



# AIR TREATMENT AND WELDING ENVIRONMENT

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**ELECTRIC**



# LINCOLN ELECTRIC WEBSHOP

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# CONTENTS

Custom design .....	1
General data/Indoor pollution targets .....	2
Occupational exposure limit values/Atmospheric discharge targets .....	3

## PART I

<b>LOW-VACUUM PROCESS</b> .....	<b>5</b>
<b>1</b> DOWN-DRAFT TABLES .....	<b>7 - 14</b>
<b>2</b> EXTRACTION COLLECTORS .....	<b>14 - 16</b>
<b>3</b> EXTRACTION ARMS .....	<b>17 - 34</b>
<b>4</b> EXTRACTION ARM FANS .....	<b>35 - 37</b>
<b>5</b> CONTROL UNITS .....	<b>38 - 41</b>
<b>6</b> MOBILES FILTRATION UNITS .....	<b>42 - 47</b>
<b>7</b> FILTERS FOR FIXED SYSTEMS .....	<b>50 - 60</b>
<b>8</b> FANS .....	<b>61 - 71</b>
<b>9</b> CLEANING EQUIPMENT .....	<b>72 - 79</b>

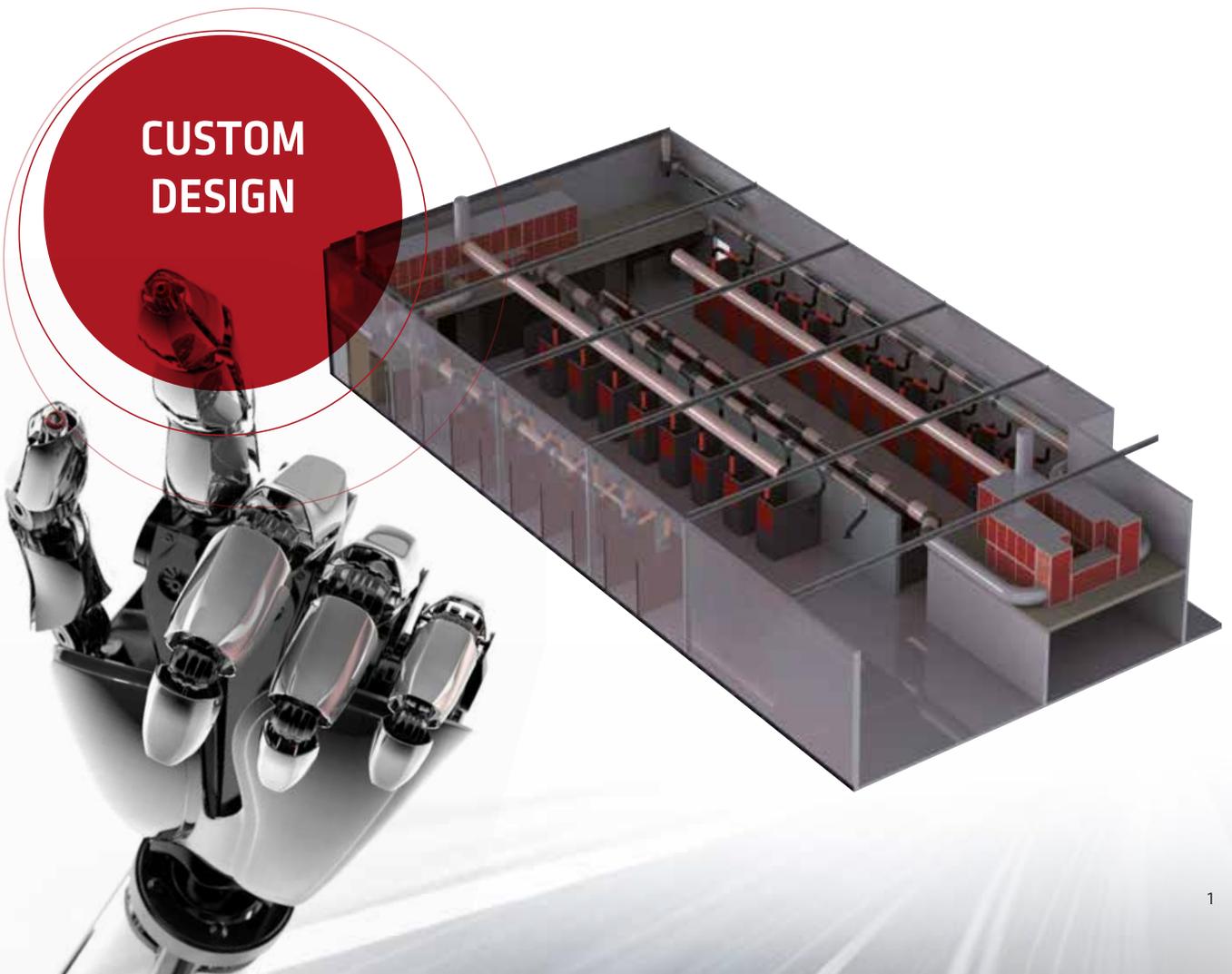
## PART II

<b>HIGH VACUUM</b> .....	<b>81</b>
<b>1</b> FUME EXTRACTION TORCHES .....	<b>83 - 88</b>
<b>2</b> ERGONOMIC BOOMS .....	<b>89 - 92</b>
<b>3</b> TURBINES AND CENTRAL UNITS .....	<b>93 - 99</b>
<b>4</b> CONTROL UNITS .....	<b>100 - 101</b>

## PART III

<b>WORKSHOP SAFETY</b> .....	<b>103</b>
<b>1</b> VISUAL SAFETY .....	<b>105 - 115</b>
<b>2</b> PROTECTION FROM HEAT .....	<b>116 - 118</b>
<b>3</b> SOUNDPROOFING .....	<b>119 - 123</b>
<b>4</b> MISCELLANEOUS .....	<b>124</b>

**CUSTOM  
DESIGN**



Fume and dust extraction systems are designed on the basis of several criteria.

Each individual system is devised to suit the process and the type and characteristics of the fumes.

In general, industrial fumes are discharged outside the building in order to comply with the gas exposure values set by CARSAT and INRS (in France) and are also generally filtered to comply with the specifications issued by DREAL in respect of the environment.

**Machinery for ventilation and for the capture of fumes from welding, cutting, grinding and sanding must take account of two criteria:**

1. Pollution in the respiratory tracts of the individuals exposed to pollutants, and also pollution in the workshop.
2. Pollutants discharged outside the plant.

**Another general aspect is to be considered:** the noise emitted by the equipment put in place, to determine the noise generated in the shop, and also the outdoor environment, particularly regarding the noise at the boundary of the property, if homes are located close to the industrial site.

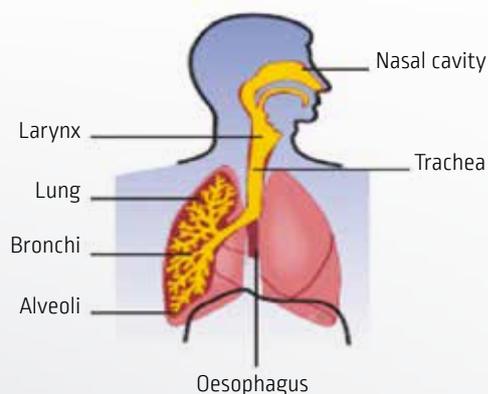


## INDOOR POLLUTION TARGETS

Welding, cutting, grinding, sanding and machining always generate two types of pollution: solid (*particles*) and gaseous.

### Inhalable, thoracic and respirable fractions

The respiratory system may be divided into three areas: upper airways, the tracheobronchial tree and the alveolar region.



#### **Different areas of the respiratory system**

Based on that division, three particle fractions have been defined according to their size, namely inhalable, thoracic and respirable fractions [according to standard AFNOR EN 481]. These provide indications about the penetration and settlement of particles in the respiratory system and their potential effects on health.

- Inhalable fraction: mass fraction of airborne particles that can enter the body through the mouth and nose and settle in the respiratory tract; it includes particles with an aerodynamic diameter<sup>1</sup> up to 100  $\mu\text{m}$ .
- Thoracic fraction: mass fraction of particles which, once inhaled, can pass beyond the larynx; it includes particles with an aerodynamic diameter up to 30  $\mu\text{m}$ .
- Respirable fraction: mass fraction of particles which, once inhaled, can reach the pulmonary alveoli; it includes particles with an aerodynamic diameter up to 10  $\mu\text{m}$ .

As particles emitted during welding and cutting work have an aerodynamic diameter below 1  $\mu\text{m}$ , the respirable fraction plays a central role from the viewpoint of the effects on health. Data about inhalable dust generally lead to an overestimation of exposure rather than an underestimation.

1. The aerodynamic diameter of a particle is the diameter of a spherical particle with a density of  $10^3 \text{ kgm}^{-3}$  and the same terminal velocity in undisturbed air as a particle in the same conditions of pressure, temperature and relative humidity. The aerodynamic diameter simultaneously refers to the size of the particle [and therefore its geometric dimensions], and its shape and density.



## OCCUPATIONAL EXPOSURE LIMIT VALUES

Concentration levels in the working atmosphere and the respiratory tracts of operators that may not be exceeded or occupational exposure limit values (OELV) have been established by the ministry for labour, in order to protect workers' health (some values are also recommended by the national employees' healthcare insurance fund: CNAMTS).

Occupational exposure limit values are the concentration limits that may never be exceeded in the air inhaled by workers. They are derived from the current scientific data available to specialists about the toxicity of pollutants. They are aimed at limiting the dust content in workplaces.

These occupational exposure limit values are a minimum target and the figures should be brought down to levels that are as low as possible. In France, the occupational exposure limit value over 8 hours for all particles making up welding fumes is 5 mg/m<sup>3</sup>. The occupational exposure limit values for each component element of the fumes must also be observed.

**Source:** Guide INRS ED 6132 welding fumes risk

Occupational exposure limit values for the main pollutants encountered during welding and allied processes (occupational exposure limit values over a maximum time of 8 hours/short-term exposure limit values measured over a maximum time of 15 minutes)

Pollutants	OELV (mg/m <sup>3</sup> )
Respirable dust	5
Inhalable dust	10
Aluminium (welding fumes)	5
Aluminium (Al <sub>2</sub> O <sub>3</sub> )	10
Nitrogen (dioxide)	6
Nitrogen (monoxide)	30
Barium (soluble compounds)	0.5
Beryllium (and compounds)	0.002
Cadmium (oxides)	0.05
Chromium VI (compounds of)	0.001
Cobalt	0.02
Copper (fumes)	0.2
Hydrogen cyanide	2/10
Titanium dioxide	10

Pollutants	OELV (mg/m <sup>3</sup> )
Iron (Fe <sub>2</sub> O <sub>3</sub> , fumes)	5
Fluorides	1.5
Manganese (Mn <sub>3</sub> O <sub>4</sub> , fumes)	1
Molybdenum	5
Carbon monoxide	55
Nickel (oxide and trioxide)	1
Ozone	0.2/0.4
Phosgene	0.08/0.4
Lead (metallic and compounds)	0.1
Crystalline silica (quartz)	0.1
Titanium (dioxide)	10
Tungsten	5
Vanadium	0.05
Zinc (oxide, fumes)	5

## ATMOSPHERIC DISCHARGE TARGETS

If the facility is listed or requires special permission, outdoor discharge may not exceed 100 mg/m<sup>3</sup> if the discharge is below 1 kg/hour or must be below 40 mg/m<sup>3</sup> if the discharge is above 1 kg/hour.

- If the company is covered by ISO 14001, filtration must be used.
- If the facility requires prior permission, the system must be approved by DREAL before it is built.
- Discharge into the atmosphere must be through a chimney (height calculated according to the French order of 2 February 1998, article 52).

### French labour code - Article R232-5

In enclosed premises where personnel are required to spend time, the air must be renewed so as to keep the atmosphere sufficiently pure to protect the health of workers.

### French labour code - Article R232-5-7

If hazardous emissions cannot be eliminated, they must be captured as they are generated, as close to their source of emission as possible and as effectively as possible.

The pollutants generated by the work must be captured with a preference for the following:

- capture at the workpiece or work surface, with no constraint
- capture at the tool, capture where the operator has the capture device in hand, supplemented by appropriate ergonomics
- capture by an arm, which is effective but requires correct positioning

If capture is not possible, then overall ventilation is to be used, and the operator must have personal protection. Indeed, dilution treatment does not protect the operator during their work. Filtration must be adapted to the type and volume of pollutants collected.

For welding and cutting, only solid particles are filtered, not the associated gases and products during work operations. Activated carbon filtration is only effective for odours and ozone, but not for welding fumes.

The values indicated and the legal texts relate to France. Check with local country laws for compliance.

# GENERAL INFORMATION

## General

The pollutants generated by each welding or cutting process are different due to their:

- ♦ type,
- ♦ concentration,
- ♦ and also direction.

The capture system must therefore be adapted on the basis of these different criteria.

### **Welding operations.**

Regardless of the process used, including braze welding, the fumes are hot and therefore naturally rise in the air. Fumes can be captured at source with a fume extraction torch (high-vacuum system) or from the work surface with extraction arms or down-draft tables (low-vacuum system). As a result, **fumes are carried away above the work surface.**



**During manual or automatic cutting** using gas or plasma, fumes are generated above the cut material and **therefore carried away from above the work surface.**

### **While grinding,**

the material that is thrown out makes it necessary to demarcate the work area.



For optimum efficiency, it is necessary to adapt the speed of capture to the point of emission of fumes depending on the process used. Our team of fume control specialists will work on a solution that best meets your requirements.

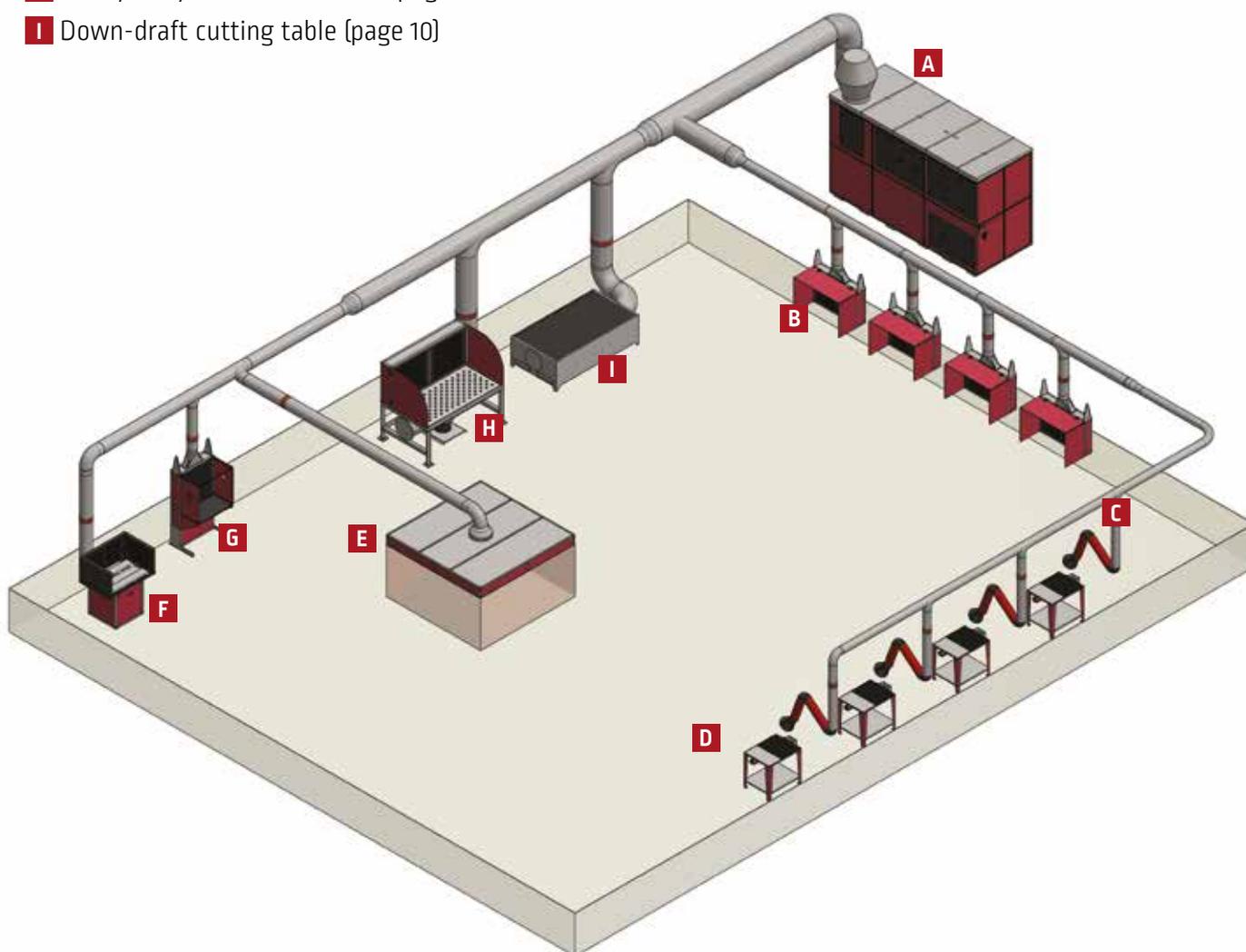
**THE WELDER'S FACE MUST NEVER BE LOCATED BETWEEN THE POINT OF EMISSION OF POLLUTANTS AND THE CAPTURING DEVICE.**

# LOW-VACUUM PROCESS

Example of low-vacuum equipment:

- A** Digifilter (page 56)
- B** Extraction panel (page 14)
- C** Extraction arm (page 17 - 34)
- D** Work table (page 7)
- E** Extraction hood (page 15)
- F** Down-draft table (page 8)
- G** Down-draft work table (page 7)
- H** Heavy-duty down-draft table (page 9)
- I** Down-draft cutting table (page 10)

**PROJECTS ACCORDING TO  
ATEX GAS AND DUST STANDARDS  
CAN BE CARRIED OUT ON REQUEST**



## CONTENTS

### DOWN-DRAFT TABLES

1	BRAZE WELDING TABLE .....	7
2	BRAZE WELDING DOWN-DRAFT TABLE .....	7
3	DUO BRAZE WELDING DOWN-DRAFT TABLE .....	8
4	ASM DOWN-DRAFT TABLE .....	8
5	TASB BOOM .....	8
6	HEAVY-DUTY DOWN-DRAFT TABLE .....	9
7	ESSENTIAL GRINDING DOWN-DRAFT TABLE .....	9
8	ESSENTIAL CUTTING DOWN-DRAFT TABLE .....	10
9	ASMV DOWN-DRAFT TABLE .....	10
10	AMSFM DOWN-DRAFT TABLE .....	11
11	AMSFMD DOWN-DRAFT TABLE .....	12
12	DOWN-DRAFT TABLE WITH CLEANING FUNCTION.....	13
13	AESM DOWN-DRAFT TABLE .....	14

### EXTRACTION COLLECTORS

1	EXTRACTION PANEL .....	14
2	CONTACT FLOOR .....	14
3	TRAINING EXTRACTION BOOM .....	15
4	EXTRACTION HOOD .....	15
5	POLYCARBONATE ENCLOSURE .....	16

### EXTRACTION ARMS

1	LMA 75 ARM .....	17
2	LMA 100 ARM .....	18
3	LIA 160 STAINLESS STEEL ARM .....	18
4	TELESCOPIC 160 ARM .....	19
5	ECOFLEX 160 ARM .....	19
6	POLYARTICULATED 160 ARM .....	20
7	EXTENSION 160 BOOM .....	21
8	PEBE 160 BOOM .....	22
9	ARM 160 CAPTURE RAIL .....	23
10	ACCESSORIES FOR ARM 160 .....	24 - 26
11	LTA 2.0 ARM .....	27
12	LTA 2.0 CW ARM .....	28
13	LFA 2.0 - 3.0 - 4.0 ARM .....	29
14	LFA 3.1 - 4.1 ARM .....	30
15	LFA 4.1 - LC ARM .....	31
16	EXTENSION EC2 - EC4 BOOM .....	32
17	ACCESSORIES FOR LTA - LFA ARM .....	33 - 34

### EXTRACTION ARM FANS

1	FANS 1.8 - 2.1 .....	35
2	FAN 28 .....	36
3	FAN 42 .....	37

### CONTROL BOXES

1	MASTER BOX .....	38
2	DAMPER BOX .....	39
3	EXPERT BOX .....	40
4	FLOW CONTROLLER .....	41

### MOBILE FILTRATION UNITS

1	MOBIFILTER 1600 M .....	42
2	MOBIFLEX 200 M .....	43
3	MECAZUR 1.8 M .....	44
4	MOBIFLEX 400 MS .....	45
5	MECAZUR 1.3 E .....	46
6	MOBIFLEX 300 E .....	47

### FILTERS FOR FIXED INSTALLATIONS

1	FU CYCLONE FILTER .....	50
2	MECAZUR 35 FILTER .....	50
3	WALLFLEX FILTER .....	51
4	MECAFILTRE MODULAR FILTER .....	52
5	STATIFLEX 200 M FILTER .....	53
6	STATIFLEX 400 MS FILTER .....	54
7	STATIFLEX 300 E FILTER .....	55
8	DIGIFILTER .....	56 - 59
9	HEAT EXCHANGER .....	60

### FANS

1	PORTABLE FAN .....	61 and 62
2	FAN WITH 1 TO 5 EXTRACTION COLLECTORS .....	63
3	D350 TO D800 SERIES FAN .....	64 and 65
4	PRCU SERIES FAN .....	66 and 67
5	FAN SOUNDPROOFING BOX .....	68
6	STARTING BOXES AND ACCESSORIES .....	69 - 71

### CLEANING EQUIPMENT

1	AMBICLEAN .....	72 - 74
2	DIGIFILTER PUSH PULL .....	75 - 77
3	CHIMNEY .....	78
4	HELICAL FAN .....	79

Our range of down-draft tables contain different versions to suit your application:

Braze welding tables with no extraction.

## Braze welding table

Table dedicated to training in welding and brazing.

It is available in two dimensions:

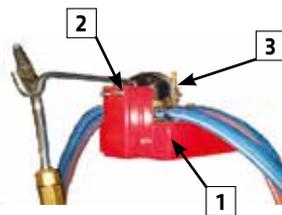
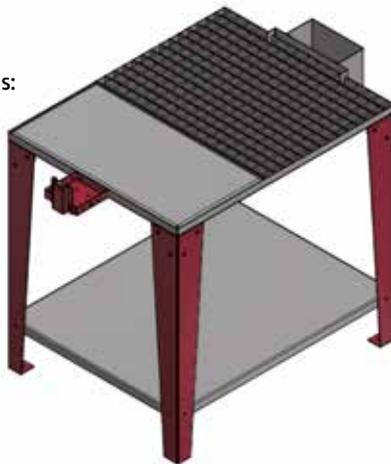
- 850 x 665 mm.
- 1,100 x 665 mm.

Three work surface configurations are possible:

- Combined, grating and steel plate.
- Combined, grating and refractory brick (with wooden deburring block).
- Refractory brick (with wooden deburring block).

The table may be complemented by:

- A specimen support boom.
- A water pan.
- A gas saver bracket.



### Ordering

Description	Part number
Bare welding table, 850 x 665 mm	W000380588
<b>Work surface to select below:</b>	
Combined grating and steel plate surface	W000380590
Combined grating and refractory brick surface	W000380589
Full refractory brick surface	EM61000240
Bare welding table, 1,100 x 665 mm	W000380591
<b>Work surface to select below:</b>	
Combined grating and steel plate surface	W000380593
Combined grating and refractory brick surface	W000380592
Full refractory brick surface	EM61000241
<b>Options</b>	
P.E.S specimen support boom	W000380557
Water pan	W000380587
Gas saver bracket (1)	W000380549
Limit switch kit for saver (2): it is used for control by a DAMPER BOX or MASTER BOX	W000380551
Gas saver ECO73 OX/Nat gas (3)	W000291431
Gas saver ECO73 OX/AD (3)	W000291432
Gas saver ECO73 OX/LPG (3)	W000291433
<b>Spares</b>	
Set of 6 refractory bricks, 220 x 110 mm	W000380552

Welding, brazing or grinding tables with extraction systems.

## Down-draft table for braze welding

The down-draft table for braze welding captures fumes from all welding processes through a front extraction panel.

- Work surface with grating, dimensions 900 x 500 mm.
- Work surface height: 810 mm.
- Permissible load: 100 kg.
- Hinged side panels with shade 11 viewing screen (110 x 90 mm).
- Upper cover.
- Outlet adapted for Ø 200 mm.
- Optional work surface in refractory brick.

Extraction rate to apply: 1,300 m<sup>3</sup>/h.



**Opposite double table** designed on the basis of an additional kit

- Outlet adapted for Ø 315 mm.

Extraction rate to apply: 2,600 m<sup>3</sup>/h.

### Ordering

Description	Part number
Single table (900 x 500 mm)	W000380663
Complement for opposite double table	W000380664
<b>Table in dimensions 1800 x 500 on request</b>	
<b>Shared options</b>	
Work surface in refractory brick (Two surfaces required for opposite double table)	W000342580
<b>Fan for single table - individual assembly</b>	
2.1 fan - 0.75 kW - 3 Ph - 230/400 V - 50 Hz	W000342132
Wall bracket for 2.1 fan	W000342143
Circuit breaker or disconnecting box	see page 69
<b>Fan for double table - individual assembly</b>	
HRS 300 - 1.5 kW - 3 Ph - 230/400 V - 50 Hz	EM61000372
Wall bracket for HRS 300 fan	EM61000242
Circuit breaker or disconnecting box	see page 69

## Duo down-draft table for welding and brazing

The Duo down-draft table for welding and brazing captures fumes from two workstations and all welding processes through a front extraction panel.

- Two work surfaces with area (880 x 550 mm).
- Height 870 mm.
- Pollutants are captured by the extraction panel with a removable front located opposite each work surface.
- Permissible load per work surface: 100 kg.
- Tilting upper cover in translucent polycarbonate.
- Outlet adapted for Ø 250 mm

The work surface is to be selected based on the need:

- Work surface with grating for welding *[supplied as standard]*.
- Option: Work surface in refractory brick and wooden deburring block for brazing.



**Extraction rate to apply:**  
2,600 m<sup>3</sup>/h.

### Ordering

Description	Part number
Duo table	W000372345
<b>Option</b>	
Work surface in refractory brick	EM61000243
<b>Fan for double table - individual assembly</b>	
HRS 300 - 1.5 kW - 3 Ph - 230/400 V - 50 Hz	EM61000372
Outlet adapted for Ø 250 HRS 300	EM61000386
Wall bracket for HRS 300 fan	EM61000242

Circuit breaker or disconnecting box: see page 69

**Quatro type table on request**

## ASM down-draft table for welding and grinding

The ASM down-draft table captures fumes from all welding processes and occasional grinding work.

Pollutants are captured by the work surface and 500 mm high lateral and front panels.

- Metal pre-filter - Dimensions: 610 x 610 x 24 mm (L x W x H).
- Work surface height: 920 mm.
- Dust recovery hopper and drum.



### Ordering

Description	Part number
ASM table, 1,200 x 800 mm	W000342583
ASM table, 2,000 x 800 mm	W000342584

### Complement

<b>A</b> Rear lateral or vertical outlet, Ø 250 mm	W000342588
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Duo type table on request

### Spares

Metal pre-filter	W000379636
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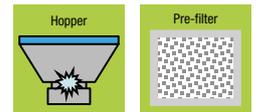


Table dimensions (mm)	Rate to apply (m <sup>3</sup> /h)	Permissible load (kg/m <sup>2</sup> )	Work surface size (mm)
1,200 x 800	2,000	200	1,070 x 740
2,000 x 800	3,000	200	1,870 x 740

## TASB boom for down-draft tables

Boom that can support a specimen for welding in all positions.

**Adaptable on all down-draft tables in the range.**

- Dimensions:
  - Vertical post: 600 mm.
  - Horizontal arm, telescopic over 150 mm.
- 200 x 100 mm plate for fixing to the work surface.

### Ordering

Description	Part number
TASB 500 boom	W000380595



# Heavy-duty down-draft table for welding and grinding

The down-draft table captures fumes from all welding processes and grinding operations with heavy parts up to 500 kg.

- Two work surface configurations with 25 mm thick steel are possible:
  - Standard work surface,
  - Special work surface for the use of Demmeler clamps.
- Mechanically welded structure.
- Extraction through the work surface and front panel.
- Hinged lateral panels, 800 mm high.
- Work surface height: 920 mm.
- Collecting hopper under the work surface with dust drum.

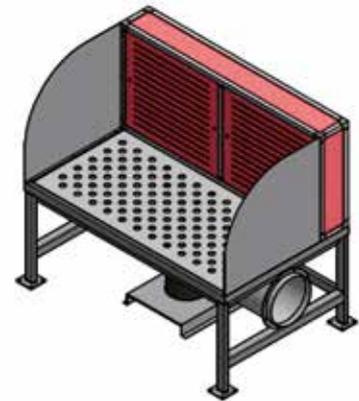


Table dimensions (mm)	Rate to apply (m <sup>3</sup> /h)	Permissible load (kg/m <sup>2</sup> )	Connection diameter (mm)
1,200 x 800	4,000	500	315
1,500 x 1,000	6,000	500	355
2,000 x 1,000	8,000	500	400

### Ordering

Description	Part number
<b>Table, 1,200 x 800</b>	
Bare heavy-duty table	W000342111
Standard work surface	EM61000244
Special work surface for Demmeler clamps	EM61000245
<b>Table, 1,500 x 1,000</b>	
Bare heavy-duty table	W000342112
Standard work surface	EM61000246
Special work surface for Demmeler clamps	EM61000247
<b>Table, 2,000 x 1,000</b>	
Bare heavy-duty table	W000342110
Standard work surface	EM61000248
Special work surface for Demmeler clamps	EM61000249
<b>Complement</b>	
Demmeler clamp	EM61000250

### Fan to use for individual assembly

	Fan	Outlet adaptation
Table, 1,200 x 800	D350B - 3 kW 230/400 V W000342611	Ø 315 mm W000342714
Table, 1,500 x 1,000	D630A - 5.5 kW 230/400 V W000342631	Ø 450 mm EM61000251
Table, 2,000 x 1,000	D630A - 5.5 kW 230/400 V W000342631	Ø 500 mm EM61000252

Circuit breaker or disconnecting box: see page 69



# Essential down-draft table for grinding

The Essential down-draft table for grinding captures non-explosive metal dust.

- Extraction through the table.
- Table with 500 mm high lateral and front panels with metal pre-filters to avoid incandescent particles bouncing off them.
- Mechanically welded structure.
- Metal pre-filter - Dimensions: 400 x 400 x 24 mm [L x W x H].
- Collecting hopper under the work surface with dust drum.
- Work surface height: 920 mm.

Table dimensions (mm)	Rate to apply (m <sup>3</sup> /h)	Metal pre-filter quantity	Permissible load (kg/m <sup>2</sup> )	Connection diameter (mm)
1,000 x 500	1,800	4	100	200
1,500 x 1,000	5,400	7	100	355
2,000 x 1,000	7,200	8	100	400

### Ordering

Description	Part number
Table, 1,000 x 500	EM61000373
Table, 1,500 x 1,000	EM61000374
Table, 2,000 x 1,000	EM61000375
<b>Spare consumables</b>	
Metal pre-filter	W000384370

### Fan to use for individual assembly

	Fan	Outlet adaptation
Table, 1,000 x 500	3.0 - 1.1 kW - 230/400 V W000342134 Bracket - W000342143	Ø 250 mm W000342136
Table, 1,500 x 1,000	D350B - 3 kW - 230/400 V W000342611	Ø 355 mm W000342715
Table, 2,000 x 1,000	D560B - 4 kW - 230/400 V W000342628	Ø 500 mm W000342729

Circuit breaker or disconnecting box: see page 69



## Essential down-draft table for cutting

The all-process cutting table captures non-explosive metal dust and can be complemented with a grinding kit.

- Permissible load: 30 mm thick steel plate.
- Cutting surface height: 700 or 900 mm.
- Bent plate construction, bolted together.
- Cutting surface with metal plates (6 x 60 mm) to support workpieces.
- Heavy particle recovery drawers.
- Grinding kit made up of:
  - Metal grating.
  - 2 lateral panels, 500 mm high.
  - 1 front panel, 500 mm high.



Table dimensions (mm)	Rate to apply (m³/h)	Connection diameter (mm)
1,000 x 500	1,800	250
1,000 x 1,000	3,600	315
2,000 x 1,000	7,200	450

### Ordering

Description	Part number
Essential cutting table, 1,000 x 500 mm	W000380502
Grinding kit, 1,000 x 500 mm	EM61000253
Essential cutting table, 1,000 x 1,000 mm	W000375248
Grinding kit, 1,000 x 1,000 mm	EM61000254
Essential cutting table, 2,000 x 1,000 mm	W000375249
Grinding kit, 2,000 x 1,000 mm	EM61000255

### Filter with cleaning function to add

Table, 1,000 x 500	Digifilter 2 CD	EM61000005
Table, 1,000 x 1,000	Digifilter 4 CD	EM61000010
Table, 2,000 x 1,000	Digifilter 8 CD	EM61000012

## Down-draft table for welding and grinding with backward centrifugal fan.

### ASMV down-draft table for welding and grinding

Conformity

The ASMV down-draft table incorporates a fan and captures fumes from all welding processes and occasional grinding work. Pollutants are captured by the work surface and 500 mm high lateral and front panels.

- Fan, 2.2 kW - 400 V - 3 phases - 50 Hz.
- Metal pre-filter - Dimensions: 610 x 610 x 24 mm (L x W x H).
- Work surface height: 920 mm.

Table dimensions (mm)	Rate to apply (m³/h)	Permissible load (kg/m²)	Work surface dimensions (mm)
1,200 x 800	2,000	200	1,070 x 740
2,000 x 800	3,000	200	1,870 x 740

### Ordering

Description	Part number
ASMV table, 1,200 x 800 mm	W000273087
ASMV table, 2,000 x 800 mm	W000273086

### Complements

<b>A</b> Rear lateral or vertical outlet, Ø 250 mm	W000342588
<b>B</b> Vertical outlet with silencer box	W000273464
TRC Ø 250 mm for silencer, 1,200 x 800 table	W000380507
TRC Ø 315 mm for silencer, 2,000 x 800 table	W000380508

### Duo type table on request

### Spare consumables

Metal pre-filter	W000379636
------------------	------------



Down-draft tables for welding and grinding - Fan and mechanical filter.

## AMSMF down-draft table for welding and grinding

Conformity 

The AMSFM down-draft table incorporates a fan and a fine mechanical filter. It captures fumes from all welding processes and occasional grinding work.

Pollutants are captured by the work surface and 500 mm high lateral and front panels.

- Fan, 2.2 kW - 400 V - 3 phases - 50 Hz.
- Metal pre-filters - Quantity: 2  
Dimensions 610 x 610 x 24 mm (L x W x H).
- Class F8 fine filter - filter surface area 40 m<sup>2</sup>  
- Dimensions: 610 x 610 x 292 mm.
- Collecting hopper with dust drum under the work surface.
- Work surface height: 920 mm.
- Complements: Wheel kit for mobile table and H13 high-performance filtration box.



Table dimensions (mm)	Rate to apply (m <sup>3</sup> /h)	Permissible load (kg/m <sup>2</sup> )	Work surface dimensions (mm)	Overall dimensions (mm)
1,200 x 800	2,000	200	1,070 x 740	1,850 x 810
2,000 x 800	3,000	200	1,870 x 740	2,000 x 810

### Ordering

Description	Part number
AMSMF table, 1,200 x 800 mm	W000371223
AMSMF table, 2,000 x 800 mm	W000371222
<b>Complements</b>	
<b>A</b> Rear lateral or vertical outlet, Ø 250 mm	W000342588
<b>B</b> Vertical outlet with silencer box	W000273464
TRC Ø 250 mm for silencer, 1,200 x 800 table	W000380507
TRC Ø 315 mm for silencer, 2,000 x 800 table	W000380508
Wheel kit for mobile table	EM61000431
HEPA H13 filtration box	EM61000432
<b>Spare consumables</b>	
Metal pre-filter	W000379636
Fine filter, 42 m <sup>2</sup>	W000379637
HEPA H13 filter, 42 m <sup>2</sup>	W000373568



Self-cleaning down-draft table for welding and grinding

## AMSFMD self-cleaning down-draft table for welding and grinding

Conformity 

The AMSFMD down-draft table includes a fan with two high-efficiency polyester filter cartridges. It captures fumes from all welding processes and occasional grinding work.

Offline self cleaning *(with the fan off)* allows improved cartridge regeneration.

Pollutants are captured by the work surface and 500 mm high lateral and front panels.

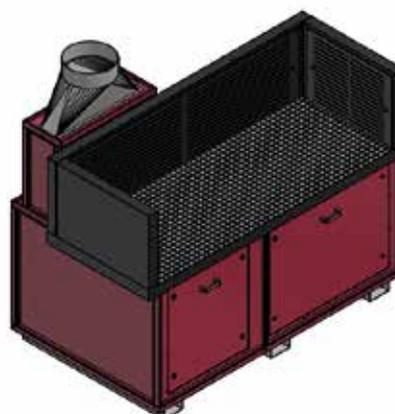
- Fan, 2.2 kW - 400 V - 3 phases - 50 Hz.
- 1 metal pre-filter - Class EU2 - Dimensions: 610 x 610 x 24 mm.
- 2 polyester filter cartridges with PTFE membrane - Class H13 Filtration area 30 m<sup>2</sup> (2 x 15 m<sup>2</sup>).
- Cartridge saturation indicator light.
- 1 dust recovery container.
- Work surface height: 920 mm.
- Complement:
  - Wheel kit for mobile table



Table dimensions (mm)	Rate to apply (m <sup>3</sup> /h)	Permissible load (kg/m <sup>2</sup> )	Work surface dimensions (mm)	Overall dimensions (mm)
1,200 x 800	2,000	200	1,070 x 740	2,100 x 1,160
2,000 x 800	3,000	200	1,870 x 740	2,220 x 1,160

### Ordering

Description	Part number
AMSFMD table, 1,200 x 800 mm	EM61000165
AMSFMD table, 2,000 x 800 mm	EM61000166
<b>Complements</b>	
Discharge silencer box	EM61000195
TRC Ø 250 mm for silencer, 1,200 x 800 table	W000380507
TRC Ø 315 mm for silencer, 2,000 x 800 table	W000380508
Wheel kit for AMSFMD mobile table	EM61000256
<b>Spare consumables</b>	
Metal pre-filter	W000379636
Filter cartridge with PTFE membrane - 15 m <sup>2</sup>	EM61000155



# Self-cleaning down-draft table for welding and grinding

Conformity 

The down-draft table with self-cleaning filter cartridges captures non-explosive metal dust from all welding processes and grinding operations.

- Fan, 2.2 kW - 400 V - 3 phases - 50 Hz.
- Extraction through front extraction panel.
- Mobile support table with recovery containers for heavy particles.
- Hinged lateral panels.
- Upper cover.
- Integrated fan, 400 V - 3 Ph - 50 Hz.
- Class EU2 metal pre-filter - Dimensions 1,000 x 200 x 24 mm - [L x W x H].
- High-efficiency 15 m<sup>2</sup> polyester filter cartridges with PTFE membrane.
- Compressed air regulator filter.
- Work surface height: 920 mm.
- Permissible load: 100 kg/m<sup>2</sup>.
- Complement: Outdoor discharge silencer box.



Table dimensions (mm)	Rate to apply (m <sup>3</sup> /h)	Fan power (kW)	Metal pre-filter quantity	Filter cartridge quantity	Connection diameter (mm)	Overall dimensions (mm)
1,200 x 800	4,000	3	2	2	355	1,220 x 1,580
2,000 x 1,000	6,000	4	2	4	400	2,020 x 1,780
3,000 x 1,000	8,000	2 x 3	4	6	500	3,020 x 1,780

## Ordering

Description	Part number
Table, 1,200 x 800 mm	W000342106
Table, 2,000 x 1,000 mm	W000342107
Table, 3,000 x 1,000 mm	W000378190
<b>Spare consumables</b>	
Metal pre-filter	W000380594
Filter cartridge with PTFE membrane, 15 m <sup>2</sup>	EM61000155
<b>Complements</b>	
Silencer box for 1,200 x 800 table	EM61000257
Silencer box for 2,000 x 1,000 table	EM61000258
Silencer box for 3,000 x 1,000 table	EM61000259

Down-draft tables for welding and grinding - Fan and electrostatic filter.

## AESM down-draft table for welding and grinding

Conformity 

The AESM down-draft table includes a fan and an electrostatic filter.

It is adapted for extracting greasy or oily welding fumes from carbon steels.

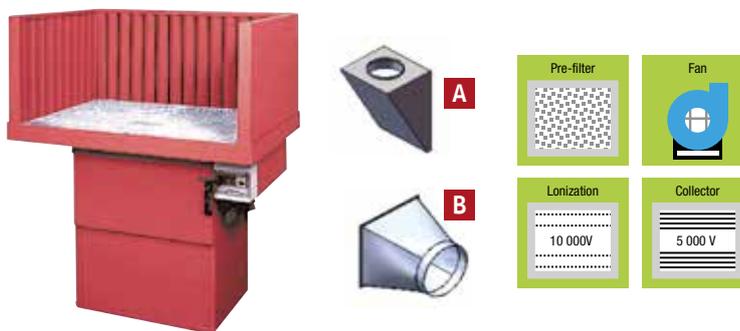
Pollutants are captured by the work surface and 500 mm high lateral and front panels.

- Work surface height: 920 mm.
- Filtration is carried out in four stages:
  - Metal pre-filter - Class EU2
  - Ionising cell, 10,000 V
  - Collecting cell, 5,000 V
  - Finishing filter.
- Fan, 0.75 kW - 230 V - 1 Ph - 50 Hz.

Table dimensions (mm)	Rate to apply (m <sup>3</sup> /h)	Permissible load (kg/m <sup>2</sup> )	Work surface dimensions (mm)
1,200 x 800	1,800	200	1,070 x 740
2,000 x 800	2,600	200	1,870 x 740

### Ordering

Description	Part number
AESM table, 1,200 x 800 mm	W000342577
AESM table, 2,000 x 800 mm	W000342578
<b>Complements</b>	
<b>A</b> Rear lateral or vertical outlet, Ø 250 mm	W000342588
<b>B</b> Horizontal outlet, Ø 250 mm	W000342587
Activated carbon ( <i>odour filter</i> )	W000276021
<b>Spare consumables</b>	
Metal pre-filter	W000379667
Finishing filter	W000379667
Ionising cell	W000379668
Collecting cell	W000379669



## Capture with extraction panels.

### Extraction panel

Extraction panel dedicated to capturing all fine non-explosive fumes and dust.

