

# \*User Manual



## Super-PM Extraction-Arm

- Extraction-Arm for use in Chemical, Pharma and Food Industry.
- Hood and Handle of Acid Proof Mirror Polished Stainless Steel.
- All other Parts Electro Galvanized or Powder Painted.
- Parallelogram-Arms and Gas Springs. Free Flow in the Hose.
- Extremely easy to move and stays in position.
- Models: Dia. 110mm or 160mm. 1.5m/2m/2.2m/2.5m/3m and 4m.
- Dia. 110mm: Straight Hood or 67° Hood or 150° Hood.
- Dia. 160mm: 42° Hood.

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# 1.0 General Information.

Super-PM is an Extraction-Arm with Handle and Hood made of Mirror Polished Acidproof Stainless Steel. The rest of the unit is Powder Painted or Electro Galvanized.

Super-PM is designed for extracting corrosive Smoke, Dust and Gases.

### Smoke, Dust and Gases.

Extraction-Arms extract smoke, dust and gases directly at source, before the contaminated air has been inhaled by somebody. You will get better working environment all over the premises.

Less dust in the air will mean less wear and tear of the machines and lower cleaning costs.

### Chemical, Food and Pharma Industry.

Super-PM is made for using when controlling, measuring, weighing, filling, blending, mixing, emptying, packaging, etc. It withstands tough chemical environments thanks to the stainless steel hood and handle.

### The Hood is the Secret.

The hoods are developed in cooperation with one of the biggest companies in the chemical industry. The straight hood is for dust, the 67° hood is for smoke and the 150° hood is for gases. The 150° hood develops a "Tornado" effect, which enhances its capacity to extract gases.



### Perfectly Balanced.

External Gas Springs and Parallelogram-Arms make the Hood extremely easy to move and 100% stable in all positions.

The dia. 110mm Models are for applications whee 400-700m<sup>3</sup>/h is needed.

The dia .160 mm Models are for applications where 700-1300 m<sup>3</sup>/h is needed.

	Art. Nr.	Art. Nr.	Art. Nr.	Art. Nr.
<b>Acidproof Stainless Steel Hood and Handle. Arm Powder Coated.</b>	<b>d.110 mm Straight Hood</b>	<b>d.110 mm 67° Hood</b>	<b>d.110 mm 150° Hood</b>	<b>d.160 mm Hood</b>
Super-PM 1.5m(0.25m+1.5m)	P-723	P-729	P-735	P-741
Super-PM 2m(0.5m+1.5m)	P-724	P-730	P-736	P-742
Super-PM 2.2m(0.25m+2m)	P-725	P-731	P-737	P-743
Super-PM 2.5m(0.5m+2m)	P-726	P-732	P-738	P-744
Super-PM 3m(0.5m+3m)	P-727	P-733	P-739	P-745
Super-PM 4m(0.5m+0.6m+3m)	P-728	P-734	P-740	P-746
Damper, tight. Acidproof Stainless Steel	P-483	P-482	P-482	P-484

## 1.1 Safety Notes

The product is designed to meet the requirements of the relevant EC directives. To maintain this status all installations, repair and maintenance work must be carried out by qualified personnel using only original spare parts.

Contact your nearest authorized dealer for advise.

Use adequate safety clothing when cleaning the unit.

Check that no objects, which can cause problems, are sucked into the Extraction-Arm.

Avoid impacts against the Hood.

Apart from the general information given in our user manual it is necessary to perform a risk analysis for the particular work prodeses that are going to be done in each induvidual case.

**The final responsibility for safety can only be taken by the owner of the installation.**

## 1.2 Range of Application

Super-PM Extraction-Arms are designed for being used in Pharma-, Food- and Chemical Industry by for example weighing, mixing, taking samples, examinations, experiments and so on.

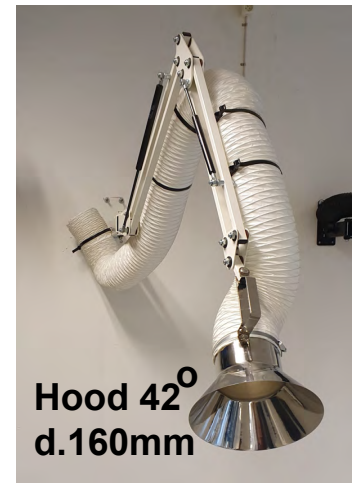
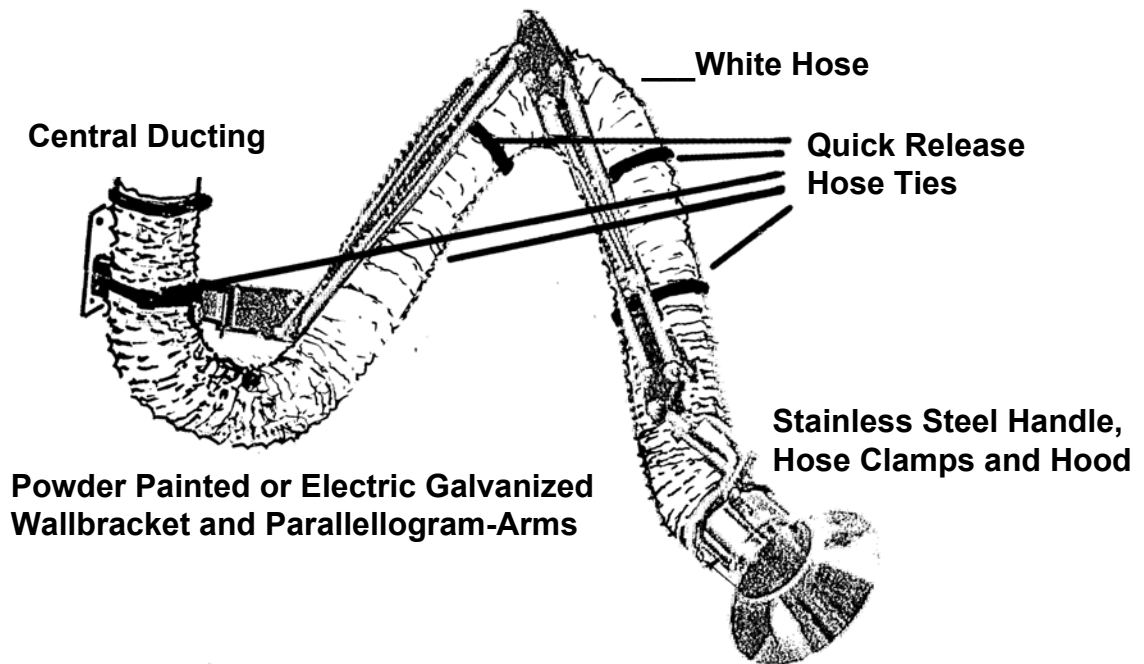
The Hood is easy to position at any point within the working area.

