

User Manual MK-Mesa



MK-Mesa 1m/1.4m

- Back Draft/Downdraft Extraction Tables 1m/1.4m wide
- Robust and elegant design
- Outlet connection/s dia. 199mm outside.
- Frontside damper/dampers.
- Easy to open side panels
- Easy to assemble and install
- Height adjustable legs.
- Spark Trap/Traps (Accessory)

Table of Contents

1.0 General Information

1.1 SafetyNote

1.2 Range of Application

1.3 Unit Description

1.4 Installation

1.5 Mounting

2.0 Maintenance

2.1 General Information

2.2 Spare Parts

1.0 General Information

The MK-Mesa Backdraft/Downdraft Tables are designed for creating efficient and worker friendly Environments.

They can be used for all sorts of work situations where a table and extraction of contaminated air is needed.

Extraction can take place backwards and downwards at the same time.

Thanks to the Frontside "Guillotine" Damper/Dampers you can adjust the Backdraft Air volume to Zero thus concentrating the extraction Downwards.

The unit shall be connected to an exhaust system designed to take care of the exhausted contaminations.

The working height can be adjusted from 820-970mm.

The tables are robustly made of 3mm thick steel plate.

The side shields have hinges and quick release locks.

MK-Mesa is prepared for being equipped with a Flexi FLB Extraction-Arm (1.5m/2m/3m. Accessory) on the top of the backdraft box. You can then concentrate the suction to a spot where it is especially needed.

With a 2 or 3m arm you will reach far outside the MK-Mesa Table.

There are built in Dust Trays which are easy to pull out and empty.

1.1 Safety Note

Always interrupt the current before opening the device. Equip the MK-Mesa with a Spark Trap if it will be used for applications with Sparks. Follow all regulations regarding Explosion Risks.

1.2 Range of Application

MK-Mesa Backdraft/Downdraft Tables are for extraction of Gas, Fume and Dust from all sorts of work. It must be connected to an extraction source. The extraction system shall be designed for the actual type of contamination and local laws.

1.3 Unit Description

MK-Mesa Backdraft/Downdraft-Table without Fan/Filter.

Plymoth MK-Mesa is a modern Workbench with Backdraft/Downdraft Extraction. 1m or 1.4m wide. Prepared for Extraction Arm.

Dust, Fume and Gases.

Plymoth MK-Mesa is a backdraft/downdraft workbench suitable for all works where dust, fume and gases are a problem. The contaminated air is extracted backwards/downwards from the working area. Nobody runs the risk of inhaling it.

Smooth Downdraft Table Top. MK-Mesa has a tabletop made of 75mm u-formed iron bars with 15mm extraction slots in between. It gives a smooth working surface combined with downdraft.

Unique Funnel-shaped Extraction Openings with “Guillotine” Dampers. The extraction to the back is through a backdraft box with vertical funnel-shaped openings. The horizontal “Guillotine” regulating dampers make it possible to adjust the width of the vertical openings from full open to closed. You can divide the total air volume between backdraft and downdraft. You adjust the regulating damper with a handle from the front of the backdraft box.



Extraction Arm (separate order). Extraction can be concentrated to a smaller area of the workbench with a Flexi FLB 1.5m Extraction-Arm. The arm is mounted on top of the backdraft box. The amount of air through the arm can be adjusted with the regulating damper. If you need to reach outside the workbench a Flexi FLB 2m or 3m arm can be fitted. The side panels can be opened for long objects.

Strongly designed. Plymoth MK-Mesa is strongly designed of 2mm and 3mm steel-sheet. It is as standard powder painted in white. The table height can be adjusted from 800-950mm. Suitable air volume for a 1m wide Table is 1500-2000m³/h and for a 1.4m wide Table 2000-3000m³/h. MK-Mesa shall be connected with an external fan or extraction system. Connection d.199mm (outside) for 1m Table and 2x199mm (outside) for 1.4m Table.

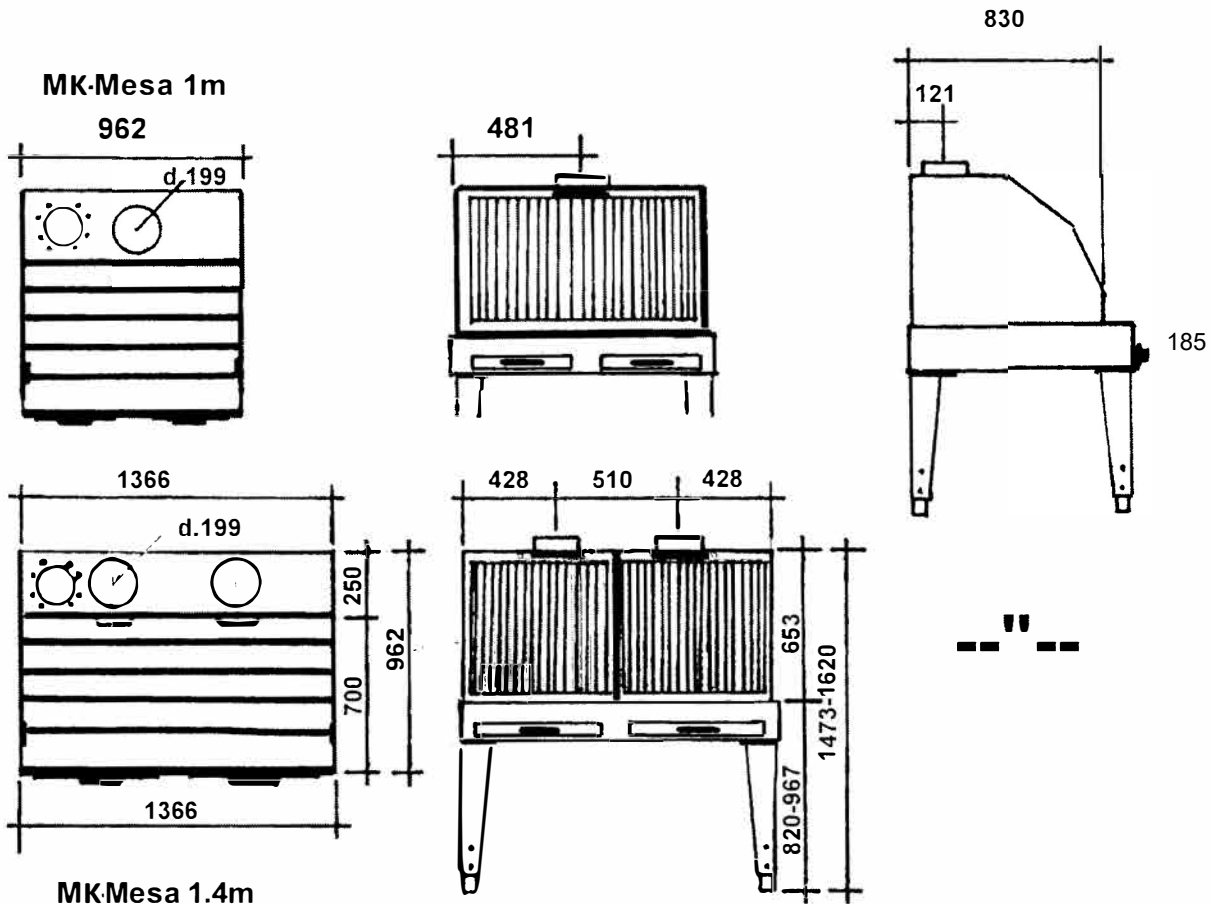
Spark and Ash Bins. There are 2 easy to empty Spark/Ash Bins under the Extraction Table Surface.