It is fitted with:

- 4 wall-mounting tabs.
- 1 upper cover.
- 2 hinged lateral panels, 470 mm wide.
- 1 TRC outlet adapted for the panel size.

Easy maintenance thanks to the removable front.



### Ordering

Description	Part number
Panel (500 x 500) + TRC Ø 125 mm	W000342798
Panel (1,000 x 500) + TRC Ø 160 mm	W000342786
Panel (1,000 x 800) + TRC Ø 160 mm	W000342788
Panel (1,000 x 1,000) + TRC Ø 200 mm	W000342789
Panel (1,500 x 500) + TRC Ø 200 mm	W000342790
Panel (1,500 x 1,000) + TRC Ø 250 mm	W000342791
Panel (1,500 x 1,800) + TRC Ø 400 mm	W000342792
Panel (2,000 x 500) + TRC Ø 250 mm	W000342793
Panel (2,000 x 1,000) + TRC Ø 315 mm	W000342794
Panel (2,500 x 300) + TRC 2 x Ø 160 mm	W000342797

### On request

- Other extraction panel dimensions.
- ATEX Gas and dust extraction panels.

Extraction rate to apply: 1,800 m<sup>3</sup>/h per m<sup>2</sup> to obtain a speed of 0.5 m/s at the point of emission [470 mm maximum].

## Contact floor - Presence detector

Contact floor that can detect the presence of an operator and put the extraction under the control of the workstation.

- Dimensions: 1,000 x 700 x 20 mm (LxWxH).
- Made in aluminium chequer plate.
- Several modules may be combined.
- Incorporates a presence detection contact.
- May be combined with a MASTER BOX or DAMPER BOX.



### Ordering

Description	Part number
Contact floor (L = 1,000 mm x W = 700 mm)	W000381023

## Extraction boom for training centres

The boom extracts fumes from all welding processes and all positions. It is perfectly suitable for teaching in training centres.

**The complete boom includes the following:**

- A part support clamp that is adjustable in all positions.
  - Maximum load 20 kg.
- A pivoting height-adjustable table
  - Maximum load 100 kg.
- Extraction panel, dimensions 1,000 x 700 mm.
- Outlet adapted for Ø 250 mm.
- 1 front cover.
- 2 pivoting support tubes, Ø 33.7 mm.
- Complement:
  - Kit of Orange CE strips, width 300 mm - height 1,750 mm

Extraction rate to apply: 1,300 m<sup>3</sup>/h.

**Ordering**

Description	Part number
Complete welding boom	W000375246
Work boom (with no extraction panel)	W000375245

Complements	
Kit of 7 Orange CE strips	W000010257
Kit of 11 hooks	W000010459

Fan to use for individual assembly	
HCAS 280 A - 1.5 kW - 3 Ph - 230/400 V - 50 Hz Fan inlet and outlet diameter: 250 mm	W000380503
Wall bracket for HCAS 280 fan	EM61000260
Circuit breaker or disconnecting box	See page 69



WORKING POSITIONS:

## Capture with extraction hoods.

These are designed for capturing fumes and vapours generated at workstations. They are only for use with automatic welding machines or robotised systems. A hood can be made more efficient through the use of curtains or strips on its perimeter, particularly if the point of emission of pollutants is far from the bottom of the hood.

**In no event may they be used on manual workstations.**

**DO NOT USE FOR WELDING BY A HUMAN OPERATOR**



In that case, the operator's face would be located between the point of emission of fumes and the hood.

## Essential extraction hood

The box hood generates peripheral air flow with a high extraction speed, forming a channelling air curtain.

- Structure in aluminium sections and galvanised steel panels.
- Removable lower panels.
- Centred extraction connection.
- Hooks for overhead suspension. On request, posts for fastening to the floor.
- To be complemented by:
  - Perimeter strips for more efficiency (*Welder protection section*).
  - A fan appropriate for the recommended air flow rate.

Extraction rate to apply: 1,200 m<sup>3</sup>/h. per m<sup>2</sup>.



**Ordering**

Description	Part number
Dimensions of hoods - Connecting diameter	
500 x 500 mm - Ø 125 mm	EM61000261
1,000 x 1,000 mm - Ø 160 mm	EM61000262
1,500 x 1,000 mm - Ø 250 mm	EM61000263
2,000 x 1,000 mm - Ø 250 mm	EM61000264
2,000 x 1,500 mm - Ø 315 mm	EM61000265
2,000 x 2,000 mm - Ø 355 mm	EM61000266
2,500 x 1,500 mm - Ø 355 mm	EM61000267
3,000 x 1,500 mm - Ø 400 mm	EM61000268

**On request**

- Other dimensions of extraction hoods.
- Light well hood with an opening at its centre, closed by translucent polycarbonate with M1 fire rating.



Enclosure of robotic and automatic machine zones.

## Polycarbonate enclosure

Enclosing consists in fully covering a robotic welding unit or a machine.

Structure in aluminium sections clad with translucent polycarbonate plates with M1 fire rating.

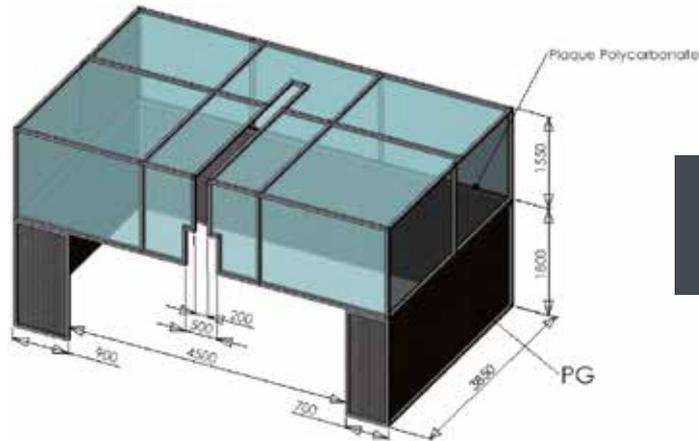
Effective capture for all types of pollutant, MIG/MAG welding fumes, robotic plasma cutting, residual fumes, weld bonding, robotic resistance welding etc.

Air flow rate to apply according to the volume of the unit and the open surfaces for part entry and exit.

The choice of the fan to use is to be made accordingly.



Examples of equipment



On request:  
Study and execution  
of the project  
by our technical staff.

LINCOLN ELECTRIC can also supply a large number of effective fume capture solutions for robotic units:

- Retractable extraction hoods for loading/unloading large parts at the top
- Displacement extraction hoods combined with a lip box for machines with several workstations
- Extraction collectors for automatic torches (see page 88)
- Push-pull installations with or without air recycling for specific robotised machines (see page 75)

Depending on your application, our team of fume control specialists will prepare the project that best suits your requirements.

# LMA 75 extraction arm

It captures fumes and vapours from a work bench, fixed machines or laboratory tables.

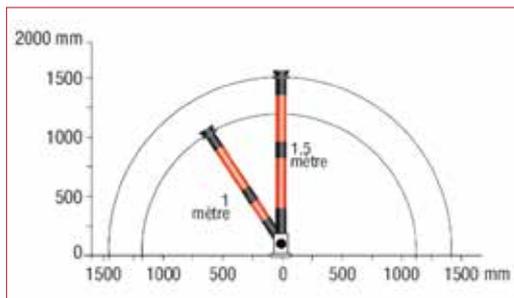
**Applications:** Tin welding, sanding of small parts, TIG welding etc.

- Available in two versions: Wall-mounted on or on bench.
- Ø 75 mm arm in rigid aluminium tubes with epoxy paint.
- Shape memory flexible articulations.
- Arm with no internal structure, for low air flow resistance.
- Arm supplied with whistle nozzle.

**Head loss from the arm:**

- 200 Pa with 150 m<sup>3</sup>/h
- 240 Pa with 200 m<sup>3</sup>/h
- 410 Pa with 250 m<sup>3</sup>/h
- 600 Pa with 300 m<sup>3</sup>/h

Range of Mini Flex arm



**Air flow rate at the nozzle:**  
150 - 300 m<sup>3</sup>/h.



LMA 75 for work bench

**Ordering**

Description	Part number
Wall-mounted LMA 75 arm, 1 m	W000342308
Wall-mounted LMA 75 arm, 1,5 m	W000342309
LMA 75 arm for work bench, 1 m	W000342302
LMA 75 arm for work bench, 1,5 m	W000342303

Complements	
Nozzle with lighting	W000342306
Conical nozzle	W000342305
Transformer for halogen lighting	W000272053

**Fan to use for individual assembly**

Description		Part number
For 1 arm Extraction rate 220 m <sup>3</sup> /h	CAHP 200 - 0.18 kW - 230 V - 1 Ph Ø of fan inlet/outlet: 80 mm - Wall bracket	W000379116
	CAHP 200 - 0.18 kW - 230/400 V - 3 Ph Ø of fan inlet/outlet: 80 mm - Wall bracket	W000379117
For 2 arms Extraction rate 220 m <sup>3</sup> /h per arm	CAHP 240 - 0.37 kW - 230 V - 1 Ph Ø of fan inlet/outlet: 100 mm - Wall bracket	W000379118
	CAHP 240 - 0.37 kW - 230/400 V 3 Ph Ø of fan inlet/outlet: 100 mm - Wall bracket	W000379119
For 3 arms Extraction rate 220 m <sup>3</sup> /h per arm	CAHP 310 - 0.75 kW - 230 V - 1 Ph Ø of fan inlet/outlet 125 mm - Wall bracket	W000379120
	CAHP 310 - 0.75 kW - 230/400 V - 3 Ph Ø of fan inlet/outlet: 125 mm - Wall bracket	W000379121

Complements	
Circuit breaker or disconnecting box: see page 69	
Please enquire for installations with more arms	

## LMA 100 extraction arm

For capturing fumes and vapours from a workbench, fixed machine or laboratory table.

- Ø 100 mm arm in rigid aluminium tubes with epoxy paint.
- Multidirectional nozzle articulation operated by a front handle.
- Arm with no internal structure, for low air flow resistance.
- Arm supplied with Ø 200 extraction cone.
- The wall-mounted arm is balanced by a spring tensioner located at the arm pivot.



### Head loss from the arm:

- 250 Pa with 250 m<sup>3</sup>/h
- 360 Pa with 350 m<sup>3</sup>/h
- 550 Pa with 450 m<sup>3</sup>/h
- 800 Pa with 550 m<sup>3</sup>/h

**Air flow rate at the nozzle:**  
250 - 550 m<sup>3</sup>/h.

### Ordering

Description	Part number
Wall-mounted LMA 100 arm, 1.5 m	W000379100
Wall-mounted LMA 100 arm, 2.1 m	W000379099
Complements	
Damper kit for arm	W000379101
Halogen lighting kit with switch	W000379098
Transformer for halogen lighting	W000272053
Arm in Atex version on request	

### Fan to use for individual assembly

Description	Part number	
For 1 arm Extraction rate 450 m <sup>3</sup> /h	CAHP 240 - 0.37 kW - 230 V - 1 Ph Ø of fan inlet/outlet: 100 mm - Wall bracket	W000379118
	CAHP 240 - 0.37 kW - 230/400 V 3 Ph Ø of fan inlet/outlet: 100 mm - Wall bracket	W000379119
For 2 arms Extraction rate 450 m <sup>3</sup> /h per arm	Fan, 1.8 - 0.55 kW - 230/400 V - 3 Ph Ø of fan inlet/outlet: 160 mm	W000379138
	Floor stand and wall bracket for fan	W000342143
For 3 arms Extraction rate 450 m <sup>3</sup> /h per arm	Fan, 2.1 - 0.75 kW - 230/400 V - 3 Ph Ø of fan inlet/outlet: 160 mm	W000342132
	Floor stand and wall bracket for fan	W000342143
Complements		
Circuit breaker or disconnecting box: see page 69		
Please enquire for installations with more arms		

## LIA 160 extraction arm - Stainless steel

316L stainless steel extraction arm for wall mounting.

- Length 2 m or 3 m - Diameter 160 mm.
- Stainless steel nozzle adjustable in all positions.
- Arm designed with 3 flexible external articulations and no internal parts.
- Maximum usage temperature: 80 °C.
- Arm supplied ready for assembly.

**Air flow rate at the nozzle:**  
800 - 1,200 m<sup>3</sup>/h.



### Ordering

Description	Part number
LIA 160 arm, stainless steel - 2 m	EM0000119491
LIA 160 arm, stainless steel - 3 m	EM0000119492

## TELESCOPIC 160 extraction arm

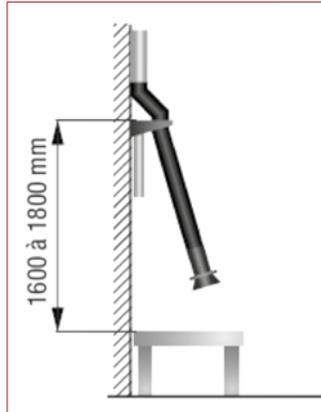
The TELESCOPIC 160 arm is compact and suitable for low-ceilinged welding booths and for small work surfaces.

- Maximum range 2.2 metres.
- Antistatic hose, Ø 160 mm.
- Arm rotation pivot with ball bearing.
- Ø 300 mm removable metal nozzle with guard grille.
- Adjustment damper and handle.
- Supplied with wall bracket.
- Supplemented by a 1.8 or 2.1 fan or installed in a centralised system.

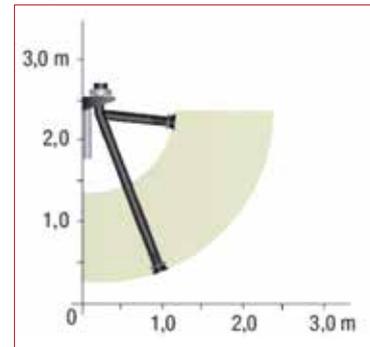
**Air flow rate at the nozzle:**  
1,000 - 1,200 m<sup>3</sup>/h.

- Head loss from the arm:**
- 380 Pa with 900 m<sup>3</sup>/h
  - 450 Pa with 1,000 m<sup>3</sup>/h
  - 500 Pa with 1,100 m<sup>3</sup>/h
  - 600 Pa with 1,200 m<sup>3</sup>/h

**Arm mounted by means of the standard wall mount**



Range of Telescopic arms



### Ordering

Description	Part number
TELESCOPIC arm, 0,9 m to 2,2 m	W000342127
<b>Complements</b>	
Complementary accessories: see pages 24 - 26	

## ECOFLEX 160 extraction arm

ECOFLEX arms are cost-effective, and recommended for extracting welding fumes.

- Available in 3 lengths: 2, 3 or 4 m.
- Ø 160 mm hose.
- Arm rotation pivot with ball bearing.
- Ø 300 mm removable metal nozzle with guard grille.
- Support mechanisms incorporated into the arm.
- Adjustment damper and handle.
- Supplied with wall bracket.
- Supplemented by a 1.8 or 2.1 fan or installed in a centralised system.

**Air flow rate at the nozzle:**  
1,000 - 1,200 m<sup>3</sup>/h.

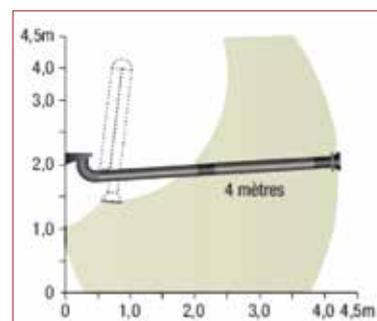
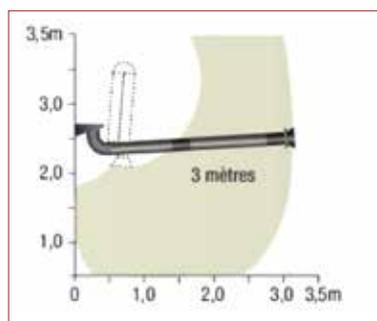
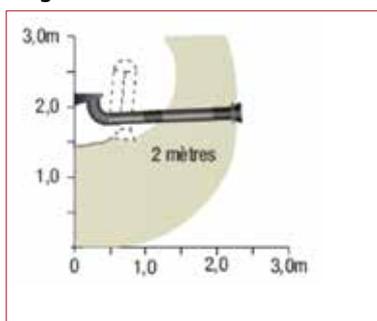
- Head loss from the arm:**
- 450 Pa with 900 m<sup>3</sup>/h
  - 530 Pa with 1,000 m<sup>3</sup>/h
  - 640 Pa with 1,100 m<sup>3</sup>/h
  - 750 Pa with 1,200 m<sup>3</sup>/h



### Ordering

Description	Part number
ECOFLEX 2 m wall-mounted arm	W000342118
ECOFLEX 3 m wall-mounted arm	W000342119
ECOFLEX 4 m wall-mounted arm	W000342120
<b>Complements</b>	
Complementary accessories: see pages 24 - 26	

### Range of Ecoflex arms



## POLYARTICULATED 160 extraction arm

The POLYARTICULATED 160 arm is the leader in its field and is recommended for extracting welding fumes of all types in industrial environments. It is to be complemented by a 1.8 or 2.1 fan or connected to a centralised system.

- Excellent manoeuvrability.
- Available in three lengths: 2, 3 and 4 m.
- Bearing structure in Ø 160 mm aluminium tube with antistatic hose.
- Median articulation of arms adjustable from the outside.
- Arm rotation pivot with ball bearing.
- Ø 300 mm removable metal nozzle with guard grille.
- Adjustment damper and circular handle.
- Supplied with wall bracket.

### Ordering

Description	Part number
Wall-mounted POLYARTICULATED arm, 2 m	W000342115
Wall-mounted POLYARTICULATED arm, 3 m	W000342125
Wall-mounted POLYARTICULATED arm, 4 m	W000342126

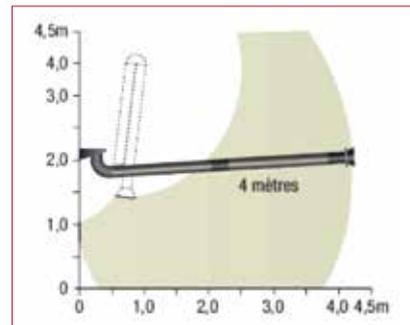
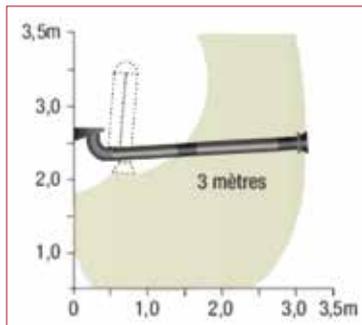
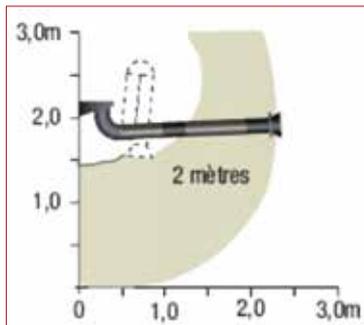
Complements
Complementary accessories: see pages 24 - 26
POLYARTICULATED arms are available in ATEX versions (EX II 3D marking)



**Air flow rate at the nozzle:**  
1,200 m<sup>3</sup>/h.

**Head loss from the arm:**  
 - 420 Pa with 900 m<sup>3</sup>/h  
 - 500 Pa with 1,000 m<sup>3</sup>/h  
 - 600 Pa with 1,100 m<sup>3</sup>/h  
 - 700 Pa with 1,200 m<sup>3</sup>/h

### Range of Polyarticulated arms



### Example of equipment



Extension boom + Polyarticulated arm

## Extension boom for 160 arm

These booms are to be used with POLYARTICULATED and ECOFLEX arms. They are used to increase the working area to a maximum range of 8.8 m.

- Horizontal arm support boom with reel support rail (maximum load 50 kg).
- Supplied with its wall mount with a ball bearing pivot and friction brake.
- Duct diameter 160 mm.
- Supplemented by a POLYARTICULATED or ECOFLEX arm, 2, 3 or 4 metres long depending on the range needed.
- 360° arm rotation under the boom, to leave no dead zone.
- Supplemented by a 2.1 fan or installed in a centralised system.



### Welding reel suspended from the inner arm



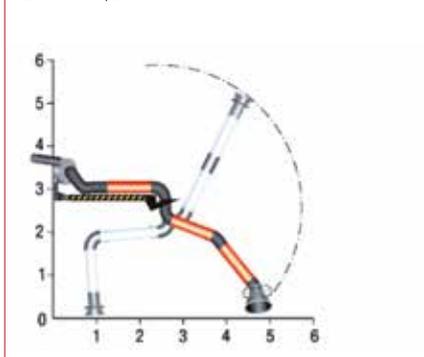
### Head loss from the arm:

- 450 Pa with 900 m<sup>3</sup>/h
- 570 Pa with 1,000 m<sup>3</sup>/h
- 700 Pa with 1,100 m<sup>3</sup>/h
- 800 Pa with 1,200 m<sup>3</sup>/h

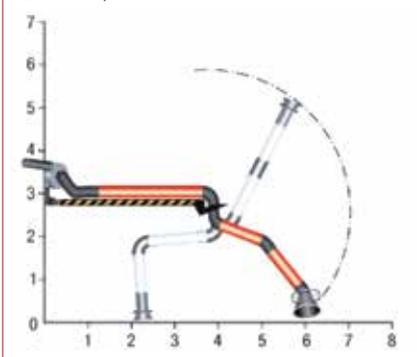
### Ordering

Description		Part number
Extension boom, 2,5	Boom, 2,5	W000342150
	Ducting, 2,5	W000342151
Extension boom, 3,5	Boom, 3,5	W000342154
	Ducting, 3,5	W000342155
Extension boom, 4,5	Boom, 4,5	W000342157
	Ducting, 4,5	W000342158
Wall mount for fan, 2,1		W000272055

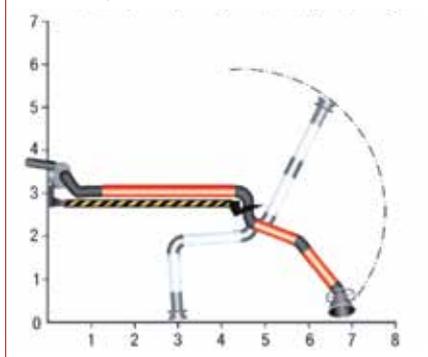
Azur boom, 2,5 + 4-metre arm



Azur boom, 3,5 + 4-metre arm



Azur boom, 4,5 + 4-metre arm



## PEBE 160 boom

PEBE booms are dedicated to extended working areas because of their large radius, with a maximum range of 8 metres. The flexible arm at the end slides vertically (*travel 1,600 mm*).

- Permissible load: 50 kg on the first leg and 5 kg on the second one.
- Articulated horizontal sections and telescopic arm, Ø 160 mm.
- Supplied with its wall bracket and ball bearing pivot and brake.
- Central articulation that leaves no dead zone in the working area.
- Complemented with a 2.1 fan or installed in a centralised system.

**Air flow rate at the nozzle:**  
1,000 to 1,200 m<sup>3</sup>/h.

**Head loss from the arm:**

- 450 Pa with 900 m<sup>3</sup>/h
- 530 Pa with 1,000 m<sup>3</sup>/h
- 600 Pa with 1,100 m<sup>3</sup>/h
- 700 Pa with 1,200 m<sup>3</sup>/h

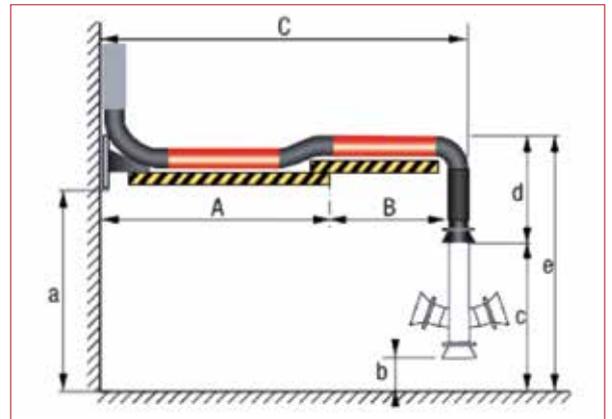


**Ordering**

Description		Part number
PEBE 3.16 boom (range 3 m)	3.16 articulated arm	W000342161
	PEBE 3.16 ducting kit	W000342162
	Vertical 160 telescopic arm	W000342175
PEBE 4.5.16 boom (range 4.5 m)	4.5.16 articulated arm	W000342165
	PEBE 4.5.16 ducting kit	W000342166
	Vertical 160 telescopic arm	W000342175
PEBE 6.16 boom (range 6 m)	6.16 articulated arm	W000342169
	PEBE 6.16 ducting kit	W000342170
	Vertical 160 telescopic arm	W000342175
PEBE 8.16 boom (range 8 m)	8.16 articulated arm	W000342173
	PEBE 8.16 support arm	W000342174
	PEBE 8.16 ducting kit	W000342176
	Vertical 160 telescopic arm	W000342175
Wall mount for 2.1 fan		W000272055

**Complements**

Complementary accessories: see pages 24 - 26



PEBE booms	Range	A	B	C	a	b	c	d	e
PEBE 3.16	3 m	1,550	1,200	3,000	3,200	550	2,100	1,400	3,500
PEBE 4.5.16	4.5 m	2,550	1,750	4,550	3,200	550	2,100	1,400	3,500
PEBE 6.16	6 m	3,550	2,400	6,200	3,150	550	2,100	1,400	3,500
PEBE 8.16	8 m	4,550	3,400	8,200	3,150	550	2,100	1,400	3,500

# Capture rail for 160 extraction arm

The capture rail supports a POLYARTICULATED or ECOFLEX arm, thus giving it a maximum range of 9.8 metres.

The arm is fixed to the rail carriage and moves very easily over the whole length of the rail.

- 5.8 m long rail made up of different modules in extruded aluminium sections and a sliding carriage.
- Compatible with the 160 range of arms.
- Mounted on the wall or the ceiling.
- Fan connection at the end of the 5.8 m section.
- Other rail lengths available on request.



### Ordering

Description	Part number
Complete 5.8 m capture rail assembly	EM0000101183

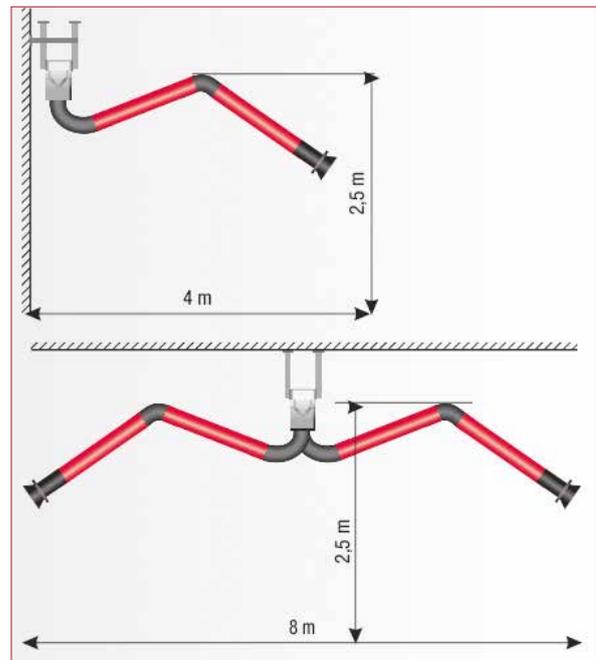
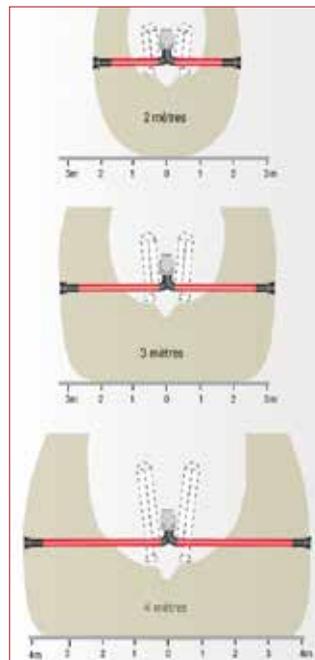
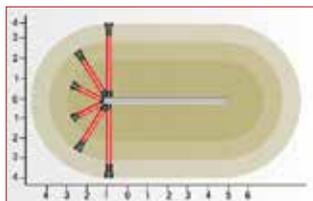
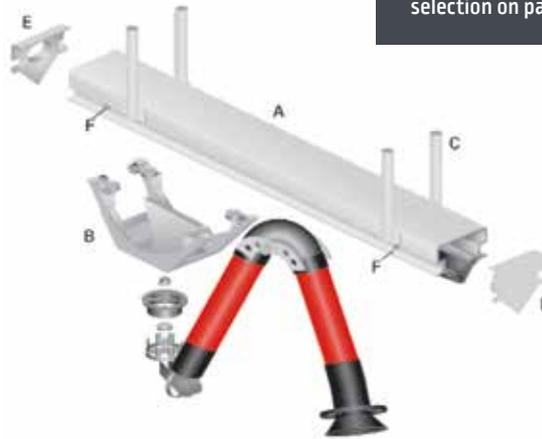
### Complements

Complementary accessories: see pages 24 - 26

160 range extraction arm selection on pages 19 and 20

### Made up of:

References	Description
A	1 rail with lip seals
B	1 guide carriage with shuttle
C	2 suspension pairs
D	1 plain rail end
E	1 duct connection end, Ø 160 mm
F	2 carriage stops



## Accessories for extraction arms of the 160 range

### LED lighting

It lights the working area.  
The double switch is supplied as standard and is fixed to the nozzle of the arm.

- Controls the LED lamp.
- For controlling the fan manually if used along with a MASTER BOX (see page 38).



#### Ordering

Description	Part number
LED lighting - 24 V	W000342209
Spiral cord for telescopic arm	W000272054

### 230 V/24 V/70 W transformer

This transformer can supply power to 1 to 3 halogen lights.

**NB:** Equipment incorporated into the DAMPER BOX and MASTER BOX.



#### Ordering

Description	Part number
Transformer for 1 to 3 arms	
Transformer, 230 V - 1 Ph - 24 V/70 W	W000272053

### Flexible extension with nozzle with magnetic stand

It captures fumes in an enclosure where the arm cannot reach.

- Length 3 m.
- Nozzle with handle and magnetic stand.
- Fixed to replace the conical nozzle of the arm.



#### Ordering

Description	Part number
3 m flexible extension with magnetic nozzle for Ø 160 arm	W000342128

### M1 polyester hood for arm

Increases the capture surface.

- Fixed to replace the conical nozzle of the arm.
- Only for use with the Ø 160 range of arms.



#### Ordering

Description	Part number
M1 polyester hood for Ø 160 arm	W000342121

### M1 polyester pivoting nozzle

Increases the capture surface.

- Fixed to replace the conical nozzle of the arm.
- Has a pivot mechanism.
- Only for use with the Ø 160 range of arms.



#### Ordering

Description	Part number
Long polyester nozzle for Ø 160 arm	W000342122

## Fixed booms for 160 arms

Fixed booms are used for mounting arms to the wall, ceiling or floor.

- TELESCOPIC
- ECOFLEX
- POLYARTICULATED

**NB:** Anchors are not supplied as they depend on the type of floor.



### Ordering

Description	Part number
Fixed boom, L = 1.1 m	W000342199
Fixed boom, L = 2.2 m	W000342198

## Legs for Extension and PEBE boom

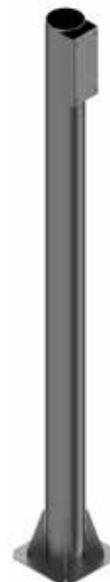
These support posts are designed specially for mounting the 2.5, 3.5 and 4.5 extension booms and 3, 4.5, 6 and 8 PEBE booms.

- Black painted steel post with 325 mm section, height 3300 mm.
- 500 x 500 mm plate - 15 mm thick.
- Fastened to the floor by 4 holes, Ø 20 mm.
- Wall bracket fastening plate with bolts.

**NB:** Anchors are not supplied as they depend on the type of floor.

### Ordering

Description	Part number
Leg for 2.5 extension boom	W000381213
Leg for 3.5 and 4.5 extension booms	W000381214
Leg for PEBE 3 boom	W000342160
Leg for PEBE 4.5 boom	W000342164
Leg for PEBE 6 boom	W000342168
Leg for PEBE 8 boom	W000342172



## Discharge kit for clad walls and roofs

Discharge kits include a set of accessories for discharging air outside the building using arms of the 160 range and a 1.8 or 2.1 fan.

### A Ø 160 discharge kit for clad wall:

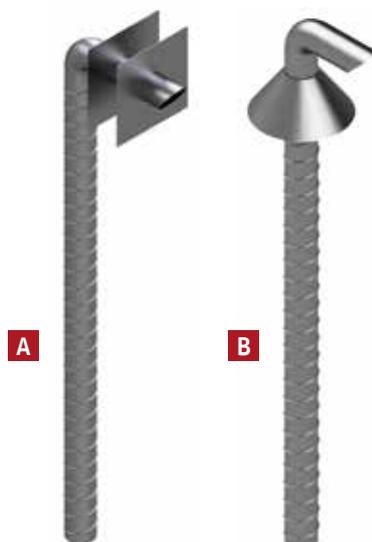
- 1 Ø 160 mm spiral duct.
- 2 Ø 160 mm 90° bends.
- 1 Ø 160 mm meshed whistle.
- 2 Ø 160 mm cleanliness plates.
- 1 set of accessories.

### B Ø 160 discharge kit for roof:

- 1 Ø 160 mm spiral duct.
- 2 Ø 160 mm 90° bends.
- 1 Ø 160 mm meshed whistle.
- 1 roof waterproofing guard.
- 1 set of accessories.

### Ordering

Description	Part number
<b>A</b> Clad wall discharge kit	EM6100237
<b>B</b> Roof discharge kit	EM6100238



## Sensors for the automatic starting up of 160 extraction arms

### Light sensor (Ø 160 arm)

It senses the light of the welding arc or the torch flame.

- It is used when the welding current cannot be sensed or when the current is very low.
- Must be used with the DAMPER BOX or MASTER BOX *(see pages 39 and 38)*.



#### Ordering

Description	Part number
Light sensor	W000342208

### Current sensor

It detects the starting up and stopping of the welding current, alternating and direct (AC-DC).

- Must be used with the DAMPER BOX or MASTER BOX *(see pages 39 and 38)*.



#### Ordering

Description	Part number
Current sensor	W000379696

### Gas saver sensor

It senses the presence of the torch on the bracket.

- Starts the fan or the associated power-operated shutter.
- Must be used with the DAMPER BOX or MASTER BOX *(see pages 39 and 38)*.



#### Ordering

Description	Part number
Gas saver bracket	W000380549
Limit switch	W000380551

### Contact type torch rest

It senses the presence of a MIG/MAG torch on the bracket.

- Starts the fan or the associated power-operated shutter.
- Must be used with the DAMPER BOX or MASTER BOX *(see pages 39 and 38)*.



#### Ordering

Description	Part number
Contact type torch rest	W000279767

## LTA 2.0 extraction arm

The LTA 2.0 arm is a cost-effective solution that is suited for use in welding booths or training centres for capturing fumes and dry dust.

- Maximum range 1.4 metres.
- Ø 203 mm reinforced plastic tube structure.
- Rotahead type 360° rotary hood.
- Guard grille and air flow adjustment damper.
- Handle, turns over 180° in relation to the wall pivot.
- Can optionally be fitted with LED lighting and automatic starting up when the welding arc is detected.
- Balanced thanks to its Easylift friction device.
- Complemented by a 28 fan or installed in a centralised system.

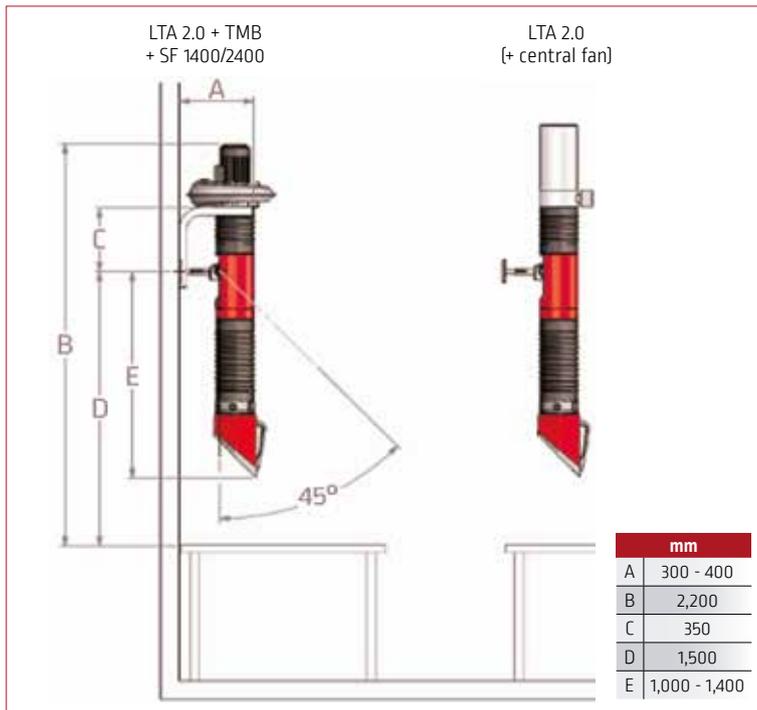
**Air flow rate at the nozzle:**  
1,200 m<sup>3</sup>/h.



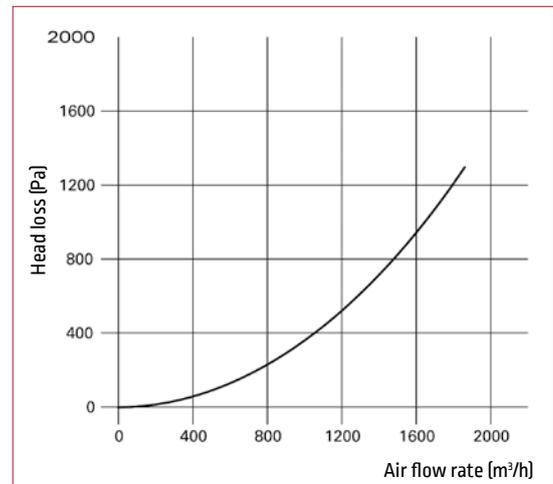
### Ordering

Description	Part number
LTA 2.0 extraction arm, 1.4 m	EM7925260180
<b>Complements</b>	
TMB wall bracket ( <i>fan connection</i> )	EM7915302000
<b>Complement for connection to a centralised system</b>	
NFC sleeve	EM7940201010

### Assembly principles and measurements



### Arm head loss table



## LTA 2.0 CW extraction arm

The LTA 2.0 CW arm is suitable for use in welding booths of training centres for capturing fumes and dry dust.

- Telescopic arm, 1,550 - 2,500 mm, that is a travel range of 950 mm.
- Ø 203 mm reinforced plastic tube structure.
- Rotahood type 360° rotary hood.
- Guard grille and air flow adjustment damper.
- Handle, turns over 180° in relation to the wall pivot.
- Can optionally be fitted with LED lighting and automatic starting up when the welding arc is sensed.
- The arm is balanced thanks to its Easylift friction device.
- Complemented by a 28 fan or installed in a centralised system.

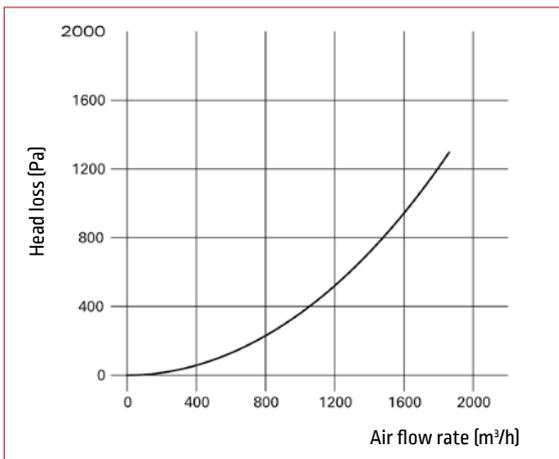


**Air flow rate at the nozzle:**  
1,200 m<sup>3</sup>/h.

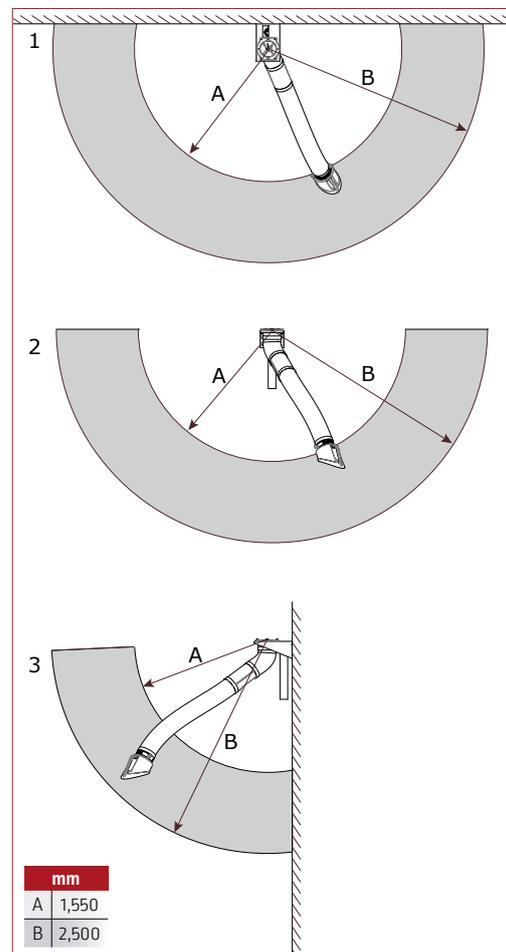
### Ordering

Description	Part number
LTA 2.0 CW extraction arm	EM7925264180
Complement for connection to a centralised system	
NFC sleeve	EM7940201010

### Arm head loss table



### Range of LTA 2.0 CW arm



# LFA 2.0, 3.0, 4.0 extraction arm

The LFA arm is suitable for use in industrial environments or training centres for capturing fumes and dry dust.

- Highly manoeuvrable
- Available with ranges of 2 m, 3 m and 4 m.
- Ø 203 mm reinforced plastic tube structure.
- Rotahood type 360° rotary hood.
- Guard grille and air flow adjustment damper.
- Handle for moving the arm easily thanks to the Easylift friction system.
- The arm can be turned over 180° in relation to its wall mount.
- Complemented by a 28 fan or installed in a centralised system.