For the best capturing efficiency the hood should be positioned as near the contamination generating process as possible.

Always dimension your system so the airflow is sufficient for the application in question.

Be sure to follow local laws and regulations.

### 1.3 Unit Description Super-PM.



**The Super-PM Extraction-Arms** with Stainless Steel Handle and Hood are designed to extract fume, light dust and gases in environments with Corrosion risks.

The flexible PVC Hose, with covered steelspiral, is balanced by Parallelogram-Arms with Gas Springs. It makes the Hood Extremely easy to move and it stays in position.

Free flow in the hose gives lower pressure drop and less maintenance.

The Hood can be turned 90° in all directions. It is easy to position at any point within the working area.

The Hood can be equipped with a Stainless Steel Damper (Accessory).

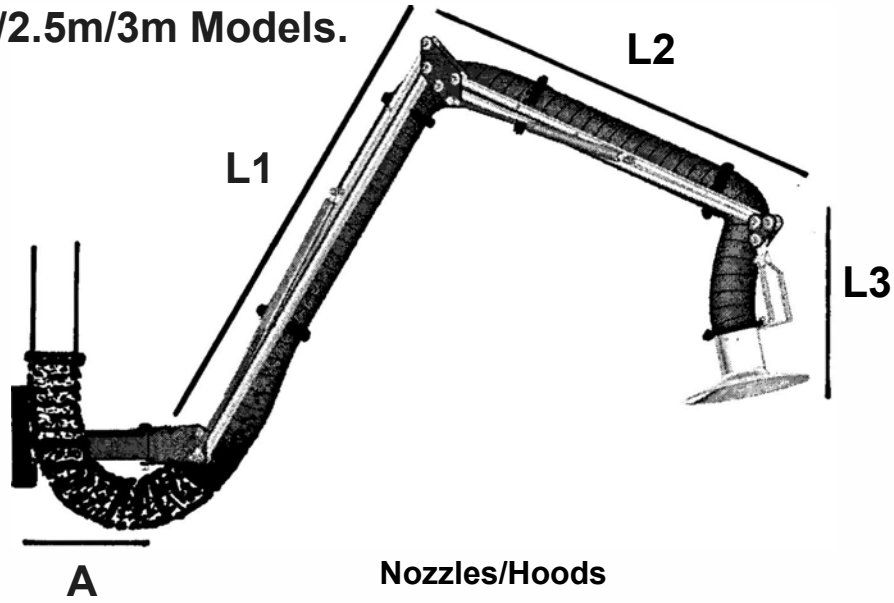
The Super PM Extraction-Arm shall be connect to a an exhaust system designed for the work situation. Max allowed vacuum is 1500Pa.

Recomended Airflow for dia.110mm Models is 400-700m<sup>3</sup>/h.

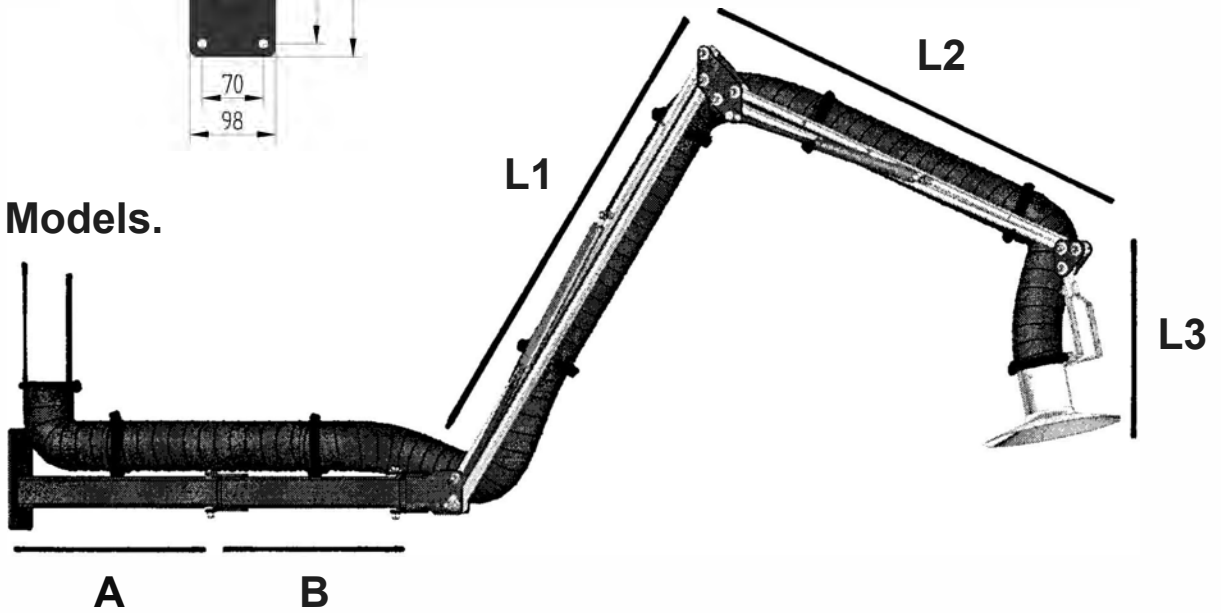
Recomended Airflow for dia.160mm Models is 700-1300m<sup>3</sup>/h.