	Art.Nr.
MK-Mesa/1m incl.Table Top, Backdraft Box, Damper and Side-Panels. 1mx1m. White.	P-786
MK-Mesa/1.4m incl.Table Top, Backdraft Box, Damper and Side-Panels.1.4x1m. White	P-787
Flexi FLB 1.5m Extraction-Arm. Diameter 160mm. White.	P-788
Flexi FLB 2m Extraction-Arm. Diameter 160mm. White.	P-789
Flexi FLB 3m Extraction-Arm. Diameter 160mm. White.	P-790

* The MK-Mesa in the picture is extra equipped with a Flexi FLB 1.5m extraction arm.

Measures (mm): MK-Mesa 1 m/1.4m

The measures on MK-Mesa 1m are the same as on 1.4m if not written out.



Extraction-Arm (Accessory). Product No. P-788, P-789, P-790.

Seen from the front side, on the top to the left is a hole prepared for mounting of an Extraction-Arm. It has 8xM8 Pop-Nut Threads. It is covered with a bolted steel lid.

Technical data

	MK-Mesa 1m	MK-Mesa 1.4m
Recommended Airflow:	2000m ³ /h	3000m ³ /h
Pressure Drop:	250Pa	300Pa
Pressure Drop with Spark Trap:	350Pa	450Pa
Max. Load:	150kg	150kg
Weight:	145kg	220kg
Outlet on top of unit :	199mm	2x199mm

Prepared for 1xExtraction-Arm 1.5m, 2m or 3m on top of unit.

Accessories

Spark Trap

Metal mesh filter that reduces the risk of extracting hot sparks which can cause fire. For mounting in the back panel.

Flexi FLB Extraction-Arm. 1.5m, 2m or 3m for mounting in a prepared hole. This hole is covered with a bolted steel plate. The bolts shall be used for the FLB Extraction-Arm.

1.4 Installation

After the mounting of the MK-Mesa it shall be transported to the place where it shall be installed and connected to an extraction system.

The extraction system can be of the following types:

1. Ducting to a Fan and sent out of the building.
2. Connection to a central ducting system with a fan in the end and out of the building.
3. Like 2. above but with a Heat Exchanger before it is sent out of the building.
4. Connection to a filter unit and sent out of the building or if allowed returned to the room. Which to choose depends on Exhausted Contaminations, Filter Unit and Local Laws.
5. Connection to a central ducting system with a Filter Unit and sent out of the building or returned to the room. Which depends on Exhausted Contaminations, Filter Unit and Local Laws.
6. 4 and 5 above can be equipped with Heat Exchanger if sent out of the building. It is advisable to use dia. 200mm ducting from the MK-Mesa Unit. It fits directly to the outlet/outlets and keeps down the pressure drop.
7. When the unit is connected to the extraction system you shall bolt it to the floor.