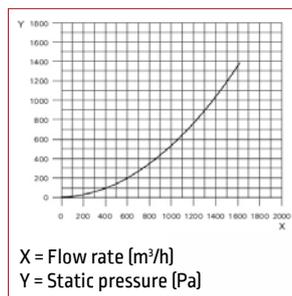
Air flow rate at the nozzle:  
1,200 to 1,400 m<sup>3</sup>/h.



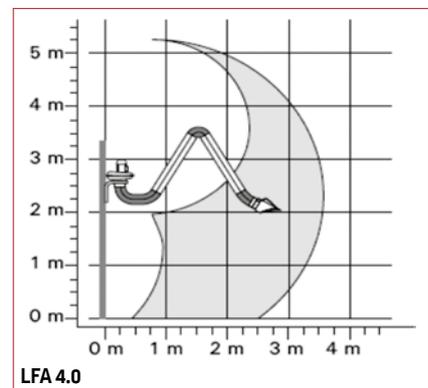
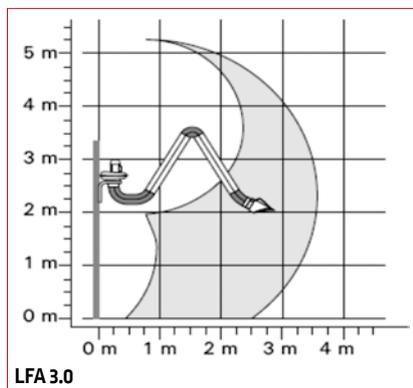
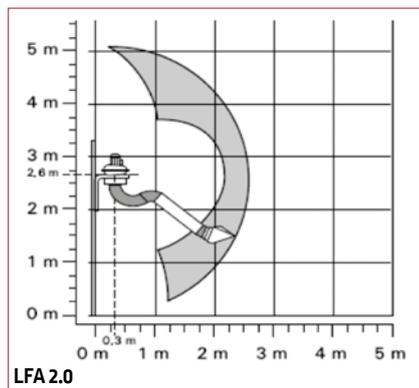
## Ordering

Description	Part number
LFA 2.0 flexible extraction arm	EM7925270180
<b>LFA 2.0 complement</b>	
TMB wall bracket (fan connection)	EM7915302000
LFA 3.0 flexible extraction arm	EM7925160180
LFA 4.0 flexible extraction arm	EM7925210180
<b>LFA 3.0 and 4.0 complement</b>	
LMB wall bracket (fan connection)	EM7915301700
<b>Complement for connection to a centralised system</b>	
NFC sleeve	EM7940201010

Arm head loss table



## Range of LFA flexible extraction arm



## LFA 3.1 and 4.1 extraction arm

The arm is adapted for heavy-duty use in industrial environments thanks to its balance system, which makes the movement of the arm exceptionally light.

- Highly manoeuvrable.
- Minimum maintenance.
- Available with ranges of 3 m and 4 m.
- Ø 203 mm reinforced plastic tube structure.
- Extremely manoeuvrable arm thanks to its patented Balance system.
- Minimum maintenance.
- Rotahood type 360° rotary hood.
- Guard grille and air flow adjustment damper.
- Handle for moving the arm.
- The arm can be turned over 180° in relation to its wall mount.
- Complemented by a 28 fan or installed in a centralised system.

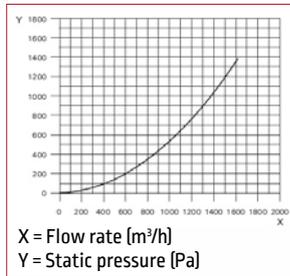
**Air flow rate at the nozzle:**  
 1,200 to 1,400 m<sup>3</sup>/h.



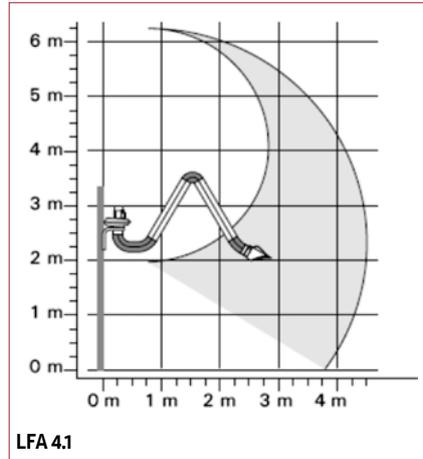
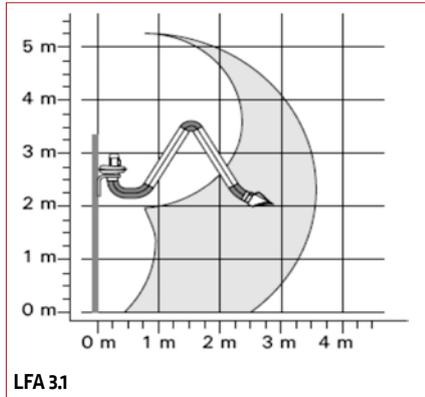
### Ordering

Description	Part number
LFA 3.1 3 m extraction arm	EM7925170180
LFA 4.1 4 m extraction arm	EM7925220180
LFA 3.1 and 4.1 complement	
LMB wall bracket (fan connection)	EM7915301700
Complement for connection to a centralised system	
NFC sleeve	EM7940201010

### Arm head loss table



### Range of LFA arm



## LFA 4.1 - LC extraction arm

The LFA 4.1 LC arm has a maximum range of 3.8 m, with a central double articulation that is dedicated to areas with low ceilings.

In other ways, it has the same characteristics as the LFA 4.1 arm described above.

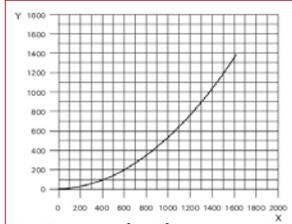


**Air flow rate at the nozzle:**  
1,200 to 1,400 m<sup>3</sup>/h.

### Ordering

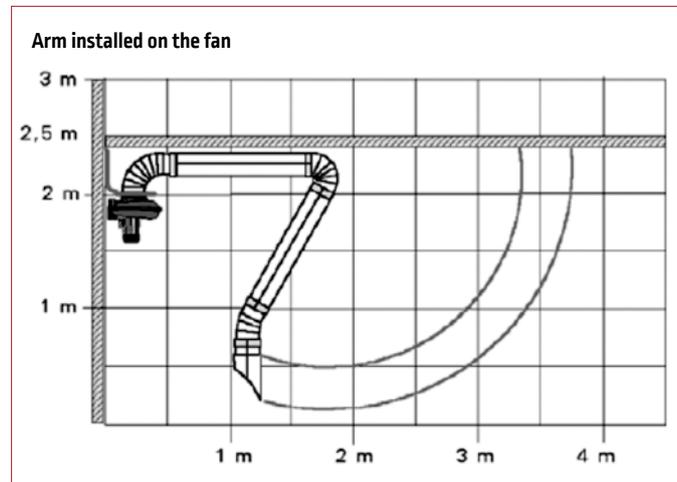
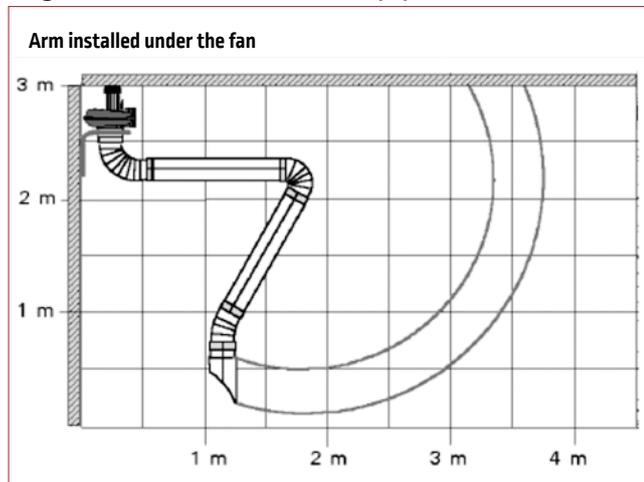
Description	Part number
LFA 4.1 - LC flexible extraction arm	EM7925230180
<b>LFA 4.1 - LC complement</b>	
TMB wall bracket <i>[fan connection]</i>	EM7915302000
<b>Complement for connection to a centralised system</b>	
NFC sleeve	EM7940201010

Arm head loss table



X = Flow rate (m<sup>3</sup>/h)  
Y = Static pressure (Pa)

### Range of LFA 4.1-LC arm/Possible assembly options



## EC2 - EC4 EXTENSION boom

EC2 and EC4 booms extend the arms of the LFA range to reach a maximum range of 8 m.

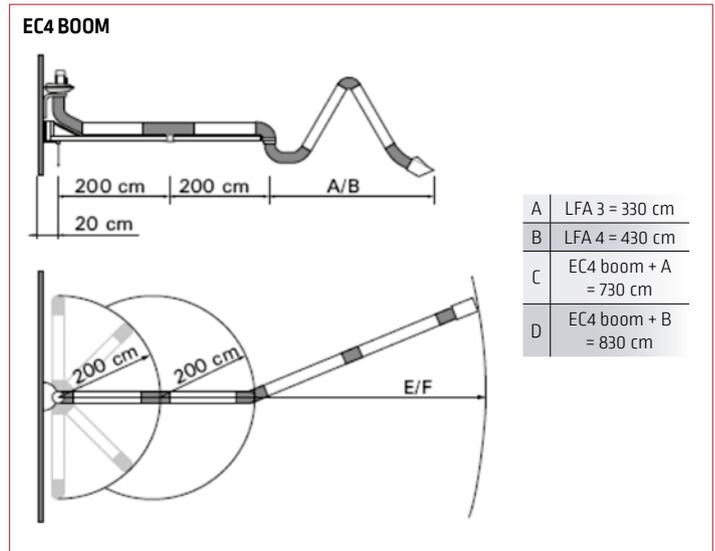
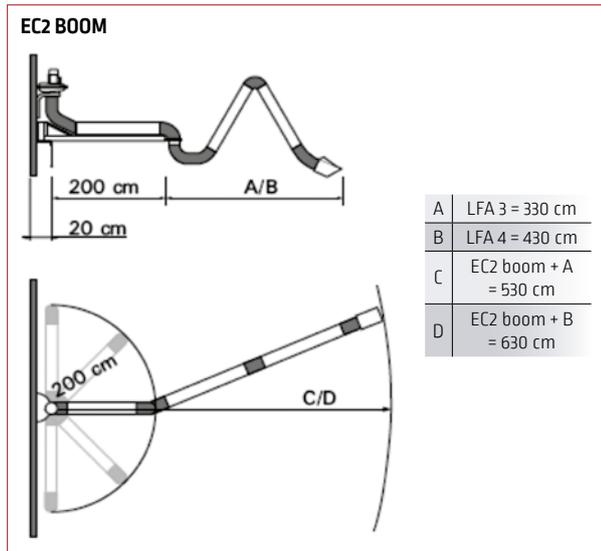
- Handstop system for locking the boom in five positions.
- Two available lengths: 2 m and 4 m.
- Ø 203 mm tube.
- Wall mounting included.
- Complemented by an arm of the LFA range.
- Complemented by a 42 fan or installed in a centralised system.
- Optional reel support rail (*max load = 50 kg*).

### Ordering

Description	Part number
EC2 - 2 m boom	EM7920122700
EC4 - 4 m boom, double pivot	EM7920122700 + EM9830401700
<b>EC2 - EC4 complement</b>	
TMB wall bracket ( <i>fan connection</i> )	EM7915302000
<b>Option</b>	
Reel support rail for EC2 boom, length 2 m	EM7900070080



### Range of EC2 - EC4 booms



Accessories for LTA - LFA extraction arms

## Current sensor

It detects the starting up and stopping of the welding current, alternating and direct (AC-DC).

- Must be used with the DAMPER BOX or MASTER BOX [see pages 39 and 38].



**Ordering**

Description	Part number
Current sensor	W000379696

## LED lighting

It lights the working area.

The lamp control switch is supplied as standard and is fixed on the nozzle of the arm.

- Must be used with the DAMPER BOX or MASTER BOX [see pages 39 and 38].

**Ordering**

Description	Part number
LED lamp	EM7900010110
NCW-11 connecting cable	EM9850031050

## LED lighting and automatic starting/stopping

It lights the working area and makes the fan start under the control of the welding current.

The control switch is supplied as standard and is fixed to the nozzle of the arm.

- Used for controlling the lamp.
- Uses manual or automatic fan control by photoelectric sensing.
- Not suitable for TIG welding.
- Must be used with the DAMPER BOX or MASTER BOX [see pages 39 and 38].

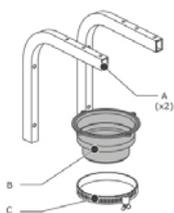


**Ordering**

Description	Part number
LED lamp + automatic starting	EM7900010190
NCW-11 connecting cable	EM9850031050

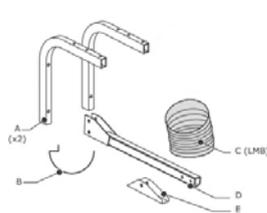
## TMB and LMB wall brackets

**TMB bracket**



A	Wall bracket
B	NFC connecting sleeve
C	Fastening clamp

**LMB bracket**



A	Wall bracket
B	Spring flange
C	Hose
D	Suspension adapter
E	Hinge stop

**Ordering**

Description	Part number
TMB bracket	EM7915302000
LMB bracket	EM7915301700

## Accessories for LTA - LFA extraction arms

### Post for LTA-LFA extraction arm

This support post is designed specially for mounting the whole range of LTA (except LTA 2.0 CW) and LFA arms.

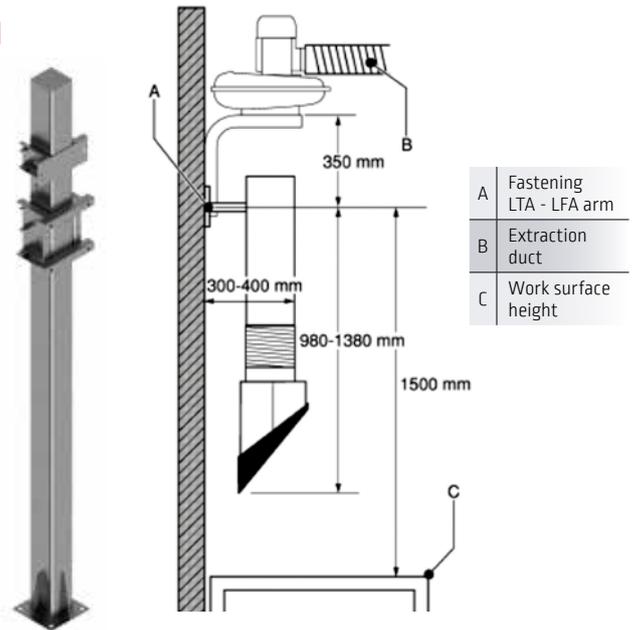
Its total height is 3,000 mm.

- Black painted steel post with section 120 x 120 mm, height 3,000 mm.
- 12 mm thick 210 x 210 mm plate.
- Fastened to the floor through 4 holes, Ø 15 mm, centre distance 165 x 165 mm.
- Sliding plate for LTA arm with bolts.
- Wall bracket fastening plate for LFA arm with bolts.

**NB:** Anchors are not supplied as they depend on the type of floor.

#### Ordering

Description	Part number
LTA - LFA arm post (with adapter plate)	W000375723



### Post for EC2-EC4 extension booms

The support post is designed specially for mounting EC2 and EC4 extension booms.

Its total height is 3,000 mm.

- EC2 boom - Black painted steel post, section Ø 220 mm, height 3,000 mm.
- EC4 boom - Black painted steel post, section Ø 300 mm, height 3,000 mm.
- 12 mm thick 450 x 450 mm plate.
- Fastened to the floor through 4 holes, Ø 15 mm, centre distance 380 x 380 mm.
- Fastening plate for EC2 and EC4 boom wall bracket with bolts.

**NB:** Anchors are not supplied as they depend on the type of floor.

#### Ordering

Description	Part number
EC2 extension boom post	W000381282
EC4 extension boom post	W000381283



### Discharge kit for clad walls and roofs

Discharge kits are made up of a kit of accessories for discharging air outside the building using LTA and LFA arms combined with a 28 fan.

#### A Clad wall discharge kit:

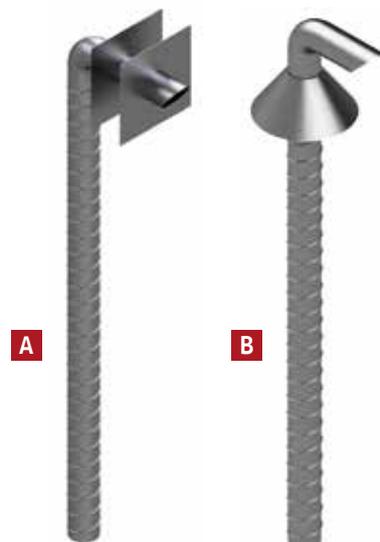
- 1 Ø 160 mm spiral duct.
- 2 Ø 160 mm 90° bends.
- 1 Ø 160 mm meshed whistle.
- 2 Ø 160 mm cleanliness plates.
- 1 set of accessories.

#### B Roof discharge kit:

- 1 Ø 160 mm spiral duct.
- 2 Ø 160 mm 90° bends.
- 1 Ø 160 mm meshed whistle.
- 1 Outer waterproofing guard.
- 1 set of accessories.

#### Ordering

Description	Part number
A Clad wall discharge kit	EM61000237
B Roof discharge kit	EM61000238



## Fan 1.8 - 2.1 for 160 extraction arm

These fans are modern, powerful and silent.

- Assembled directly on the wall bracket of POLYARTICULATED, EXTENSIBLE and ECOFLEX arms with Ø 160 mm.
- Aluminium turbine, painted steel scroll.
- Inlet/outlet Ø 160 mm.
- Inlet and outlet grille.
- Special fan bracket for mounting the 2.1 fan on extension and PEBE booms.

Conformity 



	No-load flow rate (m <sup>3</sup> /h)	Noise (dB(A))	Flow rate at nozzle (m <sup>3</sup> /h)
1.8 fan	1,800	64	1,000
2.1 fan	2,100	65	1,200

### Ordering

Description	Part number
1.8 fan - 230/400 V - 3 Ph-50 Hz - 0.55 kW	W000379138
2.1 fan - 230/400 V - 3 Ph - 50 Hz - 0.75 kW	W000342132
Circuit breaker or disconnecting box: see page 69	
<b>Brackets and stands</b>	
Bracket for wall mounting and stand	W000342143
Bracket for extension and PEBE booms (2.1 fan)	W000272055

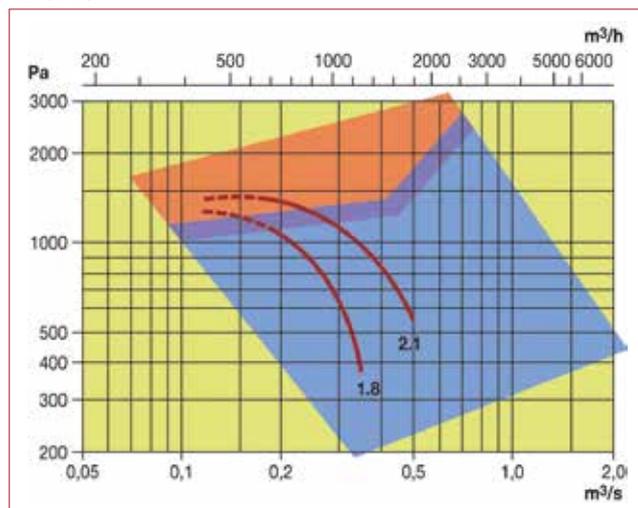


Disconnecter box



Circuit breaker

### Fan curve



## 28 fan for LTA - LFA Ø 200 extraction arm

This fan is ideal for all LTA or LFA arms used with or without independent filtration.

- Aluminium turbine, polypropylene scroll.
- Inlet: 200 mm - Outlet: 160 mm
- Weight: 15 kg.
- Direct assembly on wall bracket TMB or LMB.

Conformity 

	No-load flow rate (m <sup>3</sup> /h)	Noise (dB(A))	Flow rate at nozzle (m <sup>3</sup> /h)
28 fan	2,000	64	1,200

### Ordering

Description	Part number
28 fan - 230 V - 1 Ph - 50 Hz - 0.75 kW - 2,800 rpm	EM7905220710
28 fan - 230 V - 3 Ph - 50 Hz - 0.75 kW - 2,800 rpm	EM7905220750
28 fan - 400 V - 3 Ph - 50 Hz - 0.75 kW - 2,800 rpm	EM7905220740

### Complements

Circuit breaker or disconnecting box: see page 69

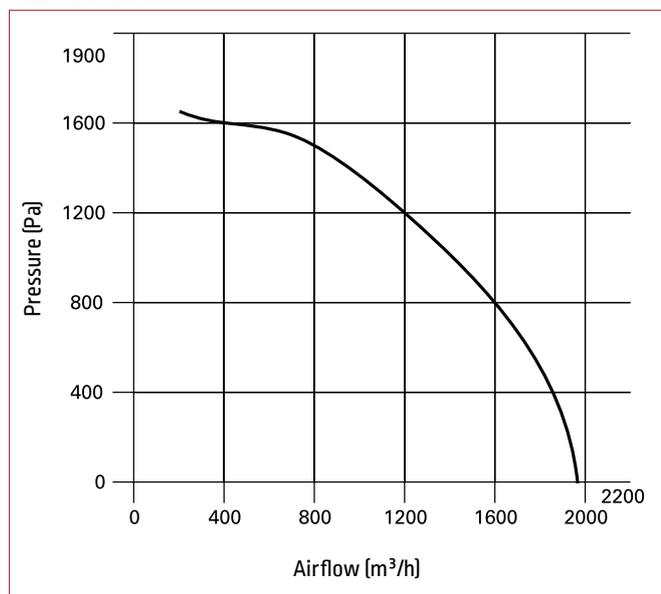


Disconnecting box



Circuit breaker

### Curve of 28 fan



## 42 fan for LFA arm + EC2 EC4 extension

Fan suitable for LFA arms mounted on EC2 and EC4 booms used with or without independent filtration.

- Turbine and scroll in painted steel.
- Inlet  $\varnothing$  200 mm.
- Discharge with a  $\varnothing$  160 mm soft sleeve.
- Complemented by a hose, L= 1.5 m  $\varnothing$  200 mm to connect the fan to the arm.

Conformity 



	No-load flow rate (m <sup>3</sup> /h)	Noise (dB(A))	Flow rate at nozzle (m <sup>3</sup> /h)
42 fan	3,000	70	1,300

### Ordering

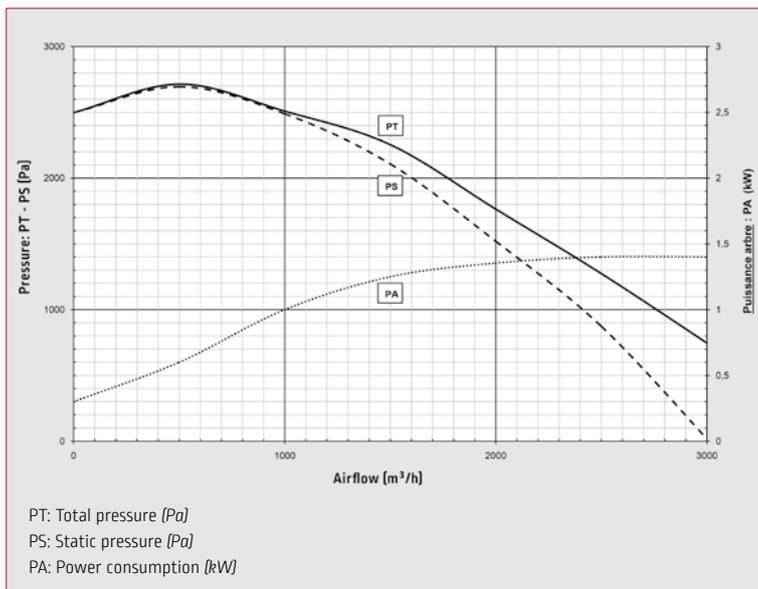
Description	Part number
42 fan - 230/ 400V - 3 Ph - 50 Hz - 1.5 kW - 2,800 rpm	W000378253

### Complements

Circuit breaker or disconnecting box: see page 69

Flexible duct, $\varnothing$ 200 mm 1.5 m long	W000257717
Wall bracket for 42 fan	W000380991

### Fan curve



Disconnecting box



Circuit breaker

## MASTER BOX

The MASTER BOX controls a fan manually or automatically. It reduces the noise in the workshop and decreases power consumption.

- Manual/automatic mode selection switch.
- Automatic starting via a sensor (current or light) or an external normally open contact.
- In automatic mode, fan stopping is delayed in relation to the stop control (delay adjustable from 5 to 60 s).
- Fan operation indicator light.
- 24 VAC supply for LED lighting.
- Possibility to put two sensors in parallel if used with two arms and only one fan.
- Padlockable switch for isolation from the electrical system.
- Power supply 230/400 V - 1 Ph - 50 Hz.
- Maximum permissible power: 5.5 kW motor.
- Unit dimensions (H x W x D): 300 x 220 x 120 mm.

### Ordering

Description	Part number
MASTER BOX	W000376084

Thermal magnetic safety system to select based on motor power	
GV2 ME06 safety system	W000374601
GV2 ME07 safety system	W000374602
GV2 ME08 safety system	W000374603
GV2 ME10 safety system	W000374604
GV2 ME14 safety system	W000374606
GV2 ME16 safety system	W000374607
GV2 ME20 safety system	W000374608
GV2 ME21 safety system	W000374609

Complements	
AC/DC current sensor	W000379696
Light sensor	W000342208
Contact type torch rest	W000279767

Conformity 



By automating the working of a fan, you can reduce the power consumption, noise and volume of air extracted while working, thus reducing heating costs.

### Motor protection selection table

Motor power	230 V - 3 Ph	400 V - 3 Ph	230 V - 1 Ph
0.37 kW	GV2ME07	GV2ME06	GV2ME08
0.55 kW	GV2ME07	GV2ME06	GV2ME10
0.75 kW	GV2ME08	GV2ME07	GV2ME10
1.1 kW	GV2ME08	GV2ME08	GV2ME14
2.2 kW	GV2ME14	GV2ME10	
3 kW	GV2EM14	GV2EM14	
4 kW	GV2EM20	GV2EM14	
5.5 kW	GV2EM21	GV2EM16	

## DAMPER BOX

The DAMPER BOX is used to manually or automatically control a power-operated damper. It reduces the noise in the workshop and decreases power consumption.

- Manual/automatic mode selection switch.
- Automatic starting via a sensor (*current or light*) or an external normally open contact.
- In automatic mode, the closing of the damper is delayed in relation to the stop control (*delay adjustable from 5 to 60 s*).
- Rapid-opening power-operated shutter: 4 s.
- Damper opening indicator.
- 24 VAC supply for LED lighting.
- One or two sensors connected in parallel may be used with two welding sources.
- Padlockable switch for isolation from the electrical system.
- Power supply 230/400 V - 1 Ph - 50 Hz.
- Dimensions: 275 x 225 x 120 mm (*h x w x d*).

### Ordering

Description	Part number
DAMPER BOX	W000370749
<b>Power-operated shutters</b>	
Power-operated shutter Ø 80	W000380478
Power-operated shutter Ø 100	W000380479
Power-operated shutter Ø 125	W000380480
Power-operated shutter Ø 160	W000380481
Power-operated shutter Ø 200	W000380482
Power-operated shutter Ø 250	W000380489
Power-operated shutter Ø 315	W000370744
Power-operated shutter Ø 355	W000379175
Power-operated shutter Ø 400	W000370743
<b>Complements</b>	
Current sensor	W000379696
Light sensor	W000342208
Contact type torch rest	W000279767

Conformity 



## EXPERT BOX

The EXPERT BOX controls a fan with the help of a frequency variator and a pressure sensor. It varies and regulates the air flow in a centralised extraction system with different extraction collectors.

- Reduced volumes of extracted air, limited to capture needs only.
- Lower power consumption
- Reduced noise.
- Energy and heating consumption (lower CO<sub>2</sub> emissions).
- The number of sensors in a system can be increased on the basis of a diversity factor.
- The extraction rate is regulated if the dynamic pressure of the fan is controlled.
- Includes a padlockable switch.
- Power supply 400 V - 3 Ph - 50 Hz.
- Vacuum regulation range 0 to 2,500 Pa.

Conformity 



### Ordering

Description	Part number
EXPERT BOX 1.5 kW	W000278636
EXPERT BOX 2.2 kW	W000278637
EXPERT BOX 3 kW	W000278638
EXPERT BOX 4 kW	W000278639
EXPERT BOX 5,5 kW	W000278640
EXPERT BOX 7,5 kW	W000278641
EXPERT BOX 9 kW	W000278642
EXPERT BOX 11 kW	W000278643
EXPERT BOX 15 kW	W000278644
EXPERT BOX 18.8 kW	EM61000269
EXPERT BOX 22 kW	EM61000270
Pressure sensor	W000276149



Pressure sensor

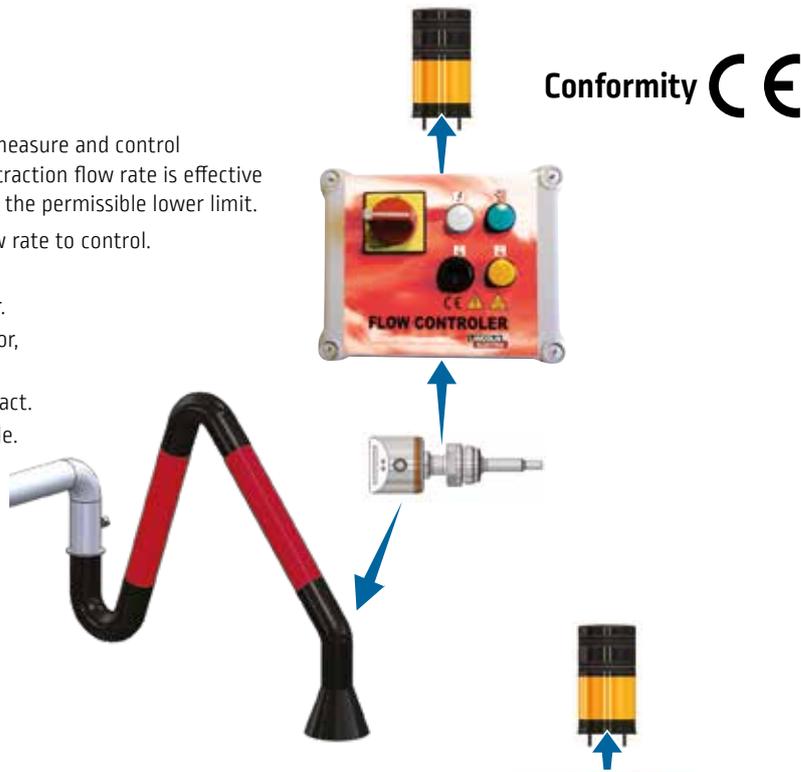
## FLOW CONTROLLER

The FLOW CONTROLLER unit is designed to continually measure and control the extraction rate in a duct. It informs the user if the extraction flow rate is effective and in line with the nominal flow rate or if it has reached the permissible lower limit.

- Allows the adjustment of the range and limit of the flow rate to control.
- Measurement range 5 to 30 m/s.
- Reports satisfactory flow rate through a green indicator.
- Reports inadequate flow rate through an orange indicator, a buzzer and an orange stack light.
- Reports external information through an NO or NC contact.
- Measurement with hot wire sensor, 5 m connecting cable.
- Includes a padlockable switch.
- Power supply 230/400 V - 3 Ph or 230 V - 1 Ph.

### Ordering

Description	Part number
FLOW CONTROLLER - 5 m connecting cable - Flow sensor	W000402169
Sensor support plate	W000402173
Complements	
Orange stack light	W000402172



Conformity

## DAMPER BOX FLOW CONTROLLER

It combines the functions of a FLOW CONTROLLER and a DAMPER BOX by starting up a power-operated shutter and continuously controlling the extraction flow rate.

### Ordering

Description	Part number
DAMPER BOX FLOW METER - 5 m connecting cable - Flow sensor	W000402170
Sensor support plate	W000402173
Welding current sensor	W000379696
Complements	
Orange stack light	W000402172



## MASTER BOX FLOW CONTROLLER

It combines the functions of the FLOW CONTROLLER and the MASTER BOX by starting up a fan and continuously controlling the extraction flow rate.

### Ordering

Description	Part number
MASTER BOX FLOW CONTROLLER - 5 m connecting cable - Flow sensor	W000402171
Sensor support plate	W000402173
Welding current sensor	W000379696
Thermal magnetic safety system to select based on motor power: see table on page 38 MASTER BOX	
Complements	
Orange stack light	W000402172



## Mechanical mobile filtration units

### MOBIFILTER 1600M

MOBIFILTER 1600 M is designed specially to extract and filter dry welding fumes from light or medium welding activities. It is simple to use and its large extraction capacity makes it particularly effective.

- Maximum capture rate at the arm: 1,400 m<sup>3</sup>/h.
- Cassette type mechanical filter.
- Metal pre-filter - Class EU2.
- Filter surface area 40 m<sup>2</sup> - Class F8.
- Motor 1.5 kW.
- Automatic control by the welding current.
- Vertical rear air outlet.
- Noise: 70 dB(A).
- Complements:
  - Polyarticulated or Ecoflex arm, 3 or 4 m long.
  - Outdoor discharge kit for Ø 160 mm hose.

**NB:** This type of device may not be used while welding in confined atmospheres. If it is to be used permanently, a fixed filter solution should be preferred, with a fixed collector or arm and discharge outside the building.



Conformity 

#### Ordering

Description	Part number
MOBIFILTER 1600M 400 V - 3 Ph - 50 Hz	W000377937
MOBIFILTER 1600M 230 V - 1 Ph - 50 Hz	W000377938
MOBIFILTER 1600M 110 V - 1 Ph - 50 Hz	W000377939

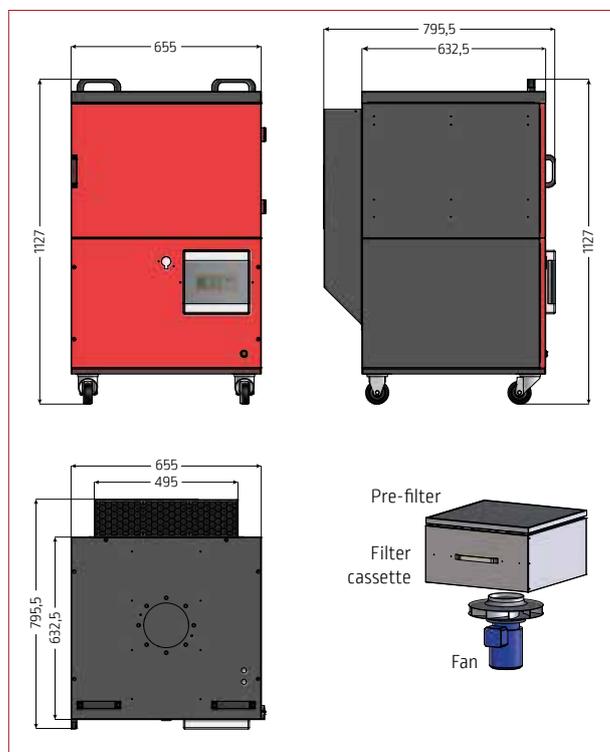
Complement with one of the arms	
3 m ECOFLEX arm	W000341029
4 m ECOFLEX arm	W000341031
3 m POLYARTICULATED arm	W000341032
4 m POLYARTICULATED arm	W000341033

Options	
Activated carbon kit	W000380758
Arm halogen lighting	W000342209
Outdoor discharge kit, Ø 160 mm	W000380765
5 m hose, Ø 160 mm	W000380641
10 m hose, Ø 160 mm	W000380642
15 m hose, Ø 160 mm	W000380643
Set of 6 flat clamps, Ø 160 mm	EM61000370

Spare parts	
Metal pre-filter, thickness 30 mm	W000379698
Fine filter, 610 x 610 x 292 - Class F8	W000379637

\* Not available in France

#### Installation



## Mechanical mobile filtration units

### MOBIFLEX 200 M

MOBIFLEX 200 M is designed specially to extract and filter dry welding fumes from light or medium welding activities.

It is easy to use, and its high filtration capacity (50 m<sup>2</sup>) and efficiency give it a longer life.

- Maximum capture rate at the arm: 1,250 m<sup>3</sup>/h.
- Cassette type mechanical filter.
- Metal pre-filter - Class EU2.
- Filter surface area 50 m<sup>2</sup> - Class M.
- Cartridge saturation indicator.
- Motor 0.75 kW.
- Vertical air outlet.
- Noise: 69 dB(A).
- Complement:
  - 3 or 4 m long LFA arm.

**NB:** This type of device may not be used while welding in confined atmospheres. If it is to be used permanently, prefer a fixed filter solution with a fixed collector or arm and discharge outside the building.



Conformity

#### Ordering

Description	Part number
MOBIFLEX 200 M - 115 V - 1 Ph - 50 Hz*	EM7028100700
MOBIFLEX 200 M - 230 V - 1 Ph - 50 Hz*	EM7022110700
MOBIFLEX 200 M - 230 V - 3 Ph - 50 Hz*	EM7023100700
MOBIFLEX 200 M - 400 V - 3 Ph - 50 Hz*	EM7025100700
MOBIFLEX 200 M HC - 230 V - 1 Ph - 50 Hz	EM0000119512
MOBIFLEX 200 M HC - 400 V - 3 Ph - 50 Hz	EM0000119493

#### Arm complement

LFA 3.0 arm - 3 m	EM7925160180
LFA 4.0 arm - 4 m	EM7925210180
LFA 3.1 arm - 3 m	EM7925170180
LFA 4.1 arm - 4 m	EM7925220180
Hose, Ø 200 mm L 5 m + magnetic stand collector	EM7900068030
Extension hose, Ø 200 mm L 5 m	EM7900068040

#### Options

LED lamp kit	EM7900010110
LED lamp kit + automatic on/off	EM7900010190
4 m connecting cable	EM9850031040
Transformer	EM9820300030
Activated carbon filter	EM9850070060

#### Spare parts

Metal pre-filter	EM9820310110
Filter cartridge, 50 m <sup>2</sup>	EM9850060050

#### Outdoor discharge hose (MOBIFILTER 200-M HC)

Hose, Ø 160 mm L 5 m +	W000380641
Hose, Ø 160 mm L 10 m +	W000380642
Hose, Ø 160 mm L 15 m +	W000380643
Set of 6 flat clamps, Ø 160 mm	EM61000370

\* Not available in France

### MOBIFLEX 200 M HC

MOBIFLEX 200 M HC has characteristics identical to those of MOBIFLEX-200-M, only it additionally has a connecting kit for outdoor discharge with a 160 mm diameter.

### MOBIFLEX 200 M/W3

MOBIFLEX 200 M/W3 has IFA W3 certification according to standard EN 15021/1.

- Maximum capture rate at the arm: 1,250 m<sup>3</sup>/h.
- Cassette type mechanical filter.
- Metal pre-filter - Class EU2.
- Mechanical filter, class MERV 16 under ASHRAE 52.2
  - Filter surface area: 50 m<sup>2</sup>.
- Cartridge saturation indicator
- Motor 0.75 kW.
- Vertical air outlet.
- Noise: 69 dB(A).
- Complement:
  - 3 or 4 m long LFA arm.



#### Ordering

Description	Part number
MOBIFLEX 200 M/W3 - 230 V - 1 Ph - 50 Hz	EM0000119513
MOBIFLEX 200 M/W3 - 400 V - 3 Ph - 50 Hz	EM0000118478

#### Arm complement and options

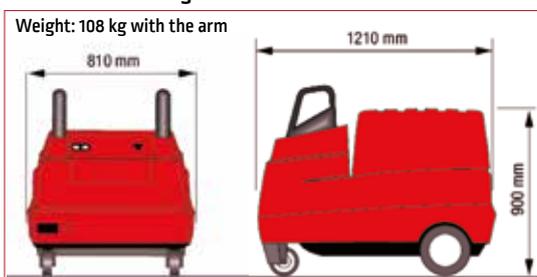
See MOBIFILTER 200 M

#### Spare parts

Metal pre-filter	EM9820310110
Filter cartridge, 50 m <sup>2</sup>	EM9850060250

#### Dimensions and weight of Mobiflex 200-M

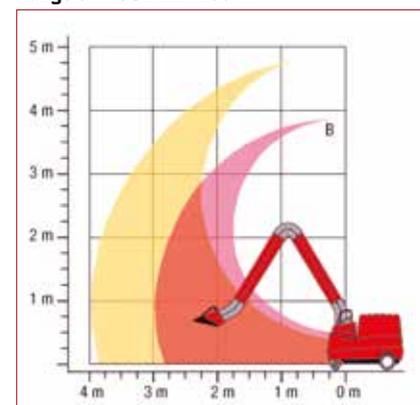
Weight: 108 kg with the arm



We recommend the use of MOBIFLEX 200-M for annual consumption of:

- Solid wire: below 750 kg.
- Flux-cored wire: below 450 kg.
- Rutile electrodes: below 500 kg.
- Basic electrodes: below 450 kg.
- TIG process: unlimited.

#### Range of MOBIFLEX 200-M



## Mechanical mobile filtration units

### MECAZUR 1.8M

MECAZUR 1.8M is designed specially to extract and filter dry welding fumes for light or medium welding activities.

The possibility to connect two extraction arms makes it particularly attractive.

- Maximum capture flow rate:
  - 1,400 m<sup>3</sup>/h with one arm.
  - 2 x 1,000 m<sup>3</sup>/h with two arms.
- Cassette type mechanical filter.
- Metal pre-filter - Class EU2.
- Filter surface area 18.5 m<sup>2</sup> - Class F8.
- Cartridge saturation indicator light.
- Motor 2.2 kW.
- Vertical rear air outlet.
- Sound level: 72 dB(A).
- Complements:
  - Polyarticulated or Ecoflex arm, 3 or 4 m long.
  - Outdoor discharge kit for Ø 160 mm hose.

The filter is prearranged for fitting the automatic On/Off option.

As an option, the 1.8M mobile filter may be fitted with an adapter for connecting a hose for outdoor discharge after filtration:

- Diameter 160 mm for use with one arm.
- Diameter 250 mm for use with two arms.