**Measures (mm.) Super-PM. 1.5m, 2m, 2.2m, 2.5m, 3m and 4m.**

**1.5m/2m/2.2m/2.5m/3m Models.**



**4m Models.**



	A	B	L1	L2	L3	Weight	Total Length
1,5 m	250 mm	-	435 mm	335 mm	480 mm	14 kg	1750 mm
2,0 m	500 mm	-	435 mm	335 mm	480 mm	15 kg	2000 mm
2,2 m	250 mm	-	665 mm	565 mm	480 mm	17 kg	2250 mm
2,5 m	500 mm	-	665 mm	565 mm	480 mm	18 kg	2500 mm
3,0 m	500 mm	-	1165 mm	960 mm	480 mm	24 kg	3350 mm
4,0 m	500 mm	500 mm	1165 mm	960 mm	480 mm	27 kg	3850 mm

**Important for all Super-M Models! Each of the Wall Bolts must stand a min. Traction Power of 1600N.**

# Pressure Drop: Super-PM Extraction-Arms.

## Ø 110mm Extraction-Arms.

Extraction-Arm	400m <sup>3</sup> /h	500m <sup>3</sup> /h	600m <sup>3</sup> /h	700m <sup>3</sup> /h
1.5-2.5m Ø 110mm	300 Pa	450 Pa	600 Pa	750 Pa
3m Ø 110mm	325 Pa	500 Pa	650 Pa	825 Pa
4m Ø 110mm	375 Pa	550 Pa	700 Pa	900 Pa



## Ø 160mm Extraction-Arms.

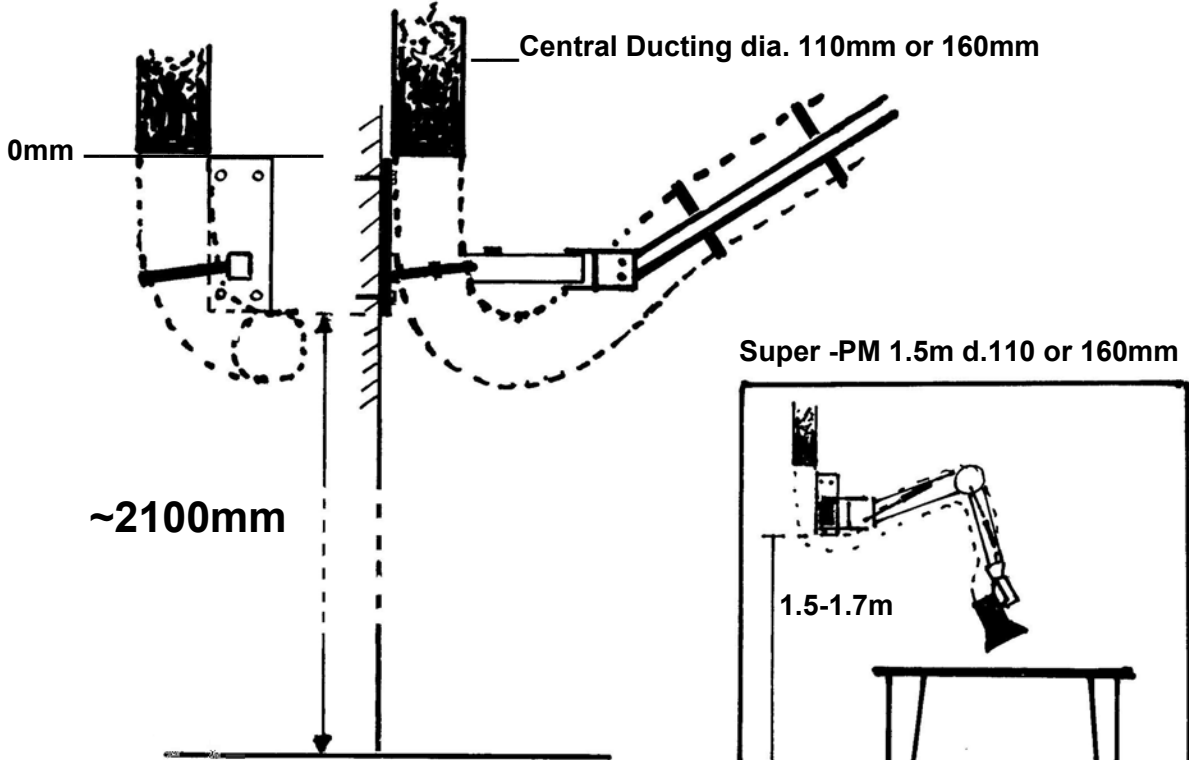
Extraction-Arm	700m <sup>3</sup> /h	1.000 m <sup>3</sup> /h	1.200 m <sup>3</sup> /h	1.300 m <sup>3</sup> /h
1.5-2.5m Ø 160mm	350 Pa	550 Pa	700 Pa	780 Pa
3m Ø 160mm	375 Pa	600 Pa	750 Pa	850 Pa
4m Ø 160mm	400 Pa	650 Pa	800 Pa	900 Pa