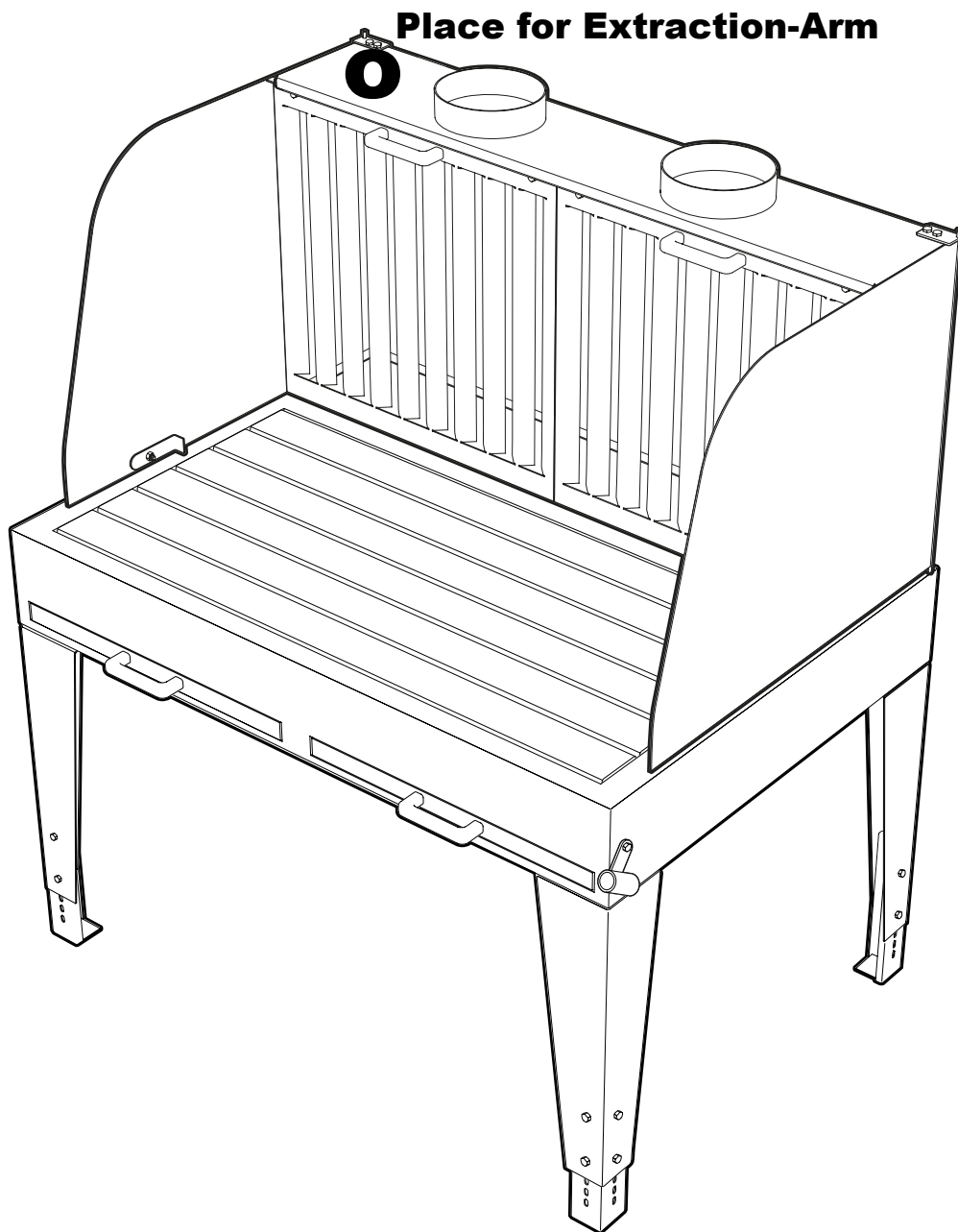
There are prepared holes in the feet.

Flexi FLB Extraction Arm 1.5/2m or 3m (Accessory):

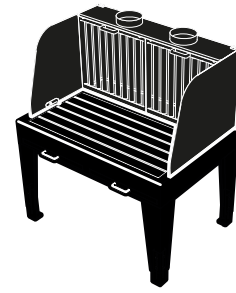
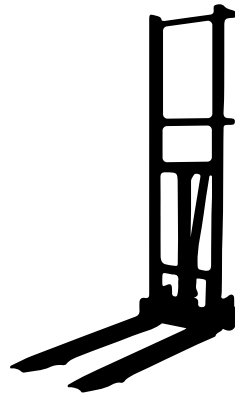
Can be mounted on the prepared place on the top of the MK-Mesa at any time.

For complete instruction see User Manual for Flexi Table Extraction Arms.

1.5 Mounting



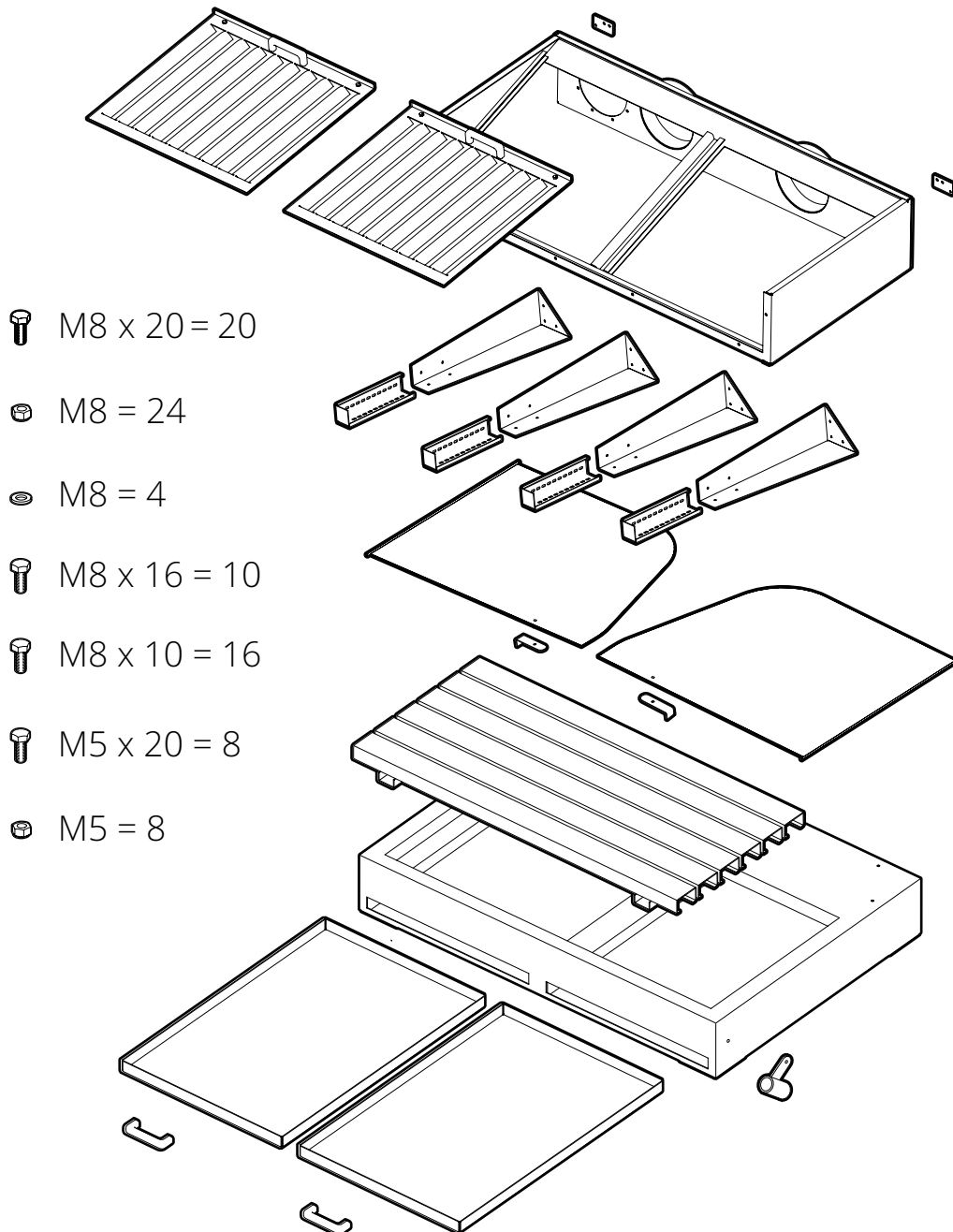
Recomended Mounting Steps.



