STAINLESS**



WING HOOD



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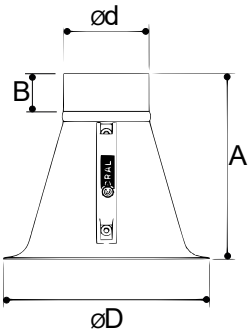

ALUMINIUM

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4.5. SAFETY DEVICE DESCRIPTION

Sparkle separating mesh

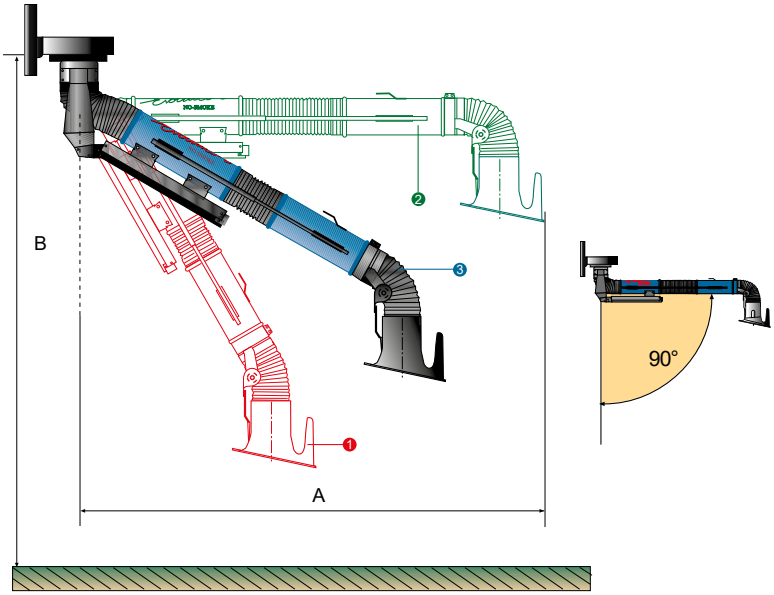
The Extraction Fan version differs from standard MasterWeld products for the following features:

- stainless steel stiff pipes, shutter and suction hood
- anti static flexible hoses (with $R<10^9$ Ohm, $-20°<T<90°$) and conductive tubes (do not required copper braids to connect the tube sections).
- earthing copper braid that must be connected to the wall shelf and the earthing system of the plant where the arm is installed.

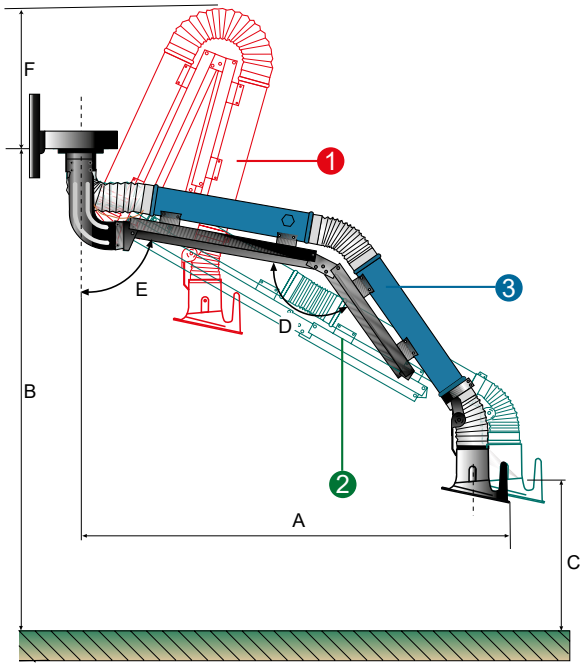
4.6. DESCRIPTION OF PERIMETER AREAS

During installation, ensure there is sufficient space around the inspection hatch to allow it to be opened.

For the filters' maximum encumbrances, refer to the following table.