**NB:** This type of device may not be used while welding in confined atmospheres. If it is to be used permanently, prefer a fixed filter solution with a fixed collector or arm and discharge outside the building.

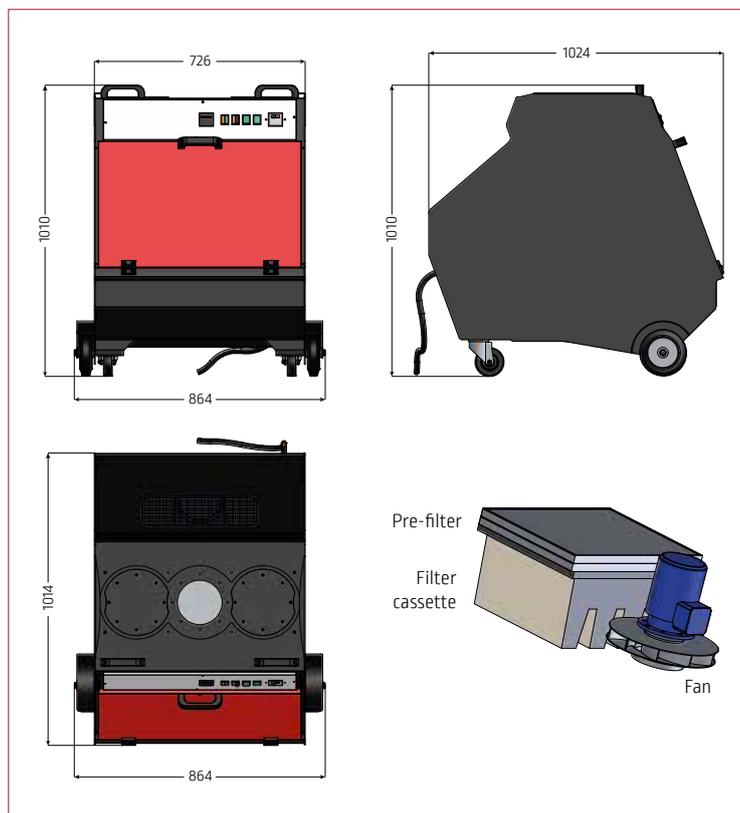
Conformity 



#### Ordering

Description	Part number
MECAZUR 1.8M 400 V - 3 Ph - 50 Hz	W000341028
<b>Complement: 1 or 2 arms as required</b>	
ECOFLEX 3 m arm (1 or 2)	W000341029
ECOFLEX 4 m arm (1 or 2)	W000341031
POLYARTICULATED 3 m arm (1 or 2)	W000341032
POLYARTICULATED 4 m arm (1 or 2)	W000341033
<b>Options</b>	
Activated carbon	W000341043
Optional automatic operation for use with a welding source	W000341044
Additional RI sensor for use with two arms and two welding sources	W000380662
Outdoor discharge kit, Ø 160 mm for 1 arm	W000381200
Outdoor discharge kit, Ø 250 mm for 2 arms	W000381201
5 m hose, Ø 160 mm	W000380641
10 m hose, Ø 160 mm	W000380642
15 m hose, Ø 160 mm	W000380643
Set of 6 flat clamps, Ø 160 mm	EM61000370
6 m hose, Ø 250 mm	W000381202
10 m hose, Ø 250 mm	W000381194
Set of 6 flat clamps, Ø 250 mm	EM61000371
<b>Spare parts</b>	
Metal pre-filter	W000379667
Fine filter	W000379666

#### Installation



## Mechanical mobile filtration units

### MOBIFLEX 400 MS

MOBIFLEX 400 MS is designed specially for extracting and filtering abundant dry welding fumes during heavy-duty work in industrial environments.

- Air flow rate at the nozzle: 1,200 m<sup>3</sup>/h [clean filter].
- Self-cleaning filter cartridge  
(Class M cartridge according to EN IEC 60335-2-69 protected by a class G2 pre-filter according to EN 779)  
- Filter surface area 30 m<sup>2</sup>.
- Cleaned by compressed air pulses  
(need to connect the device to a system supplying dry de-oiled compressed air at 5 to 6 bars).
- Dust collector drawer.
- Motor power: 750 W.
- Max. noise: 69 dB(A).
- Drive wheels and handles.
- Complement:  
- 3 or 4 m long LFA arm.
- Unit delivered with electrical control and power cable.

**NB:** This type of device may not be used while welding in confined atmospheres. If it is to be used permanently, prefer a fixed filter solution with a fixed collector or arm and discharge outside the building.



Conformity

#### Ordering

Description	Part number
MOBIFLEX 400 M - 115 V - 1 Ph - 50Hz*	EM7048400700
MOBIFLEX 400 M - 230 V - 1 Ph - 50Hz*	EM7045400700
MOBIFLEX 400 M - 230 V - 3 Ph - 50Hz*	EM7043300700
MOBIFLEX 400 M - 400 V - 3 Ph - 50Hz*	EM7045300700

#### Arm complement

LFA 3.0 arm - 3 m	EM7925160180
LFA 4.0 arm - 4 m	EM7925210180
LFA 3.1 arm - 3 m	EM7925170180
LFA 4.1 arm - 4 m	EM7925220180
Hose, Ø 200 mm L 5 m + magnetic stand collector	EM7900068030
Extension hose, Ø 200 mm L 5 m	EM7900068040

#### Options

LED lamp kit	EM7900010110
LED lamp kit + automatic on/off	EM7900010190
4 m connecting cable	EM9850031040
Activated carbon filter	EM9850070060

#### Spare parts

Metal pre-filter	EM0000102274
Filter cartridge, 30 m <sup>2</sup>	EM9850060110

\* Not available in France

### MOBIFLEX 400 MS - W3

MOBIFLEX 400 MS - W3 has characteristics identical to those of Mobiflex 400 MS, only it has a special filter that puts the equipment into IFA W3 class under EN 15021/1.

- Air flow rate at the nozzle: 1,200 m<sup>3</sup>/h [clean filter]
- Mechanical filter, class MERV 16 under ASHRAE 52.2  
- Filter surface area: 30 m<sup>2</sup>.



#### Ordering

Description	Part number
MOBIFLEX 400 M - W3 - 230 V - 1 Ph - 50 Hz	EM0000119514
MOBIFLEX 400 M - W3 - 400 V - 3 Ph - 50 Hz	EM7045300700

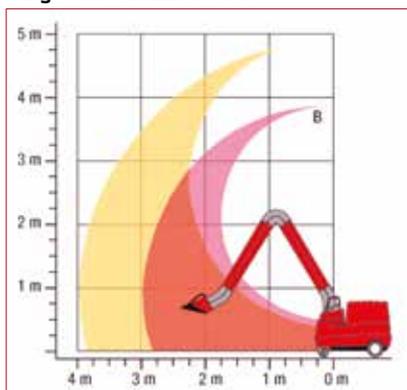
#### Arm complement

LFA 3.0 arm - 3 m	EM7925160180
LFA 4.0 arm - 4 m	EM7925210180
LFA 3.1 arm - 3 m	EM7925170180
LFA 4.1 arm - 4 m	EM7925220180
Hose, Ø 200 mm L 5 m + magnetic stand collector	EM7900068030
Extension hose, Ø 200 mm L 5 m	EM7900068040

#### Spare parts

Metal pre-filter	EM0000102274
Filter cartridge, 30 m <sup>2</sup>	EM9850060240

#### Range of MOBIFLEX 400 MS

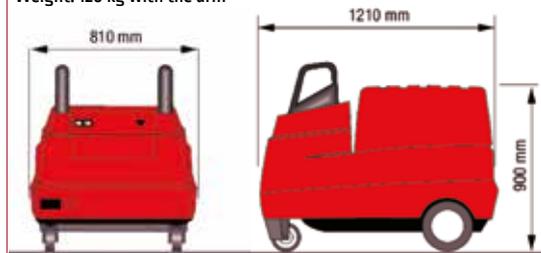


We recommend the use of MOBIFLEX 400 MS for annual consumption of:

- Solid wire: above 750 kg.
- Flux-cored wire: above 450 kg.
- Rutile electrodes: above 500 kg.
- Basic electrodes: above 450 kg.
- TIG process: unlimited.

#### Dimensions and weights of MOBIFLEX 400 MS

Weight: 120 kg with the arm



## Electrostatic mobile filtration units

### MECAZUR 1.3E

Conformity 

MECAZUR 1.3 E is recommended for extracting greasy or oily welding fumes from carbon steels.

- Maximum capture flow rate:
  - 1,200 m<sup>3</sup>/h with one arm.
  - 2 x 900 m<sup>3</sup>/h with two arms.
- Filtration in three stages:
  - Metal pre-filter - Class EU2.
  - Ionising cell, 10,000 V.
  - 5,000 V collecting cell - Filter surface area: 12 m<sup>2</sup>.
- Cartridge saturation indicator light.
- Motor 1.1 kW.
- Vertical rear air outlet.
- Noise: 72 dB(A).
- Complements:
  - Polyarticulated or Ecoflex arm, 3 or 4 m long.
  - Outdoor discharge kit for Ø 160 mm hose.

The filter is prearranged for fitting the automatic On/Off option.

As an option, the 1.8M mobile filter may be fitted with an adapter for connecting a hose for outdoor discharge after filtration:

- Diameter 160 mm for use with one arm.
- Diameter 250 mm for use with two arms.

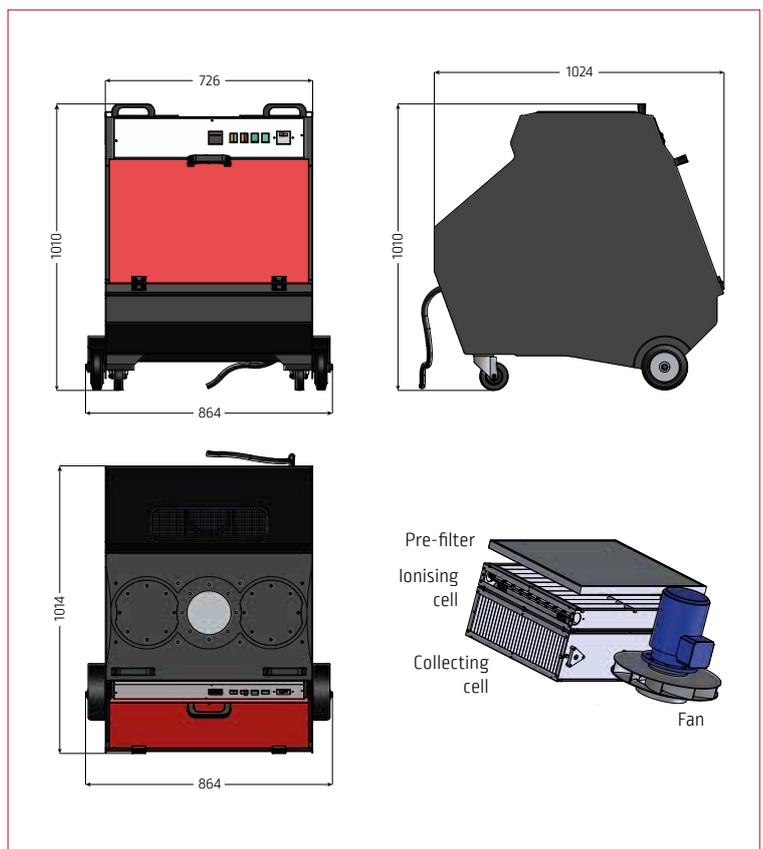
**NB:** This type of device only filters non-explosive solid particles. It may not be used in confined atmospheres. If it is to be used permanently, prefer a fixed filter solution with a fixed collector or arm and discharge outside the building.



#### Ordering

Description	Part number
MECAZUR 1.3E 400 V - 3 Ph - 50 Hz	W000341040
MECAZUR 1.3E 230 V - 1 Ph - 50 Hz	W000374196
<b>Complement with one of the arms</b>	
ECOFLEX 3 m arm [1 or 2]	W000341029
ECOFLEX 4 m arm [1 or 2]	W000341031
POLYARTICULATED 3 m arm [1 or 2]	W000341032
POLYARTICULATED 4 m arm [1 or 2]	W000341033
<b>Options</b>	
Activated carbon filter	W000341043
Optional automatic operation for use with a welding source	W000341044
Additional RI sensor for use with two arms and two welding sources	W000380662
Outdoor discharge kit, Ø 160 mm for 1 arm	W000381200
Outdoor discharge kit, Ø 250 mm for 2 arms	W000381201
5 m hose, Ø 160 mm	W000380641
10 m hose, Ø 160 mm	W000380642
15 m hose, Ø 160 mm	W000380643
Set of 6 flat clamps, Ø 160 mm	EM61000370
6 m hose, Ø 250 mm	W000381202
10 m hose, Ø 250 mm	W000381194
Set of 6 flat clamps, Ø 250 mm	EM61000371
<b>Spare parts</b>	
Metal pre-filter	W000379667
Ionising cell	W000379668
Collecting cell	W000379669

#### Installation



## Electrostatic mobile filtration units

### MOBIFLEX 300 E

Conformity 

MOBIFLEX 300 E is recommended for extracting greasy or oily welding fumes from carbon steels.

- Maximum capture flow rate: 1,200 m<sup>3</sup>/h.
- Filtration in three stages:
  - Metal pre-filter - Class EU2
  - Ionising cell, 10,000 V
  - 5,000 V collecting cell
  - Filter surface area: 14.2 m<sup>2</sup>.
- Cartridge saturation indicator light.
- Motor 0.75 kW.
- Vertical rear air outlet.
- Noise: 69 dB(A)
- Complement:
  - 3 or 4 m long LFA arm.

**NB:** This type of device only filters non-explosive solid particles. It may not be used in confined atmospheres. If it is to be used permanently, prefer a fixed filter solution with a fixed collector or arm and discharge outside the building.



#### Ordering

Description	Part number
MOBIFLEX 300 E - 110 V - 1 Ph - 50 Hz	EM7038400700
MOBIFLEX 300 E - 230 V - 1 Ph - 50 Hz	EM7032400700
MOBIFLEX 300 E - 230 V - 3 Ph - 50 Hz	EM7033400700
MOBIFLEX 300 E - 400 V - 3 Ph - 50 Hz	EM7035400700

#### Arm complement

LFA 3.0 arm - 3 m	EM7925160180
LFA 4.0 arm - 4 m	EM7925210180
LFA 3.1 arm - 3 m	EM7925170180
LFA 4.1 arm - 4 m	EM7925220180
Hose, Ø 200 mm L 5 m + magnetic stand collector	EM7900068030
Extension hose, Ø 200 mm L 5 m	EM7900068040

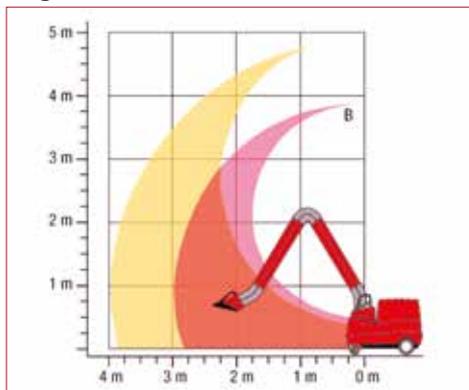
#### Options

LED lamp kit	EM7900010110
LED lamp kit + automatic on/off	EM7900010190
4 m connecting cable	EM9850031040
Activated carbon filter - Pack of 5	EM9850080020

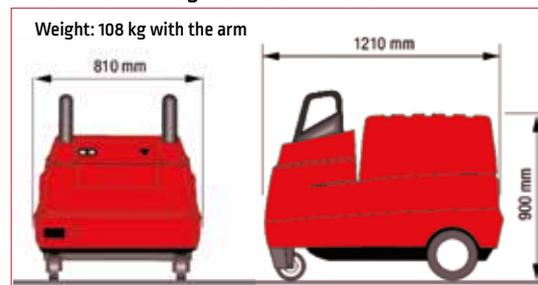
#### Spare parts

Metal pre-filter	EM0000102273
Ionising cell	EM0000102272
Collecting cell	EM9821430000
Wires for ionising cell	W000379680

#### Range of MOBIFLEX 300-E



#### Dimensions and weight of MOBIFLEX 300-E



## CHOICE OF FILTRATION TECHNOLOGY DEPENDING ON POLLUTANT TYPE

	CARBON STEEL		STAINLESS STEEL	ALUMINIUM		FLUX-CORED WIRE, ARC	FLAME CUTTING	PLASMA CUTTING	
	Welding or grinding		Welding or grinding	Welding	Grinding	All materials		Except titanium	
	Dry fumes	Oily fumes						Dry air	Water vortex
CYCLONE FILTER	0	0	0	0	0	0	5	1	3
MECHANICAL FILTER	5	0	5	5	*	3	5	1	0
ELECTROSTATIC FILTER	5	5	0	0	*	2	1	0	0
FILTER WITH CLEANING FUNCTION	5	3	5	5	*	5	5	5	0
WET FILTER	1	3	3	1	*	1	3	0	5

0: do not use - 5: best choice

\* explosive dust: ATEX filter suitable for this type of dust

Mechanical	The choice is made based on the volume of dust and the service time
Cleaning	

### CYCLONIC FILTRATION

- Filtration for heavy particles, 5 microns.
- Efficient and cost-effective filtration with no possibility of recycling.
- Pre-filtration for large volumes of dust: grinding, sanding, oxy cutting.

**Efficiency (cyclone efficiency) is directly related to the following:**

- the type of particle (*size and density*),
- diameter and height of the cyclone,
- compliance with the air entry speed in the cyclone,
- particle concentration (*mg/m<sup>3</sup>*).

**NB:** Head loss is constant in a cyclone and is relatively large in a high-efficiency cyclone: 1,800 Pa. When using the cyclone with a vacuum, dust and particles will not go through the fan.

**Handled flow rate:**  
500 to 20,000 m<sup>3</sup>/h.



### CASSETTE TYPE MECHANICAL FILTRATION

- High-efficiency filtration.
- Disposable and recyclable cartridge.
- Efficient and cost-effective filtration.
- Electrode and MIG/MAG welding, brazing.

**Efficiency is directly related to the following:**

- the surface of the filtering element,
- the type of the filtering medium (*filtration class*),
- the characteristics of the fan used with the filter.

**NB:** Head loss increases as the medium is filled. A fan with a vertical characteristic will provide an extraction rate close to the initial rate throughout the life of the filter.

**Handled flow rate:**  
1,000 to 10,000 m<sup>3</sup>/h.



## ELECTROSTATIC FILTRATION

- Spark arrestor metal pre-filter.
  - Different ionising and collecting cells.
  - Washable filter cells.
  - Constant extraction rate.
  - All arc and MAG processes except aluminium and stainless steel.
- Efficiency is directly related to the following:**
- filtering surface of the collecting cell,
  - number of wires of the ionising cell,
  - voltages of the ionising and collecting cells,
  - speed of air flow through the device.

**Applications:** Carbon steel welding fumes, greasy or oily fumes.

**NB:** Head loss remains constant throughout the operating life of the filter.

The filter must operate with a vacuum to provide lasting overall efficiency (importance of device sealing).

Filtration regenerated by washing the filter cells: sludge treatment required.

**Handled flow rate:**  
1,200 to 15,000 m<sup>3</sup>/h.



## MECHANICAL FILTRATION WITH CLEANING FUNCTION

- High-efficiency filter cartridge.
  - Cleaned with compressed air.
  - Heavy-duty use.
  - Flux-cored wire welding, MIG aluminium, sanding, plasma cutting.
- Efficiency is directly related to the following:**
- cleaning power,
  - filter surface area combined with the type of dust,
  - type of filter medium and filtration class,
  - cartridge fold structure, which must be open.

**Applications:** Abundant dry dust or fumes.

**NB:** When cleaning is effective, head loss remains constant throughout the life of the filter. A high-pressure fan (vertical characteristic) will provide an extraction rate close to the initial rate throughout the life of the filter.

**Handled flow rate:**  
1,200 to 50,000 m<sup>3</sup>/h.



## WET FILTRATION

Supplied on request

- Droplet separator.
  - Finishing filter.
  - Constant extraction rate.
  - Filtration for heavy particles above 5 microns.
  - Water vortex plasma process or above water.
  - Burning particles and dust from grinding or sanding.
- Efficiency is directly related to the following:**
- speed of air flow through the device,
  - head loss remains constant throughout the operating life of the filter. Maximum 1,800 Pa.

**Applications:** Wet and heavy dust or fumes. Explosive dust from aluminium, titanium, magnesium and others.

**NB:** The filter must operate with a vacuum to provide lasting overall efficiency (importance of device sealing).

Filtration regeneration by washing the separating cells: sludge treatment required.

**Handled flow rate:**  
1,000 to 8,000 m<sup>3</sup>/h.



## Mechanical filter

### FU cyclone mechanical filter

FU cyclone filters are designed specially for filtering heavy particles and dust with a size above 5 microns.

Centrifugal filtration is used for grinding, sanding, oxy cutting and all non-explosive heavy particles.

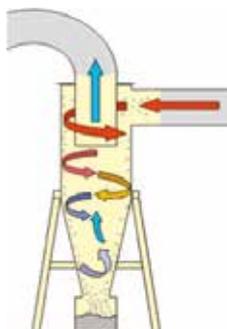
Cyclones are to be used at their nominal flow rates to ensure optimum filtration.

The head loss to take into account ranges from 1,500 to 2,000 Pa.

Cyclone filtration for heavy particles above 5µ provides efficiency close to 95 - 98%.

Such filtration is efficient and cost effective, but air will not be recycled in the working atmosphere.

It also acts as pre-filtration for large volumes of dust before fine filtration.



#### Ordering

Description	Part number
Cyclone FU200 (500 m <sup>3</sup> /h)	W000275966
Cyclone FU315 (1,000 m <sup>3</sup> /h)	W000275967
Cyclone FU400 (2,000 m <sup>3</sup> /h)	W000275968
Cyclone FU500 (3,000 m <sup>3</sup> /h)	
Lower body part	W000275970
Upper body part	W000275969
Cyclone FU600 (4,500 m <sup>3</sup> /h)	
Lower body part	W000275972
Upper body part	W000275971
Cyclone FU700 (6,300 m <sup>3</sup> /h)	
Lower body part	W000275974
Upper body part	W000275973
Cyclone FU800 (8,200 m <sup>3</sup> /h)	
Lower body part	W000275976
Upper body part	W000275975
Cyclone FU900 (10,000 m <sup>3</sup> /h)	
Lower body part	On request
Upper body part	On request
Cyclone FU1100 (15,000 m <sup>3</sup> /h)	
Lower body part	On request
Upper body part	On request
Cyclone FU1300 (20,000 m <sup>3</sup> /h)	
Lower body part	On request
Upper body part	On request

### MECAZUR 35 cassette type mechanical filter

Conformity 

The MECAZUR 35 wall-mounted mechanical filter is designed for filtering non-abundant and non-explosive dry particles and fumes.

It is designed to be a versatile filter, both for direct assembly with one or two extraction arms or for use in a centralised system.

- Available in wall-mounted or floor versions.
- Maximum capture flow rate: 2,400 m<sup>3</sup>/h.
- Cassette type mechanical filter.
- Metal pre-filter - Class EU2.
- Filter cassette - Class F8 - Filter surface area 40 m<sup>2</sup>.
- Cartridge saturation indicator.
- Complement:
  - POLYARTICULATED or ECOFLEX arm, 3 or 4 m long.
  - 2.1 or 4.7 fan.

The extraction arms are fixed directly under the filter for the wall-mounted version.



#### Ordering

Description	Part number
Choice of filter	
MECAZUR 35M wall-mounted version	W000342292
MECAZUR 35M floor version	W000342837
Fan to use with one arm	
2.1 fan	W000342132
Fan adapter flange	W000342871
Fan to use with two arms	
4.7 fan	W000342139
TRC fan Ø 315 mm	W000342141
Fan adapter flange	W000342285
Extraction arm from the 160 range	for selection pages 19 and 20
Circuit breaker or disconnecting box	see choice on page 69
Spare parts	
Metal pre-filter	W000379698
Fine filter 610 x 610 x 292 mm - Class F8	W000379637

## WALLFLEX SC - W3 mechanical filter



The WALLFLEX mechanical wall-mounted self-cleaning filter is designed for applications that produce large quantities of non-explosive dry fumes.

- Equipment available in "compact" and "separate" version.
- Connection of 1 or 2 extraction arms of the 160 range.
- Maximum filter extraction rate for two arms: 2,400 m<sup>3</sup>/h.
- Polyester filter cartridge with PTFE membrane (filter surface area 20 m<sup>2</sup>).
- WALLFLEX SC complies with ISO EN 15012-1:2013 welding class W3.
- Offline cleaning (with the fan off) for better cartridge regeneration.
- Integrated compressed air pressure regulator.
- Remote control of filter.
- Easy maintenance of dust drum (capacity 18 l).
- Noise with silencer: 70 dB(A).
- Weight: 125 kg.

### WALLFLEX includes the following:

- Filter unit.
- Fan and outlet adapter.
- Check valve.
- Filter control electrical box.
- Dust drum + 5 plastic bags.
- Compressed air pressure regulator.

**Specifications**

Fan 3.0 or 4.7

- Filter cartridge with highly efficient PTFE membrane on polyester support
- Self-cleaning system with pulse amplifier

Check valves between the extraction arm(s) and filter housing

Innovative double adhesive seal

Shut-off valve between dust container and filter housing for dust-free removal of the dust container

Unique dust-free bag in/bag out maintenance concept for filter replacement

Ease of use thanks to the filter control unit

**Compact version**

**Separate version**

Assembly of up to 2 extraction arms directly on the unit or the wall **to be ordered separately**

WALLFLEX 1200 SC - W3 with POLYARTICULATED arm 160

### Ordering

Description	Part number
WALLFLEX Compact for 1 extraction arm - 1.1 kW - 400 V	
WALLFLEX 1200 CSC - W3	EM61000376
WALLFLEX Compact for 2 extraction arms - 2.2 kW - 400 V	
WALLFLEX 2400 CSC - W3	EM61000377
WALLFLEX Separate for 1 extraction arm - 1.1 kW - 400 V	
WALLFLEX 1200 SC - W3	EM61000378
WALLFLEX Separate for 2 extraction arms - 2.2 kW - 400 V	
WALLFLEX 2400 SC - W3	EM61000379

### Options

Description	Part number
Silencer, Ø 250 (WALLFLEX 1200)	W000342137
Silencer, Ø 315 (WALLFLEX 2400)	W000342142

### Consumable

Description	Part number
Filter cartridge, 20 m <sup>2</sup>	EM000117546

### Choice of extraction arm

Description	Part number
2 m POLYARTICULATED arm	W000342115
3 m POLYARTICULATED arm	W000342125
4 m POLYARTICULATED arm	W000342126
ECOFLEX arm, 2 m	W000342118
ECOFLEX arm, 3 m	W000342119
ECOFLEX arm, 4 m	W000342120

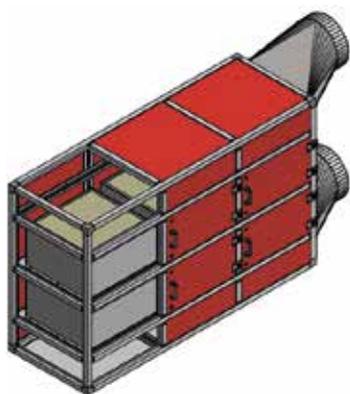
## MECAFILTRE modular mechanical filter

MECAFILTRE modular filters are designed for filtering non-explosive dry particles and fumes. Their modular principle means that they can be used in all types of installation.

- Range available from 4,000 to 10,000 m<sup>3</sup>/h *[higher capacity on demand]*.
- Class EU2 metal pre-filter that protects the fine filter.
- Fine cassette filter, 40 m<sup>2</sup> each, class F8, efficiency 99%.
- Filter saturation indicator with sound alarm and light.
- Head loss: 800 Pa.
- Fine filter to be replaced 1 to 3 times/year depending on use.
- Roof option if the filter is placed outdoors.
- Choice of options to select:
  - Additional HEPA filtration unit, H13 high-performance.
  - Activated carbon cell unit.
- Fan and control to be ordered separately.



Conformity **CE**



### Technical specifications

Model	Maximum flow rate (m <sup>3</sup> /h)	Filter surface area (m <sup>2</sup> )	Number of filters and pre-filters	L (mm)	L (mm)	H (mm)	Ø Inlet - Outlet
M2	4,000	80	2	1,930	740	1,630	315
M3	6,000	120	3	2,640	740	1,630	400
M4	8,000	160	4	3,350	740	1,630	500
M5	10,000	200	5	4,060	740	1,630	560

### Ordering

Description	Part number
MECAFILTRE modular M2	W000272413
MECAFILTRE modular M3	W000272414
MECAFILTRE modular M4	W000272415
MECAFILTRE modular M5	W000272416
<b>Complements</b>	
Set of 2 TRC Ø 315 mm for M2 filter	W000380599
Set of 2 TRC Ø 400 mm for M3 filter	W000380600
Set of 2 TRC Ø 500 mm for M4 filter	W000380601
Set of 2 TRC Ø 560 mm for M5 filter	W000380602
<b>Options</b>	
HEPA H13 M2 filtration	W000380610
HEPA H13 M3 filtration	W000380611
HEPA H13 M4 filtration	W000380612
HEPA H13 M5 filtration	W000380613
M2 activated carbon filtration	W000380616
M3 activated carbon filtration	W000380617
M4 activated carbon filtration	W000380619
M5 activated carbon filtration	W000380622
MECAFILTRE M2 roof	EM61000365
MECAFILTRE M3 roof	EM61000366
MECAFILTRE M4 roof	EM61000367
MECAFILTRE M5 roof	EM61000368
<b>Consumables</b>	
Metal pre-filter 610 x 610 x 24 mm	W000379636
Fine filter 610 x 610 x 292 mm - Class F8	W000379637
HEPA H13 filter, 42 m <sup>2</sup>	W000373568
Cassette with activated carbon	W000380597
25 kg bag of activated carbon	W000380598

### Fan to use with Mecafilter

Description	Part number
<b>Fan for M2 filter</b>	
Fan, 40,00m <sup>3</sup> /h at 1,600 Pa - D400 A - 4 kW - 230/400 V - 50 Hz	W000342614
TRC fan Ø 400 mm	W000342719
<b>Fan for M3 filter</b>	
Fan, 60,00m <sup>3</sup> /h at 1,600 Pa - D400B - 5.5 kW - 230/400 V - 50 Hz	W000342165
TRC fan Ø 400 mm	W000342719
<b>Fan for M4 filter</b>	
Fan, 8,000 m <sup>3</sup> /h at 1,600 Pa - D450 A - 7.5 kW - 400/660 V - 50 Hz	W000342803
TRC fan Ø 500 mm	W000342724
<b>Fan for M5 filter</b>	
Fan, 10,000 m <sup>3</sup> /h at 1,600 Pa - D450 B - 11 kW - 400/660 V - 50 Hz	W000342804
TRC fan Ø 500 mm	W000342724
Circuit breaker or disconnecting box	See page 69
Expert Box	See page 40

# STATIFLEX 200 M mechanical filter

The STATIFLEX 200 M filter is designed for filtering non-abundant non-explosive dry particles and fumes. It offers a simple and cost-effective solution.

- Maximum capture rate with two extraction arms: 2,400 m<sup>3</sup>/h .
- Cassette type mechanical filter.
- Metal pre-filter - Class EU2.
- Fine filter of the cartridge type Class M - Filter surface area: 50 m<sup>2</sup>.
- Filter cartridge saturation indicator.
- Noise: 69 dB(A).
- To be used with one 28 fan per arm.
- Complement:
  - 1 or 2 LTA or LFA arms.
  - See pages 27 to 31.



Conformity **CE**

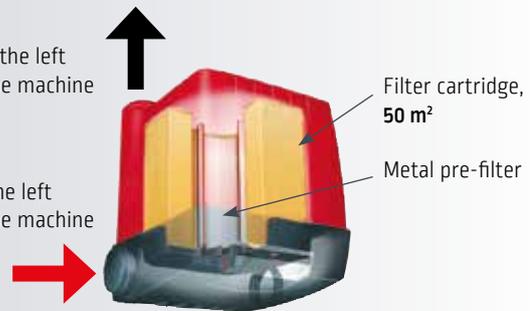
### Ordering

Description	Part number
STATIFLEX 200 M	EM7435000700
<b>Complement for fan per arm</b>	
28 fan - 230 V - 1 Ph - 0.75 kW	EM7905220710
28 fan - 400 V - 3 Ph - 0.75 kW	EM7905220740
Circuit breaker or disconnecting box	see choice on page 69
Check valve	EM7900030810
<b>Consumables</b>	
Metal pre-filter	EM9820310110
Filter cartridge, 50 m <sup>2</sup>	EM9850060050

### Specifications

Air outlet to the left or right of the machine

Air inlet to the left or right of the machine



## STATIFLEX 400 MS mechanical filter

The STATIFLEX 400 MS mechanical filter is a filter with a filter cartridge with the cleaning function.

It is designed for filtering abundant non-explosive dry particles and fumes.

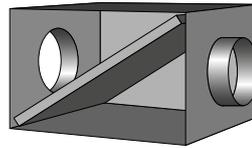
This versatile filter is suitable for one capture arm.

- Maximum capture rate at the arm: 1,400 m<sup>3</sup>/h.
- External metal pre-filter box.
- Cellulose fibre paper filter - Class M - Filter surface area: 30 m<sup>2</sup>.
- Effective cartridge cleaning by the Robotclean system.
- Filter cartridge saturation indicator.
- To be used with a 28 fan for an LTA or LFA arm or a 42 fan if an extension boom is used.

Statiflex 400 MS is controlled by the ESSENTIAL MASTER BOX.

### The supply includes:

- STATIFLEX 400 MS.
- Wall bracket.
- NCW 11 power cable.
- Connecting sleeve.
- Metal pre-filter box.



### Specifications

Air inlet to the left of the machine



Air outlet to the left or right of the machine



### Pre-filter box assembly principle



### Ordering

Description	Part number
STATIFLEX 400 MS	EM7445000700
Pre-filter box	included
<b>Fan to use with one arm</b>	
28 fan - 230 V - 3 Ph - 0.75 kW	EM7905220750
28 fan - 400 V - 3 Ph - 0.75 kW	EM7905220740
<b>Fan to use with one arm + EC2 or EC4 extension boom</b>	
Azur 42 fan - 230/400 V - 3 Ph - 1.5 kW	W000378253
Hose, Ø 200 mm, 1.5 m long	W000257717
<b>Fan control and filter</b>	
ESSENTIAL MASTER BOX	W000376084
NCW 11 m connecting cable	EM9850031050
Thermal safety device	see choice on page 38
<b>Consumables</b>	
Metal pre-filter	EM0000102274
Filter cartridge, 30 m <sup>2</sup>	EM9850060110



Selection of LTA and LFA arm, extension booms and control options in the corresponding sections

## Electrostatic filter

### STATIFLEX 300 1E - 300 2E - 300 3E

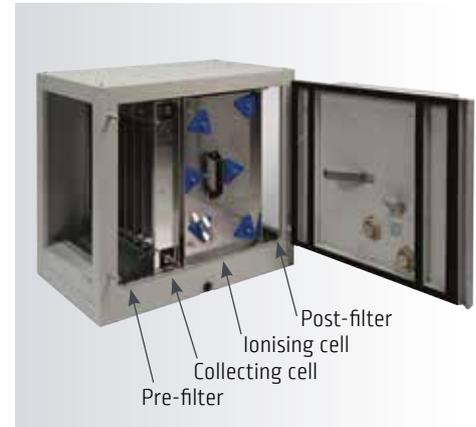
Conformity 

STATIFLEX 300 fixed electrostatic filtration units are designed specially for cleaning greasy or oily welding fumes from carbon steels.

- Filtration in four stages:
  - Aluminium pre-filtration [complement 1]
  - Ionising cell [10,000 V]
  - Collecting cell [5,000]
  - G3 synthetic post-filtration [complement 2].
- Filter elements saturation alarm.
- The filter elements are washable.

**NB:** The inlet/outlet hoppers of STATIFLEX 300 are to be ordered separately.

STATIFLEX 300 units may be combined to increase the treated air flow rate capacity.



#### Specifications

STATIFLEX	Filtration capacity (m <sup>3</sup> /h)	Head loss (Pa)	Pre/Post-filter quantity	Ionising cell quantity	Collecting cell quantity	Filter surface area (m <sup>2</sup> )	Weight (kg)	Dimensions (LxDxH) (mm)
300 - 1E	2,500	<150	1	1	1	14.2	60	560 x 660 x 630
300 - 2E	5,000	<175	2	2	2	28.4	100	1,010 x 660 x 630
300 - 3E	7,500	<250	3	3	3	42.6	140	1,460 x 660 x 630

#### Ordering

Description	Part number	
STATIFLEX 300 - Inlet to the right	230 V - 1 Ph	400 V - 3 Ph
300 - 1ER	EM7940140700	EM7940142700
300 - 2ER	EM7941140700	EM7941142700
300 - 3ER	EM7942140700	EM7942142700
STATIFLEX 300 - Inlet to the left	230 V - 1 Ph	400 V - 3 Ph
300 - 1EL	EM7940040700	EM7940042700
300 - 2EL	EM7941040700	EM7941042700
300 - 3EL	EM7942040700	EM7942042700
Complement 1: Pre-filter		
SAF aluminium pre-filter	EM0000102273	
Complement 2: Post-filter		
SSF synthetic post-filter - Filter Class G3	EM0103003010	

Options	
Activated carbon post-filter SCF anti-odour - Type RB2	EM0104060010
Remote control	EM0010010310
Parts for connecting to a duct system	
STATIFLEX 300 - 1E: TRC Ø 315 mm	EM0717030040
STATIFLEX 300 - 2E: TRC Ø 400 mm	EM0717030050
STATIFLEX 300 - 3E: TRC Ø 500 mm	On request
Consumables	
Ionising cell	EM0000102272
Collecting cell	EM9821430000
Cell cleaning fluid	EM9850080090
Cleaning box	EM9602010030

PLC-managed cleaning filter with control screen HMI.

## DIGIFILTER is innovative, efficient and reliable.

Conformity 

Applications dedicated chiefly to welding, cutting, grinding and sanding: Digifilter is suitable for all non-explosive dry dust and fumes.

### Specifications:

- High-efficiency self-cleaning filter.
- PLC management with remote control with a 5.7" touch screen HMI.
- High-efficiency backward centrifugal fan.
- Class EU2 metal pre-filter.
- Polyester medium filter cartridges with high-efficiency PTFE membrane, class H13.
- 40-litre drum(s) for dust recovery.
- Duct silencing to limit noise to 75 dB(A) from 1 metre.
- Rugged filter structure made in epoxy painted galvanised metal.



### Description of HMI functions



HMI home screen

- Operating modes: manual/automatic/clock.
- Dynamic mode display of unit operating status.
- Threshold-based or continuous cleaning of filter cartridges.
- Real-time display of main parameters:
  - pressure difference of filter cartridges,
  - compressed air pressure.
- Weekly programming clock.
- Remote control with 15 m cable.
- Stack light showing On, Off, Safety alarm.
- Settings saved on USB stick.
- Filter cartridge pressure difference trend curve.
- Filter maintenance management:
  - hours of use,
  - cartridge replacement,
  - fan maintenance,
  - dust drum maintenance.