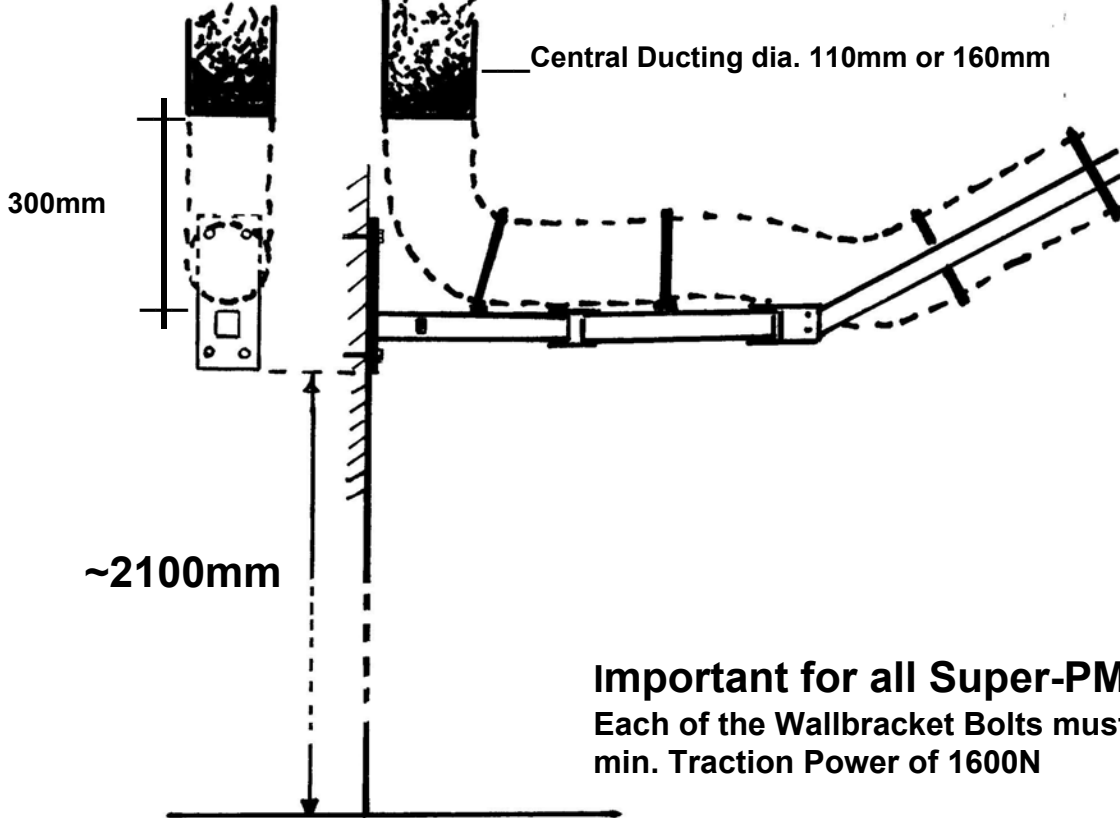
# 1.4 Installation.