	MEASUREMENTS		
[mm]	ARM RETRACTED (1)	ARM EXTENDED (2)	WORKING POSITION (3)
A [mm]	1600	2000	1850
B [mm]		2500	



		EXTRACTION FAN ARM - WALL SHELF											
	Ø [mm]	Ø100	Ø100	Ø125	Ø125	Ø150	Ø150	Ø180	Ø180	Ø200	Ø200	Ø250	Ø250
	length [m]	2,1	2,7	3,0	4,0	3,0	4,0	3,0	4,0	3,0	4,0	3,0	4,0
Working posit. (3)	A	1700	2200	2400	3300	2450	3300	2050	3115	2365	3200	2440	3350
	B	2800	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	C	1600	1500	2200	1300	1400	2000	1700	1300	1200	1400	1300	1500
	D	110°	110°	110°	120°	145°	110°	90°	115°	140°	115°	130°	110°
	E	100°	100°	130°	100°	80°	120°	120°	105°	80°	105°	110°	100°
Arm extended(2)	A	1850	2200	2600	3600	2800	3600	2600	3720	2600	3730	2600	3750
	B	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	C	1200	1200	2200	2000	2300	1500	2250	2250	2200	2230	2230	2260
	D	145°	145°	180°	180°	180°	150°	180°	180°	180°	180°	180°	180°
	E	78°	78°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°
Arm retracted (1)	A	580	600	780	962	900	1000	580	800	800	1000	800	1000
	B	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	C	2000	2100	2000	2200	2100	2100	1900	2050	1970	2000	1900	1950
	D	10°	10°	5°	10°	10°	10°	0°	5°	10°	10°	15°	15°
	E	155°	155°	165°	150°	150°	150°	150°	160°	150°	155°	165°	165°
	F	800	800	800	1350	850	1400	880	1430	900	1450	950	1500

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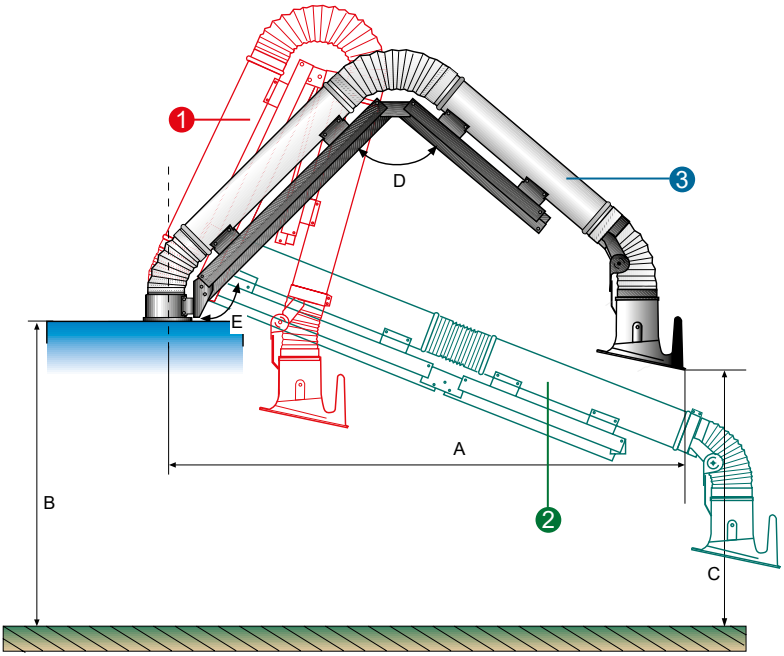