### Dimensional specifications

DIGIFILTER	Ø of inlet/outlet in mm	Width in mm	Depth in mm	Height in mm	Weight in kg
2 CD - Compact	250	1,565	1,480	2,275	900
4 CD - Compact	355	1,800	1,480	2,275	1,050
6 CD - Compact	400	2,510	1,480	2,275	1,300
8 CD - Compact	450	3,027	1,480	2,275	1,600
10 CD - Compact	500	3,480	1,480	2,275	1,700
12 CD - Compact	560	3,895	1,480	2,275	1,800
16 CD - Separate version	630	3,030 + 1,600*	1,480 + 1,800*	3,240 + 1,760*	3,000
20 CD - Separate version	710	3,980 + 1,740*	1,480 + 1,900*	3,240 + 1,760*	3,300
24 CD - Separate version	800	4,940 + 1,900*	1,480 + 2,000*	3,240 + 1,920*	3,600

\* Fan box dimensions

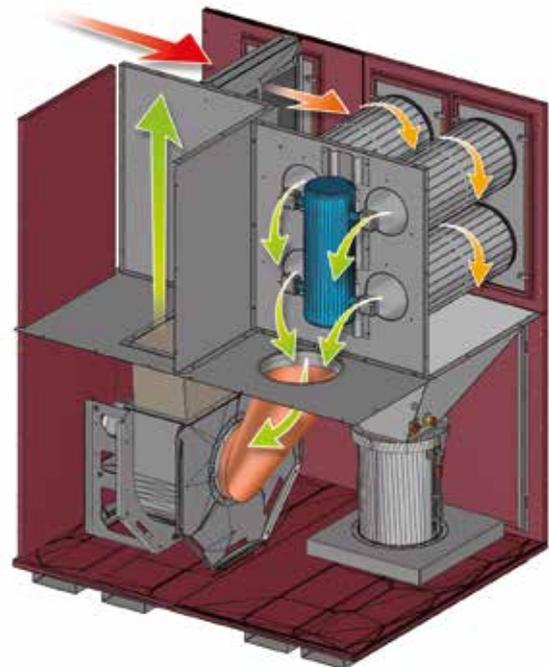
## Ordering

DIGIFILTER Compact type	Part number Inlet on the right	Part number Inlet on the left
<b>DIGIFILTER - 2 CD</b> Operating point: 2,400 m <sup>3</sup> /h at 2,800 Pa Motor, 4 kW - 400 V - 3 Phases 2 x 15 m <sup>2</sup> filter cartridges	EM61000005	-
<b>DIGIFILTER - 4 CD</b> Operating point: 4,000 m <sup>3</sup> /h at 2,400 Pa Motor, 5,5 kW - 400 V - 3 Phases 4 x 15 m <sup>2</sup> filter cartridges	EM61000010	EM61000018
<b>DIGIFILTER - 6 CD</b> Operating point: 6,000 m <sup>3</sup> /h at 2,100 Pa Motor, 7,5 kW - 400 V - 3 Phases 6 x 15 m <sup>2</sup> filter cartridges	EM61000011	EM61000019
<b>DIGIFILTER - 8 CD</b> Operating point: 8,000 m <sup>3</sup> /h at 2,100 Pa Motor, 11 kW - 400 V - 3 Phases 8 x 15 m <sup>2</sup> filter cartridges	EM61000012	EM61000020
<b>DIGIFILTER - 10 CD</b> Operating point: 10,000 m <sup>3</sup> /h at 2,600 Pa Motor, 15 kW - 400 V - 3 Phases 10 x 15 m <sup>2</sup> filter cartridges	EM61000013	EM61000021
<b>DIGIFILTER - 12 CD</b> Operating point: 12,000 m <sup>3</sup> /h at 2,400 Pa Motor, 18,5 kW - 400 V - 3 Phases 12 x 15 m <sup>2</sup> filter cartridges	EM61000014	EM61000022

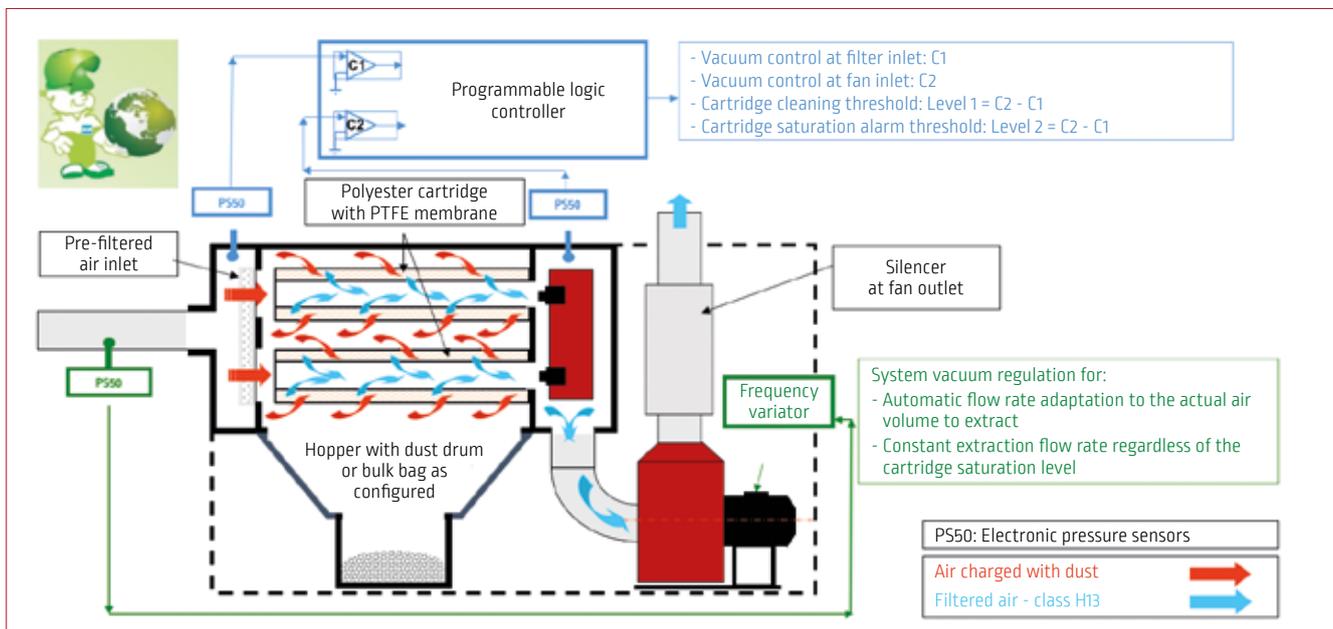
DIGIFILTER Separate version	Part number Inlet on the right	Part number Inlet on the left
<b>DIGIFILTER - 16 CD</b> Operating point: 16,000 m <sup>3</sup> /h at 2,400 Pa Motor, 22 kW - 400 V - 3 Phases 16 x 15 m <sup>2</sup> filter cartridges	EM61000015	EM61000023
<b>DIGIFILTER - 20 CD</b> Operating point: 20,000 m <sup>3</sup> /h at 2,800 Pa Motor, 30 kW - 400 V - 3 Phases 20 x 15 m <sup>2</sup> filter cartridges	EM61000016	EM61000024
<b>DIGIFILTER - 24 CD</b> Operating point: 24,000 m <sup>3</sup> /h at 2,400 Pa Motor, 37 kW - 400 V - 3 Phases 24 x 15 m <sup>2</sup> filter cartridges	EM61000017	EM61000025

NB: Upon request, we can also offer:

- DIGIFILTER with capacity 32,000, 40,000 and 50,000 m<sup>3</sup>/h.
- ATEX DIGIFILTER for explosive particles (zone 21 or 22 dust).



## Operating principle



## Complements for DIGIFILTER:

Multiple selections to be made necessarily at the time of the order

### 1. ICP function

Recommended for smart, economical and environmentally-friendly use.

- Variable flow rate operation *(system with several collectors)*.
- Air flow rate regulation *(cutting table application)*.
- Constant vacuum provided by an electronic sensor.
- PLC management with remote control with HMI screen.
- Improve air flow rate and pressure performance through the use of a frequency variator.

#### Description of HMI functions:

- Operating modes: manual/automatic/clock.
- Dynamic mode display of filter operating status.
- Threshold-based or continuous cleaning.
- Real-time display of main parameters:
  - system vacuum at filter inlet,
  - filter cartridge pressure difference,
  - fan power consumption,
  - working frequency,
  - compressed air pressure.
- Weekly programming clock.
- Remote control with 15 m cable.
- Stack light showing On, Off, Safety alarm.
- Maximum and minimum process efficiency safety alarm.
- Faults saved on USB stick.
- Filter cartridge pressure difference trend curve.
- Filter maintenance management:
  - hours of use,
  - cartridge replacement,
  - fan maintenance,
  - dust drum maintenance.



HMI screen

#### Ordering

Description	Part number
ICP 4 CD - Frequency variator 5.5 kW Operating point: 4,000 m <sup>3</sup> /h at 2,900 Pa	EM61000026
ICP 6 CD - Frequency variator 7.5 kW Operating point: 6,000 m <sup>3</sup> /h at 2,700 Pa	EM61000027
ICP 8 CD - Frequency variator 11 kW Operating point: 8,000 m <sup>3</sup> /h at 2,800 Pa	EM61000028
ICP 10 CD - Frequency variator 15 kW Operating point: 10,000 m <sup>3</sup> /h at 2,800 Pa	EM61000029
ICP 12 CD - Frequency variator 18.5 kW Operating point: 12,000 m <sup>3</sup> /h at 3,000 Pa	EM61000030
ICP 16 CD - Frequency variator 22 kW Operating point: 16,000 m <sup>3</sup> /h at 3,000 Pa	EM61000031
ICP 20 CD - Frequency variator 30 kW Operating point: 20,000 m <sup>3</sup> /h at 3,000 Pa	EM61000032
ICP 24 CD - Frequency variator 37 kW Operating point: 24,000 m <sup>3</sup> /h at 2,800 Pa	EM61000033

### 2. DIGIFILTER - ICP soundproofing kit

This complementary equipment made of panels with reinforced structures and soundproofing foam reduces the noise from the filter by about 5 dB(A).

#### Ordering

Description	Part number
4 CD soundproofing kit	EM61000034
6 CD soundproofing kit	EM61000035
8 CD soundproofing kit	EM61000036
10 CD soundproofing kit	EM61000037
12 CD soundproofing kit	EM61000038
16 CD soundproofing kit	EM61000039
20 CD soundproofing kit	EM61000040
24 CD soundproofing kit	EM61000041

### 3. Rotary seal + bulk bag function

This equipment is recommended with applications that generate high emissions of fumes or dust, such as plasma cutting and some grinding and sanding operations.

DIGIFILTER units with this function are only available in the separate version.

The complement is made up of:

- 1 rotary seal and 1 bulk bag with the DIGIFILTER 4 CD to 12 CD.
- 2 rotary seals and 2 bulk bags with the DIGIFILTER 16 CD to 24 CD.

Description	Part number
Rotary seal and bulk bag, 4 CD	EM61000042
Rotary seal and bulk bag, 6 CD	EM61000043
Rotary seal and bulk bag, 8 CD	EM61000044
Rotary seal and bulk bag, 10 CD	EM61000045
Rotary seal and bulk bag, 12 CD	EM61000046
Rotary seal and bulk bag, 16 CD	EM61000047
Rotary seal and bulk bag, 20 CD	EM61000048
Rotary seal and bulk bag, 24 CD	EM61000049
Set of 10 bulk bags, 700 x 700 x 700 mm	EM61000369



### 4. Roof and vertical discharge kit complement

This equipment is recommended if the DIGIFILTER is installed outdoors with no roof.

The DIGIFILTER is supplied with the roof installed, with the exception of the 2 CD model *[assembly drawing supplied]*.

We also offer a vertical discharge kit suitable for the outlet diameter of the filter.

Description	Part number
Roof 2 CD Vertical flow HN 250	EM61000050 EM61000065
Roof 4 CD Vertical flow HN 355	EM61000051 EM61000066
Roof 6 CD Vertical flow HN 400	EM61000052 EM61000067
Roof 8 CD Vertical flow HN 450	EM61000053 EM61000068
Roof 10 CD Vertical flow HN 500	EM61000054 EM61000069

Description	Part number
Roof 12 CD Vertical flow HN 560	EM61000055 EM61000070
Roof 16 CD Vertical flow HN 630	EM61000056 EM61000071
Roof 20 CD Vertical flow HN 710	EM61000057 EM61000072
Roof 24 CD Vertical flow HN 800	EM61000058 EM61000073

### Consumables for the Digifilter range

#### Spare filters:

Polyester filter cartridge with PTFE membrane, W3 filtration class according to EN 15012/1.

Filter cartridge	Quantity	Part number
DIGIFILTER - 2 CD	2	EM61000155
DIGIFILTER - 4 CD	4	
DIGIFILTER - 6 CD	6	
DIGIFILTER - 8 CD	8	
DIGIFILTER - 10 CD	10	
DIGIFILTER - 12 CD	12	
DIGIFILTER - 16 CD	16	
DIGIFILTER - 20 CD	20	
DIGIFILTER - 24 CD	24	

Filter cartridge for special applications:

Filter cartridge	Applications	Part number
Antistatic	ATEX	EM61000157
PTFE impregnation	Oily fumes	EM61000156

Metal pre-filter, Class EU2  
Dimensions [LxWxH]:  
800 x 295 x 24 mm

Metal pre-filter	Quantity	Part number
DIGIFILTER - 2 CD	1	W000379658
DIGIFILTER - 4 CD	2	
DIGIFILTER 6 CD - 8 CD	3	
DIGIFILTER 10 CD - 12 CD	4	
DIGIFILTER - 16 CD	6	
DIGIFILTER 20 CD - 24 CD	8	

## HEAT EXCHANGER

Lincoln Electric has developed its own heat exchanger to complement the Digifilter self-cleaning filter range.

**It compensates for the air extracted from the workshop without leading to the risk of pollution by dust or gas.**

We use the plate heat exchanger system, which makes our product:

- EFFICIENT, up to 80%.
- ECONOMICAL, since it is the result of in-house development.
- RELIABLE, because the technology offers perfect sealing between the two flows and does not require any special maintenance.



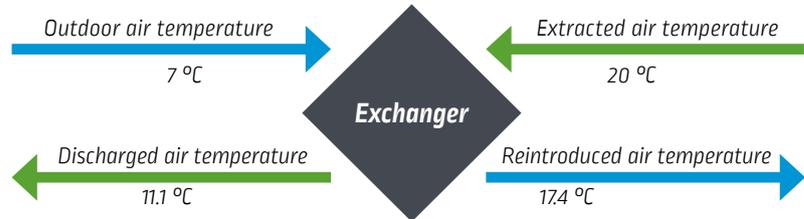
### Operating principle

The extracted air gives up its calories to the fresh outside air via the recovery plate heat exchanger.

The thermal energy is transferred by the exchange between the flow of fresh air and the extracted air through aluminium walls that are very close to each other (approximately 4 mm).

It uses the double-pass operating principle, which results in its excellent 80% efficiency.

Example of use of a plate heat exchanger with a capacity of 12,000 m<sup>3</sup>/h:



Efficiency calculation method: 
$$\frac{[\text{Reintroduced temp} - \text{Outdoor temp}]}{[\text{Extracted temp} - \text{Outdoor temp}]} = \text{EFFICIENCY } 80\%$$

### Specifications

- Capacity range 8,000 to 24,000 m<sup>3</sup>/h (other capacities on request).
- Plate heat exchanger in aluminium with turbulent surface.
- High-efficiency backward centrifugal fan.
- Electrical control unit with frequency variator.
- Measuring blade for controlling the reintroduced air flow rate.
- Class G4 filtration system for fresh air extraction.
- Fully soundproofed and insulated, for outdoor placement.
- Class F7 reintroduced air filter tube.

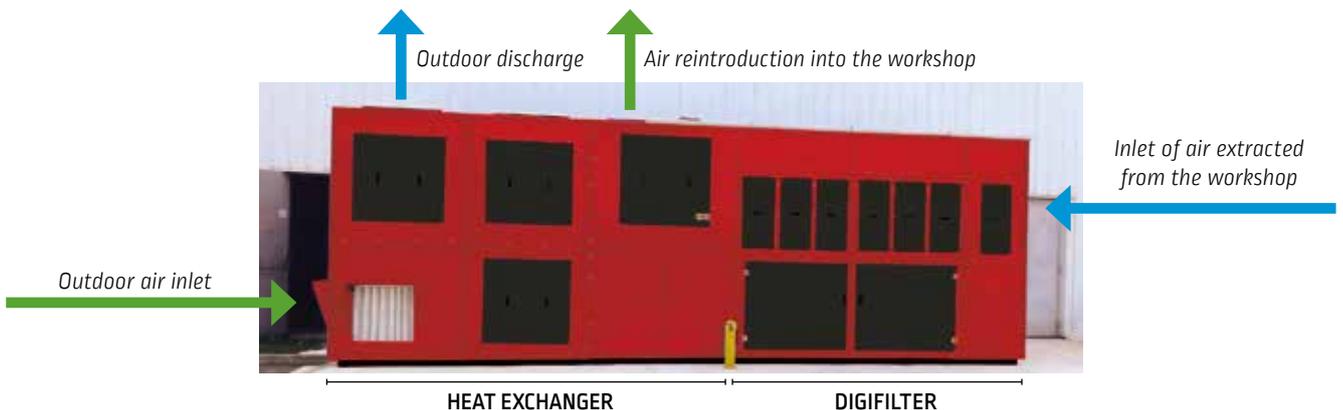
A study specific to the equipment will be carried out by our sales engineers specialised in fume control.

### Ordering

Description	Part number
Heat exchanger 8000	EM61000271
Heat exchanger 10000	EM61000272
Heat exchanger 12000	EM61000273
Heat exchanger 16000	EM61000274
Heat exchanger 20000	EM61000275
Heat exchanger 24000	EM61000276
Reintroduced air textile duct - Class F7	On request

Consumables	
Fresh air inlet filter, 592 x 592 x 98 mm - Class G4	EM61000174

Example of equipment: DIGIFILTER 12 CD ICP + Heat exchanger, 12,000 m<sup>3</sup>/h



## ESSENTIAL 2100 fan

The ESSENTIAL 2100 portable centrifugal fan is designed for capturing and transporting air with a low dust charge. It is to be connected to an outdoor discharge.

- Can blow or extract air.
- Complemented by a hose, Ø 160 mm, with a nozzle with a magnetic stand and a discharge hose Ø 160 mm.
- Optional: Fan wheel kit.
- Motor: 1.1 kW - 230 V - 1 Ph or 3 Ph and 400 V - 3Ph.
- Extraction rate: 2,160 m<sup>3</sup>/h (*free flow*).
- Noise: 65 dB(A) .
- Weight of fan alone: 21 kg.

### It is supplied as standard with:

- A stand and a transport handle.
- An electrical circuit breaker and a 5 m connecting cable.
- 4 anti-vibration mounts as standard under the feet of the fan
- Safety grilles at fan inlet and outlet.



Conformity **CE**

### Ordering

Description	Part number
ESSENTIAL 2100 fan - 230 V - 1 Ph - 50 Hz	W000374016
ESSENTIAL 2100 fan - 230 V - 3 Ph - 50 Hz	W000374015
ESSENTIAL 2100 fan - 400 V - 3 Ph - 50 Hz	W000374014
Complement	
Fan wheel kit	W000374097

## MOBIFLEX 100 NF fan

MOBIFLEX 100 NF is a portable extraction fan for non-explosive light dust and fumes. It must be used along with an extraction hose with a capture nozzle and a discharge hose.

- Supplied with circuit breaker and 5 m long power cable.
- Motor 0.75 kW - 230 V - 1 Ph or 3 Ph and 400V - 3 Ph.
- Extraction rate: 2,400 m<sup>3</sup>/h (free flow).
- Noise: 67 dB(A).
- Weight of fan alone: 20 kg.

- Fan inlet/outlet diameter 160 mm.

### It is supplied as standard with:

- A stand and a transport handle.
- An electrical circuit breaker and a 6 m connecting cable.
- Safety grilles at fan inlet and outlet.



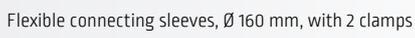
Conformity **CE**

### Ordering

Description	Part number
MOBIFLEX 100 NF 215- 230 V - 1 Ph - 50 Hz	EM7130200700
MOBIFLEX 100 NF 215- 230 V - 3 Ph - 50 Hz	EM7130300700
MOBIFLEX 100 NF 435- 400 V - 3 Ph - 50 Hz	EM7130500700
Complement	
5 m long extraction hose with nozzle and magnetic stand	EM7900068010

# Complementary equipment for ESSENTIAL 2100 and MOBIFLEX 100 fans

1 - FANS

Description		Part number
<p>Metal nozzle with magnet. 80 x 250 mm extraction section. Nozzle with deflectors and handle.</p>		<p>Capture nozzle with magnet - Ø 160 mm connection</p> <p><b>W000380596</b></p>
<p>Flame retardant hose (M2) High resistance to UV rays and ozone. Temperature range de -10 to 80°C.</p>		<p>PVC hoses with embedded metal spiral, for extraction or discharge</p>
		<p>5 m hose, Ø 160 mm</p> <p><b>W000380641</b></p>
		<p>10 m hose, Ø 160 mm</p> <p><b>W000380642</b></p>
		<p>15 m hose, Ø 160 mm</p> <p><b>W000380643</b></p>
		<p>Set of 6 flat clamps, Ø 160 mm</p> <p><b>EM61000370</b></p>
<p>Hose with glass fabric wall with PVC coating, fire retardant. High resistance to flying sparks. High resistance to UV rays and ozone. Temperature range de -20 to 90°C.</p>		<p>Hoses with glass fabric walls with PVC coating and external metal spiral that offers very high friction resistance, for extraction or discharge</p>
		<p>Clip hose, 5 m Ø 160 mm</p> <p><b>W000380636</b></p>
		<p>Clip hose, 10 m Ø 160 mm</p> <p><b>W000380637</b></p>
		<p>Clip hose, 15 m Ø 160 mm</p> <p><b>W000380638</b></p>
		<p>Set of 4 clamps with offset turns, Ø 160 mm</p> <p><b>W000380639</b></p>
<p>This sleeve is used to connect two hoses with Ø 160 mm in order to increase the length of the extraction or blowing hose.</p>		<p>Flexible connecting sleeves, Ø 160 mm, with 2 clamps</p> <p><b>W000380640</b></p>

# Fans for 1 to 5 extraction arms



These fans are modern, efficient, silent and economical. They are suitable for welding and cutting fumes, and also for light dust and exhaust gas.

- 1.8 and 2.1 fans are used with extraction arms of the 160 range.
- Azur 3.0, 4.7 and D350 fans are to be used in centralised networks, with up to 5 extraction arms.
- 1.5 mm thick steel scrolls, painted and very strong.
- Aluminium turbine to avoid sparks, fitted at the air inlet and outlet with guard grilles.
- Low noise.
- Protection rating: IP55 - Class F.



### Specifications

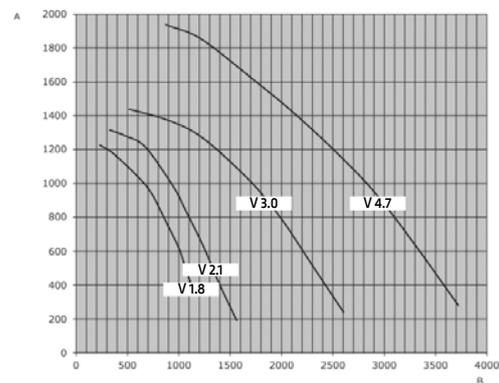
	Motor power (kW)	No-load flow rate (m <sup>3</sup> /h)	Ø of inlet (mm)	Ø of outlet (mm)	Noise dB(A)	Weight (kg)
1.8 fan	0.55	1,800	160	160	64	13.5
2.1 fan	0.75	2,100	160	160	65	16.4
3.0 fan	1.1	3,000	250	200/250	70	24
4.7 fan	2.2	4,700	250	250/315	70	35
D350 fan	3	7,200	355	315/355	76	78

### Ordering

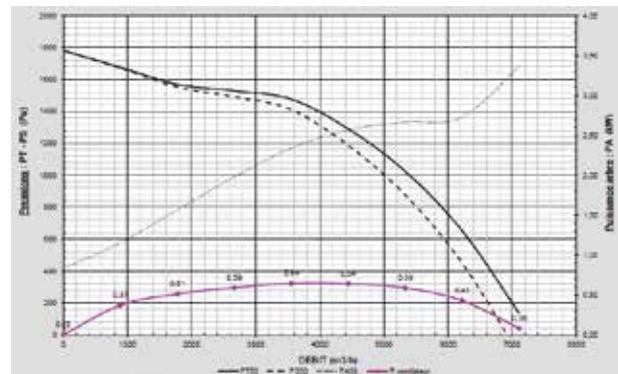
Description	Part number
1.8 fan - 230/400 V - 3 Ph - 50 Hz	W000379138
2.1 fan - 230/400 V - 3 Ph - 50 Hz	W000342132
<b>Complement</b>	
Universal fan bracket for mounting on the floor or wall [Reference 1]	W000342143
3.0 fan - 230/400 V - 3 Ph - 50 Hz	W000342134
<b>Complements according to assembly</b>	
Adaptation for fan outlet, Ø 200 mm	W000342135
Adaptation for fan outlet, Ø 250 mm	W000342136
Universal fan bracket for mounting on the floor or wall [Reference 1]	W000342143
4.7 fan - 230/400 V - 3 Ph - 50 Hz	W000342139
<b>Complements according to assembly</b>	
Adaptation for fan outlet, Ø 250 mm	W000342140
Adaptation for fan outlet, Ø 315 mm	W000342141
Universal fan bracket for mounting on the floor or wall [Reference 1]	W000342143
D 350 fan - 230/400 V - 3 Ph - 50 Hz	W000342611
<b>Complements according to assembly</b>	
Adaptation for fan outlet, Ø 315 mm	W000342714
Adaptation for fan outlet, Ø 355 mm	W000342715
Bracket for wall mounting, D 350	W000342716
<b>Silencer complement</b>	
Silencer, Ø 160 mm	W000342131
Silencer, Ø 200 mm	EM61000380
Silencer, Ø 250 mm	W000342137
Silencer, Ø 315 mm	W000342142
Silencer, Ø 355 mm	W000342424

### Fan curve

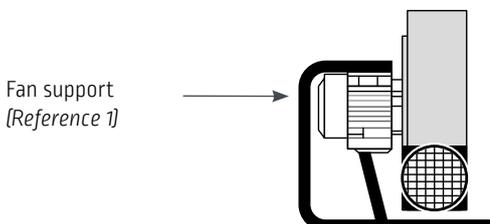
Fans, 1.8 - 2.1 - 3.0 - 4.7



D350 fan



PT: Total pressure (Pa) - PS: Static pressure (Pa) - PA: Power consumption (kW)



# High-speed centrifugal fans

These centrifugal fans, which may be of the single-port or backward type, are directly driven and highly efficient and are designed to extract clean air or air with a low dust load industrial installations at a maximum temperature of 80 °C.

- Scroll and frame in 3 to 6 mm thick painted steel.
- Single-port turbine in painted steel. Backward blades and dynamically balanced turbine.
- Electric motor, 230/400 V or 400/660 V - 3 Ph - 50 Hz.
- IE3 motor standard.
- Protection rating: IP 55 - Class F.
- Standard orientation: LGO°.
- Maximum usage temperature: 80 °C.
- Star-delta starting recommended from 75 kW.

Conformity 



## D350 to D800 series

### Ordering

Description	Part number
Fan D350 - Inlet Ø 350 mm - 3 Ph - 50 Hz	
D350 A - 2.2 kW - 2,800 rpm - 230/400 V	W000342610
D350 B - 3 kW - 2,800 rpm - 230/400 V	W000342611
Complements according to assembly	
Adaptation for fan outlet, Ø 315 mm	W000342714
Adaptation for fan outlet, Ø 355 mm	W000342715
D350 wall mounting bracket	W000342716

Fan D400 - Inlet Ø 400 mm - 3 Ph - 50 Hz	
D400 A - 4 kW - 2,800 rpm - 230/400 V	W000342614
D400 B - 5.5 kW - 2,800 rpm - 230/400 V	W000342615
Complements according to assembly	
Adaptation for fan outlet, Ø 355 mm	W000342718
Adaptation for fan outlet, Ø 400 mm	W000342719
Adaptation for fan outlet, Ø 450 mm	W000342720
D400 wall mounting bracket	W000342721

Fan D450 - Inlet Ø 450 mm - 3 Ph - 50 Hz	
D450 A - 7.5 kW - 2,800 rpm - 230/400 V	W000342617
D450 B - 11 kW - 2,800 rpm - 230/400 V	W000342618
D450 A - 7.5 kW - 2,800 rpm - 400/690 V	W000342803
D450 B - 11 kW - 2,800 rpm - 400/690 V	W000342804
Complements according to assembly	
Adaptation for fan outlet, Ø 400 mm	W000342722
Adaptation for fan outlet, Ø 450 mm	EM61000303
Adaptation for fan outlet, Ø 500 mm	W000342724
D450 wall mounting bracket	W000342725

Fan D500 - Inlet Ø 500 mm - 3 Ph - 50 Hz	
D500 A - 15 kW - 2,800 rpm - 230/400 V	W000342621
D500 B - 18.5 kW - 2,800 rpm - 230/400 V	W000342622
D500 A - 15 kW - 2,800 rpm - 400/690 V	W000342805
D500 B - 18.5 kW - 2,800 rpm - 400/690 V	W000342806
Complements according to assembly	
Adaptation for fan outlet, Ø 450 mm	W000342726
Adaptation for fan outlet, Ø 500 mm	W000342727
D500 wall mounting bracket	W000342728

Description	Part number
Fan D560 - Inlet Ø 560 mm - 3 Ph - 50 Hz	
D560 A - 3 kW - 1,400 rpm - 230/400 V	W000342627
D560 B - 4 kW - 1,400 rpm - 230/400 V	W000342628
Complements according to assembly	
Adaptation for fan outlet, Ø 500 mm	W000342729
Adaptation for fan outlet, Ø 560 mm	W000342730
D560 wall mounting bracket	W000342731

Fan D630 - Inlet Ø 630 mm - 3 Ph - 50 Hz	
D630 A - 5.5 kW - 1,400 rpm - 230/400 V	W000342631
D630 B - 7.5 kW - 1,400 rpm - 230/400 V	W000342632
D630 A - 7.5 kW - 1,400 rpm - 400/690 V	W000342808
Complements according to assembly	
Adaptation for fan outlet, Ø 450 mm	EM61000251
Adaptation for fan outlet, Ø 500 mm	EM61000252
Adaptation for fan outlet, Ø 560 mm	W000342732
Adaptation for fan outlet, Ø 630 mm	W000342733

Fan D710 - Inlet Ø 710 mm - 3 Ph - 50 Hz	
D710 A - 11 kW - 1,400 rpm - 400/690 V	EM61000277
D710 B - 15 kW - 1,400 rpm - 400/690 V	W000342809
Complements according to assembly	
Adaptation for fan outlet, Ø 630 mm	W000381408
Adaptation for fan outlet, Ø 710 mm	W000381409

Fan D800 - Inlet Ø 800 mm - 3 Ph - 50 Hz	
D800 A - 18.5 kW - 1,400 rpm - 400/690 V	EM61000278
D800 A - 22 kW - 1,400 rpm - 400/690 V	EM61000279
Complements according to assembly	
Adaptation for fan outlet, Ø 710 mm	On request
Adaptation for fan outlet, Ø 800 mm	On request

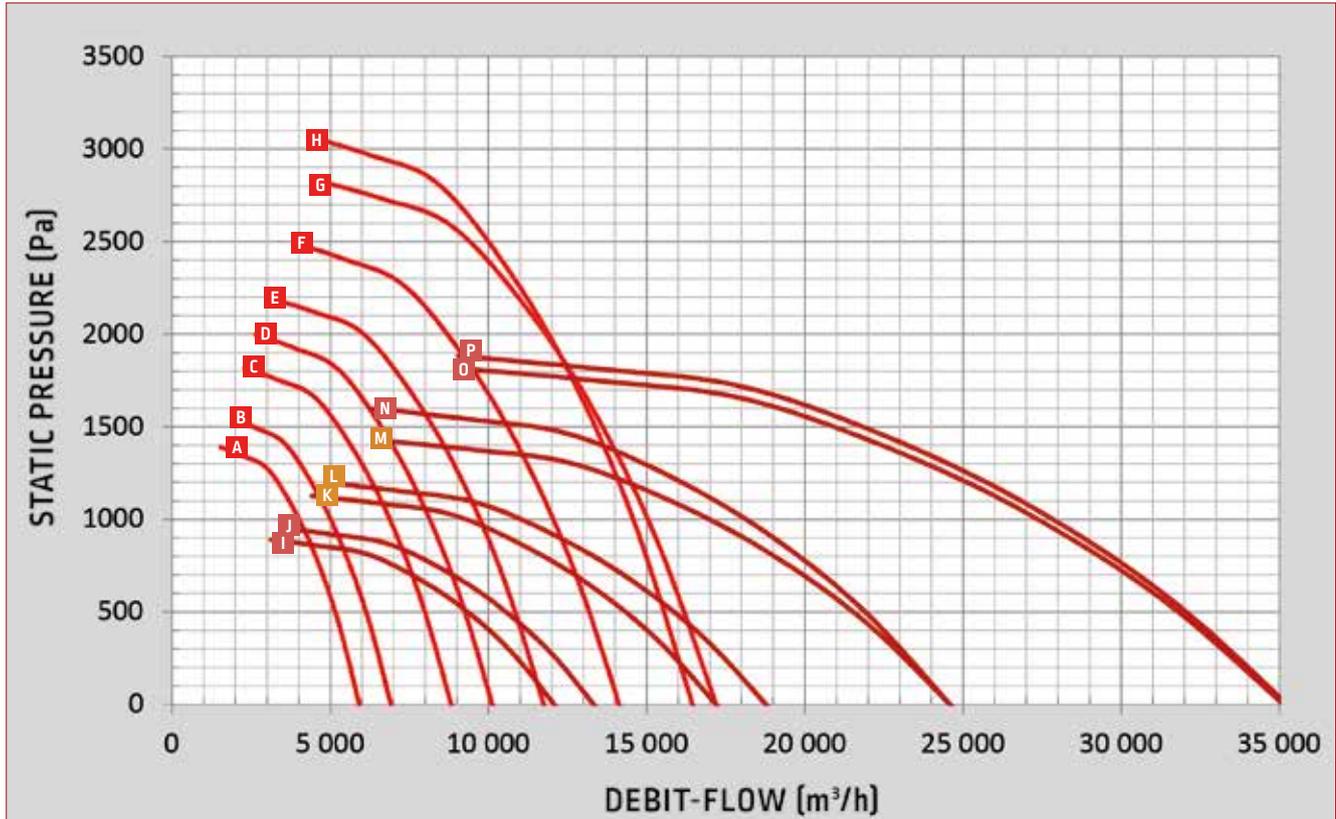
Complements	
Circuit breaker or disconnecting box	see page 69
EXPERT BOX	see page 40

## D350 to D800 series (continued)

Series D	Poles	Kw	LpA (dBA)	Weight	
A	350	2	2.2	72	77
B	350	2	3	74	87
C	400	2	4	76	110
D	400	2	5.5	78	133
E	450	2	7.5	79	150
F	450	2	11	81	197
G	500	2	15	83	228
H	500	2	18.5	84	248

Series D	Poles	Kw	LpA (dBA)	Weight	
I	560	4	3	72	180
J	560	4	4	73	190
K	630	4	5.5	75	244
L	630	4	7.5	76	257
M	710	4	11	79	345
N	710	4	15	80	366
O	800	4	18.5	72	470
P	800	4	22	83	471

Fan curve



# PRCU series



### Ordering

Description	Part number
PRCU 350 fan - Inlet Ø 350 mm - 3 Ph - 50 Hz	
PRCU 350 A - 1.5 kW - 2,800 rpm - 230/400 V	W000342645
PRCU 350 B - 2.2 kW - 2,800 rpm - 230/400 V	EM61000280
Complements according to assembly	
Adaptation for fan outlet, Ø 250 mm	W000342663
Adaptation for fan outlet, Ø 315 mm	EM61000281
PRCU 350 wall mounting bracket	EM61000282
PRCU 400 fan - Inlet Ø 350 mm - 3 Ph - 50 Hz	
PRCU 400 A - 3 kW - 2,800 rpm - 230/400 V	W000342646
PRCU 400 B - 4 kW - 2,800 rpm - 230/400 V	EM61000283
Complements according to assembly	
Adaptation for fan outlet, Ø 250 mm	EM61000284
Adaptation for fan outlet, Ø 315 mm	W000342664
PRCU 400 wall mounting bracket	EM61000285
PRCU 450 fan - Inlet Ø 450 mm - 3 Ph - 50 Hz	
PRCU 450 A - 5.5 kW - 2,800 rpm - 230/400 V	W000342648
PRCU 450 B - 7.5 kW - 2,800 rpm - 230/400 V	EM61000286
PRCU 450 B - 7.5 kW - 2,800 rpm - 400/690 V	W000342810
Complements according to assembly	
Adaptation for fan outlet, Ø 315 mm	W000342665
Adaptation for fan outlet, Ø 400 mm	W000342666
PRCU 450 wall mounting bracket	EM61000287
PRCU 500 fan - Inlet Ø 500 mm - 3 Ph - 50 Hz	
PRCU 500 A - 9 kW - 2,800 rpm - 230/400 V	EM61000288
PRCU 500 B - 11 kW - 2,800 rpm - 230/400 V	W000342649
PRCU 500 A - 9 kW - 2,800 rpm - 400/690 V	W000342811
PRCU 500 B - 11 kW - 2,800 rpm - 400/690 V	W000342812
Complements according to assembly	
Adaptation for fan outlet, Ø 400 mm	W000342662
Adaptation for fan outlet, Ø 450 mm	W000342667
Adaptation for fan outlet, Ø 500 mm	W000342668

Description	Part number
PRCU 560 fan - Inlet Ø 560 mm - 3 Ph - 50 Hz	
PRCU 560 A - 15 kW - 2,800 rpm - 230/400 V	W000342650
PRCU 560 B - 18.5 kW - 2,800 rpm - 230/400 V	W000342651
PRCU 560 A - 15 kW - 2,800 rpm - 400/690 V	W000342813
PRCU 560 B - 18.5 kW - 2,800 rpm - 400/690 V	EM61000289
Complements according to assembly	
Adaptation for fan outlet, Ø 560 mm	EM61000290
Adaptation for fan outlet, Ø 630 mm	EM61000291
PRCU 630 fan - Inlet Ø 630 mm - 3 Ph - 50 Hz	
PRCU 630 A - 4 kW - 1,400 rpm - 230/400 V	EM61000292
PRCU 630 B - 5.5 kW - 1,400 rpm - 230/400 V	EM61000293
Complements according to assembly	
Adaptation for fan outlet, Ø 450 mm	EM61000294
Adaptation for fan outlet, Ø 500 mm	EM61000295
PRCU 710 fan - Inlet Ø 710 mm - 3 Ph - 50 Hz	
PRCU 710 A - 5.5 kW - 1,400 rpm - 230/400 V	EM61000296
PRCU 710 B - 7.5 kW - 1,400 rpm - 230/400 V	EM61000297
PRCU 710 B - 7.5 kW - 1,400 rpm - 400/690 V	EM61000298
Complements according to assembly	
Adaptation for fan outlet, Ø 560 mm	EM61000299
Adaptation for fan outlet, Ø 630 mm	EM61000300
PRCU 800 fan - Inlet Ø 800 mm - 3 Ph - 50 Hz	
PRCU 800 A - 11 kW - 1,400 rpm - 400/690 V	W000342816
PRCU 800 B - 15 kW - 1,400 rpm - 400/690 V	W000342817
Complements according to assembly	
Adaptation for fan outlet, Ø 630 mm	EM61000301
Adaptation for fan outlet, Ø 710 mm	EM61000302
Complements	
Circuit breaker or disconnecting box	see page 69
EXPERT BOX	see page 40

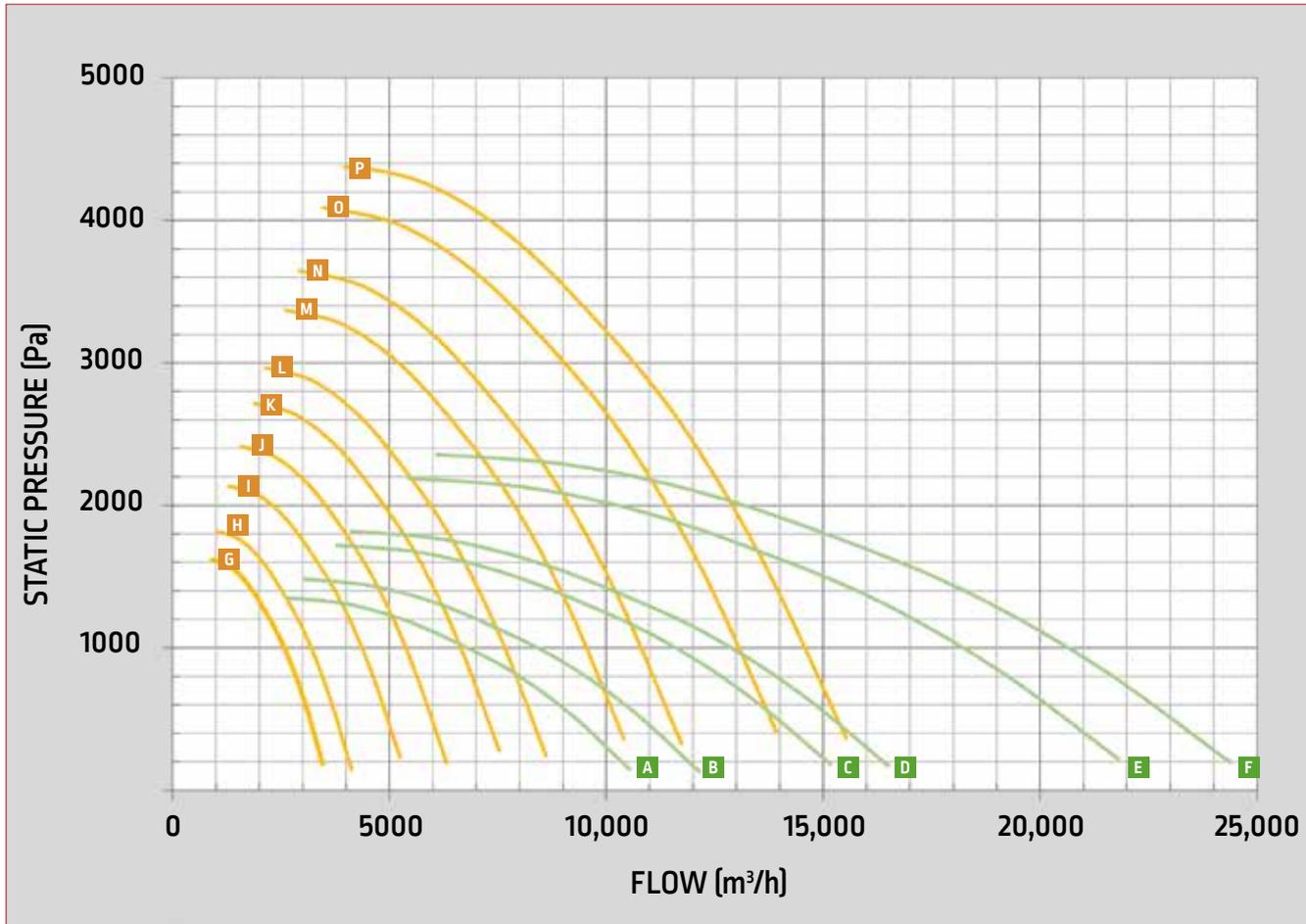


# PRCU series (continued)

Series D	Poles	Kw	LpA [dBA]	Weight
G PRCU 350	2	1.5	71	72
H PRCU 350	2	2.2	72	74
I PRCU 400	2	3	75	94
J PRCU 400	2	4	77	102
K PRCU 450	2	5.5	79	137
L PRCU 450	2	7.5	80	137
M PRCU 500	2	9	82	185
N PRCU 500	2	11	83	216
O PRCU 560	2	15	85	233
P PRCU 560	2	18.5	86	251

Series D	Poles	Kw	LpA [dBA]	Weight
A PRCU 630	4	4	74	220
B PRCU 630	4	5.5	75	220
C PRCU 710	4	5.5	78	335
D PRCU 710	4	7.5	78	335
E PRCU 800	4	11	81	440
F PRCU 800	4	15	82	460

Fan curve



# Soundproofing boxes for series D and PRCU centrifugal fans

Soundproofing boxes are designed to protect the fan and reduce the noise emitted by it. It may be located inside the workshop or outside it.

- Noise reduction of about 6 dB(A) with a soundproofing box with a standard silencer.
- Noise reduction of about 9 dB(A) with a soundproofing box with a podded silencer.

**It is fitted with:**

- A box in galvanised metal panels soundproofed on 6 sides including:
  - Soundproofing of 6 sides by high-density foam (25 mm thick).
  - Support frame with pocket for handling forks.
  - Soft fan inlet sleeve.
  - Soft fan outlet transformation.
  - Anti-vibration mounts under the fan.
  - Padlockable fan insulation device.
  - Silencer supports.

The supply must be supplemented by the selection of a standard or podded silencer.