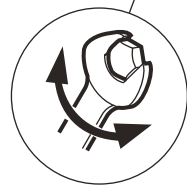
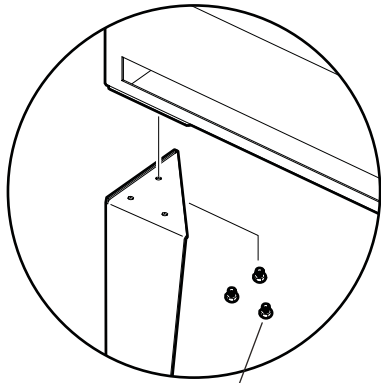
145 kg and 220 kg

MK-Mesa 1m is mounted in the same way as 1.4m.

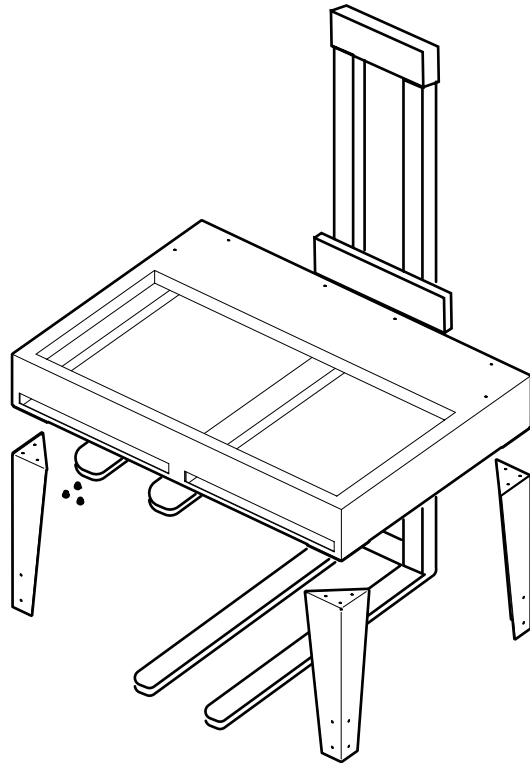
Overview



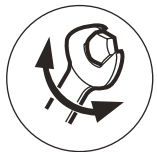
1



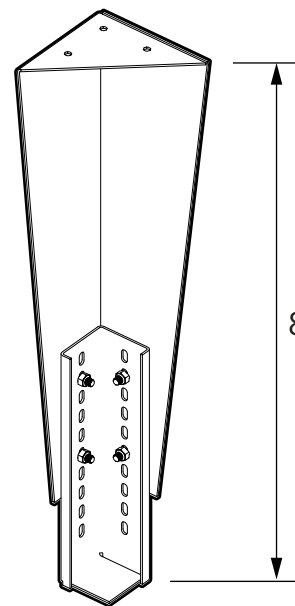
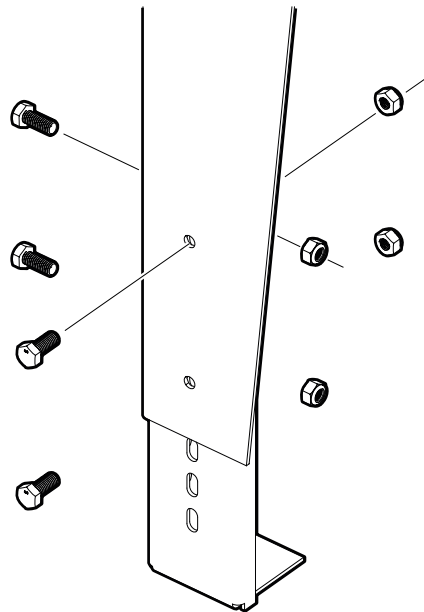
13 mm
M8x16 x 16