		EXTRACTION FAN TROLLEY											
	Ø [mm]	Ø100	Ø100	Ø125	Ø125	Ø150	Ø150	Ø180	Ø180	Ø200	Ø200	Ø250	Ø250
	Length[m]	2,1	2,7	3,0	4,0	3,0	4,0	3,0	4,0	3,0	4,0	3,0	4,0
Working posit. (3)	A	1420	2000	2200	3300	2300	2000	2175	1550	1700	2000	1750	1900
	B	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-
	D	110°	110°	110°	110°	110°	55°	110°	130°	75°	55°	70°	48°
	E	140°	125°	125°	125°	125°	145°	125°	100°	125°	145°		
Arm extended(2)	A	1640	2300	2500	3700	2600	3800	2490	3600	2470	3620	2510	3640
	B	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-
	D	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°
	E	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°
Arm closed(1)	A	400	370	580	604	640	600	526	550	710	600	700	590
	B	-	-	-	-	-	-	-	-	-	-	-	-
	C	-	-	-	-	-	-	-	-	-	-	-	-
	D	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°	0°
	E	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°

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5. INFORMATION ON USE

5.1. RECOMMENDATIONS FOR USAGE

The machine is designed to operate in negative pressure.

Any other use of the machine must be previously authorised by MasterWeld Should the user not have written authorisation, the Manufacturer shall deny any liability for damage caused to persons or objects and the warranty on the line and machinery shall cease.

The Extraction Fan arm is designed to process also flammable and/or explosive vapours. The suction hood should be equipped with the spark stopper mesh for extraction of incandescent powders.
In all cases, ensure that the temperature range from –20°C to +90°C is respected. Contact the MasterWeld technical office beforehand in all cases.

The Extraction Fan filtering arm is not suitable to process toxic vapours or substances by nature or reaction. Contact the MasterWeld technical office beforehand in all cases.

In the Extraction Fan version
The machine is designed to operate in the conditions described in paragraph "INTENDED USE/ UNINTENDED USE", however, there may be some restrictions; verify these instructions before using the machine.

In the Extraction Fan version
The arm is a component to be integrated in a system: for this reason, the system must also comply with equivalent safety criteria in accordance with the Extraction Fan directive 2014/34/UE.

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5.2. INTENDED USE/IMPROPER USE

5.2.1. Type of treated air

TYPE OF TREATED AIR EXTRACTION FAN ARM			
OPERATION	**INTENDED**	**IMPROPER**	**WORK ENVIRONMENT**
FILTRATION of:	• Non-explosive metal powder • Inert dusts	• Drawing in liquids • Dust and vapours that are toxic substances by nature or reaction. • Working in environments with an explosion hazard. • Potentially explosive metal powder. • Powder that may be explosive or flammable by nature or reaction.	Produced during processing operations in the wood industries. Produced during mechanical industry processing Produced by machining in the chemical/ pharmaceutical and craft industry.

TYPE OF TREATED AIR EXTRACTION FAN ARM			
OPERATION	**INTENDED**	**IMPROPER**	**WORK ENVIRONMENT**
FILTRATION of:	• Inert dusts • Food stuff • Pharmaceutic dusts • Chemical dusts • Sawdust • Metal powder • Potentially explosive metal powder. • Working in environments with an explosion hazard • Powder that may be explosive or flammable by nature or reaction. • Drawing in dust with a **ST3 Kst>200bar•m•s-1** and / or minimum ignition energy > 10 mJ	• Drawing in liquids • Dust and vapours that are toxic substances by nature or reaction.	Produced during processing operations in the wood industries. Produced during mechanical industry processing Produced by machining in the chemical/ pharmaceutical and craft industry.

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5.2.2. Intended use in Extraction Fan environments

The machine is designed to operate also with St2 powders. For St3 powders, please contact MasterWeld's technical department.

In the Extraction Fan version
Table 1 refers to filter applications depending on the category of the product processed.

TABLE 1

LEVEL OF PROTECTION	CATEGORY GROUP I	CATEGORY GROUP II	PROTECTIVE PERFORMANCE	OPERATING CONDITIONS
Very high (Methane)	M1		Two independent means of protection or safety guaranteed even when two faults occur independently of each other.	The equipment remains powered and operational even in the presence of an explosive atmosphere.
Very high		1		The equipment remains powered and operational in zones 0, 1, 2 (G) and/or 20, 21, 22 (D).
High (Methane)	M2		Protection suitable for normal operation and heavy duty conditions.	Power to the equipment is shut off in case of an explosive atmosphere.
High		2	Protection suitable for normal operation and in case of frequent disturbances or equipment in which malfunction is normal.	The equipment remains powered and operational in zones 1, 2 (G) and/or 21, 22 (D).
Normal		3	Protection suitable for normal operation.	The equipment remains powered and operational in zones 2 (G) and/or 22 (D).