## Mounting Height and Connection of Hose to Central Ducting.

Super-PM 2m/2.2m/2.5m and 3m



Super-PM 4m

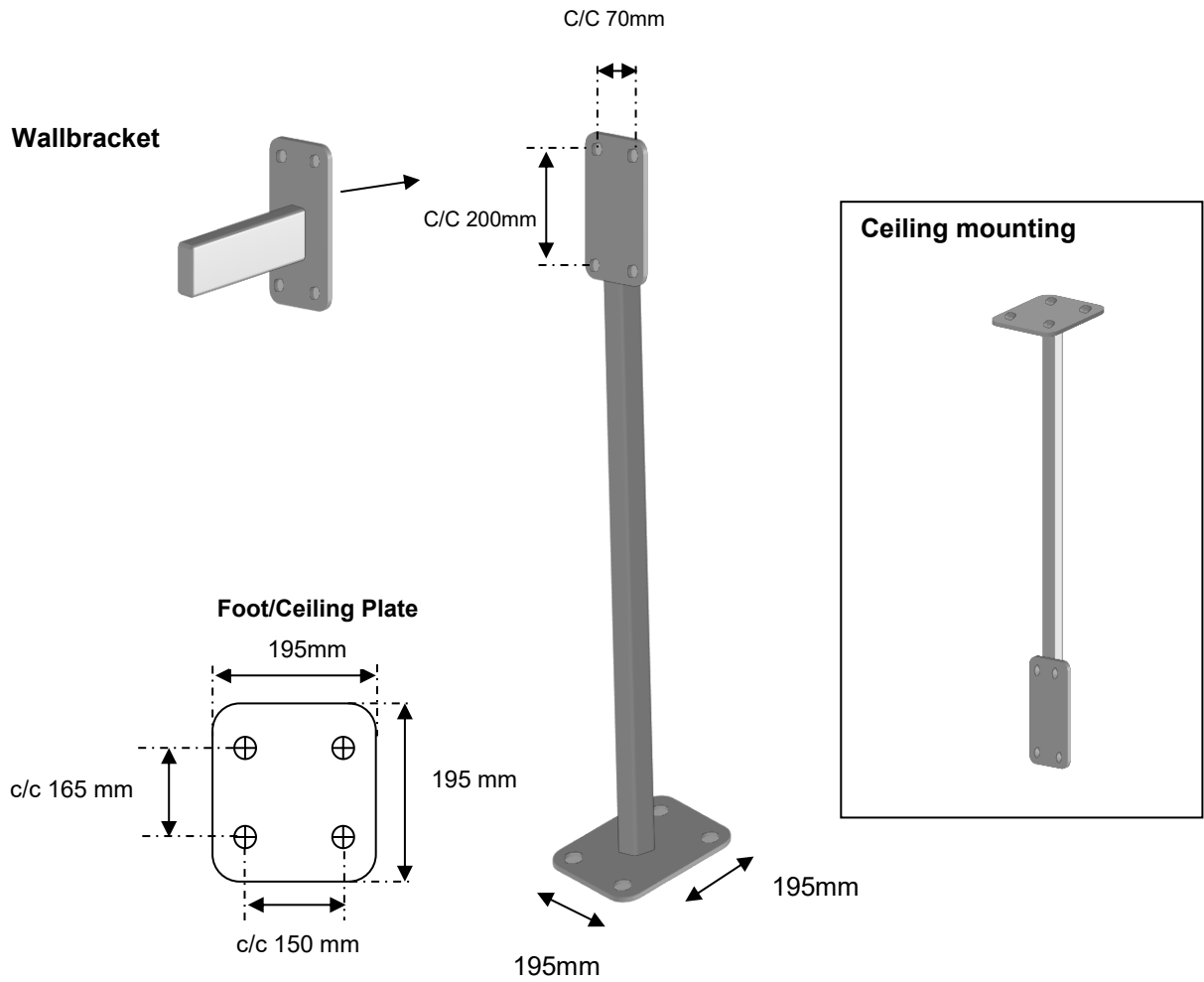


**Important for all Super-PM Models!**

Each of the Wallbracket Bolts must stand a min. Traction Power of 1600N



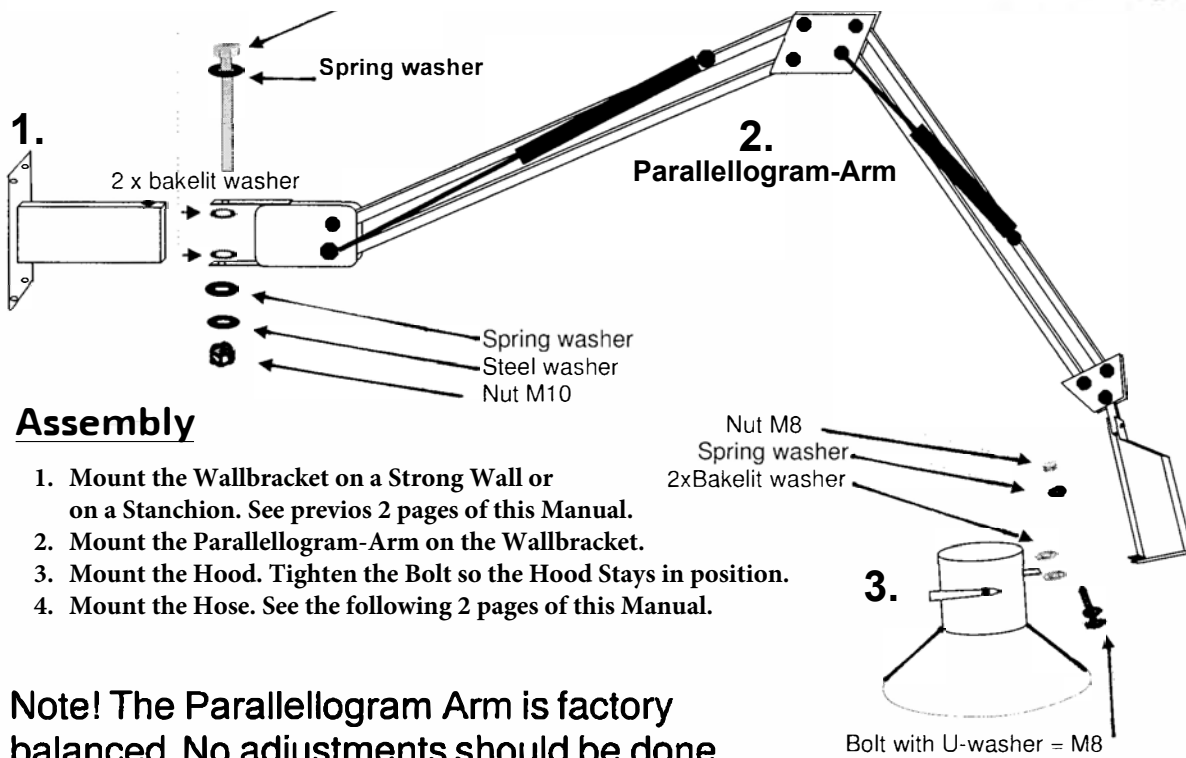
# Floor/Ceiling Stanchion: Super-PM Extraction-Arms (Accessory). Made of Powder Painted Steel.