**Ordering**

Description	Part number
<b>Equipped soundproofing box</b>	
D350 - PRCU 350 fan	EM61000304
D400 - PRCU 400 fan	EM61000305
D450 - PRCU 450 fan	EM61000306
D500 - PRCU 500 fan	EM61000307
D560 - PRCU 560 fan	EM61000308
D630 - PRCU 630 fan	EM61000309
D710 - PRCU 710 fan	EM61000310
D800 - PRCU 800 fan	EM61000311
<b>Complement for standard silencer</b>	
D350 - PRCU 350 fan; Ø 355 mm	W000342424
D400 - PRCU 400 fan; Ø 400 mm	W000342641
D450 - PRCU 450 fan; Ø 450 mm	W000342642
D500 - PRCU 500 fan; Ø 500 mm	W000342643
D560 - PRCU 560 fan; Ø 560 mm	W000342428
D630 - PRCU 630 fan; Ø 630 mm	W000342644
D710 - PRCU 710 fan; Ø 710 mm	EM61000312
D800 - PRCU 800 fan; Ø 800 mm	EM61000313
<b>Complement for podded silencer (Heightened acoustic attenuation)</b>	
D350 - PRCU 350 fan; Ø 355 mm	EM61000381
D400 - PRCU 400 fan; Ø 400 mm	EM61000382
D450 - PRCU 450 fan; Ø 450 mm	EM61000383
D500 - PRCU 500 fan; Ø 500 mm	EM61000384
D560 - PRCU 560 fan; Ø 560 mm	EM61000385
D630 - PRCU 630 fan; Ø 630 mm	EM61000314
D710 - PRCU 710 fan; Ø 710 mm	EM61000315
D800 - PRCU 800 fan; Ø 800 mm	EM61000316



Standard silencer



Podded silencer

# Thermal magnetic circuit breaker



The circuit breaker is to be selected if the line feeder is protected. A thermal magnetic circuit breaker controls the starting and stopping of the motor and its thermal magnetic protection.

For CE compliance of the machine, a disconnecting and isolating device must be provided on the line feeder. The circuit breaker is supplied with its cable glands.



### Ordering

Description	Part number
Box, 230 V - 1 Ph - 50 Hz Direct on-line motor starting	
0.55 kW motor	W000342524
0.75 kW motor	W000342525
1.1 kW motor	W000342526
1.5 kW motor	W000342527

Description	Part number
Box, 230 V - 3 Ph - 50 Hz Direct on-line motor starting	
0.55 kW motor	W000342523
0.75 kW motor	W000342524
1.1 kW motor	W000342526
1.5 kW motor	W000342526
2.2 kW motor	W000342527
3.0 kW motor	W000342527
4.0 kW motor	W000342528

Description	Part number
Box, 400 V - 3 Ph - 50 Hz Direct on-line motor starting	
0.55 kW motor	W000342522
0.75 kW motor	W000342522
1.1 kW motor	W000342523
1.5 kW motor	W000342524
2.2 kW motor	W000342525
3.0 kW motor	W000342526
4.0 kW motor	W000342526
5.5 kW motor	W000342527

# Disconnecting box



The disconnecting box is to be selected if the line feeder is not protected. A disconnecting box offers overall protection to a fan (CE compliance).

### The box includes:

- A padlockable disconnecter with motor protection fuses
- a motor control relay with thermal magnetic protection
- On/Off controls
- 5 m long cable with section appropriate for motor power



### Ordering

Description	Part number
Box, 230 V - 1 Ph - 50 Hz Direct on-line motor starting	
0.55 kW motor	W000342544
0.75 kW motor	W000342551
1.1 kW motor	W000342550
1.5 kW motor	W000342534

Description	Part number
Box, 230 V - 3 Ph - 50 Hz Direct on-line motor starting	
0.55 kW motor	W000342540
0.75 kW motor	W000342542
1.1 kW motor	W000342544
1.5 kW motor	W000342548
2.2 kW motor	W000342550
3.0 kW motor	W000342534
4.0 kW motor	W000342535

Description	Part number
Box, 400 V - 3 Ph - 50 Hz Direct on-line motor starting	
0.55 kW motor	W000342541
0.75 kW motor	W000342543
1.1 kW motor	W000342545
1.5 kW motor	W000342549
2.2 kW motor	W000342551
3.0 kW motor	W000342538
4.0 kW motor	W000342539
5.5 kW motor	W000342531
7.5 kW motor	W000342536

Description	Part number
Box, 230 V - 3 Ph - 50 Hz Star-delta motor starting	
4 kW motor	W000342260
5.5 kW motor	W000342261
7.5 kW motor	W000342262
15 kW motor	W000342263
22 kW motor	W000342264

Description	Part number
Box, 400 V - 3 Ph - 50 Hz Star-delta motor starting	
4 kW motor	W000342257
5.5 kW motor	W000342258
7.5 kW motor	W000342259
9 kW motor	W000342269
11 kW motor	W000342265
15 kW motor	W000342266
18.5 kW motor	W000342267
30 kW motor	W000342268

# Padlockable isolating switch

A fan must be fitted with a padlockable isolating device placed less than a metre away from the fan for the installation to meet overall CE compliance requirements.

Three-pole switch for direct on-line starting, six-pole for star-delta starting.

Recommended for:

- Fans placed outside the building or at a height,
- Chimneys.

The switch is supplied with cable glands.

### Ordering

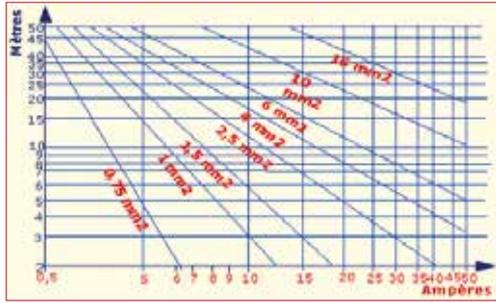
Description	Part number
<b>Voltage 230 V - Three-pole switch</b> For single-phase, three-phase motor or frequency variator	
For power rating ≤ 6.5 kW	W000377154
For power rating ≤ 13 kW	W000377159
For power rating ≤ 15 kW	W000377166
For power rating ≤ 30 kW	W000377170
For power rating ≤ 45 kW	W000377174
For power rating ≤ 55 kW	W000377178
<b>Voltage 400 V - Three-pole switch</b> For three-phase motor or frequency variator	
For power rating ≤ 6.5 kW	W000377156
For power rating ≤ 13 kW	W000377160
For power rating ≤ 15 kW	W000377167
For power rating ≤ 30 kW	W000377171
For power rating ≤ 45 kW	W000377175
For power rating ≤ 55 kW	W000377179

Description	Part number
<b>Voltage 230/400 V - Six-pole switch</b> For motor with star-delta starting with 230 V system	
For power rating ≤ 6.5 kW	W000377157
For power rating ≤ 13 kW	W000377164
For power rating ≤ 15 kW	W000377168
For power rating ≤ 30 kW	W000377172
For power rating ≤ 45 kW	W000377176
For power rating ≤ 55 kW	W000377180
<b>Voltage 400/690 V - Six-pole switch</b> For motor with star-delta starting with 400 V system	
For power rating ≤ 6.5 kW	W000377158
For power rating ≤ 13 kW	W000377165
For power rating ≤ 15 kW	W000377169
For power rating ≤ 30 kW	W000377173
For power rating ≤ 45 kW	W000377177
For power rating ≤ 55 kW	W000377181



# Power cable

Primary cables - Standard H07RN-F



## Ordering

Description	Part number
Cable 3 x 1.5 mm <sup>2</sup> - max current 23 A	W000010098
Cable 4 x 1.5 mm <sup>2</sup> - max current 21 A	Please enquire
Cable 4 x 2.5 mm <sup>2</sup> - max current 29 A	W000010100
Cable 4 x 4 mm <sup>2</sup> - max current 38 A	W000010101
Cable 4 x 6 mm <sup>2</sup> - max current 50 A	W000010102
Cable 4 x 10 mm <sup>2</sup> - max current 68 A	W000010103
Cable 4 x 16 mm <sup>2</sup> - max current 92 A	W000010104

# Choice of motor protection fuses



Motor power (kW)	System voltage		
	230 V/3 Ph	400 V/3 Ph	230 V/1 Ph
	Ampere (A)		
0.55	6	4	6
0.75	6	4	8
1.1	8	6	12
1.5	10	6	16
2.2	12	8	-
3	16	10	-

Motor power (kW)	System voltage		
	230 V/3 Ph	400 V/3 Ph	230 V/1 Ph
	Ampere (A)		
4	20	12	-
5.5	25	16	-
7.5	40	20	-
9	40	25	-
11	50	25	-
15	63	40	-
18.5	80	40	-
22	-	63	-
30	-	80	-

# Choice of motor power cables (to verify according to cable length)

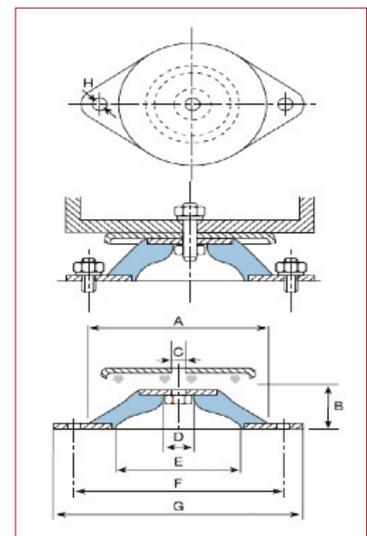
Motor power (kW)	System voltage		
	230 V/3 Ph	400 V/3 Ph	230 V/1 Ph
	Section (mm <sup>2</sup> )		
0.55	4 x 1.5	4 x 1.5	3 x 1.5
0.75	4 x 1.5	4 x 1.5	3 x 1.5
1.1	4 x 1.5	4 x 1.5	3 x 1.5
1.5	4 x 1.5	4 x 1.5	3 x 1.5
2.2	4 x 2.5	4 x 1.5	-
3	4 x 2.5	4 x 1.5	-

Motor power (kW)	System voltage		
	230 V/3 Ph	400 V/3 Ph	230 V/1 Ph
	Section (mm <sup>2</sup> )		
4	4 x 2.5	4 x 1.5	-
5.5	4 x 4	4 x 1.5	-
7.5	4 x 4	4 x 2.5	-
9	4 x 6	4 x 2.5	-
11	4 x 6	4 x 4	-
15	4 x 10	4 x 6	-
18.5	4 x 16	4 x 6	-
22	-	4 x 10	-
30	-	4 x 16	-

# Anti-vibration mounts

## Ordering

Description	Part number
Set of 4 mounts	
Mount BR 60 - load 15 kg per support	W000380767
Mount BR 80 - load 75 kg per support	W000380768
Mount BR 100 - load 90 kg per support	W000380769
Mount BR 150 - load 130 kg per support	W000380770
Mount BR 200 - load 500 kg per support	W000380771



Type	A (mm)	B (mm)	C	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
BR 60	60	24	M-6	14	34	76	95	6.5
BR 80	80	27	M-8	25	65	100	120	8.2
BR 100	100	28	M-10	22	70	124	148	10
BR 150	150	39	M-14	34	115	182	214	12
BR 200	200	44	M-18	35	140	240	280	14.5

Equipment for cleaning the atmosphere in workshops with PLC management and HMI screen.

## AMBICLEAN W3 is innovative, economical and easy to use

The AMBICLEAN puts into motion the cloud of fumes stagnating in the workshop. It captures, filters and recycles it into the workshop through blowing nozzles.

The system is simple and does not make it necessary to use a ducting system.

It does not generate heat loss or drafts that could disturb welding.

### Specifications:

- High-performance self cleaning.
- PLC management with remote control with a 5.7" touch screen HMI.
- High-efficiency backward centrifugal fan.
- Class EU2 metal pre-filter.
- Polyester medium filter cartridges with high-efficiency PTFE membrane, class H13.
- Complies with European standard W3 EN 15012-1.
- 40-litre drum(s) for dust recovery.
- Rugged filter structure made in epoxy painted galvanised metal.

### ICP function

for smart, economic and environmentally-friendly use.

- Constant blowing rate regulated by an electronic sensor associated with a frequency variator.
- PLC management with remote control with HMI screen.

### Description of HMI functions:

- Operating modes: manual/automatic/clock.
- Dynamic mode display of filter operating status.
- Threshold-based or continuous cleaning of filter cartridges.
- Real-time display of main parameters:
  - filter cartridge pressure difference,
  - fan power consumption,
  - working frequency,
  - compressed air pressure.
- Weekly programming clock.
- Remote control with 15 m cable.
- Stack light showing On, Off, Safety alarm.
- Maximum and minimum process efficiency safety alarm
- Faults saved on USB stick.
- Filter cartridge pressure difference trend curve.
- Filter maintenance management:
  - hours of use,
  - cartridge replacement,
  - fan maintenance,
  - dust drum maintenance.

Conformity 



HMI home screen



AMBICLEAN has filter cartridges with PTFE membranes that are highly efficient [99.97% with 0.15 µm particles]. However, the gas contained in welding fumes cannot be handled safely by any device, and we recommend using a fresh air volume equal to 20 % of the air volume handled by the machine.

**Dimensional specifications**

Ambiclean	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
AMBICLEAN 8000	1,800	1,480	4,850	1,000
AMBICLEAN 12000	2,250	1,480	4,850	1,300
AMBICLEAN 16000	2,750	1,600	4,850	1,600

**Ordering**

Description	Part number
<b>AMBICLEAN 8000</b> Blowing flow rate adjustable from <b>5,000 to 90,00 m<sup>3</sup>/h</b> - Motor 75 kW - 400 V - 3 Phases 8 x 15 m <sup>2</sup> filter cartridges - W3	<b>EM61000074</b>
<b>AMBICLEAN 12000</b> Blowing flow rate adjustable from <b>6,000 to 13,000 m<sup>3</sup>/h</b> - Motor 15 kW - 400 V - 3 Phases 12 x 15 m <sup>2</sup> filter cartridges - W3	<b>EM61000075</b>
<b>AMBICLEAN 16000</b> Blowing flow rate adjustable from <b>8,000 to 18,000 m<sup>3</sup>/h</b> - Motor 18.5 kW - 400 V - 3 Phases 16 x 15 m <sup>2</sup> filter cartridges - W3	<b>EM61000076</b>

## AMBICLEAN soundproofing kit

This complementary equipment made of panels with reinforced structures and soundproofing foam reduces the noise from the filter by about 4 dB(A).

**Ordering**

Description	Part number
AMB 8000 soundproofing kit	<b>EM61000080</b>
AMB 12000 soundproofing kit	<b>EM61000081</b>
AMB 16000 soundproofing kit	<b>EM61000082</b>

**NB:** Upon request, we can supply:

- AMBICLEAN with electrostatic filtration for workshops generating very oily fumes.
- AMBICLEAN including electrical resistance heaters or hot water batteries.

## Consumables for AMBICLEAN range

**Spare filters:**

Polyester filter cartridge with PTFE membrane, W3 filtration class according to EN 15012/1.

Class EU2 metal pre-filter

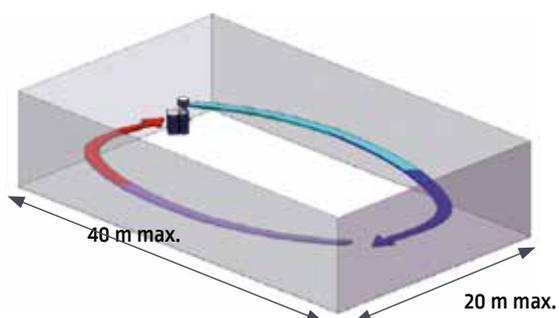
**Ordering**

Filter cartridge	Quantity	Part number
AMBICLEAN 8000	8	<b>EM61000155</b>
AMBICLEAN 12000	12	
AMBICLEAN 16000	16	

**Ordering**

Metal pre-filter	Quantity	Dimensions	Part number
AMBICLEAN 8000	4	490 x 295 x 24 mm	<b>W000373569</b>
AMBICLEAN 12000	4		
AMBICLEAN 16000	6		

## Configuration of a typical installation



If the dimensions of the workshop are larger than those stated opposite, a combination of several AMBICLEAN units will be needed. Technical study on request.

## AMBICLEAN 5000

Conformity 

AMBICLEAN 5000 is designed for small workshops that generate a small quantity of dust resulting from welding operations.

- Nominal flow rate: 5,000 m<sup>3</sup>/h with 800 Pa vacuum.
- Structure in aluminium sections and painted galvanised steel panels.
- Left and right air inlets with finned grilles.
- Blowing box with 4 turning nozzles.
- Fan, 3 kW - 400 V - 3 Ph, belt and pulley type.
- Frequency variator.
- High-performance cellulose fibreglass fine filters, HEPA, class H13.
- Remote control cabinet including:
  - Padlockable disconnecter,
  - Mode selection: Manual or automatic,
  - Programming clock,
  - Filter saturation alarm,
  - 5 m connecting cable
- Painted steel wall bracket.



### Ordering

Description	Part number
<b>AMBICLEAN 5000</b> Blowing flow rate: 5,000 m <sup>3</sup> /h - Motor 3 kW - 400 V - 3 Ph 2 filter cassettes, 42 m <sup>2</sup>	W000373567
<b>Consumables</b>	
42 m <sup>2</sup> filter cassette, HEPA class H13 - Quantity: 2	W000373568

### Dimensional specifications

AMBICLEAN	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
AMBICLEAN 5000	2,000	1,000	800	700

Equipment for cleaning the atmosphere in workshops with PLC management and HMI screen.

## DIGIFILTER PUSH PULL - W3 is innovative, economical and efficient

DIGIFILTER PUSH PULL is used along with a duct system with grilles and includes two parts:

- Blowing system.
- Extraction system.

The equipment is installed at a height from 4 to 6 metres, the blowing duct sends the cloud of fumes to the extraction duct. In that way, fumes are captured, filtered and recycled in the workshop. The installation does not generate heat loss or drafts that could disturb welding.

### Specifications:

- High-performance self cleaning.
- PLC management with remote control with a 5.7" touch screen HMI.
- High-efficiency backward centrifugal fan.
- Polyester medium filter cartridges with high-efficiency PTFE membrane, class H13.
- Complies with European standard W3 EN 15012-1.
- 40-litre drum(s) for dust recovery.
- Check valve installed on the extraction inlet.
- Rugged filter structure made in epoxy painted galvanised metal.

### ICP function

for smart, economic and environmentally-friendly use.

- Constant blowing rate regulated by an electronic sensor associated with a frequency variator.
- PLC management with remote control with a 5.7" HMI screen.

### Description of HMI functions:

- Operating modes: manual/automatic/clock.
- Dynamic mode display of filter operating status.
- Threshold-based or continuous cleaning of filter cartridges.
- Real-time display of main parameters:
  - filter cartridge pressure difference,
  - fan power consumption,
  - working frequency,
  - compressed air pressure.
- Weekly programming clock.
- Remote control with 15 m cable.
- Stack light showing On, Off, Safety alarm.
- Maximum and minimum process efficiency safety alarm
- Faults saved on USB stick.
- Filter cartridge pressure difference trend curve.
- Filter maintenance management:
  - hours of use,
  - cartridge replacement,
  - fan maintenance,
  - dust drum maintenance.



Conformity 



HMI home screen



DIGIFILTER PUSH PULL has PTFE membrane filter cartridges that are highly efficient [99.97% for 0.15 µm particles]. However, the gas contained in welding fumes cannot be handled safely by any device, and we recommend using a fresh air volume equal to 20 % of the air volume handled by the machine.

## Dimensional specifications

DIGIFILTER PP	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
DIGIFILTER PP 4 CD	1,800	1,400	2,000	500
DIGIFILTER PP 6 CD	2,200	1,400	2,000	750
DIGIFILTER PP 8 CD	1,900	1,400	3,000	1,000
DIGIFILTER PP 10 CD	2,400	1,400	3,000	1,100
DIGIFILTER PP 12 CD	2,400	1,400	3,000	1,200
DIGIFILTER PP 16 CD	3,800	1,400	3,000	1,500

## Ordering

DIGIFILTER PUSH PULL Compact type	Part number Inlet on the right	Part number Inlet on the left
<b>DIGIFILTER PUSH PULL 4 CD</b> Maximum air flow rate <b>4,500 m<sup>3</sup>/h</b> Motor, 5,5 kW - 400 V - 3 Phases 4 x 10 m <sup>2</sup> filter cartridges - W3	EM61000083	EM61000089
<b>DIGIFILTER PUSH PULL 6 CD</b> Operating point: <b>6,500 m<sup>3</sup>/h</b> Motor, 7,5 kW - 400 V - 3 Phases 6 x 10 m <sup>2</sup> filter cartridges	EM61000084	EM61000090
<b>DIGIFILTER PUSH PULL 8 CD</b> Operating point: <b>8,500 m<sup>3</sup>/h</b> Motor, 11 kW - 400 V - 3 Phases 8 x 10 m <sup>2</sup> filter cartridges	EM61000085	EM61000091
<b>DIGIFILTER PUSH PULL 10 CD</b> Operating point: <b>11,000 m<sup>3</sup>/h</b> Motor, 15 kW - 400 V - 3 Phases 10 x 10 m <sup>2</sup> filter cartridges	EM61000086	EM61000092
<b>DIGIFILTER PUSH PULL 12 CD</b> Operating point: <b>13,000 m<sup>3</sup>/h</b> Motor, 18,5 kW - 400 V - 3 Phases 12 x 10 m <sup>2</sup> filter cartridges	EM61000087	EM61000093
<b>DIGIFILTER PUSH PULL 16 CD</b> Operating point: <b>17,000 m<sup>3</sup>/h</b> Motor, 22 kW - 400 V - 3 Phases 16 x 10 m <sup>2</sup> filter cartridges	EM61000088	EM61000094

Consumables	
Filter cartridge with PTFE membrane surface 15 m <sup>2</sup>	EM61000155
Extraction and blowing grilles	
Extraction grille	W000374725
Blowing grille	W000374724
Plenum chamber for blowing grille	W000374726

## DIGIFILTER PUSH PULL soundproofing kit

This complementary equipment made of panels with reinforced structures and soundproofing foam reduces the noise from the filter by about 5 dB(A).

**NB:** Upon request, we can supply:

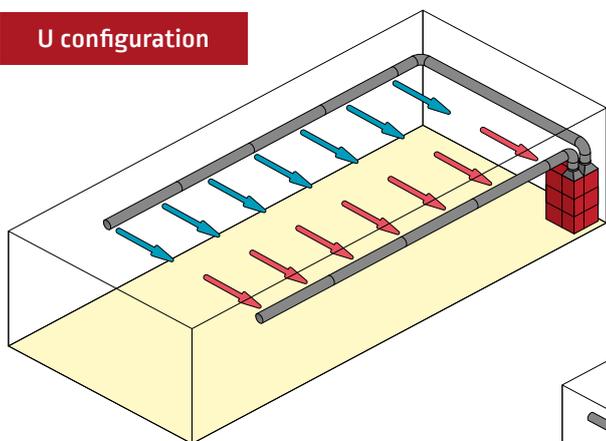
- Digifilter push pull with electrical heating resistors or hot water batteries.
- In order to avoid condensation phenomena relating to the weather conditions that could disturb the push pull air flow, we recommend placing the DIGIFILTER push pull in the workshop or under a sealed roof.

## Ordering

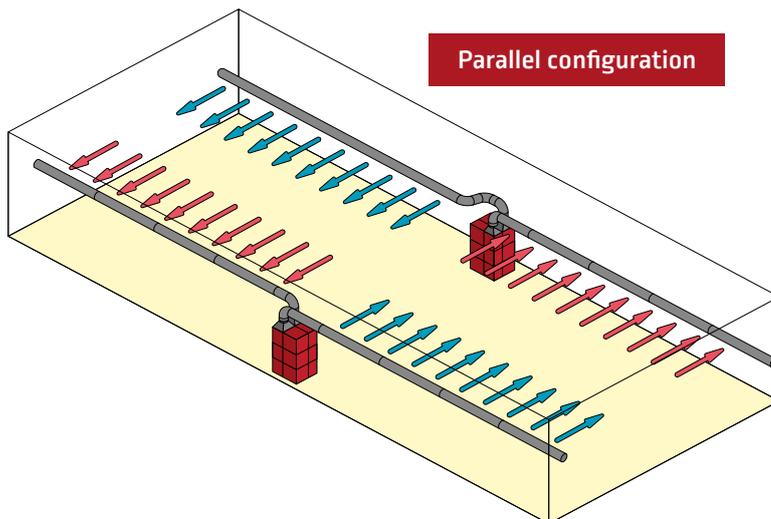
Description	Part number
Soundproofing kit, PP 4 CD	EM61000095
Soundproofing kit, PP 6 CD	EM61000096
Soundproofing kit, PP 8 CD	EM61000097
Soundproofing kit, PP 10 CD	EM61000098
Soundproofing kit, PP 12 CD	EM61000099
Soundproofing kit, PP 16 CD	EM61000100

# Configurations possible according to workshop layout.

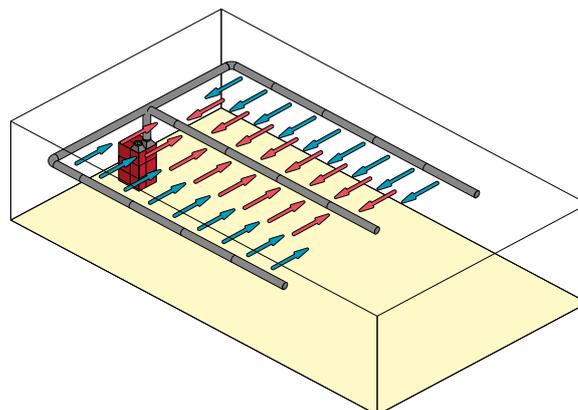
U configuration



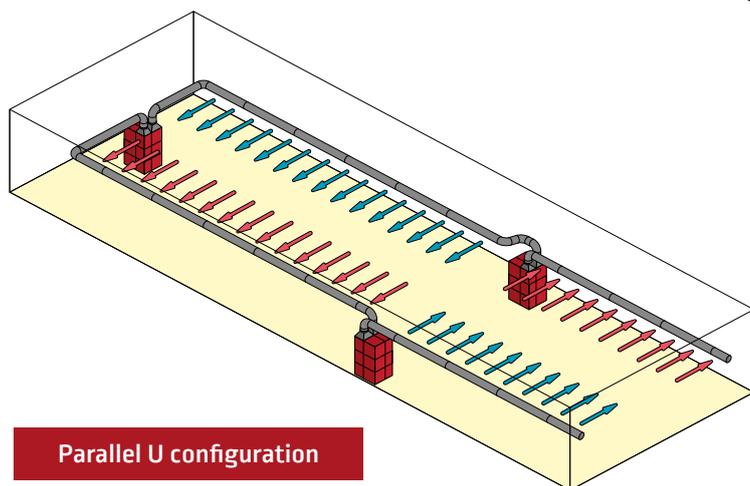
Parallel configuration



E configuration



Parallel U configuration

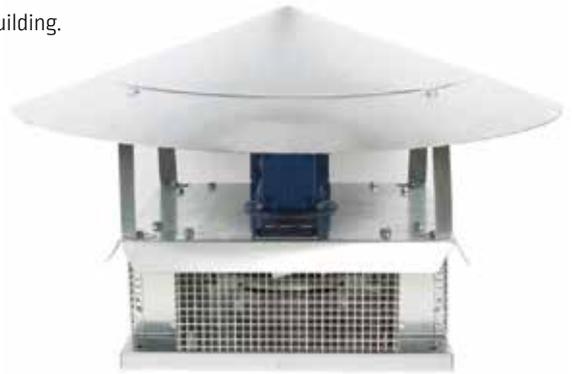


## TCR chimneys

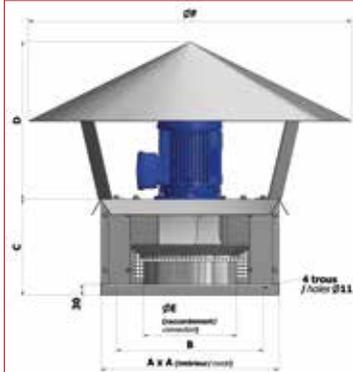


Chimneys are designed for extracting clean air or air with a low charge of dust at a maximum temperature of 80°C, and if needed, for removing smoke from the building.

- Base and hat in galvanised steel.
- Scroll and backward turbine in galvanised steel.
- Galvanised extraction and discharge grilles.
- Motor, 400 V - 3 Ph - Class F - IP55 - Type B35.
- Supplied with padlockable 400 V disconnecting switch.
- On request:
  - Motor with special voltage and frequency.
- Optional: Check valve made up of a galvanised steel frame, aluminium flaps and bearing-mounted rotating pins.



### Dimensions

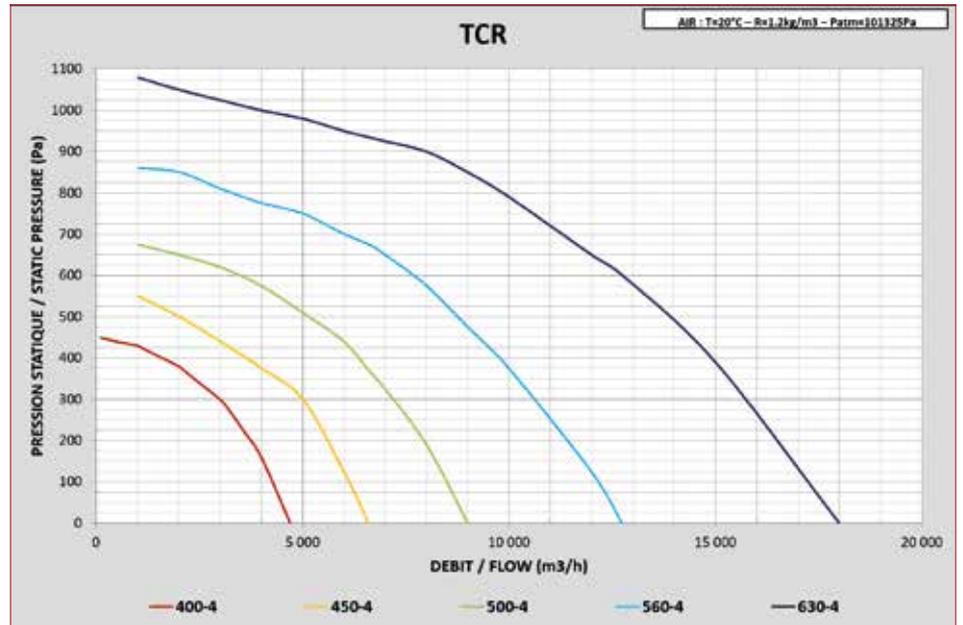


TRC	A x A	B	C	D
400	560	500	280	380
450	560	500	300	410
500	600	540	338	410
560	700	640	3675	460
630	800	740	405	480

TRC	Ø E	Ø F	Weight (kg) - std
400	355	900	37
450	400	900	47
500	450	900	52
560	500	1,200	74
630	560	1,200	111

### Curves



### Ordering

Description	Part number
TCR 400 - 0.37 kW - 230/400 V - 3 Ph - 50 Hz - 1,450 rpm - 72 dB(A)	W000380740
TCR 450 - 0.75 kW - 230/400 V - 3 Ph - 50 Hz - 1,450 rpm - 75 dB(A)	W000380742
TCR 500 - 1.5 kW - 230/400 V - 3 Ph - 50 Hz - 1,450 rpm - 79 dB(A)	W000380743
TCR 560 - 2.2 kW - 230/400 V - 3 Ph - 50 Hz - 1,450 rpm - 82 dB(A)	W000380744
TCR 630 - 4 kW - 230/400 V - 3 Ph - 50 Hz - 1,450 rpm - 85 dB(A)	W000380745

Options	
TCR 400 check valve	EM61000317
TCR 450 check valve	EM61000318
TCR 500 check valve	EM61000319
TCR 560 check valve	EM61000320
TCR 630 check valve	EM61000321

# EVXP wall-mounted helical fans



These helical fans make it possible to extract clean air or air with a low dust charge. They provide significant flow rates with a compact size.

- Motor, 230 V - 1 Ph - Class F - IP55 - Type B35.
- Painted guard grille on the motor side.
- Composite material blade.
- Painted steel support plate.
- Fluid temperature from -20 to +40 °C.
- Delivered with:
  - Variable speed drive and On/Off,
  - Thermal magnetic protection,
  - Louvred grille to place outside.
- Optional:
  - Metal frame that allows fan installation if the wall or cladding is narrow *[less than 200 mm]*.
  - Grille on blade side if the fan is installed at a height below 2 m.
  - Fixed louvred flats for renewing the extracted air.
- On request, supply of fan to blow in air.



## Ordering

Description	Part number
<b>EVXP 355-4</b> - 0.18 kW - 230 V - 1 Ph Flow rate 0 to <b>1,500 m<sup>3</sup>/h</b> Supplied with variator and 500 x 500 flap	<b>W000380698</b>
<b>EVXP 400-4</b> - 0.25 kW - 230 V - 1 Ph Flow rate 0 to <b>2,400 m<sup>3</sup>/h</b> Supplied with variator and 500 x 500 flap	<b>W000380699</b>
<b>EVXP 450-4</b> - 0.37 kW - 230 V - 1 Ph Flow rate 0 to <b>3,600 m<sup>3</sup>/h</b> Supplied with variator and 600 x 600 flap	<b>W000380700</b>
<b>EVXP 500-4</b> - 1.1 kW - 230 V - 1 Ph Flow rate 0 to <b>5,400 m<sup>3</sup>/h</b> Supplied with variator and 600 x 600 flap	<b>W000380701</b>
<b>EVXP 560-4</b> - 1.5 kW - 230 V - 1 Ph Flow rate 0 to <b>6,500 m<sup>3</sup>/h</b> Supplied with variator and 700 x 700 flap	<b>W000380702</b>

### Complement frame for thin cladding

Frame for EVXP 355	<b>W000380703</b>
Frame for EVXP 400	<b>W000380704</b>
Frame for EVXP 450	<b>W000380705</b>
Frame for EVXP 500	<b>W000380706</b>
Frame for EVXP 560	<b>W000380707</b>

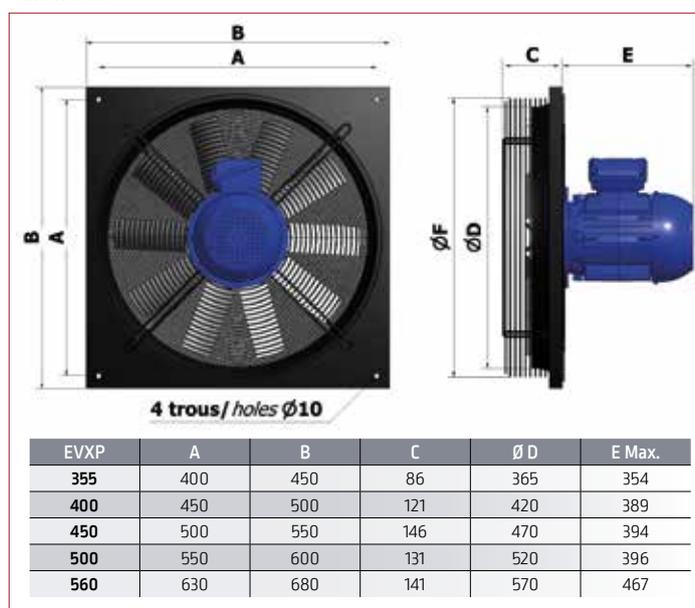
### Complement near the blade *[if the fan is accessible from the floor]*

Grille for EVXP 355	<b>W000380708</b>
Grille for EVXP 400	<b>W000380709</b>
Grille for EVXP 450	<b>W000380710</b>
Grille for EVXP 500	<b>W000380711</b>
Grille for EVXP 560	<b>W000380712</b>

### Complement louvred flap for air reintroduction

Dimensions 500 x 500 mm	<b>W000380713</b>
Dimensions 600 x 600 mm	<b>W000380714</b>
Dimensions 700 x 700 mm	<b>W000380715</b>

## Dimensions



# PURE STREAM



## Because the health of your welders is crucial

National regulations provide for limit values of exposure to weld fumes and some of their constituent elements which are known to be hazardous for the health of welders.

That is why industry is looking for solutions to limit the exposure of welders to weld fumes, while ensuring manufacturing quality and productivity.

Lincoln Electric designs and manufactures welding equipment and consumables and has expert know-how to inform you

and provide you with the best overall solutions for weld fume reduction, whether at source or by capture.

Its expertise in welding processes and fume control no longer needs to be demonstrated.

**Pure Stream,  
the solution suited to your need.**



# HIGH VACUUM

## General

The high-vacuum (HV) process is used for extraction at source of welding fume emissions using a number of collectors. The most common are extraction torches, extraction jigs, extraction nozzles or laminar collectors.

The vacuum to be applied by the collector ranges from 11,000 to 15,000 Pa. To that end, Lincoln Electric has developed a range of independent turbines and high-efficiency high-vacuum units.

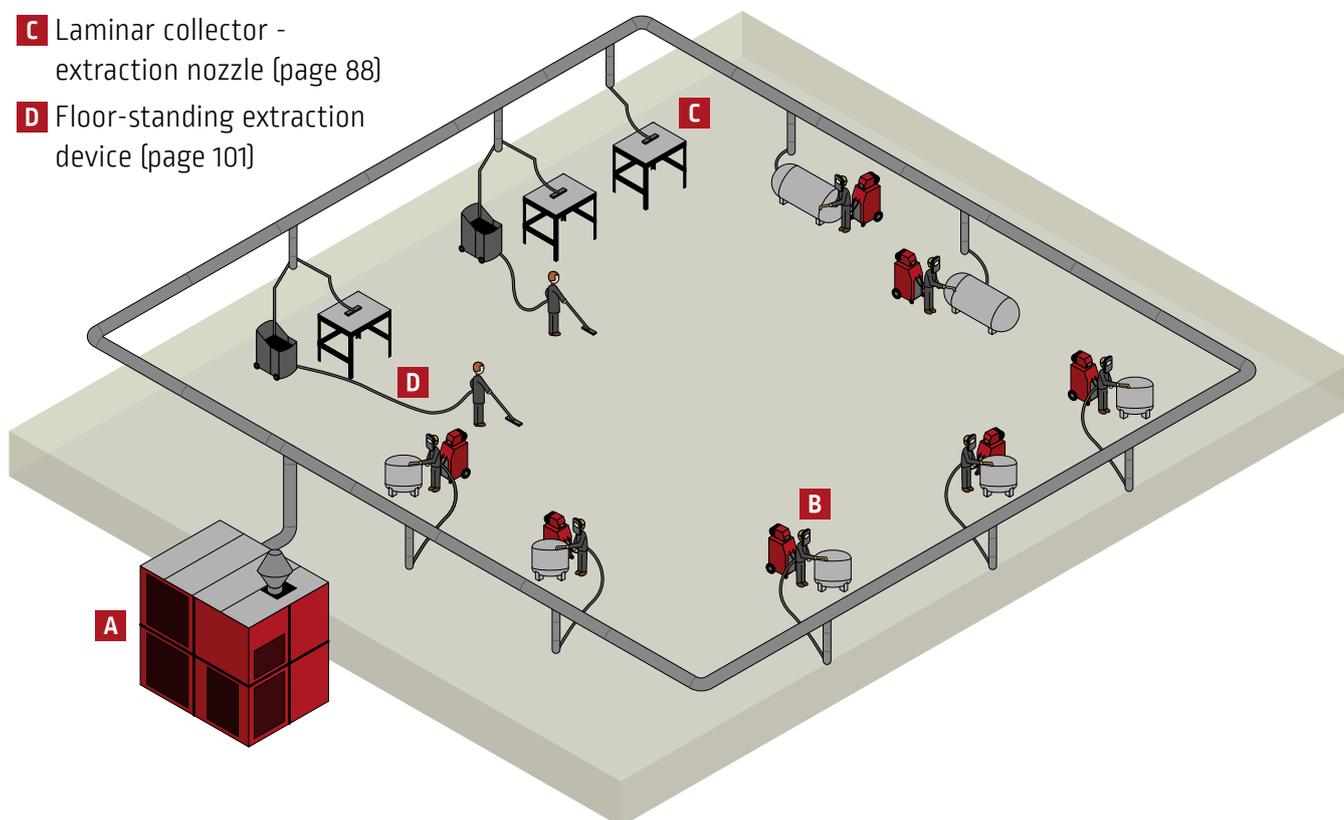
The minimum components of a system are:

- Collector *[out of those named below]*,
- An individual high-vacuum turbine or central unit,
- A centralised system if the choice of a central high-vacuum unit is made,
- Filtration is strongly recommended.

**OUR TEAM OF  
FUME CONTROL  
SPECIALISTS WILL  
PREPARE A PROJECT  
THAT WILL ADDRESS  
YOUR REQUIREMENTS**

## Example of high-vacuum equipment:

- A** High-vacuum central unit (page 97)
- B** Extraction torch (page 83 to 87)
- C** Laminar collector - extraction nozzle (page 88)
- D** Floor-standing extraction device (page 101)



## CONTENTS

### EXTRACTION COLLECTORS

<b>1</b> MIG LINC GUN FX FUME EXTRACTION TORCH.....	<b>83 - 85</b>
<b>2</b> TIG LINC TORCH FX FUME EXTRACTION TORCH.....	<b>86 and 87</b>
<b>3</b> COLLECTOR FOR AUTOMATIC TORCH.....	<b>88</b>
<b>4</b> EXTRACTION NOZZLE .....	<b>88</b>

### ERGONOMIC BOOMS

<b>1</b> BOOM FOR COMPACT POWER SOURCE .....	<b>89</b>
<b>2</b> BOOM FOR POWER SOURCE WITH SEPARATE WIRE FEEDER .....	<b>89</b>
<b>3</b> GIRAFFE BOOM.....	<b>90</b>
<b>4</b> ERGOMIG 2D BOOM.....	<b>90</b>
<b>5</b> AEROMIG 3D BOOM.....	<b>91</b>
<b>6</b> BOOM STANDS.....	<b>92</b>

### INDIVIDUAL TURBINES

<b>1</b> MINIFLEX UNIT .....	<b>93</b>
<b>2</b> ESSENTIAL TE15 AND TE35 UNIT.....	<b>93</b>
<b>3</b> MODULO MD2 UNIT.....	<b>94</b>
<b>4</b> HV 35 SC UNIT.....	<b>94</b>

<b>5</b> TE35 DUAL FLOW UNIT .....	<b>95</b>
<b>6</b> MODULO MD2 DUAL FLOW UNIT .....	<b>95</b>
<b>7</b> COMPLEMENTS.....	<b>96</b>

### HIGH VACUUM CENTRAL UNITS

<b>1</b> CHD – CCHD CENTRAL UNIT 1,000 - 4,000 M <sup>3</sup> /H.....	<b>97 - 99</b>
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### CONTROL BOXES

<b>1</b> DAMPER BOX.....	<b>100</b>
<b>2</b> DAMPER BOX DUAL FLOW.....	<b>100</b>
<b>3</b> PNEUMATIC DAMPER.....	<b>101</b>

<b>EXTRACTION OF DUST FROM THE FLOOR.....</b>	<b>101</b>
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## LINC GUN FX fume extraction torches

Compliant with standard EN 60974-7

LINC GUN FX fume extraction torches from LINCOLN ELECTRIC benefit from the experience acquired ever since these products were added to the range. As a result, LINC GUN FX torches are extraction tools offering high engineering quality for MIG-MAG welding.