TABLE 2

SEVERITY	HAZARDOUS AREAS	GAS, VAPOURS, MISTS (G)	DUSTS (D)
↑	An area in which an explosive mixture is continuously present	AREA 0	AREA 20
	An area in which an explosive mixture is likely to occur in normal operation	AREA 1	AREA 21
	An area in which an explosive mixture is not likely to occur in normal operation and if it occurs it will exist only for a short period only.	AREA 2	AREA 22

Tables 3 and 4 refer to the possibility of using the filter depending on the temperature and gas groups.

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TABLE 3		
ELECTRICAL APPLIANCE CATEGORY		GAS GROUPS
I		Mines (methane)
II		Non-mines
Category II is divided into:		
DANGER	IIA	Propane
	IIB	Ethylene
	IIC	Hydrogen, acetylene

TABLE 4		
TEMPERATURE CLASS	IGNITION TEMPERATURE [°C]	MAX. TEMPERATURE ACCEPTED ON THE APPLIANCE [°C]
T1	>450	450
T2	>300<450	300
T3	>200<350	200
T4	>135<200	135
T5	>100<135	100
T6	>85<100	85

Table 5 and 6 refer to the specific protection categories of the appliances and electric components.

TABLE 5			
TYPE	CATEGORY	EN	GROUP
GENERAL RULES		50014	
IMMERSION IN OIL	o	50015	M2-2
INTERNAL OVER-PRESSURE	p	50016	M2-2
POWDER FILLING	q	50017	M2-2
EXPLOSION-PROOF CASING	d	50018	M2-2
INCREASED SAFETY	e	50019	M2-2
INTRINSICALLY SAFE	ia	50020	M1-1
SPARK PROTECTION "N"	n	50021	3
ENCAPSULATION	m	50028	M2-2
CATEGORY 1G		50284	1
CATEGORY 1M		50303	M1

APPLIANCE CATEGORY	CATEGORY 1	CATEGORY 2	CATEGORY 3
Minimum protection	Non-applicable	IP 6X	IP 5X

Table 7 refers to the minimum reference temperatures (T reference) for ignition of the dusts.

TYPE OF DUST	IGNITION TEMPERATURE °C	MAX.TEMPERATURE OF THE APPLIANCE °C
DUST CLOUD	$2/3 \times T_{CL}$	$\leq 2/3 \times T_{CL}$
LAYER< 5 mm	$T_{5mm} - 75$ °C	$\leq (T_{5mm} - 75$ °C)
LAYER> 5 mm	Depends on the thickness	T_{5mm}

Where:
- T_{CL} = Dust ignition temperature
- T_{5mm} = Ignition temperature of a 5mm layer of dust
- $T_{Riferimento}$ = The lower between T_{nube} and T_{strato}

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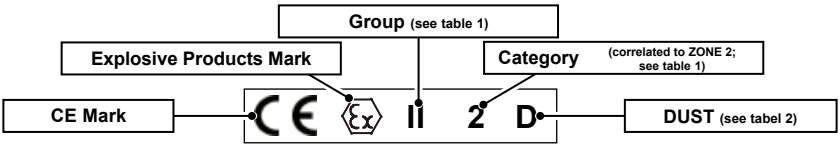
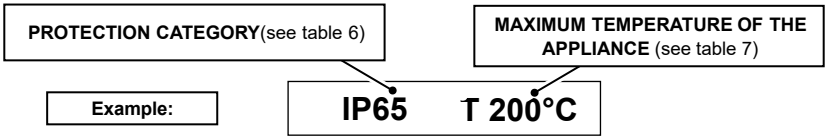
5.2.3. Example of Extraction Fan code in environments containing gas