	Art.-Nr.
0,5m	P-434
0,75m	P-435
1,0m	P-083
1,25m	P-436
1,5m	P-437
1,75m	P-438
2,0m	P-084
2,25m	P-439
2,5m	P-440

# Assemblage of Super-PM Extraction-Arms.

**A: 1.5m/2m/2.2m/2.5m and 3m Models.**



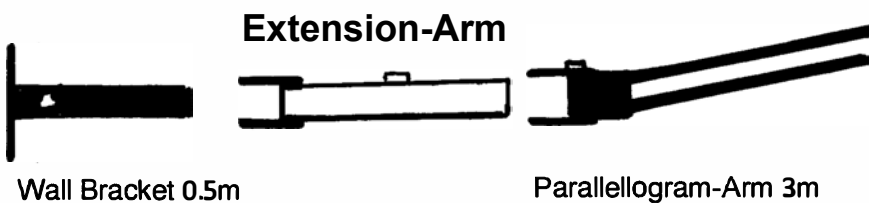
## Assembly

1. Mount the Wallbracket on a Strong Wall or on a Stanchion. See previous 2 pages of this Manual.
2. Mount the Parallelgram-Arm on the Wallbracket.
3. Mount the Hood. Tighten the Bolt so the Hood Stays in position.
4. Mount the Hose. See the following 2 pages of this Manual.

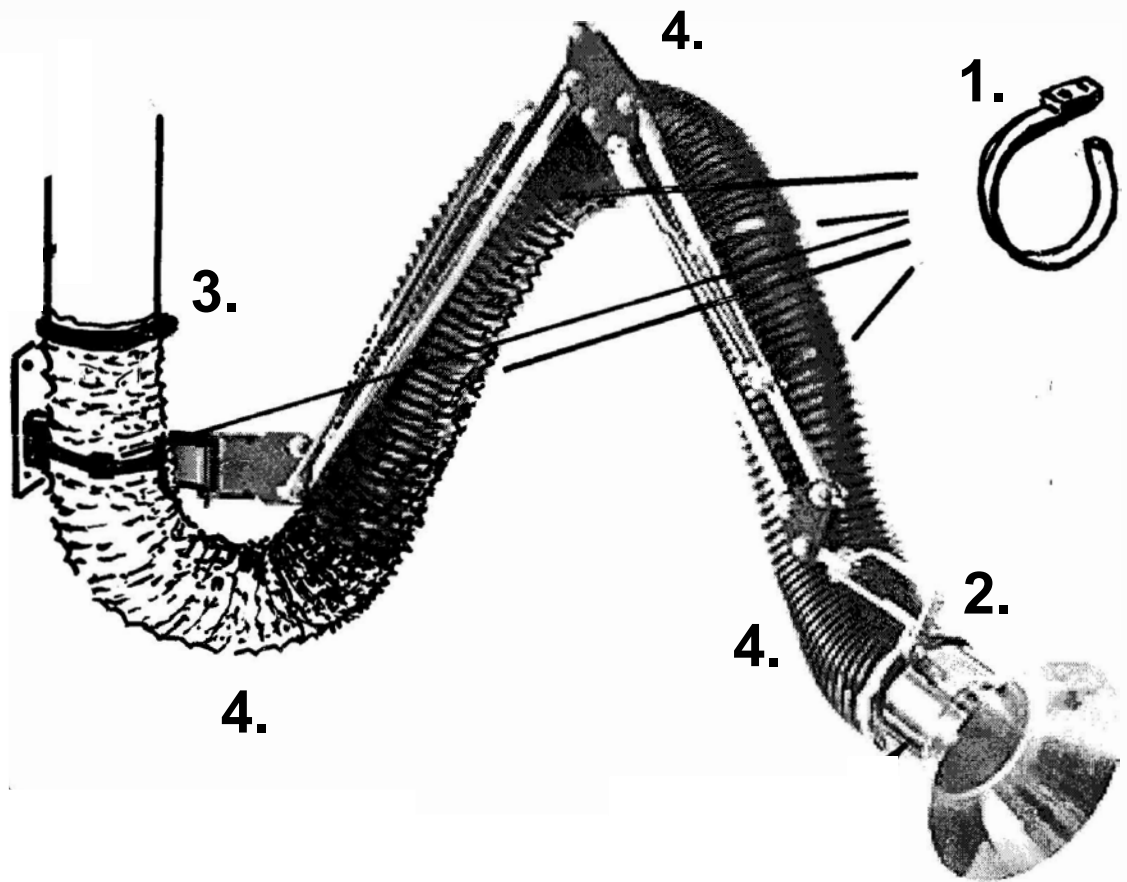
**Note! The Parallellogram Arm is factory balanced. No adjustments should be done.**

## B: 4m Models.

As above but with the Extension-Arm between the Wall-Bracket and the Parallellogram-Arm.



## Mounting of the Hose with Nylon Hose Ties and Steel Hose Clamps.



1. Nylon Ties for Hose mounting on Wallbracket and Parallellogram Arm.

2.-3. Steel Hose Clamps for mounting the Hose Ends over Hood and Exhaust Ducting.