2



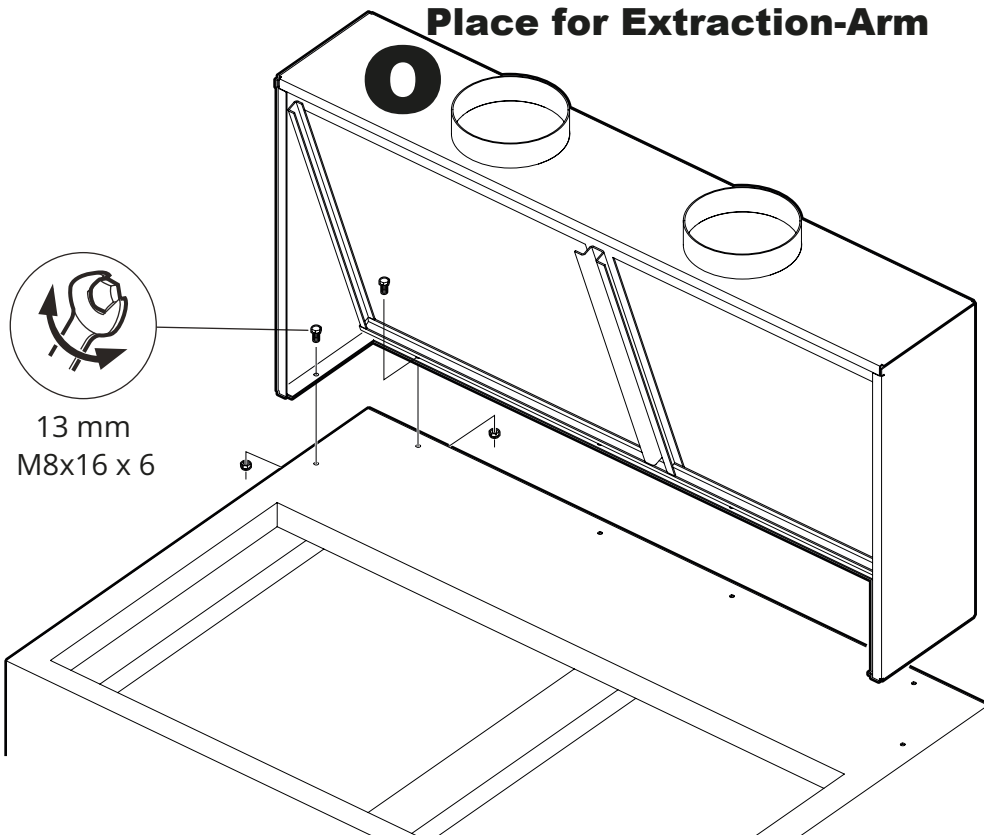
13 mm
M8x20 x 16



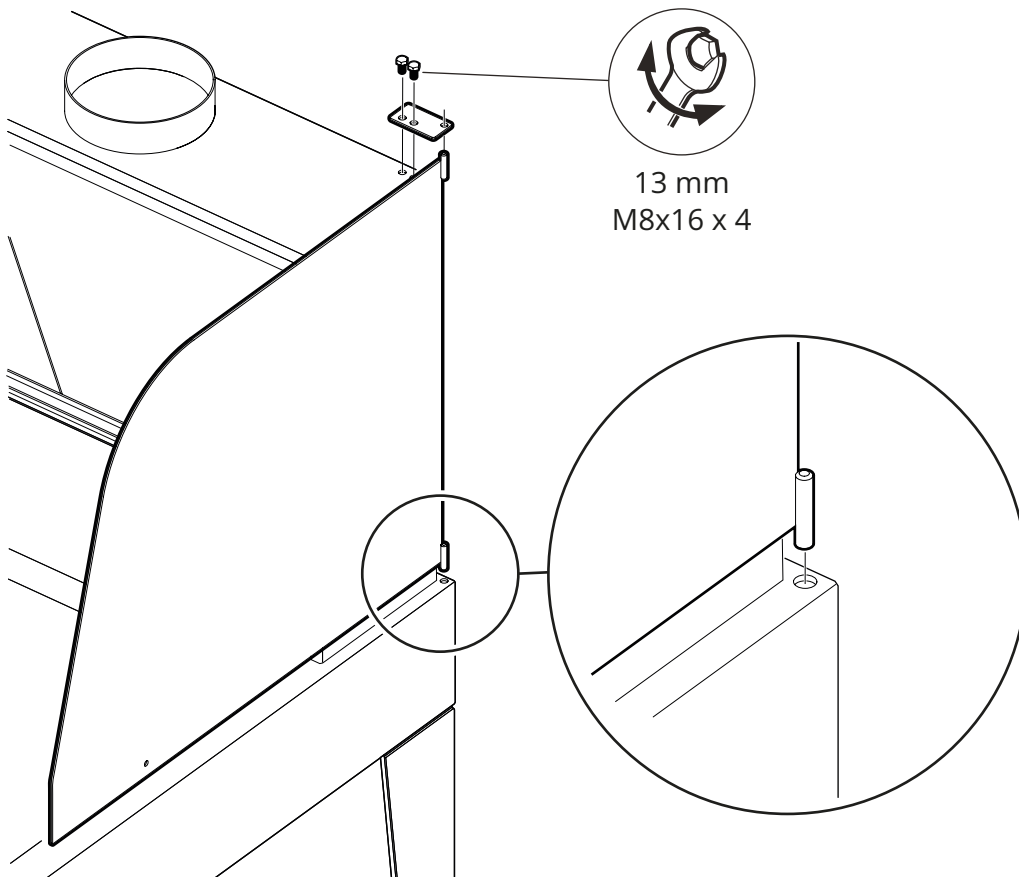
80 - 95 cm

3

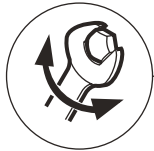
Place for Extraction-Arm



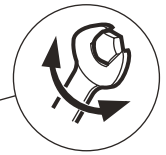
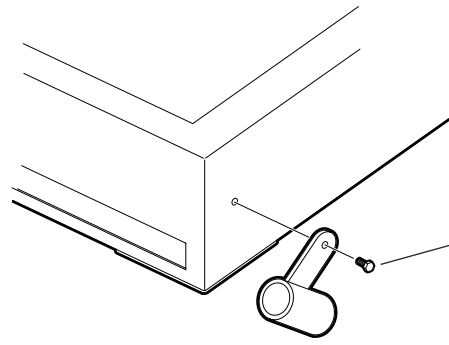
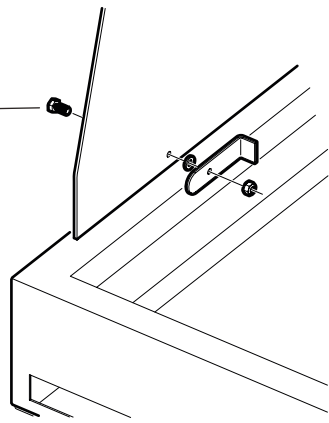
4