5.2.4. Example of Extraction Fan code in dusty environments



5.2.5. Extraction Fan code for Extraction Fan

5.3. DESCRIPTION OF CONTROLS

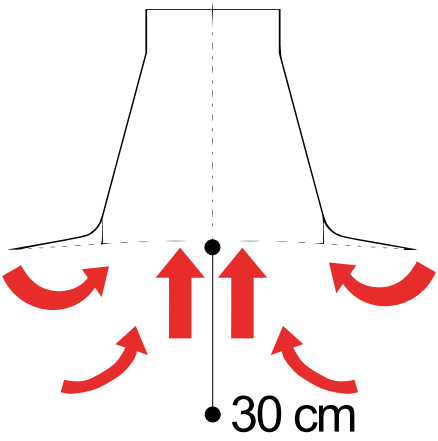
The arm can be fitted with the following commands:

- Fan ON/OFF switch;
- Lamp ON/OFF switch;
- Air capacity regulation door (only with WING HOOD);
- Fan command board and arm radio start

5.4. WING HOOD USE

To ensure the suction effectiveness of the high-efficiency Wing hood, it must be placed 30 cm away from the suction point.

Bigger distances will annul part of the suction and fail to ensure adequate speeds.



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5.5. IN CASE OF FIRE

Before proceeding, ensure the procedure is performed in safety and using the correct means according to the company's emergency and evacuation plans.

Combustion produces gases that, if inhaled, may be dangerous to health. Gases continue to form even after the flames have been extinguished.

STEP	ACTION
1	Remove voltage from the main switch of the extraction system to which the machine is connected in order to prevent the flames from spreading.
2	Attempt to put out the fire using a portable fire extinguisher (min.class AB)
3	After extinguishing the flames, air out the area and, if possible, transport the machinery into the open.
4	If necessary, contact the fire brigade.

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6. INFORMATION ON ADJUSTMENTS

6.1. RECOMMENDATIONS FOR ADJUSTMENTS

The flow rate regulating gate is not an integral part of the machine.

6.2. AIR FLOW ADJUSTMENT

To regulate the air flow rate, close the gate to decrease it (optional). To regulate the air flow, close the shutter or change the fan's speed using the inverter to decrease it.

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7. MAINTENANCE INFORMATION

7.1. RECOMMENDATIONS FOR MAINTENANCE INTERVENTIONS

Carefully read the instructions in this manual before any maintenance intervention.

Perform maintenance activities using the personal protective equipment described in the manual.

Always wear suitable footwear in order to avoid electrostatic discharges before carrying out any maintenance intervention.

In order to avoid the risk of fire or explosion, never smoke or use open flames inside or in the vicinity of the filter during maintenance or cleaning operations.

7.2. TABLE OF SCHEDULED MAINTENANCE INTERVALS

Routine maintenance operations are to be performed at the date shown in the table..

It is advised to keep a maintenance register in order to keep a trace of the interventions performed.

OPERATION	VERY FREQUENT	FREQUENT		NOT FREQUENT	
	24 hours	250 hours	500 hours	1000 hours	Yearly
Check correct calibration of the filtering arm		•			
Check conditions of flexible channel sections			•		
Replace mandatory the flexible channel sections with flexible hoses providing the same physical features					•
Check wear of suction hood joints and hood clutches			•		
Check wear of slewing bearing			•		
Check the cleaning of the inlet piping going to the filer. including hoods, flexible pipes.		•			
Check conditions of internal adjustment shutter			•		

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7.3. CLEANING AND DISPOSAL

The information provided below serves the purpose of helping perform cleaning activities inside the machine to restore operation and efficiency.

Spent dusts and spare parts must be stocked and disposed of in compliance with the law in force in the country where the machine is used.

Do not disperse polluting material in the environment. Put the filters into their respective sacks.