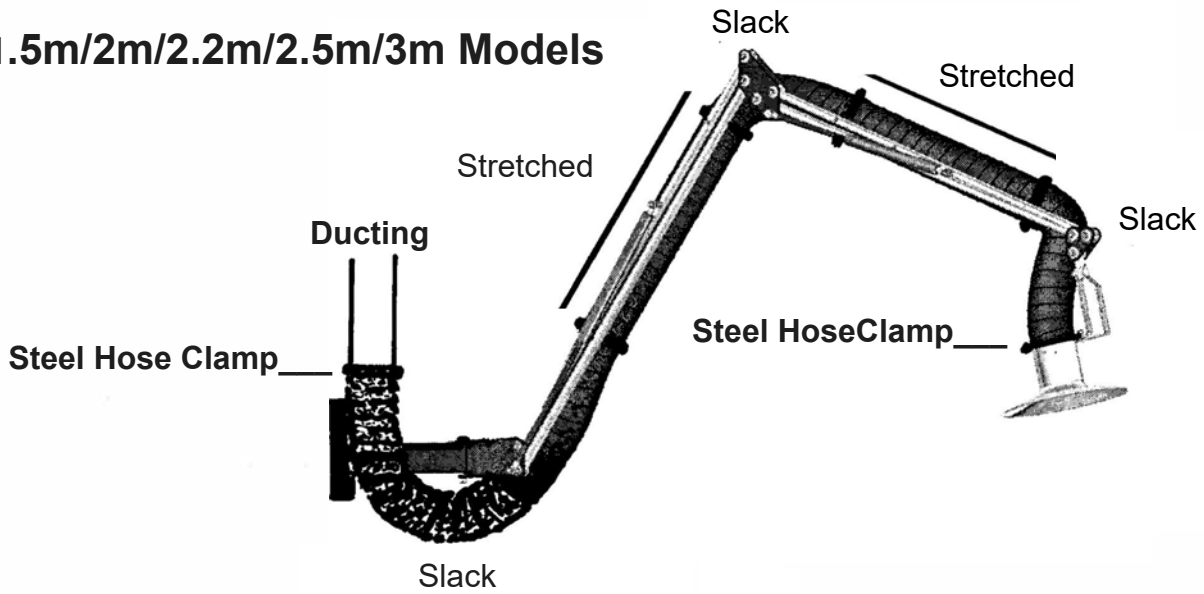
4. Slacked Hose. Please see next Page.

# Important Details of the Hose mounting.

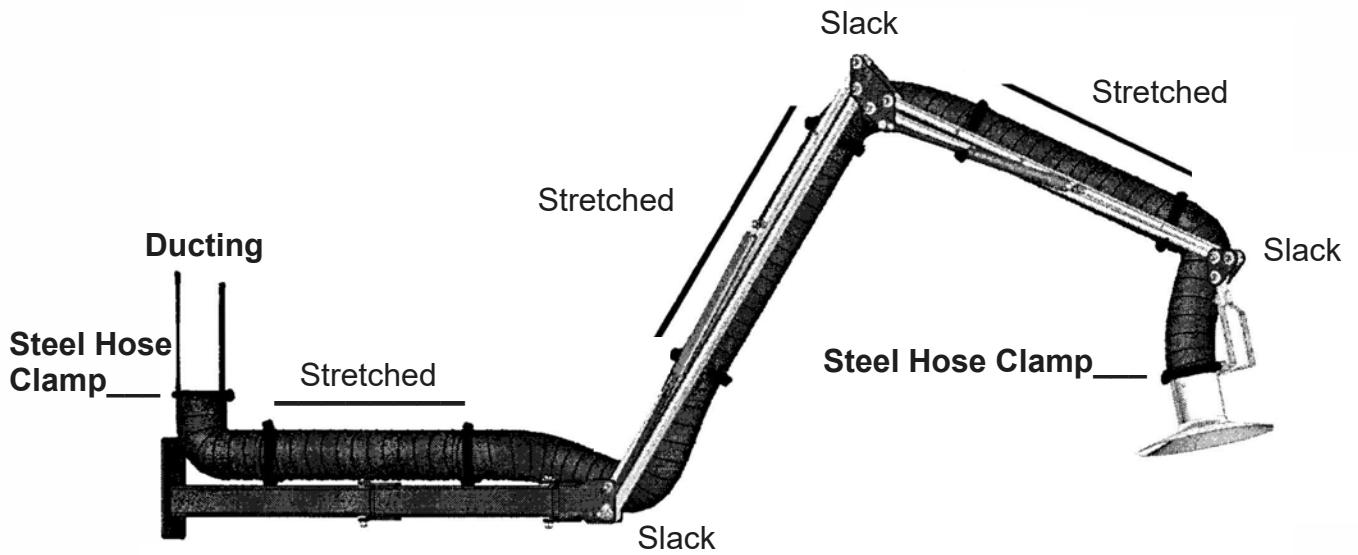
**Stretched**= Stretch the Hose between the Nylon Hose Ties.

**Slack**= Mount the Hose so it is not too hard or too loose when moving the joints. Cut the Hose to the right length at the Ducting.

## 1.5m/2m/2.2m/2.5m/3m Models



## 4m Models



## **2.0 Maintenance**

We recommend regular safety controls at least once a year on the following points:

Control the Bolts of the Wallbracket.

Control the Hose. Small Holes is no problem.

Control Friction Joints. Bakelite washers and Bolts.