5

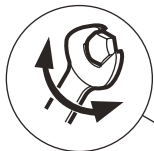


13 mm
M8x20 x 2

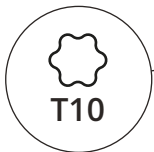


13 mm
M8x20 x 1

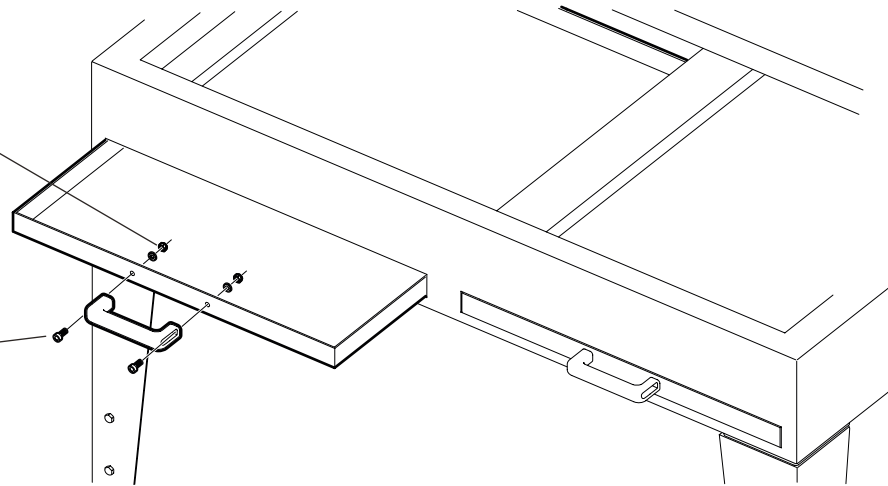
6



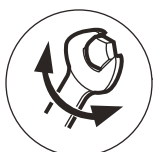
8 mm
M5 x 4



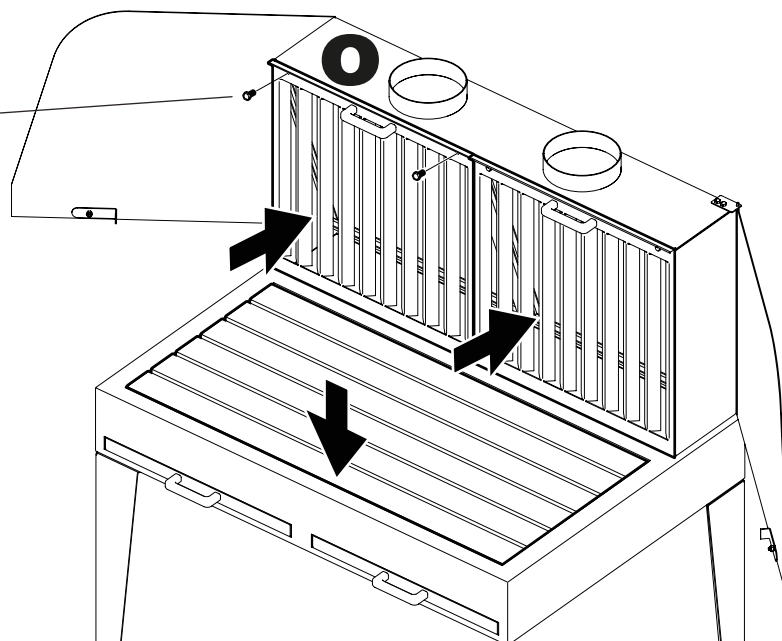
M5x20 x 4



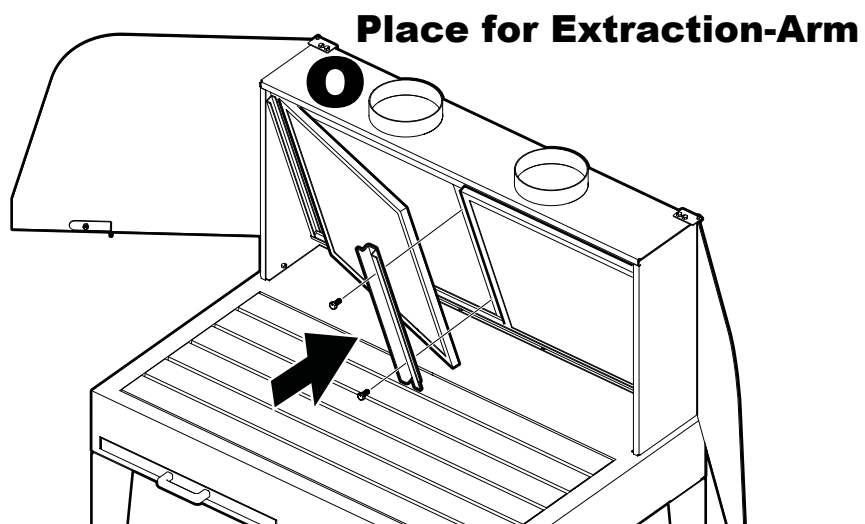
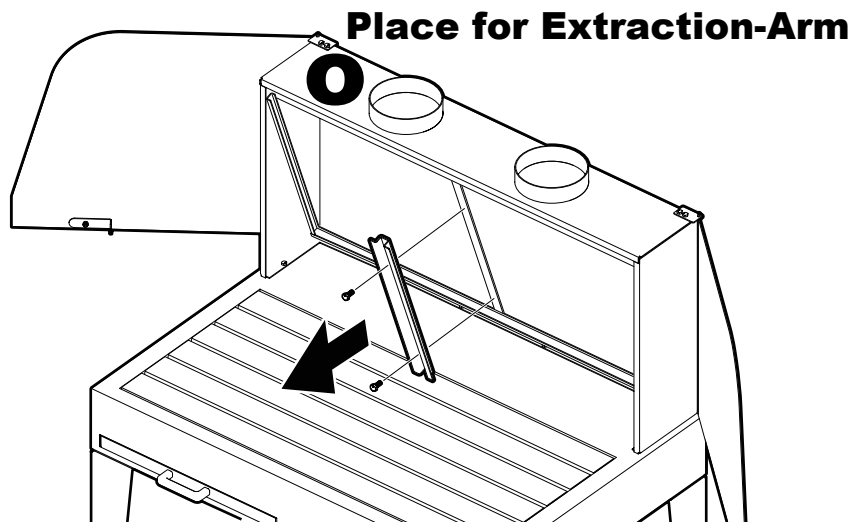
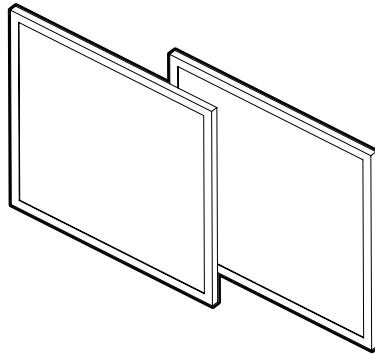
7



13 mm
M8x10 x 4



Spark trap (Accessory): Has to be mounted before step 7 above.