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8. INFORMATION ON TROUBLESHOOTING

The following information has the purpose of helping to identify the anomalies and restore the machine operation and efficiency.

DEFECT	CAUSE	POSSIBLE SOLUTIONS
Decrease of the vacuumed air flow rate.	Filters not clean	Check timer operation, the electrical and pneumatic system.
		Check the proper code table settings.
		Adjust the timer and modify one, the other or both variables: 1) Decrease the OFF pause times 2) Increase the ON work times
		Replace the filtering parts if necessary.
	Pipe connected to obstructed collection systems.	Proceed with its removal and replacement.
The fan vibrates	The impeller is dirty	Disassemble and clean the impeller.
	The impeller has suffered an impact.	Re-balance or replace the impeller.
The fan turns but vacuuming is insufficient.	The rotation direction is not correct	Reverse the two motor connection phases.
		Adjust the phase inversion of the plug.
	Obstructed air ducts.	Remove the obstacles.
	Any shutters on the collection elements closed or partially closed.	Open the shutters.

9. INFORMATION ON REPLACEMENTS

9.1. REQUESTING AFTER-SALES ASSISTANCE

If you need to order spare parts, proceed as follows:

1. Photocopy the form laid out below.
2. Fill the fields
3. Contact the area distributor or the assistance and spare parts department , sending a copy of the form completely filled out to the indicated e-mail address or fax number.

In answer to your request, you will be sent an offer including the price, delivery and sales conditions as soon as possible..

MASTERWELD

ASSISTANCE AND SPARE PARTS DEPARTMENT

MasterWeld, Olympic House, Southmead Park, Collett, Didcot, Oxfordshire, United Kingdom, OX11 7WB

Tel: +44 (0) 1235 510 717 web: www.masterweld.co.uk

Spare Parts Offer Request Form

Goods sending address		Invoice sending address
Name of requesting party	Phone number	Delivered through:
	Fax number	Date

CODE MACHINE SERIAL NUMBER	YEAR OF MANUFACTURE	POS. NO.	DESCRIPTION	QUANTITY'

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9.2. RECOMMENDATIONS FOR REPLACEMENT INTERVENTIONS

The machine replacement or repair operations are reserved to qualified, trained and authorised personnel, employed by the Manufacturer or by the Authorised Assistance Centre

In order to avoid the risk of fire or explosion, never smoke or use open flames inside or in the vicinity of the filter during maintenance or cleaning operations.

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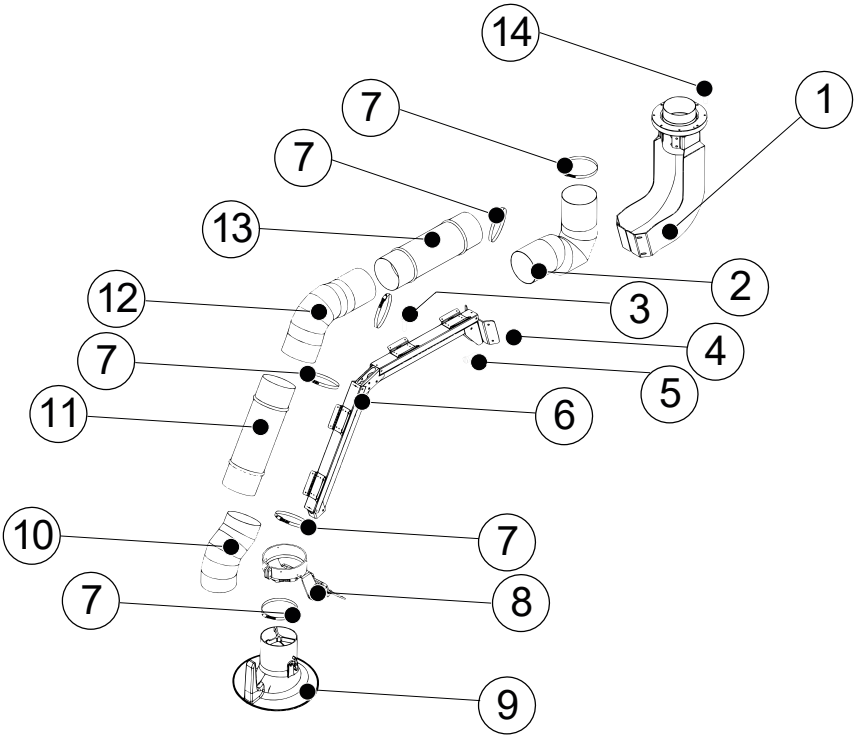
9.3. LIST OF REPLACEABLE COMPONENTS