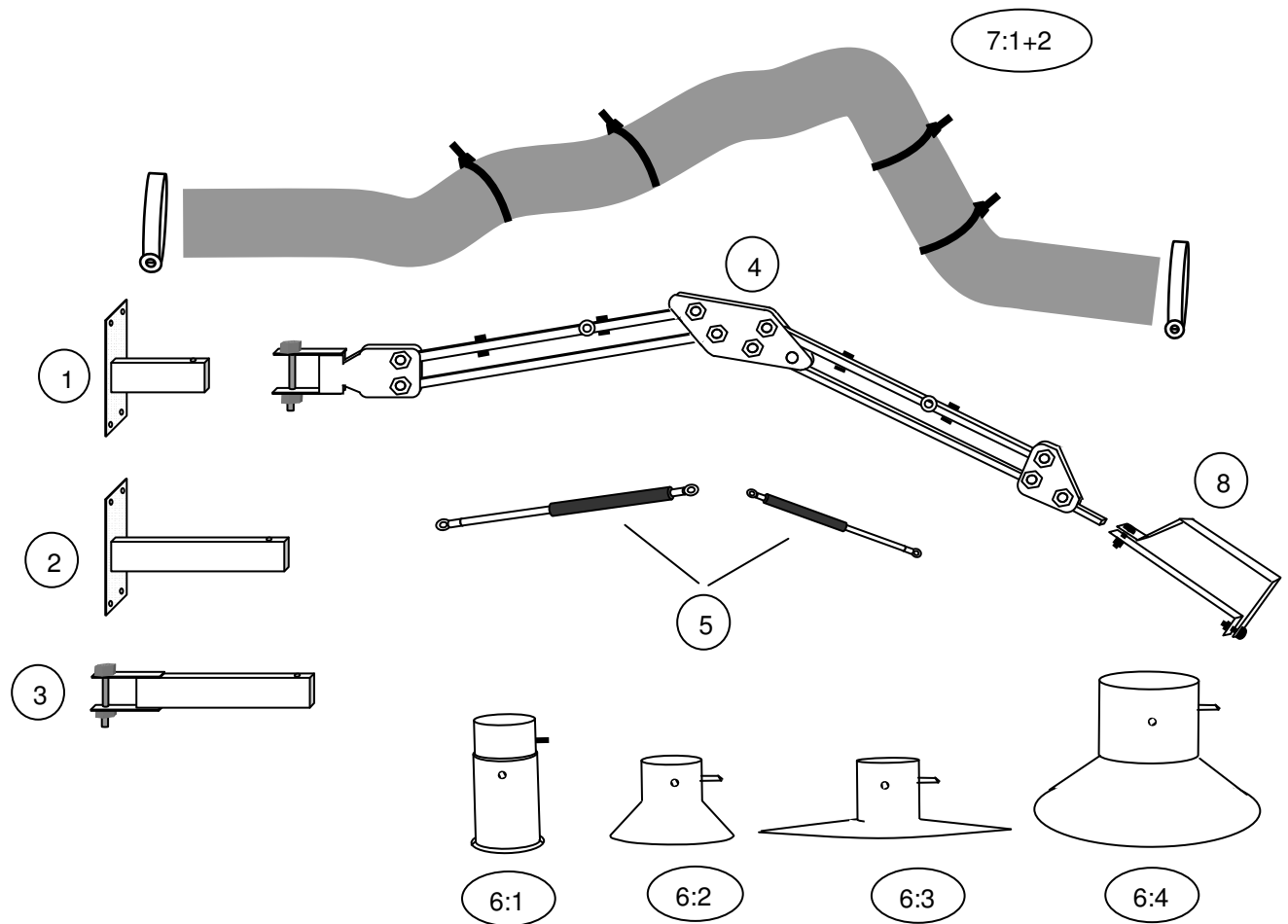
Control the "Ears" of the Gas Springs. If there are cracks you have to change them.

## 2.1 Spare parts.

### Super-PM Extraction-Arms. Ø110/160mm. 1.5m/2m/2.2m/2.5m/3m and 4m.

With mirror polished acid proof stainless steel hood and handle.  
Wallbracket and Arms Powder Painted.

Only use original Spare parts to maintain the status of the installation.



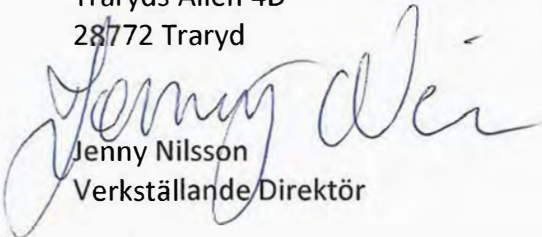
No	Description	1,5 m	2 m	3 m	4 m
1	Wallbracket 0,25 m	OM-002	OM-002	OM-002	
2	Wallbracket 0,5 m	OM-003	OM-003	OM-003	OM-003
3	Horizontalboom 0,5 m				OM-005
4	Parallelogram-Arm	R-131	R-132	R-133	R-133
5	Set of 2 Hydraulic springs	R-087	R-088	R-089	R-089
6:1	Hood straight ø110 mm (stainless)	R-112	R-112	R-112	R-112
6:2	Hood 67° ø110 mm (stainless)	R-113	R-113	R-113	R-113
6:3	Hood 150° ø110 mm (stainless)	R-114	R-114	R-114	R-114
6:4	Hood ø160 mm (stainless)	R-115	R-115	R-115	R-115
7:1	Hose White ø110 mm	R-094	R-095	R-096	R-097
7:2	Hose White ø160 mm	R-127	R-128	R-129	R-130
8	Handle (stainless)	R-134	R-134	R-134	R-134



### **Declaration of conformity**

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

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