They use the indirect capture technique which ensures very high efficiency without altering the quality of the weld bead.

We offer a complete range from 225 to 410 A with water or air cooling.

The developments of the LGFX torch combined with our ergonomic booms mean that our products offer very high manoeuvrability and accessibility to the different points of the part to weld.



### Features:

- Large capture sphere, efficiency percentage close to 80%.
- Fixed fume collector.
- Tellurium-copper (Cu Te) screw-in nozzle - Ø 12, 15 or 19 mm.
- Rotating steel fitting at the handle outlet for greater manoeuvrability.
- Manual air flow adjustment valve.
- Single-section (Ø 40 mm) bundle or double section (40/50) depending on the model.
- Protective leather sleeve on the bundle - length 1.5 m.
- Connection diameter on 50 mm hose.
- Dual Flow version for modulating the torch extraction rate depending on the type of part to weld.
- LN version *[gooseneck, 50 mm longer]* for specific parts to weld and complex access.

### Technical specifications:



AIR



WATER

		LGFX 2R	LGFX 4R	LGFX 4W	LGFX 5W
Contact tip		M6	M8 x 30	M8 x 30	M8 x 30
Ø Nozzle		12 mm	15 - 19 mm	15 - 19 mm	15 - 19 mm
Gooseneck angle		45°	45°	45°	45°
Bundle diameter (mm)		40	40	40/50	40/50
Duty factor		60%	60%	100%	100%
Connecting hose diameter (mm)		50	50	50	50
Welding intensity	CO <sub>2</sub>	250 A	400 A	360 A	450 A
	Ar/CO <sub>2</sub>	225 A	320 A	320 A	410 A
Weight (g) according to standard		1,180	1,465	1,540	1,595

### Minimum capture performance

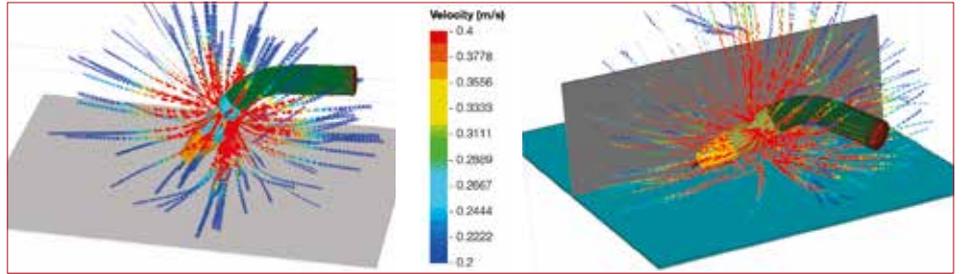
For speed 0.25 m/s	Flow m <sup>3</sup> /h	92			
	Vacuum Pa	11,500			
For speed 0.35 m/s	Flow m <sup>3</sup> /h		80	80	80
	Vacuum Pa		13,300	13,500	13,600

## Wearing parts according to European standard:

- Contact tip, M8 x 30\*
- Contact tip support, M8
- Ceramic diffuser insulator
- Wire guide sleeve

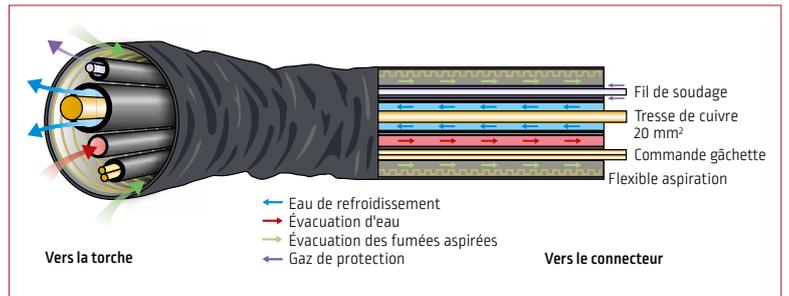
\*M6 for LGFX 2R

A torch developed specially for extraction, from design to materialisation through simulation.



## Water cooled torch

**Benefits of multiple-conductor water/electricity bundle:**  
The copper braid that conducts power is continuously cooled by the water in the torch cooling circuit, which allows the use of a smaller cable section for the same power. That reduces weight and makes the torch bundle more flexible, and therefore more manoeuvrable.



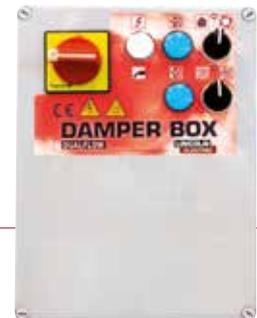
## The DUAL FLOW solution

LINCOLN ELECTRIC has filed a patent for its DUAL FLOW torch, which enables the welder to decide to change the extraction power according to the type of weld made by just pressing a micro switch located on the torch handle, during the welding process. In that way the worker is protected from fumes at all times and has the assurance of making high-quality welds thanks to close control over the work.

When combined with LGFX extraction torches with micro switches, Dual Flow devices provide a nominal extraction rate throughout the welding duration and, through a signal from the torch micro switch, reduce the extraction rate for welding in confined areas. That change in flow rate is made merely by pressing a micro switch located on the torch handle (choice of 2T or 4T mode depending on the welder's habits).

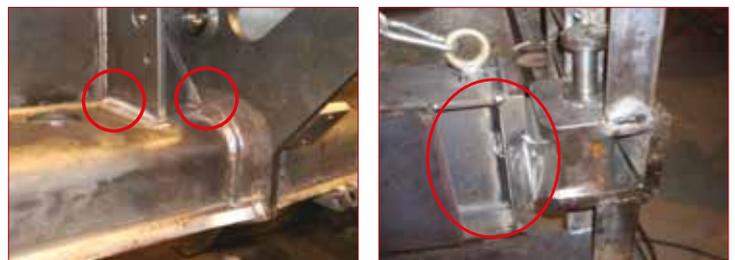


Extraction flow variation controlled by the operator by pressing the micro switch.



## Types of welded joints

Typical welded joints for mechanical welding, which require the adjustment of the extraction flow rate without stopping the arc, and therefore without losing productivity or requiring the resumption of welding.



## LINC GUN FX torches

### Ordering

Description	Part number
Air cooled torch	
LGFX 2R	3 m EM61000322
	4 m EM61000323
	5 m EM61000324
LGFX 4R	3 m EM61000325
	4 m EM61000326
	5 m EM61000327
LGFX 4R LN	4 m EM61000328

Description	Part number
Air cooled torch	
LGFX 4W	3 m EM61000329
	4 m EM61000330
	5 m EM61000331
LGFX 5W	3 m EM61000332
	4 m EM61000333
	5 m EM61000334
LGFX 4W LN	4 m EM61000335
LGFX 5W LN	4 m EM61000336



## LINC GUN FX DUAL FLOW torches

### Ordering

Description	Part number
Air cooled torch	
LGFX 2R DF	3 m EM61000337
	4 m EM61000338
	5 m EM61000339
LGFX 4R DF	3 m EM61000340
	4 m EM61000341
	5 m EM61000342
LGFX 4R DF LN	4 m EM61000343

Description	Part number
Air cooled torch	
LGFX 4W DF	3 m EM61000344
	4 m EM61000345
	5 m EM61000346
LGFX 5W DF	3 m EM61000347
	4 m EM61000348
	5 m EM61000349
LGFX 4W DF LN	4 m EM61000350
LGFX 5W DF LN	4 m EM61000351



## Torch protection sleeves

PACN protective sleeves offer very high resistance to fine spatter, wear and tear due to friction, cutting, tears and high temperature. They are of the duct type, with a full linear seam, and offer no points of catching with parts or tools. Para-aramid/cotton fibre material with nitrile coating.



### Ordering

Description	Part number
Ø 62 mm, 3 m long	W000380018
Ø 62 mm, 4 m long	W000380019
Ø 62 mm, 5 m long	W000380020

## Contact type torch rest

The contact type torch rest makes it possible to start an individual extracting turbine or open the HD damper in a centralised system as soon as the torch is taken in hand by the welder. As soon as the welder takes off the torch, the duct with an inner diameter 50 m tilts back under its own weight. The contact is active and extraction is operational. It is switched off when the operator puts the torch back into the duct, which goes back to its initial position.



### Ordering

Description	Part number
Contact type torch rest	W000279767

## Anti-adhesive torch spray

Ceraskin is the ideal ceramic anti-adhesive for fume extraction torches. It dries very quickly and protects torch consumables from weld spatter.

### Ordering

Description	Part number
Ceraskin anti-spatter spray	W000277679



## LINC TORCH FX TIG fume extraction torches

Compliant with standard EN 60974-7

The LINC TORCH FX TIG fume extraction torch range represents a technological advance in the field of the extraction of fume and particles at source during TIG welding processes.

The LINC TORCH FX torch protects welders and their environment in the workshop from harmful weld fumes and toxic particles such as manganese, nickel, chromium, cadmium and beryllium oxides, which are released during welding.

### Features:

- Capture at source - fume extraction by the torch body.
- Depending on the amperage, the effectiveness of the capture of weld fumes and toxic particles will reach 95%.
- Available in air-cooled and water-cooled versions.
- Bundle length 4 or 8 metres.
- Swivel handle.
- Very good handling by the operator thanks to its ergonomic design.
- Extraction nozzle with aluminium radiation protection screen, replaceable parts.
- Comfortable switching modules.
- Very soft and flexible extraction hose.
- Connection to extraction: Ø 38 mm hose.
- 13 mm quarter-turn connector.
- PCB module protected from HF and soiling by a protective plate.
- Wearing parts compatible with the most common standard in Europe.



### Technical specifications:



AIR

LTFX 17R



WATER

LTFX 30 W

DC welding intensity	140	320
AC/DC welding intensity	100	230
Duty factor at 40 °C	35%	100%

Minimum capture performance		LTFX 17R	LTFX 30 W
For speed 0.35 m/s	Flow m³/h	20	20
	Vacuum Pa	17,500	18,000

The handle of the ES TIG torch is shaped ergonomically to adapt to the welder's hand and fits snugly between thumb and forefinger.

The ergonomics, design and material of the handle contribute to the high stability of the torch during the welding process.

The **grip system** in 2K TPE rubber is soft and durable.

The **Switching Module** is comfortable, and placed at about -15 degrees, thus eliminating all tension in the fingers and minimises the risk of cramps due to the daily repetition of movements.

LINCOLN ELECTRIC offers two versions as standard:

- Single-button module (EB)
- Metal blade trigger module (RL)



Single-button module



# LINC TORCH FX

## Ordering

Model			LTFX 17 R		LTFX 30 W		
Length			4 m	8 m	4 m	8 m	
Handle	RL	Connection	S [Reference 2]	EM61000412	EM61000416	EM61000420	EM61000424
			C5B [Reference 1]	EM61000413	EM61000417	EM61000421	EM61000425
	EB	Connection	S [Reference 2]	EM61000414	EM61000418	EM61000422	EM61000426
			C5B [Reference 1]	EM61000415	EM61000419	EM61000423	EM61000427



## Connections

### Air cooled torch:

- 13 mm connector (35 - 50 mm<sup>2</sup>).
- Gas hose with fitting.
- **Quick connect** fitting in two versions:
  - 5-pin Tuchel connector (C5B).
  - 2 control wires (S).



Quick connect connection

### Water cooled torch:

- 13 mm connector (35 - 50 mm<sup>2</sup>) - Water + electricity.
- Gas hose with fitting.
- Water return pipe.
- **Quick connect** fitting in two versions:
  - 5-pin Tuchel connector (C5B).
  - 2 control wires (S).



## Complementary equipment

- Switching modules with 2, 3 buttons or 1 button + potentiometer *(adaptable on EB single-button module)*.
- Adapter connectors compatible with the different welding sources *(connection with the quick connect fitting)*.

On request

## Complement to associate

- Extraction turbine TE 15 - 2.2 kW - 400 V - *(see page 93)*

## Collector for automatic torch

It is designed for automatic welding machines and welding robots and captures fumes at source extremely effectively.

- Placed on the torch gooseneck.
- Connecting diameter: Ø 45 mm hose.
- Includes:
  - 1 chrome-plated extraction nozzle with 20 mm max. clamp,
  - 2 flexible connecting metal tubes,
  - 1 tube support,
  - 2 soft polyurethane pipes with Y.



### Ordering

Description	Part number
Automatic torch collector	W000379277

## Round and long nozzles

Extraction nozzles with magnetic stand Ø 45 and 50 mm for the capture at source of welding fume emissions.

- The maximum distance to observe for effective capture is 15 cm.



### Ordering

Description	Part number
<b>B</b> Laminar collector with magnetic stand, Ø 45 mm	EM7900060010
<b>A</b> Round nozzle with magnetic stand, Ø 45 mm	W000380755
<b>C</b> Long nozzle, 300 mm, with magnetic stand, Ø 45 mm	W000380754
<b>A</b> Round nozzle with magnetic stand, Ø 50 mm	EM61000352
<b>C</b> Long nozzle, 300 mm, with magnetic stand, Ø 50 mm	EM61000353

Choice of connecting hoses on page 96

In order to improve the ergonomics of workstations, increase productivity and extend the life of extraction torches, LINCOLN ELECTRIC offers a range of booms and devices adapted to the customer's needs.

## Mobile stand

The mobile stand on wheels must be fitted with the boom for machine with a separate wire feeder.

- Boom fastening height 900 mm.
- The boom is fastened by bolting.
- Mobility due to five swivel castors, two of which can be locked.
- Guaranteed stability thanks to a weight placed under the stand.



## Boom for compact power source

The boom adapts to all types of compact power source.

- Arm adjustable up to 2.5 m.
- Place to the left or right of the power source.



## Boom for machine with separate feeder

The boom is fixed to the top of the welding power source.

- Base plate with rotating pivot.
- Turning support with balance spring.
- Adjustable lifting stop.
- Arm adjustable up to 2.5 m.

### Ordering

Description	Part number
Boom for compact power source	W000261845
Boom for power source with separate feeder	W000261846
Mobile stand on castors for boom with separate feeder	W000378260



"INTEGRAL" Solution Package

## "INTEGRAL" Solution Package

The "INTEGRAL Solution" package brings together all the equipment necessary for a MIG / MAG welder to work ergonomically, while preserving the air quality of its environment.

It consists :

- a compact welding generator or a separate wire feeder to be selected from the LINCOLN ELECTRIC range,
- a fume extraction torch from the LINC GUN FX range,
- an ergonomic bracket for a fume extraction torch,
- an MD2 or TE 35 turbine with outdoor discharge by hose,
- a gas bottle (not supplied) and a liter flow regulator.

On request:  
Study and execution  
of the project.

## GIRAFFE booms for fume extraction torches

This boom is fixed to the ground and turns on its base.

- Balanced tilting arm.
- Available heights: 2 m (type 20) and 2.5 m (type 25).
- Available arm lengths: 3 m (type 30), 3.5 m (type 35) and 4.5 m (type 45).
- Feeder and welding bundle (max. weight 20 kg) fixed to the end of the boom.
- Wire reel installed on the fixed turning part of the stand.
- The gas cylinder is fixed to the foot of the boom.
- Optional: Assembly on mobile platform, 1,400 x 1,250 (please enquire).

**NB:** The weight of the feeder to install on the boom must be specified with the order.



### Ordering

Description	Part number
GIRAFFE boom 20 - 30*	W000273209
GIRAFFE boom 20 - 35*	W000340259
GIRAFFE boom 20 - 45*	W000273208
GIRAFFE boom 25 - 35*	W000273210
Mobile base, 1,400 x 1,250	Please enquire

\* The first figure states the height of the stand, the second the length of the arm.

## ERGOMIG 2D booms for fume extraction torches

This boom is available in three versions, for easy positioning above the working area. The double articulation covers the whole range of the boom.

- May be fixed to the metal structural frame of the building or placed on a stand.
- Double articulation at two-thirds of the bearing arm:
  - 180° at the wall hanging point
  - 350° for the tool support.
- Feeder bundle and extraction hose integrated into the body of the boom.
- Optional connectors and compressed air kit (connection at the end of the boom).

### Ordering

Description	Part number
ERGOMIG 2D 20 - 06 boom	W000340215
ERGOMIG 2D 30 - 10 boom	W000340216
ERGOMIG 2D 43 - 22 boom	W000340217

### Options

Connectors and compressed air kit	W000340253
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**ERGOMIG 2D 30 x 10 boom**

	Range (mm)	Permissible load at the end (kg)	Welding bundle length required (m)
Boom 20 x 06	3,100	70	10
Boom 30 x 10	4,450	70	10
Boom 43 x 22	6,800	40	15

# AEROMIG 3D booms for fume extraction torches

The AEROMIG 3D boom is the leader in its field. Available in three versions, it is height adjustable, which makes it possible to position it precisely to make welding easier. As a result, the boom holds the torch suspended, thus significantly reducing its weight for the operator. The lifting system also makes it easier to change the wire reel in the feeder.

- Up/down movement by a crank that controls a jack compensated by a gas lift.
- May be fixed to the metal structural frame of the building or placed on a stand.
- Double articulation at two-thirds of the bearing arm:
  - 180° at the wall hanging point
  - 350° for the tool support.
- Feeder bundle and extraction hose integrated into the body of the boom.
- Optional connectors and compressed air kit (connection at the end of the boom).

## Hydraulic lifting with manual pump

This version makes it easier to move the AEROMIG 3D boom up and down using a hydraulic cylinder.

## Electric hydraulic lifting

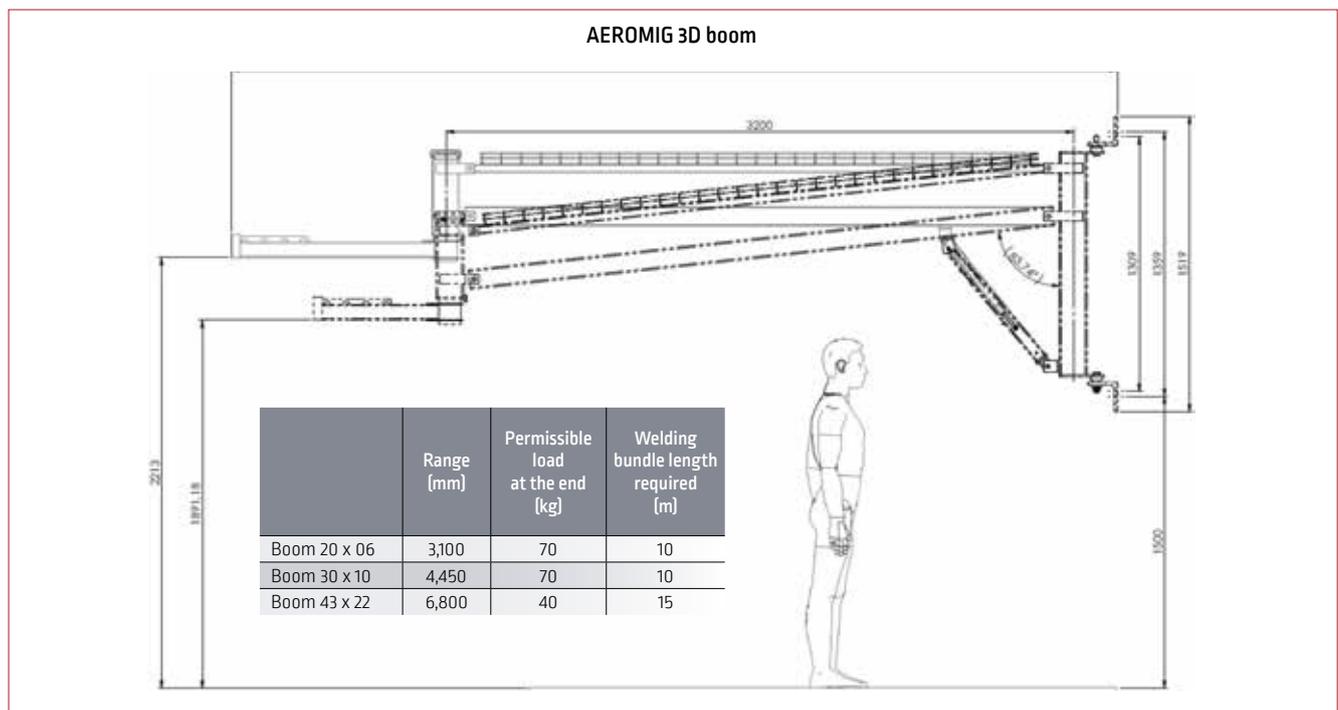
This version makes it possible to move the AEROMIG 3D boom up and down using an electrical remote control that manages the movement of the hydraulic cylinder.

- Electrical remote control with 10 m cable.
- CE cabinet with hydraulic unit for managing the cylinder.
- Double up/down control located on the front of the cabinet.



### Ordering

Description	Part number	Description	Part number	Description	Part number
AEROMIG 3D 20-06 boom		AEROMIG 3D 30-10 boom		AEROMIG3D 43-22 boom	
Crank and compensated jack control	W000340213	Crank and compensated jack control	W000340214	Crank and compensated jack control	W000340212
Manual hydraulic control	EM61000354	Manual hydraulic control	EM61000355	Manual hydraulic control	EM61000356
Electrical hydraulic control	EM61000357	Electrical hydraulic control	EM61000167	Electrical hydraulic control	EM61000358
<b>Complement</b>					
Connectors and compressed air kit	W000340253				



## ERGOMIG 2D and AEROMIG 3D boom stands

The stands for ERGOMIG and AEROMIG booms are made from thick steel tubes.

The plate of the stand is anchored to the floor with anchors adapted for the type of floor in the factory.

The crank of the boom remains at the standard height, accessible for operating the jack of AEROMIG 3D booms.

- Black painted steel post, section Ø 320 mm, 4,270 mm high.
- 12 mm thick 500 x 500 mm plate.
- Fastened to the floor by 4 holes, Ø 20 mm.

**NB:** Anchors are not supplied as they depend on the type of floor.

We recommend making a concrete block if the existing slab is not sufficiently thick.

### Ordering

Description	Part number
ERGOMIG 20-06 and 30-10 boom stand	W000379448
ERGOMIG 43-22 boom stand	W000379449
AEROMIG 20-06 and 30-10 boom stand	W000379444
AEROMIG 43-22 boom stand	W000379447



AEROMIG 3D 30-10 boom - Crank and compensated jack control

## MINIFLEX portable filtering unit

Conformity

This high-vacuum extraction unit with filtration is to be used for extracting welding fumes during maintenance operations or non-industrial production.

- Combined with a nearby capture nozzle or a fume extraction torch of 250 A maximum.
- Diameter of connection to extraction: 45 mm.
- Comprises 2 separate turbines, 1,000 W each, which can be controlled separately manually or automatically by sensing the welding current.
- Power voltage: 230 V - 50 Hz - 1 Ph.
- Metal pre-filter.
- Fine cellulose filter, class H10  
Filter surface area 12 m<sup>2</sup>.
- HEPA filter - Class H12.
- Max. flow rate:
  - 160 m<sup>3</sup>/h with 1 motor,
  - 230 m<sup>3</sup>/h with 2 motors.
- Mobile on castors supplied with hose, Ø 45 mm, 2,5 m long.
- Weight 15 kg.

### Ordering

Description	Part number
MINIFLEX filtering unit, 115 V/1 Ph/50 Hz *	EM7608001700
MINIFLEX filtering unit, 230 V/1 Ph/50 Hz *	EM7603001700
<b>Options</b>	
Activated carbon filter (odours)	EM9850070080
MINIFLEX wall bracket	EM7915303000
Connection for outdoor discharge	EM7900060050
<b>Consumables</b>	
Filter cartridge	EM9850060150
HEPA filter	EM9850060140
Metal pre-filter	EM0000102275

\* Not available in France



Complementary equipment  
page 96

## ESSENTIAL TE15 and TE35 units

Conformity

ESSENTIAL TE15 and TE35 turbines are a cost-effective solution for high-quality industrial fume extraction using welding fume extraction torches:

- TIG welding applications: TE15 turbine.
- MIG welding applications: TE35 turbine.

Complementary equipment  
page 96

Common equipment:

- Turbine, 400 V - 3 Phases.
- Automatic starting by current sensor or outside contact.
- Integrated metal pre-filter.
- 5 m long power cable.
- Ø 80 mm connection to an outdoor discharge or collecting system.
- Floor standing or wall mounted or on a post with the rear plate.
- A second fume extraction torch can be connected (on some conditions).

**NB:** These units do not have fine filtration.

	Field of application	Turbine (kW)	Ø of connection (mm)	Max. flow rate (m <sup>3</sup> /h)	Max vacuum (Pa)	Weight (kg)
TE15	TIG torch	2,2	38	80	25,000	36
TE35	MIG torch	3	50	310	30,000	51

### Ordering

Description	Part number
ESSENTIAL TE15 turbine, 400 V - 3 Ph - 50 Hz	EM61000428
<b>Options</b>	
Additional connection for connecting a hose, Ø 38 mm	EM61000429
<b>Consumables</b>	
Metal pre-filter, 200 x 305 x 24 mm	W000278617

### Ordering

Description	Part number
ESSENTIAL TE35 turbine, 400 V - 3 Ph - 50 Hz	W000278334
<b>Options</b>	
Additional connection for connecting a hose, Ø 50 mm	EM61000364
<b>Consumables</b>	
Metal pre-filter, 200 x 305 x 24 mm	W000278617



## MODULO MD2 unit

Conformity 

The MODULO MD2 turbine is the leader in the area of high-vacuum turbines designed for extracting welding fumes from fume extraction torches.

- Turbine, 3 kW - 230/400 V - 3 Ph - 50 Hz.
- Automatic starting by current sensor or outside contact.
- Diameter of connection to extraction: 50 mm.
- Metal pre-filter - Class EU2.
- Fine polyester filter, Class M  
Filter surface area: 5 m<sup>2</sup>  
*[not supplied as standard].*
- Cleaning by manual compressed air pulses.
- Dust recovery drawer.
- 5 m long power cable.
- Ø 80 mm connection to an outdoor discharge or collecting system.
- Mobile assembly with two large wheels.
- Noise: 70 dB(A).
- No-load flow rate: 310 m<sup>3</sup>/h at 30,000 Pa maximum.
- A second torch may be connected in some conditions.
- Weight 97 kg.
- Dimensions: 520 x 515 x 1,060 mm [LxWxH].

### Ordering

Description	Part number
MODULO MD2 turbine, 230/400 V - 3 Ph - 50 Hz	W000401385
Filter cartridge <i>[Reference 1]</i>	W000382775
<b>Options</b>	
Pressure reducer filter + compressed air connection hose <i>[Reference 2]</i>	W000401386
Additional connection for connecting a hose, Ø 50 mm	W000403083
<b>Consumables</b>	
Metal pre-filter, 355 x 445 x 24 mm	W000340600



Complementary equipment  
page 96

## HV 35 SC self-cleaning filtering unit

This HV 35 SC extraction unit is mainly designed for automatic installations that produce a large quantity of dry non-explosive fumes.

- Turbine, 3 kW - 400 V - 3 Ph - 50 Hz.
- Automatic starting by current sensor or outside contact.
- Diameter of connection to extraction: 45 mm.
- Polyester filter cartridge - Class M  
Filter surface area 2.5 m<sup>2</sup>.
- Self cleaning in offline mode and with manual pulses.
- Dust drum and hopper.
- Compressed air reducer incorporated into the unit *[service pressure 5 bars max.]*
- Filter cartridge saturation alarm.
- Ø 80 mm connection to an outdoor discharge or collecting system.
- Noise below 70 dB(A).
- Mobile assembly with 4 wheels, including 2 drive wheels.
- Max. flow rate: 310 m<sup>3</sup>/h  
- Max. vacuum: 30,000 Pa.
- Weight: 145 kg.
- Dimensions: 1,000 x 585 x 1,000 mm [LxWxH].
- Option available:  
- Pre-filter kit.

### Ordering

Description	Part number
HV 35 SC self-cleaning filtering unit	W000340001
<b>Complements</b>	
Metal pre-filter kit	W000340258
<b>Consumables</b>	
Polyester filter cartridge, class M	W000379693
Metal pre-filter, 200 x 200 x 24 mm	W000380756

Conformity 

Complementary equipment  
page 96



## Description of the DUAL FLOW patent filed by LINCOLN ELECTRIC

When combined with LINC GUN FX DUAL FLOW fume extraction torches, TE 35 or MD2 DUAL FLOW extraction turbines provide a nominal extraction rate that can be adjusted by using the electrical control located on the upper part of the torch handle.

The flow is at its maximum when the turbine is started, and every time it is restarted.

The flow can be reduced using the micro switch on the torch while welding, using two operating modes:

- ◆ 2T mode: the extraction rate is reduced only when the micro switch is used
- ◆ 4T mode: a press on the micro switch reduces the extraction rate, pressing it again returns to the maximum rate.

The extraction flow rate is reduced by the frequency variator of the TE 35 turbines or the DUAL FLOW damper on the MD2 turbine. The lower extraction rate can be adjusted on the variator or through the opening angle of the DUAL FLOW damper.

## ESSENTIAL TE35 DUAL FLOW

The ESSENTIAL TE35 DUAL FLOW turbine has characteristics identical to those of the TE 35 turbine, with additionally a frequency variator for managing the DUAL FLOW mode.

- Electrical box with frequency variator.
- Flow modulation management by 2T/4T sequence.

**NB:** Provide a 10 m jack extension if the turbine is more than 1 metre away from the welding machine.

### Ordering

Description	Part number
ESSENTIAL TE 35 DUAL FLOW turbine - 400 V - 3 Ph - 50 Hz	W000379431
<b>Complements</b>	
10 m torch cable extension with jack	W000381156
<b>Consumables</b>	
Metal pre-filter, 200 x 305 x 24 mm	W000278617

Complementary equipment page 96



Conformity

## MODULO MD2 DUAL FLOW

The MODULO MD2 DUAL FLOW turbine has characteristics identical to those of the MD2 turbine but additionally has the DUAL FLOW function.

- Electrical box with PLC for managing the DUAL FLOW mode.
- Power-operated damper for reducing the torch flow rate.
- Flow modulation management by 2T/4T sequence.

**NB:** Provide a 10 m jack extension if the turbine is more than 1 metre away from the welding machine.

### Ordering

Description	Part number
MODULO MD2 DUAL FLOW turbine - 230/400 V - 3 Ph - 50 Hz	W000401389
<b>Complements</b>	
Filter cartridge [Reference 1]	W000382775
10 m torch cable extension with jack	W000381156
<b>Optional compressed air supply for cleaning</b>	
Pressure reducer filter + connecting hose [Reference 2]	W000401386
<b>Consumables</b>	
Metal pre-filter (355 x 445 x 24) mm	W000340600



Complementary equipment page 96

Conformity

## Complements for high-vacuum extraction units

- VAC type hose made of PE-EVA copolymer material.
  - Available in Ø 38, 45 or 50 mm.
  - Length 5, 10 and 15 m.
  - Light, crush-proof, low head loss.
  - Service temperature -40 °C to +60 °C.



### Ordering

Description	Part number
Hose, Ø 38 mm L= 5 m with end fittings	EM61000410
Hose, Ø 38 mm L= 10 m with end fittings	EM61000411
Hose, Ø 45 mm L = 2.5 m with end fittings	EM9880020100
Hose, Ø 45 mm L = 5 m with end fittings	W000402139
Hose, Ø 45 mm L = 10 m with end fittings	W000402141
Hose, Ø 45 mm L = 15 m without end fittings	W000372365
Set of 2 end pieces for VAC45 hose	W000371977

Description	Part number
Hose, Ø 50 mm L = 5 m with end fittings	W000402140
Hose, Ø 50 mm L = 10 m with end fittings	W000402142
Hose, Ø 50 mm L = 15 m without end fittings	W000375488
Set of 2 end pieces for VAC50 hose	W000375489

- LINC GUN FX torch adapter for Ø 45 mm hose.

### Ordering

Description	Part number
LGFX adapter for Ø 45 mm hose	W000385619

- PVC type hose, Ø 50 and 63 mm, M1 fire class.

### Ordering

Description	Part number
PVC hose, Ø 50 mm, 50 m long	W000370750
PVC hose, Ø 63 mm, 50 m long	W000370034

- PVC type hose, Ø 80 mm, for outdoor discharge from high-vacuum turbines.

### Ordering

Description	Part number
Discharge hose, Ø 80 mm, 5 m long	W000386139
Discharge hose, Ø 80 mm, 10 m long	W000386140
Discharge hose, Ø 80 mm, 15 m long	W000386141

## Discharge kit for clad walls and roofs

The kits are made up of a set of accessories for discharging air outside the building for TE 35 and MD2 turbines.

### A Ø 80 discharge kit for clad wall:

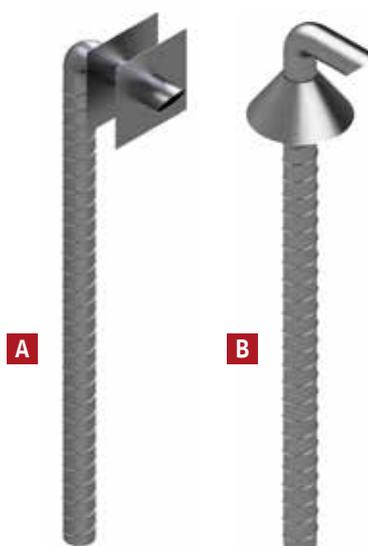
- 1 Ø 80 mm spiral duct.
- 1 Ø 80 mm 90° bends.
- 1 Ø 80 mm meshed whistle.
- 2 Ø 80 mm cleanliness plates.
- 1 polyurethane hose, 1 m long.
- 1 set of assembly accessories.

### B Ø 80 discharge kit for roof:

- 1 Ø 80 mm spiral duct.
- 2 Ø 80 mm 90° bends.
- 1 Ø 80 mm meshed whistle.
- 1 roof waterproofing guard.
- 1 polyurethane hose, 1 m long.
- 1 set of assembly accessories.

### Ordering

Description	Part number
A Clad wall discharge kit	EM61000235
B Roof discharge kit	EM61000236



## High-vacuum central units with PLC management and HMI control screen.

Our range of central units covers extraction needs from 1,000 to 4,000 m<sup>3</sup>/h at vacuum values from 20,000 to 25,000 Pascals. These units have horizontal air flow characteristics, which means that the vacuum is constant regardless of the required flow rate. Thus, we can guarantee the total efficiency of the extraction collector.

The choice will thus be made based on the required maximum flow rate.

The central unit is available in a compact version with filtration or a separate version with optional filtration.

## High-vacuum units are innovative, efficient and reliable

Applications that are mainly dedicated to welding with the help of fume extraction torches, extraction jigs, extraction nozzles, laminar collectors or systems for extracting dust from the floor.

Central units are adapted for all non-explosive dry dust or fumes.

### Specifications:

- Extraction capacity 1,000 to 4,000 m<sup>3</sup>/h, or 5 to 30 welders simultaneously using fume extraction torches.
- Constant nominal working vacuum from 20,000 to 25,000 Pa.
- PLC management with remote control with HMI screen.
- High-efficiency high-pressure backward centrifugal fan.
- Power consumption optimised for the number of torches in operation.
- Frequency variator to allow the gradual starting up of the turbine.
- High-performance self-cleaning cyclone filter.
- Polyester medium filter cartridges with high-efficiency PTFE membrane, class H13.
- 40-litre drum(s) for dust recovery.
- Padded duct silencer and vertical discharge kit to limit noise to 75 dB(A) at 1 metre.
- Rugged soundproofing box in epoxy painted galvanised metal plates.
- EU2 class metal pre-filter if the cyclone filter is not selected.

### Description of 5.7" touch screen HMI functions:

- Operating modes: manual/automatic/clock.
- Dynamic mode display of unit operating status.
- Threshold-based or continuous cleaning of filter cartridges.
- Real-time display of main parameters:
  - filter cartridge pressure difference,
  - fan power consumption,
  - working frequency,
  - compressed air pressure.
- Weekly programming clock.
- Remote control with 15 m cable.
- Stack light showing On, Off, Safety alarm.
- Settings saved on USB stick.
- Filter cartridge pressure difference trend curve.
- Filter maintenance management:
  - hours of use,
  - cartridge replacement,
  - fan maintenance,
  - dust drum maintenance.

Conformity 



HMI home screen

Our range of high-vacuum central units contains two versions:

## 1. CHD central unit

High-vacuum central unit with cyclone filter in separate version.  
The cyclone filter may be ordered later on if filtration is not selected.  
In that case, the pre-filter box will be required.



## 2. CCHD central unit

Compact high-vacuum central unit with cyclone filter integrated in a soundproof box with reinforced structure:

- Double insulation.
- Internal absorbent foam.

### Dimensional specifications

CHD Separate version	Ø of inlet/outlet (mm)	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
1000	152/200	2,070	1,300	1,546	700
2000	152/250				800
3000	203/315				950
4000	250/315				1,000
CCHD Compact version	Ø of inlet/outlet (mm)	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
1000	152/200	2,700	1,950	2,756	1,900
2000	152/250				2,000
3000	203/315				2,150
4000	250/315				2,200

### Ordering

CHD - Separate version	Part number	CCHD - Compact type	Part number
<b>CHD 1000 - 20000</b> Operating point: <b>1,000 m³/h at 20,000 Pa</b> 5 fume extraction torches operating simultaneously Fan, 15 kW - 400 V - 3 phases	EM61000120	<b>CCHD 1000 - 20000</b> Operating point: <b>1,000 m³/h at 20,000 Pa</b> 5 fume extraction torches operating simultaneously Fan, 15 kW - 400 V - 3 phases Cyclone filter 2 CD incorporated	EM61000140
<b>CHD 1000 - 25000</b> Operating point: <b>1,000 m³/h at 25,000 Pa</b> 8 fume extraction torches operating simultaneously Fan, 22 kW - 400 V - 3 phases	EM61000121	<b>CCHD 1000 - 25000</b> Operating point: <b>1,000 m³/h at 25,000 Pa</b> 8 fume extraction torches operating simultaneously Fan, 22 kW - 400 V - 3 phases Cyclone filter 2 CD incorporated	EM61000141
<b>CHD 2000 - 25000</b> Operating point: <b>2,000 m³/h at 25,000 Pa</b> 14 fume extraction torches operating simultaneously Fan, 37 kW - 400 V - 3 phases	EM61000122	<b>CCHD 2000 - 25000</b> Operating point: <b>2,000 m³/h at 25,000 Pa</b> 14 fume extraction torches operating simultaneously Fan, 37 kW - 400 V - 3 phases Cyclone filter 2 CD incorporated	EM61000142
<b>CHD 3000 - 25000</b> Operating point: <b>3,000 m³/h at 25,000 Pa</b> 22 fume extraction torches operating simultaneously Fan, 45 kW - 400 V - 3 phases	EM61000123	<b>CCHD 3000 - 25000</b> Operating point: <b>3,000 m³/h at 25,000 Pa</b> 22 fume extraction torches operating simultaneously Fan, 45 kW - 400 V - 3 phases Cyclone filter 4 CD incorporated	EM61000143
<b>CHD 4000 - 25000</b> Operating point: <b>4,000 m³/h at 25,000 Pa</b> 30 fume extraction torches operating simultaneously Fan, 55 kW - 400 V - 3 phases	EM61000124	<b>CCHD 4000 - 25000</b> Operating point: <b>4,000 m³/h at 25,000 Pa</b> 30 fume extraction torches operating simultaneously Fan, 55 kW - 400 V - 3 phases Cyclone filter 4 CD incorporated	EM61000144
Self-cleaning cyclone filter	Part number		
<b>2 CD cyclone filter</b> To be ordered for CHD 1000 and 2000 2 x 15 m² filter cartridges	W000273088		
<b>4 CD cyclone filter</b> To be ordered for CHD 3000 and 4000 4 x 15 m² filter cartridges	W000340250		
Pre-filter box - If the cyclone filter is not ordered	Part number		
Pre-filter box with class EU2 medium - 500 x 500 x 24 mm - (LxWxH)	EM61000127		

**NB:** Upon request, we can also offer:

- CHD and CCHD in ATEX version for explosive particles (dust zone 21 or 22).

## Roof for CHD and CCHD units kit complement

This equipment is recommended if the central unit is installed outdoors with no roof.

### Ordering

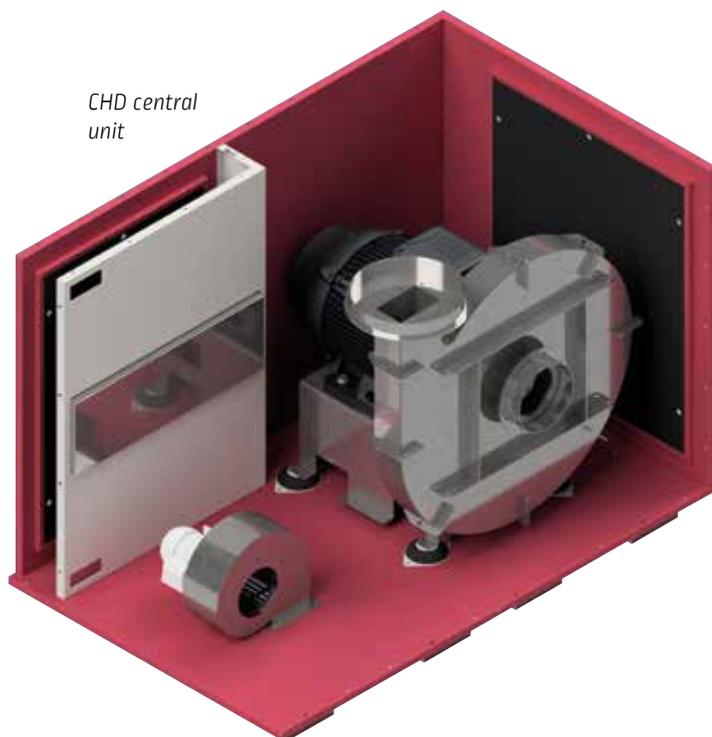
Description	Part number
Roof for CHD 1000 - 2000 - 3000 - 4000	EM61000239
Roof for CCHD 1000 - 2000 - 3000 - 4000	EM61000145

## Spare filters

### Ordering

Description	Part number
Filter cartridge with PTFE membrane - surface 15 m <sup>2</sup>	EM61000155
Metal pre-filter, 500 x 500 x 24 mm (LxWxH) - Class EU2	W000379647

CHD central unit



CCHD central unit



## DAMPER BOX

Conformity 

The DAMPER BOX controls a damper manually or automatically. It reduces the noise in the workshop and decreases power consumption.