Flexi FLB Extraction-Arm dia.160mm 1.5m/2m/3m. White with Black Hood. Product No. P-788/789/790.

General Information.

The Flexi FLB K-Mesa/MK-Mesa Extraction-Arms (Accessory) are designed to extract dust, fume and gases. They have a swivel which allows the Arm to be rotated 360 degrees. The flame-proof flexible hose, with covered steelspiral, has a parallelogram system inside to balance the hose and hood. This makes the Hood extremely easy to move to a new position and will stay there.

The Flexi steel hood is black painted and can be turned 90 degrees in all directions. It can easily be positioned at any point within the working area.

The Flexi FLB can be mounted on K-Mesa and MK-Mesa Extraction Tables. The top of the units has a prepared mounting place with 8xM8 threads. You can easily mount the arm even after the K/MK-Mesa is in use. There are 1.5m, 2m and 3m models with white dia.160mm hose.

With a 3m FLB Extraction-Arm the unit is not just a Clean Air Table, but can also cover and exhaust contaminated air in a 3x3m work both.

Max allowed vacuum is 1600Pa.

Max temperature of the exhausted air is 70 Degrees Celsius.

Recomended airflow for d.160mm Arms is 600-1000m³/h.

2.0 Maintenance

2.1 General Information.

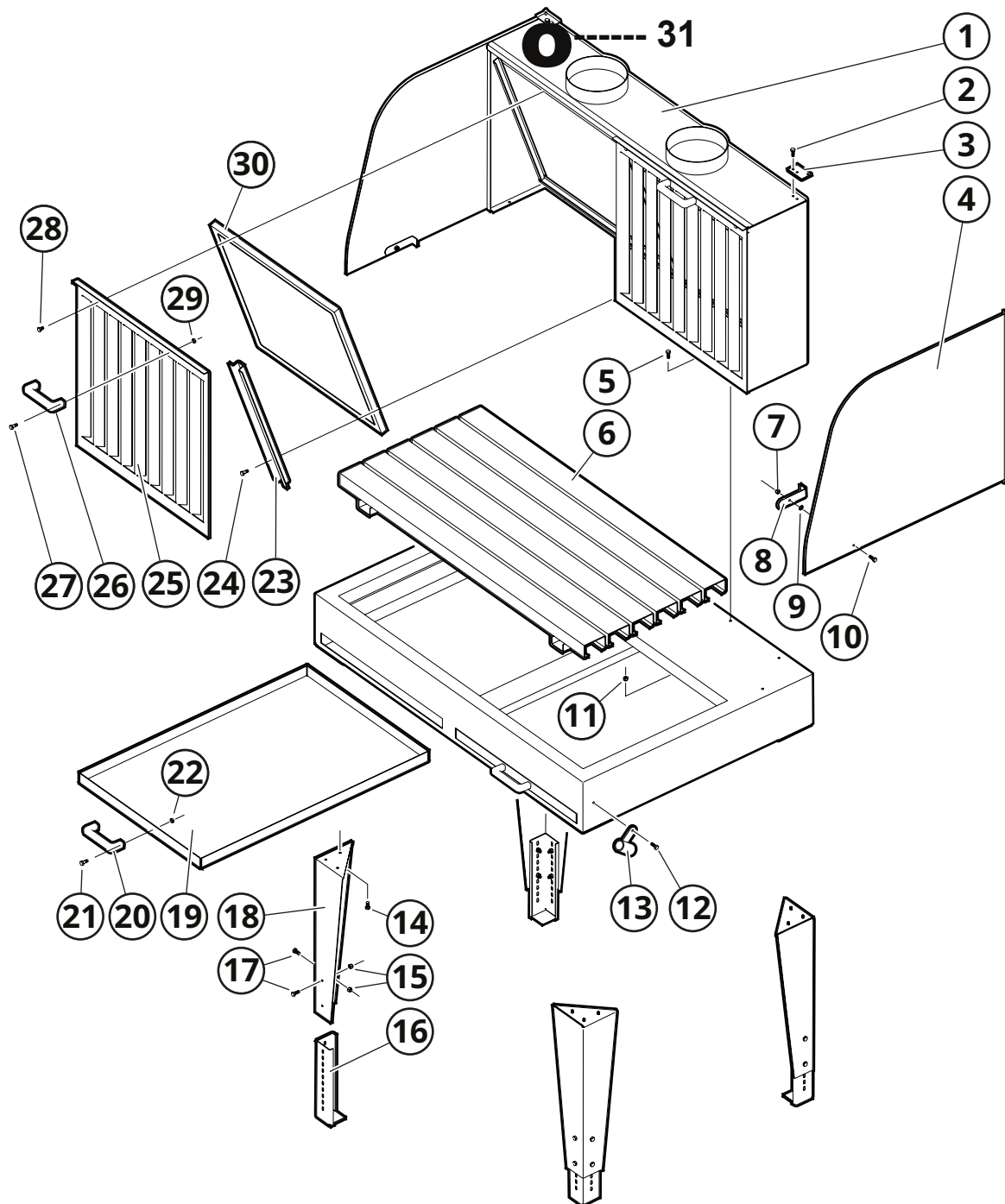
The MK-Mesa Extraction Tables are robust and normally don't need much maintenance. However the following should be checked at least 2 times a year.