EXTRACTION FAN ARM - WALL SHELF	
POS.	**PART**
1	Brake assembly + bearings
2	Bearings hose
3	Rivet
4	Nut with washer
5	Screw
6	Arm structure
7	Flexible hose clamp
8	Hood joint
9	Hood
10	Hood hose
11	Hood rigid tube
12	Central hose
13	Upper rigid tube
14	Screw

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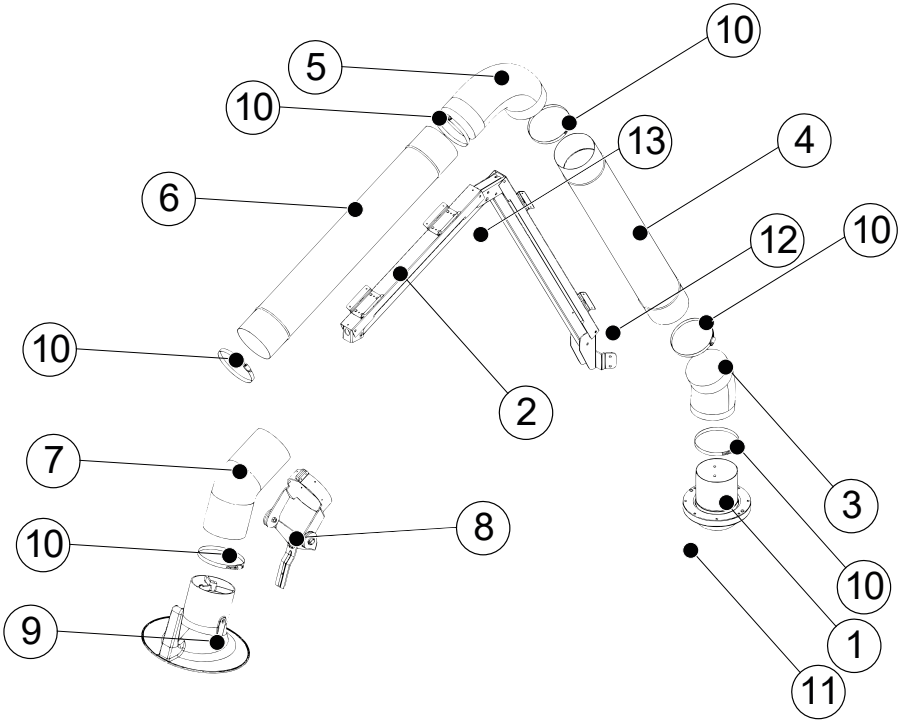

EXTRACTION FAN ARM - TROLLEY	
POS.	**PART**
1	Trolley bearing
2	Arm structure
3	Bearing hose
4	Bearing rigid tube
5	Central hose
6	Hood rigid tube
7	Hood hose
8	Hood joint
9	Hood
10	Hose clamp
11	Screw
12	Screw and nut with washer
13	Rivet