- 1. Check that the leg bolts are tight.**
- 2. Check that the Horizontal Damper is working smoothly. If not demount and clean . At the same time clean the area behind and the Spark Trap (Accessory).**
- 3. If the MK-Mesa is equipped with an Extraction Arm (Accessory) check the hose. Small holes are no problem. If the Arm doesn't stay in position, loosen the hose and tighten the friction joints.**

2.2 Spare Parts MK-Mesa 1m(P-786) and 1.4m(P-787)

When ordering spare parts please specify:

1. Name and P-number of your product.
2. Number/numbers and text from below.
3. Quantity of each number/numbers.



1.Backdraft Box 2/3.Bolt and ear for Side Panel 4.Side Panel 5/11.Bolt and nut for Backdraft Box 6.Table Top with suction slots 7/8/9/10. Quick Lock for Side Panel 12/13.Holder for compressed air pistol 14.Bolt for leg 15/17.Bolt and nut for height adjustable leg 16.Height adjustable leg 18.Leg 19.Dust Tray 20/21/22.Handl with bolts and nuts 23/24.Holder and Bolts for Spark Trap 25/28."Guillotine" Damper with Bolts 26/27/29.Handle with Bolts and Nuts 30.Spark Trap 31.Cover Lid for Extraction-Arm Hole.

Spare Parts: Flexi FLB Extraction-Arm, 1.5m/2m/3m/dia.160mm for K/MK-Mesa. White Hose and Black Hood.

SPARE PARTS

ERSATZTEILE

PIÈCES DE RECHANGE

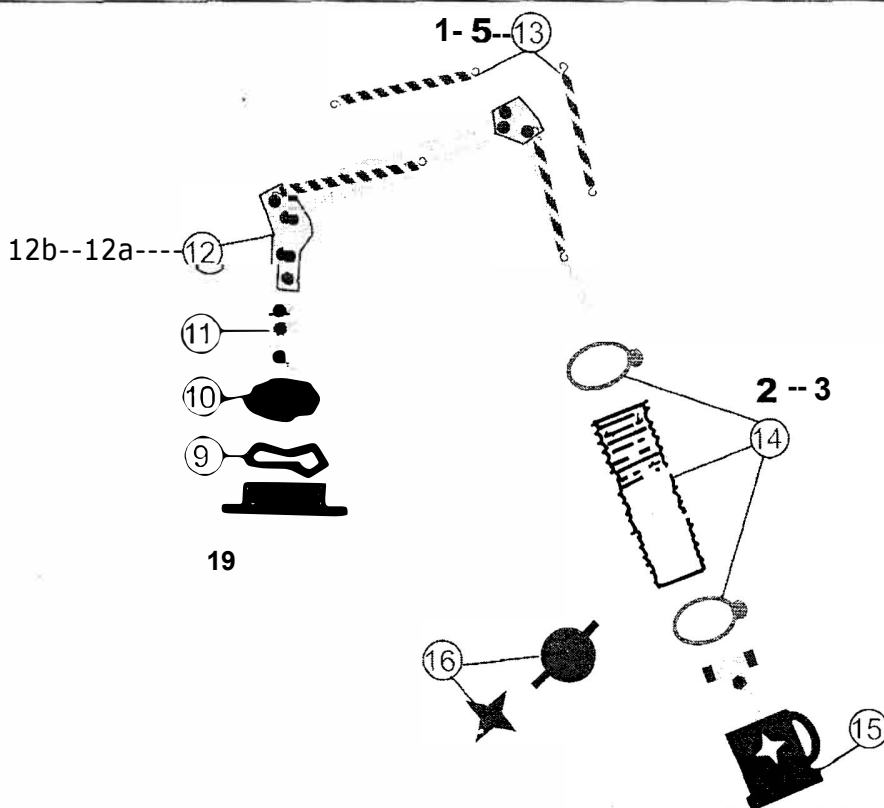
PIEZAS DE REPUESTO

Product No.

1.5m=P-788

2m=P-789

3m=P-790



ENGLISH ORDER INSTRUCTION

When ordering spare parts always state:
-Name and No. of your Product.

-Detail no. of the spare part and the name as per list below.
-Quantity of the part required

DEUTSCH BESTELLANLEITUNG

Bei der Bestellung von Ersatzteilen immer angeben:
- Ersatzteilnummer und Beschreibung (s. Liste unten).
- Anzahl erforderlicher Ersatzteile.

FRANCAIS INSTRUCTIONS DE COMMANDE

Lors de la commande de pièces de rechange, toujours spécifier:
- Numéro de détail et dénomination (voir liste).
- Quantités des pièces requises.

ESPAÑOL INSTRUCCIONES DE PEDIDO

Cuando pida repuestos especifique siempre:
- N° de pieza del repuesto (en la lista).
- Cantidad de repuestos requeridos.

- 1. Spring Set 1.5m Arm
- 2. Hose+Hose Clamps 1.5m Arm
- 3. Hose+Hose Clamps 2m Arm
- 5. Spring Set 2m Arm
- 9. Rubber kollar
- 10. Hose ring of Plastic
- 11. Shaft
- 12. Inside Arm 1.5 m complete
- 12a. inside Arm 2m complete
- 12b. Inside Arm 3m complete
- 13. Spring set 3m Arm
- 14. Hose+Clamps 3m Arm
- 15. Hood, complete
- 16. Damper set
- 19. Arm Holder



Declaration of conformity

We, J. Plymoth AB, declare under our sole responsibility that the product lines **Flexa, Chemikus, Flexi, Super-Max, Super-Vac, Super-Mesa and Maxi-Mesa, K-Mesa, MK-Mesa** to which this declaration relates are in conformity with Directives 2006/42/EC and Standards EN ISO 12100:2010 and EN ISO20607;2019.

J. Plymoth AB
Traryds Allen 4D
28772 Traryd

A handwritten signature in blue ink, appearing to read 'Jenny Nilsson', is written over the printed name and title.

Jenny Nilsson
Verkställande Direktör

2023-01-01