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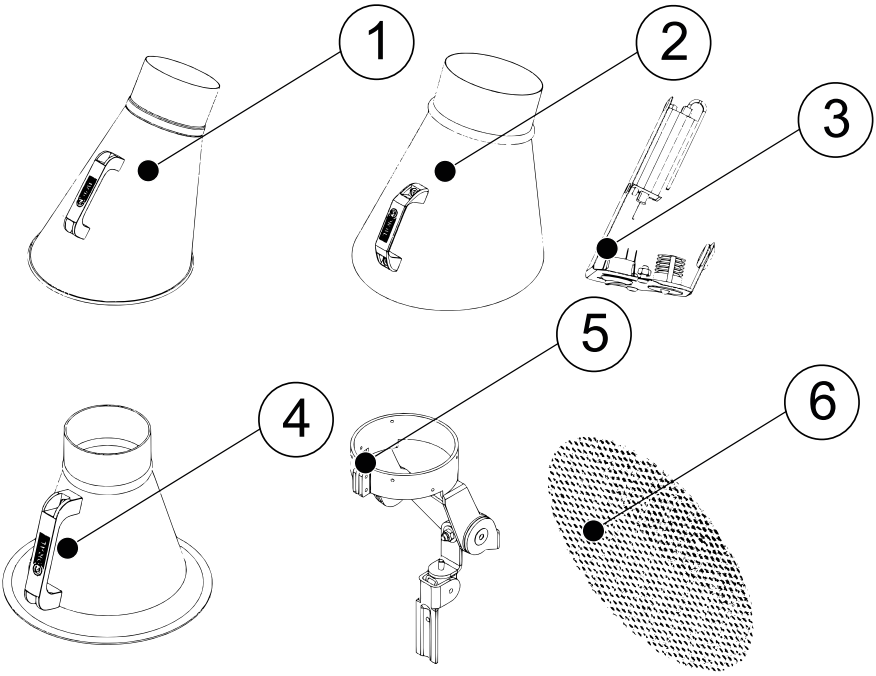
9.4. OPTIONAL



POS.	PART
1	Metal painted hood
2	Stainless steel hood
3	Light Kit
4	Aluminium hood
5	Triaxe joint
6	Sparkle separating mesh

HOOD REMOVING AND INSTALLATION(OPTIONAL)

See Para. **"Machine installation mode"**.

LIGHT KIT INSTALLATION (OPTIONAL)

See Para. **"Method for installing optional parts"**.

JOINT REMOVING AND INSTALLATION (OPTIONAL)

See Para. **"Machine installation mode"**.

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9.5. SCRAPPING AND DECOMMISSIONING

The machine does not present particular problems for decommissioning. Proper care shall be taken to prevent unauthorised personnel from starting the machine.

Comply with the laws in force in the country of use, for any legal and tax aspects (any reports, complaints, etc...).

Component	Material	Weight[kg]		Note
Structure	Steel	8 - 11		
Rigid tube	Sheet metal	4 - 6		
	Sheet steel	4 - 6		
	Sheet aluminium	4 - 6		
Hose	Steel / Plastic	1 - 2		Please consult the current regulations in force for information on how to properly dispose of these items.
Joint	Steel	5		

SPECIAL WASTE. Wear suitable protection to avoid contact with any particles which may have been released. Please consult the current regulations in force for information on how to properly dispose of these items.

STEEL. FULLY RECYCLABLE

NON-RECYCLABLE MATERIAL. Hand over to a landfill.

DISPOSE. Please consult the current regulations in force for information on how to properly dispose of these items.

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9.6. TABLE OF SCHEDULED MAINTENANCE

It is recommended to use a register to track the maintenance actions performed.

It is suggested to photocopy this page and keep the register updated.

250 HOURS				
Operation	**Date**	**Δp prev.**	**Δp after**	**Operator's signature**
Check correct calibration of the filtering arm.				
Check the status of cleanliness and, if necessary, clean the filter inlet piping, including caps, pipes and any flexible hoses.				

500 HOURS				
Operation	**Date**	**Δp prev.**	**Δp after**	**Operator's signature**
Check wear of suction hood joints and hood clutches				
Check wear of slewing bearing				
Check conditions of internal adjustment shutter				

YEARLY		
Operation	**Date**	**Operator's signature**
Replace **mandatory** the flexible channel sections with flexible hoses providing the same physical features		

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