- Manual/automatic mode selection switch.
- Automatic starting up by the current sensor or an outside contact.
- In automatic mode, the closing of the damper is delayed in relation to the stop control *(delay adjustable from 5 to 60 s)*.
- Damper opening indicator.
- Padlockable switch for isolation from the electrical system.
- Power supply 230/400 V - 1 Ph - 50 Hz.
- Dimensions: 275 x 225 x 120 mm *(h x w x d)*.

### Ordering

Description	Part number
DAMPER BOX	W000370749
<b>Complements</b>	
AC/DC current sensor	W000379696



## DUAL FLOW DAMPER BOX

Conformity 

The DUAL FLOW DAMPER BOX manages two high-vacuum pneumatic dampers. It must be used along with our range of LINC GUN FX DUAL FLOW fume extraction torches.

The first damper applies a vacuum to the extraction collector, while the second manages the modulation of the air flow at the same collector.

- Manual/automatic mode selection switch.
- 2T/4T mode selection switch:
  - 2T mode: the flow is modulated as long as the pushbutton is pressed,
  - 4T mode: press the button once to modulate the flow; press again to return to nominal flow,
  - In any event, the vacuum flow goes back to nominal during a new welding operation when the arc is shut down .
- In automatic mode, the closing of the damper is delayed in relation to the stop control *(delay adjustable from 5 to 60 s)*.
- Damper opening indicator.
- Padlockable switch for isolation from the electrical system.
- Power supply 230/400 V - 1 Ph - 50 Hz.
- Dimensions: 350 x 225 x 120 mm *(h x w x d)*.

### Ordering

Description	Part number
DUAL FLOW DAMPER BOX	W000375442
<b>Complements</b>	
AC/DC current sensor	W000379696



## High-vacuum pneumatic dampers

The pneumatic damper, used along with an ESSENTIAL DAMPER BOX or a DUAL FLOW DAMPER BOX, automates extraction from an extraction collector by putting it under the control of the actual welding time.

- Monostable 5/2 pneumatic valve - 24 VAC coil.
- Pneumatic cylinder.
- Use of a damper with the ESSENTIAL DAMPER BOX.
- Use of two dampers in series with the DUAL FLOW ESSENTIAL DAMPER BOX.



HD damper

### Ordering

Description	Part number
Pneumatic damper, HD 50	W000372349
Pneumatic damper, HD 63	W000372364
Pneumatic damper, HD 76	W000372363

Complement for air flow modulation	
Set of 20 lock rings for cylinder rod, 10 mm	W000385366

## Extraction of dust from the floor

The HD system may also be used with a device that extracts dust from the floor.

### Our mobile solution includes the following:

- High-vacuum dust drum on mobile trolley including:
  - 1 mobile trolley with handle,
  - 1 dust drum, capacity 50 litres,
  - 1 hose reel,
  - 1 storage slot for tube and brush,
  - 1 Ø 50 shutter with connector for connecting the Ø 38 mm hose,
  - 1 Ø 50 mm connection for connection to the collector system.

It is to be supplemented by:

- 1 extraction kit with brush, 450 mm, including:
  - 1 Ø 38 mm hose, 5 m long, with end fittings,
  - 1 set with chrome-plated straight and bent tubes, Ø 38 mm,
  - 1 brush, 450 mm long,
  - 1 hose, Ø 50 mm, 10 m long with end fittings.

### Ordering

Description	Part number
High-vacuum dust drum on mobile trolley	W000402088
Hose, Ø 38 mm, without end fittings - 5 m long	EM61000359
Set of 2 end fittings for Ø 38 mm hoses	EM61000360
Bent tube, Ø 38 mm	EM61000361
Straight tube, Ø 38 mm	EM61000362
Brush collector, 450 mm	EM61000363
Hose, Ø 50 mm L = 10 m with end fittings	W000402142





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**WELDLINE**  
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# ACCESSORIES

MORE COMFORT AND SAFETY FOR YOUR WELDERS



# CATALOGUE 2020

# WORKSHOP SAFETY

## General

WELDLINE® by LINCOLN ELECTRIC is the LINCOLN ELECTRIC mark for all welding environment products.

A wide range selected on the basis of demanding quality criteria that fully comply with the regulations:

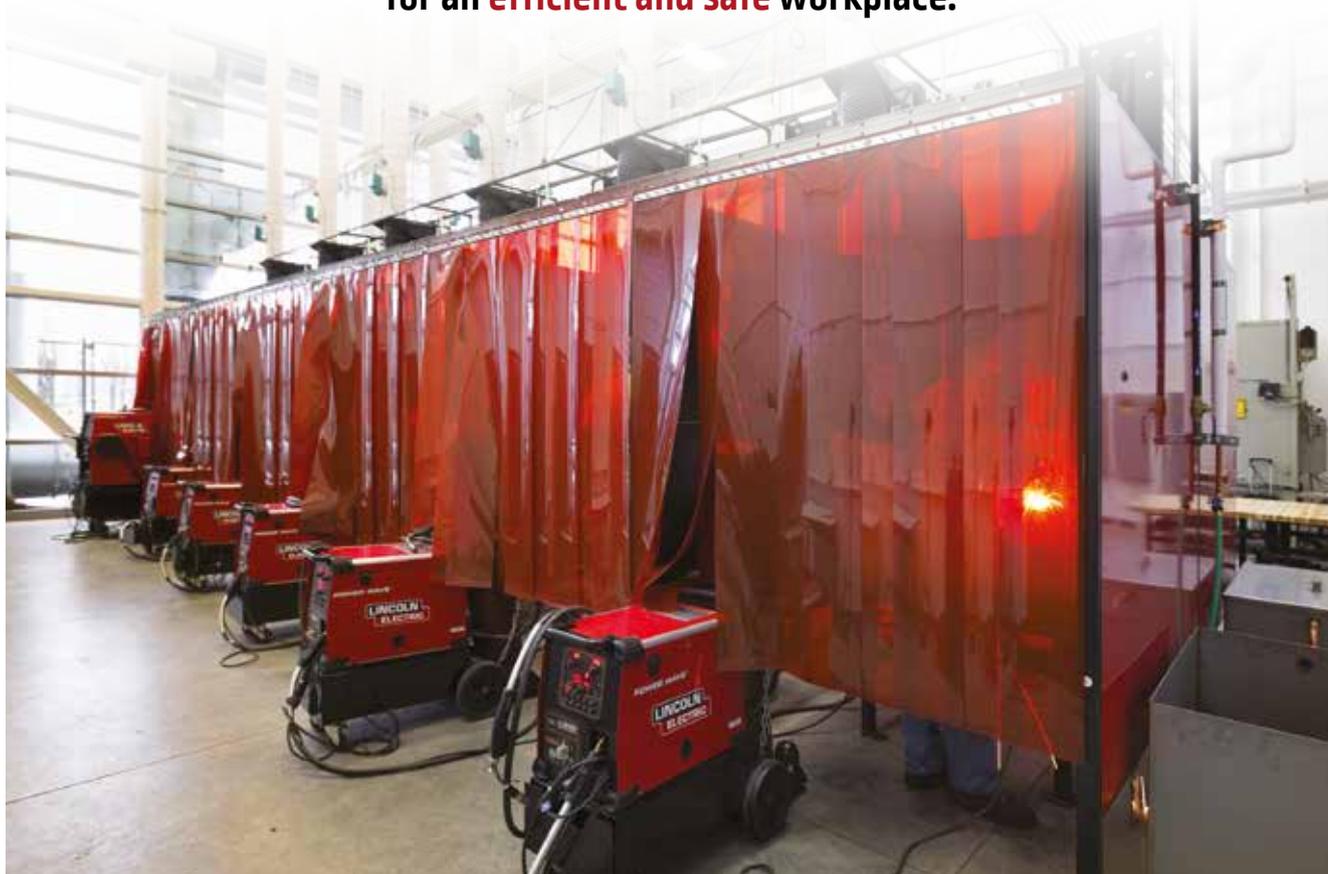
- ◆ strips to form screens for welding and grinding or strips to protect from dust or cold,
- ◆ fixed or mobile curtains or screens,
- ◆ a professional range of heat-resistant fabrics,
- ◆ all the spare parts required for creating your own special booths,
- ◆ standard elements and soundproofing walls.

The installation and use of these services are verified by **CARSAT**.

Lincoln Electric has **internationally acknowledged know-how** in welding and welding equipment.

Our team of sales engineers and dedicated specialists will prepare a project that best meets your requirements and environment.

**Our aim is to offer  
a comprehensive and professional solution  
for an efficient and safe workplace.**



**MORE COMFORT  
AND SAFETY  
FOR WELDERS**

## CONTENTS

<b>VISUAL SAFETY/GENERAL</b> .....	<b>105</b>	<b>SAFETY FABRICS</b> .....	<b>117</b>
<b>WELDING SCREENS</b> .....	<b>106</b>	<b>1</b> SPATTER PROJECTION (WELDING AND GRINDING).....	<b>117 et 118</b>
<b>1</b> PREMIUM (CURTAINS).....	<b>106</b>	<b>2</b> SPATTER PROJECTION (FLAME).....	<b>118</b>
<b>2</b> OPTILAM (STRIPS).....	<b>106</b>	<b>3</b> SPATTER PROTECTION (VERY HIGH WELDING TEMPERATURE).....	<b>118</b>
<b>3</b> PROTECTLITE.....	<b>107</b>	<b>METAL PARTITIONS</b> .....	<b>119</b>
<b>4</b> UNIVERSAL.....	<b>108</b>	<b>1</b> PAINTED EMBOSSED PLATE WELDING BOOTHS.....	<b>119</b>
<b>SAFETY STRIPS</b> .....	<b>109 - 111</b>	<b>SOUNDPROOFING</b>	
<b>SOFT SAFETY CURTAINS</b> .....	<b>112</b>	<b>SOUNDPROOFING PARTITIONS</b> .....	<b>120</b>
<b>1</b> WELDING CURTAINS.....	<b>112</b>	<b>1</b> PHONIC 60 RANGE.....	<b>120 and 121</b>
<b>2</b> CLEAR CURTAINS.....	<b>112</b>	<b>SOUNDPROOFED GRINDING BOOTH</b> .....	<b>122 and 123</b>
<b>ACCESSORIES (FOR CURTAINS AND STRIPS)</b> .....	<b>113</b>	<b>1</b> PROPHONIC 100 PARTITIONS.....	<b>122 and 123</b>
<b>1</b> RAIL 30 X 35.....	<b>113</b>	<b>MISCELLANEOUS</b>	
<b>2</b> 33.7 MM TUBE AND ACCESSORIES.....	<b>114</b>	<b>WELDING TENTS AND IMPACT PLATES</b> .....	<b>124</b>
<b>3</b> COMPLETE UNROLLING PULLER, 8,000 MM.....	<b>115</b>	<b>1</b> WELDING TENTS.....	<b>124</b>
<b>4</b> SWIVEL ARM.....	<b>115</b>	<b>2</b> IMPACT PLATES.....	<b>124</b>
<b>PROTECTION FROM HEAT</b>			
<b>HEAT GUARD FABRICS</b> .....	<b>116</b>		
<b>1</b> WELDING CUSHIONS.....	<b>116</b>		
<b>2</b> INSULATING SLEEVES.....	<b>116</b>		
<b>3</b> INSULATING BLANKETS.....	<b>116</b>		

## Safety strips, curtains, heat guard fabrics, portable screens, accessories for curtains/strips and soundproofing walls

The optical radiation to which workers may be exposed can be harmful for the eyes and skin.

Optical rays are classified by their wavelengths and include ultraviolet, visible (*the range visible to the human eye*) and infrared.

While short-term exposure to low-intensity optical rays may be beneficial for the body (*vitamin D synthesis by ultraviolet rays, for example*), prolonged exposure to high-intensity optical radiation can be hazardous. Optical radiation can affect the skin and eyes; the effects may be acute or chronic depending on the wavelength, the intensity of the radiation and the exposure time. Skin conditions may take the form of erythema (*sunburn*), premature ageing and potentially cancer. For the eyes, the immediate direct effects are injuries to the cornea, the conjunctiva or even the retina. In the long term, chronic exposure can make the lens go opaque (*cataract*).

Employers are required to offer their employees a safe working environment.

Welding workshops are governed by a variety of rules and standards, such as for instance European standard EN ISO 25980, which defines the parameters for filtering out welding radiation, self extinguishing (*fire resistance*), UV stability and control marking.

WELDLINE By LINCOLN ELECTRIC curtains and strips protect workers in the vicinity from the harmful radiation of welding arcs.

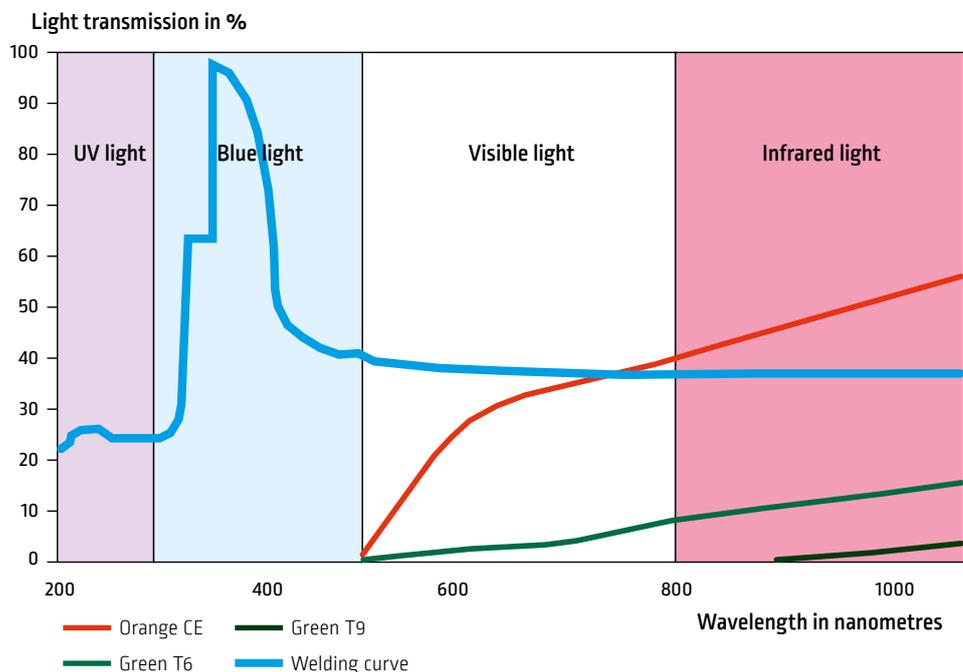
All WELDLINE By LINCOLN ELECTRIC filtration products comply with European standard EN ISO 25980 and are regularly audited and certified once again. That gives you the guarantee of a product offering unquestionable safety.



## Light transmission data of welding curtains and strips

**NB:**  
All our welding safety curtains and strips, in Orange CE, Green T6 or Green T9, comply with EN ISO 25980

Do not use clear curtains for welding.



## PREMIUM *[curtains]*

The PREMIUM screen is rugged and portable. This is a curtain screen that is stretched and stable when in position.

- 2,000 mm wide, 2,000 mm high.
- Reinforcement in galvanised round tubes (25 x 1 mm).
- UV protection according to standard EN ISO 25980.
- Safety screen, 2,000 mm x 1,700 mm.

### Ordering

Description	Part number
PREMIUM FRAME with Orange CE curtains, 2,000 x 2,000	W000370400-pack
PREMIUM FRAME with green T6 curtains, 2,000 x 2,000	W000371216-pack
PREMIUM FRAME with green T9 curtains, 2,000 x 2,000	W000370401-pack
Spare curtain	
Orange CE curtain	W000370400
Green T6 curtain	W000371216
Green T9 curtain	W000370401

**Economical**  
**Easy assembly**  
**Lightweight**



## OPTILAM *[strips]*

The OPTILAM screen is made up of 300 mm wide and 2 mm thick strips.

It is designed specially to be easily portable, and very stable at the same time.

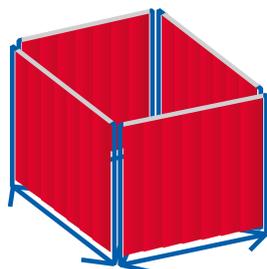
Its "duck" feet allow you to assemble two screens at angles to rapidly build booths.

- 1,860 mm wide, 1,930 mm high.
- Painted steel structure.
- 7 strips, 1,750 mm high, in accordance with standard EN ISO 25980.

### Ordering

Description	Part number
Frame alone + hooks for strips	W000010254
Kit of 7 strips in Orange CE	W000010257
Kit of 7 strips in Green T9	W000010256

**Mobile**  
**and rugged**  
**Creation**  
**of welding**  
**booths**



## PROTECTLITE

The PROTECTLITE screen is stable and mobile, and will create an effective and modular guard from welding arcs for all your work in the workshop.

PROTECTLITE is available in several versions:

- Frame alone, 2,150 mm wide, to be fitted with strips or curtains,
- Triptych version with 800 mm extension to obtain a width of 3,750 mm.

Manoeuvring castors with a 50 mm diameter and a lighter frame are a more economic alternative for Universal.

### Specifications:

- Frame - 2,000 x 2,150 mm (h x w),
- Four swivelling castors, Ø 50 mm, of which two with brakes,
- Painted steel frame structure:
  - Square tubes, [40 x 30 x 2] mm,
  - Round tubes, [30 x 2] mm.

### Strips

- Strips, L 570 x 1 x 1,600 mm provided with 50 mm overlap,
- 1 mm thickness.

### Triptych

- 800 mm swivel extensions.

#### For example:

to obtain a triptych frame with a total length 3,750 mm, you need 1 frame + 1 set of 2 extensions of 800 mm [refer to the table below].

### Curtains

- Curtains supplied with 7 eyes, 7 metal suspension rings over the width and press studs on the height. Hemmed on four sides.
- Weight 25 kg.



### Ordering

	Description	PROTECTLITE composition (width)		Part number
		2,150 mm	3,750 mm	
Curtains	Frame	1	1	W000010224
	Set of 2 extensions	-	1	W000010226
	Curtains in Orange CE	2	3	W000010355
	Curtains in Green T6	2	3	W000010351
	Curtains in Green T9	2	3	W000010359
Strips	Frame	1	1	W000010224
	Set of 2 extensions	-	1	W000010226
	Kit of 4 strips in Orange CE	1	2	W000010261
	Kit of 4 strips in Green T6	1	2	W000010484
	Kit of 4 strips in Green T9	1	2	W000010487
	Suspension ring	13	22	W000010181



#### Spares

- Kit of 4 castors:
- 2 free
  - 2 with locks
- W000010497

## UNIVERSAL

The UNIVERSAL screen is perfectly stable and mobile, and offers very high quality. Because of its rugged design, it may be used in the most extreme conditions.

Its very strong frame and large castors (75 mm) make it a long-lasting investment.

UNIVERSAL is available in several versions:

- Frame alone, 2,150 mm wide, with strips or curtains,
- Triptych version with 700 or 1,100 mm extension to obtain width 3,550 or 4,350 mm.

### Specifications:

- Frame - 2,100 x 2,150 mm (h x w),
- Four swivelling castors, Ø 75 mm, of which two with brakes,
- Painted steel frame structure:
  - Square tubes (50 x 30 x 2) mm,
  - Round tubes (35 x 2.5) mm.

### Curtains

- Curtains supplied with 7 eyes, 7 metal suspension rings over the width and press studs along the height. Hemmed on four sides,
- Weight 25 kg.



### Triptych

- Swivel extensions, 700 mm or 1,100 mm.

#### For example:

to obtain a triptych frame with a total length 3,550 mm, select 1 frame + 2,700 mm extensions (refer to the table below).



**Ruggedness**  
for heavy industry  
May be made with  
heat-resistant fabric  
or soundproofing fabric

### Strips

- W 300 x 2 x 1,800 mm strips with 66 % overlap,
- 2 mm thick.

### Ordering

	Description	Composition of UNIVERSAL (width)			Part number
		2,150 mm	3,550 mm	4,350 mm	
Curtains	Frame	1	1	1	W000010269
	Extension	-	2	-	W000010273
	Extension	-	-	2	W000010274
	Curtains in Orange CE	2	3	3	W000010356
	Curtains in Green T6	2	3	3	W000010352
	Curtains in Green T9	2	3	3	W000010360
	Clear curtains	2	3	3	W000010468
Strips	Frame	1	1	1	W000010269
	Extension	-	2	-	W000010273
	Extension	-	-	2	W000010274
	Kit of strips in Orange CE	3	4	5	W000010333
	Kit of strips in Green T9	3	4	5	W000010335
	Set of 11 hooks	1			W000010459
	Kit of accessories	-	1	1	W000010253



#### Spares

- Kit of 4 castors:
- 2 free
  - 2 with locks

W000010297

# SAFETY STRIPS

These strips are made in accordance with standard EN ISO 25980.

- Safety strips are available in different colours:



Orange CE



Green T6



Green T9

The choice of colour will depend on the welding process. Generally speaking, a light colour is suitable for brazing, flame welding and low-intensity welding. The lighting of the work space is thus improved. Green T9 is designed for high-intensity welding and/or for special welding applications such as MIG aluminium.

- Clear safety strips

They offer protection from the air, dust, humidity, splashing and noise.

They are available in 50 m long rolls or to measure, cut and punched. All strips are self extinguishing.



## Safety strip overlap

### 66 % overlap:

- 300 mm wide strips.
- Complete screen thanks to a large overlap.
- Effective wind barrier and very high mechanical strength.

$$\text{No} = \frac{\text{L} - 100}{200}$$

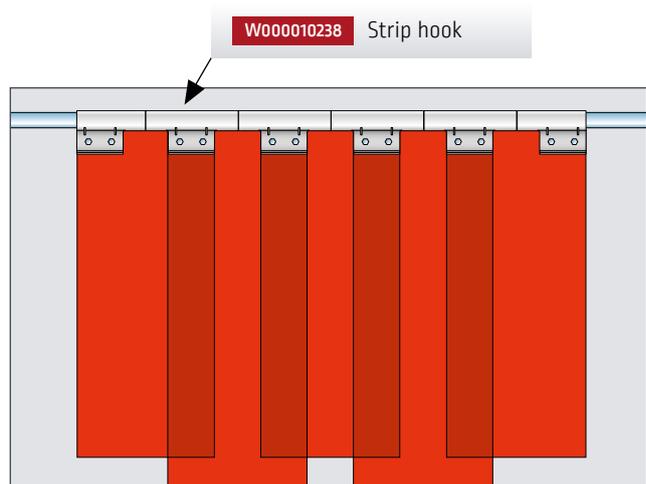
No: number of strips

L: required length in mm

If  $\text{No} < x.5$  then  $\text{No} = x$

If  $\text{No} > x.5$  then  $\text{No} = x + 1$

E.g.:  $\text{No} = 10.6$ , so 11 strips



The number of hooks is equal to the number of strips + 1.

### 33 % overlap:

- 300 mm wide strips.
- Complete screen thanks to a large overlap.
- Used mainly if workers often pass through the strips.

$$\text{No} = \frac{\text{L} - 50}{250}$$

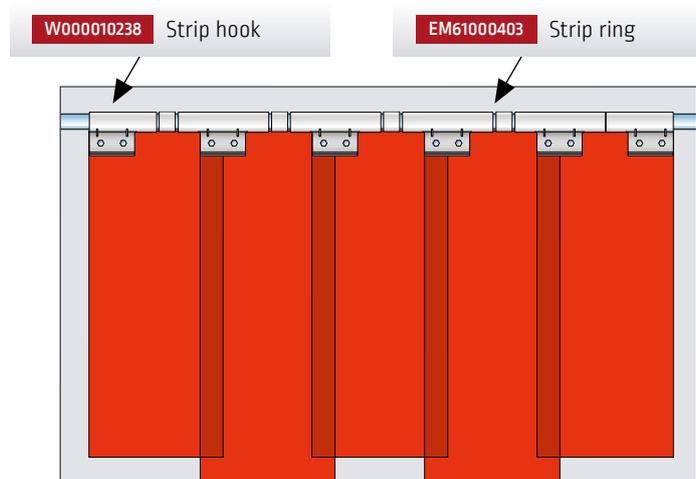
No: number of strips

L: required length in mm

If  $\text{No} < x.5$  then  $\text{No} = x$

If  $\text{No} > x.5$  then  $\text{No} = x + 1$

**NB:** do not forget the intermediate rings



The number of hooks is equal to the number of strips + 1.

The number of rings is equal to the number of strips - 1.

## Selection table of number of strips, 300 mm wide

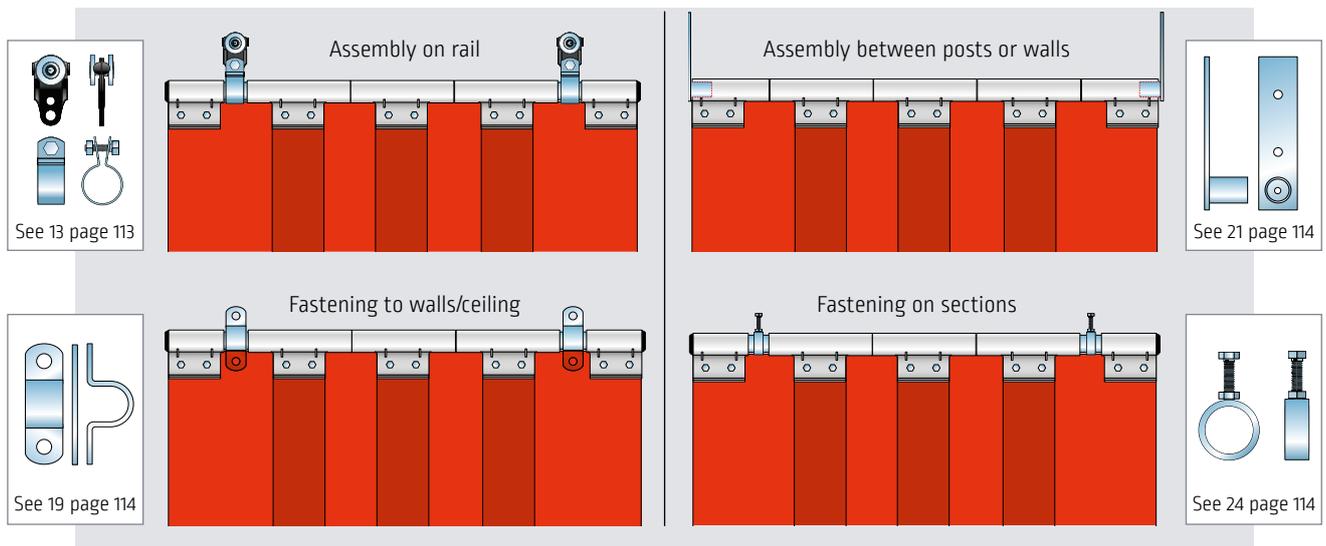
Number of strips	Width in mm with overlap	
	66 %	33 %
1	300	300
2	500	550
3	700	800
4	900	1,050
5	1,100	1,300
6	1,300	1,550
7	1,500	1,800
8	1,700	2,050
9	1,900	2,300
10	2,100	2,550
11	2,300	2,800
12	2,500	3,050

Number of strips	Width in mm with overlap	
	66 %	33 %
13	2,700	3,300
14	2,900	3,550
15	3,100	3,800
16	3,300	4,050
17	3,500	4,300
18	3,700	4,550
19	3,900	4,800
20	4,100	5,050
21	4,300	5,300
22	4,500	5,550
23	4,700	5,800
24	4,900	6,050

Number of strips	Width in mm with overlap	
	66 %	33 %
25	5,100	6,300
26	5,300	6,550
27	5,500	6,800
28	5,700	7,050
29	5,900	7,300
30	6,100	7,550
31	6,300	7,800
32	6,500	8,050
33	6,700	8,300
34	6,900	8,550
35	7,100	8,800
36	7,300	9,050

## Assembly and suspension of strips, 300 mm wide

Different types of assembly: examples for 300 mm strips with 66 % overlap

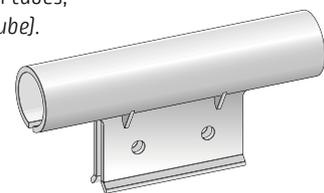


### Suspension of strips:

**NB:** the suspension hooks are fixed to the edges of the strips at their partial overlap, thus avoiding deformation and gaps between strips after some time of use. In view of the fastening principle, the first and last hooks are to be shortened

#### Suspension hook for strips

- 200 mm wide, for 33.7 mm tubes, (free rotation on 32 mm tube).



#### Intermediate ring

- For 33 % overlap, (inserted between 2 suspension hooks).



### Ordering

Description	Part number
Single hook	W000010238
Set of 11 hooks	W000010459
Single ring	EM61000403
Set of 10 rings	W000010460

## ORDERING

### Packaging in 50 m roll

Width	Thickness	Colour	Part number
200 mm	2 mm	Clear	W000010239
300 mm	2 mm	Orange CE	W000010230
	2 mm	Green T6	W000010228
	2 mm	Green T9	W000010229
	2 mm	Clear	W000010240
	3 mm	Orange CE	W000010232
	3 mm	Green T9	W000010458
	3 mm	Clear	W000010241

### Weight of strips:

Width	Thickness	Weight per metre
200 mm	2 mm	0.45 kg
300 mm	2 mm	0.67 kg
300 mm	3 mm	1.00 kg
400 mm	4 mm	1.67 kg
570 mm	1 mm	0.67 kg



### Strips cut and punched to measure

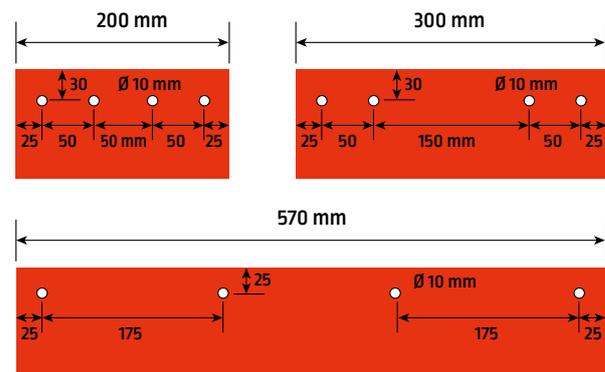
Width	Thickness	Colour	Comments	Part no for 1 metre
300 mm	2 mm	Orange CE	Standard piercing	W000010235
	2 mm	Green T6		W000010233
	2 mm	Green T9		W000010234
200 mm	2 mm	Clear	On request*	W000010243
300 mm	2 mm	Clear	On request*	W000010244
	3 mm	Clear		W000010245

**Comments:** to obtain 10 strips that are 1.80 m high, you must order part number W000XXXXX, corresponding to the colour you need, 18 times.

\* These items are defined but not held in stock.

**Delivery time:** Two weeks

### Standard piercing of strips



Number of strips	Total width	Thickness	Colour	Height	Comments	Part number	
Kit 4 strips width 570 mm	2,000 mm	1 mm	Orange CE	1,600 mm	Specially for Protectlite screens. Supplied with a kit of 13 hooks (W000010483).	W000010261	
	2,000 mm	1 mm	Green T6	1,600 mm		W000010484	
	2,000 mm	1 mm	Green T9	1,600 mm		W000010487	
	Kit of 4 strips 300 mm wide	2,000 mm	1 mm	Orange CE	1,800 mm	Supplied with a kit of 13 hooks (W000010483).	W000010262
		2,000 mm	1 mm	Green T6	1,800 mm		W000010485
		2,000 mm	1 mm	Green T9	1,800 mm		W000010488
		2,000 mm	1 mm	Orange CE	2,000 mm		W000010263
Kit of 4 strips 300 mm wide	2,100 mm	2 mm	Orange CE	1,800 mm	Specially for Universal screens (3 sets). Supplied <b>without</b> the kit of 11 hooks (W000010459).	W000010333	
	2,100 mm	2 mm	Green T9	1,800 mm		W000010335	
Kit of 7 strips 300 mm wide	1,860 mm	2 mm	Orange CE	1,750 mm	Specially for Optilam screens. Supplied <b>without</b> hooks for strips (W000010238).	W000010257	
	1,860 mm	2 mm	Green T9	1,750 mm		W000010256	

## WELDING CURTAINS

**Welding curtains are made in accordance with standard ISO EN 25980.**

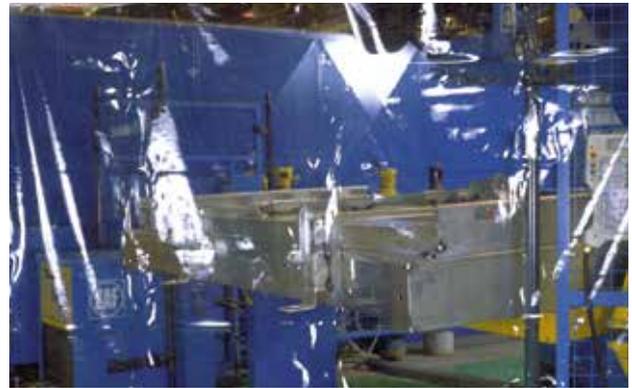
They are self extinguishing and 1400 mm wide.  
 They are hemmed on four sides, which makes them very resistant to tearing.  
 They are in 0.4 mm thick PVC.  
 They are supplied with 7 suspension eyes over their width and 7 metal rings for suspension.  
 Curtains are juxtaposed using press studs placed along their height: 120 + 400 mm spacing.

• 3 colours are available:



## CLEAR CURTAINS

Clear curtains are designed for protection from draughts, dust, humidity and grinding debris. They are self extinguishing and supplied in a width of 1,400 mm.  
 M2 fire class.  
 They are hemmed on four sides, which makes them highly resistant to tearing.  
 They are in 0.4 mm thick PVC.  
 They are supplied with 7 suspension eyes over their width and 7 metal rings for suspension.  
 Curtains are juxtaposed using press studs placed along their height: 120 + 400 mm spacing.



### Ordering

Width	Height	Colour	Part number	Comments	
1,400 mm	1,400 mm	Orange CE	W000010354	-	
		Green T9	W000010358		
		Clear	W000010466		
	1,600 mm	1,600 mm	Orange CE	W000010355	For PROTECTLITE
			Green T6	W000010351	
			Green T9	W000010359	
			Clear	W000010467	
	1,800 mm	1,800 mm	Orange CE	W000010356	For UNIVERSAL
			Green T6	W000010352	
			Green T9	W000010360	
	2,000 mm	2,000 mm	Orange CE	W000010357	-
			Green T6	W000010353	
Green T9			W000010361		
Clear			W000010469		
1,700 mm	2,000 mm	Orange CE	W000370400	Only for PREMIUM	
		Green T6	W000371216		
		Green T9	W000370401		
3,420 mm	1,300 mm	Green T9	W000010173	with Velcro tab	
		Orange CE	W000010174		

### Other curtains:

Supplied on request, within 15 days:  
 height 2,200, 2,400, 2,600, 2,800, 3,000 mm,  
 width 1,400 mm.

### Curtains to measure in special dimensions:

Price per m<sup>2</sup> with suspension eyes over their width and press studs over their height, with metal suspension rings.

#### Clear

Part number: **W000010470**

#### Coloured (Orange CE, Green T6 and T9)

Part number: **W000010465**

#### Example of order to measure for two curtains:

Width 1.80 m x height 3 m = 5.4 m<sup>2</sup>  
 for 2 curtains

Requirement = 10.8 m<sup>2</sup> = 11 m<sup>2</sup>.

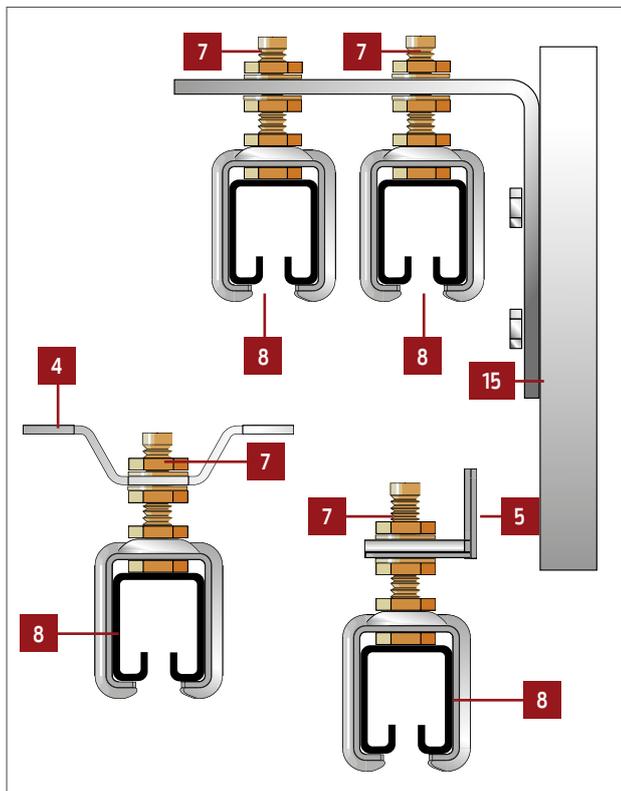
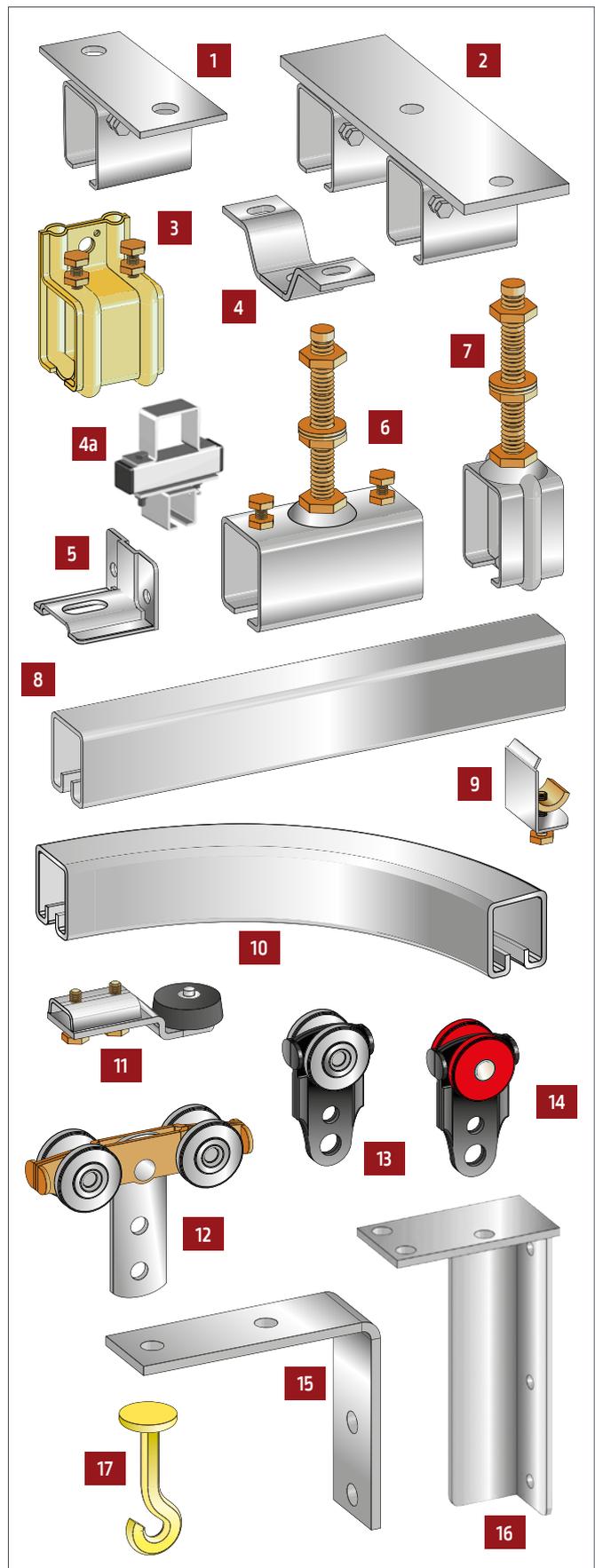
Suspension eyes over their width, press studs over their height.

# RAIL 30 x 35

Between two support structures that are 2 metres apart, the permissible load is 57 kg.

**Ordering**

	Description	Part number
1	Single rail ceiling bracket	W000010209
2	Double rail ceiling bracket	W000010210
3	Lateral connecting piece	W000010208
4	Ceiling tab	W000010214
4a	Tab for swivel arm	EM61000221
5	Corner tab	W000010213
6	Connecting piece for 2 rails	W000010212
7	Bracket for long rod 10 x 100	W000010211
8	Rail 30 x 35, maximum length 3 meters - 1 meter - 2 meters - 3 meters	W000010199 W000010200 W000010201
9	Trim finish end piece	W000010215
10	90° curved rail, radius 500 mm	W000010205
11	Carriage stop	W000010216
12	Double steel carriage	W000010178
13	Single steel carriage	W000010177
14	Lightweight carriage (for curtains)	W000010176
15	Rail fastening bracket (posts/wall)	W000010207
16	Universal bracket	W000010218
17	Rail bracket (set of 10)	W000010221

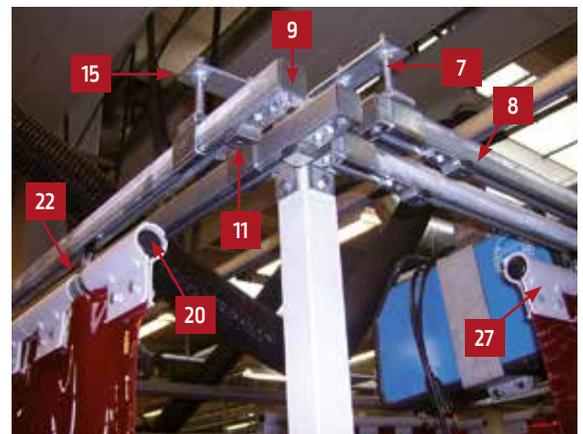


# 33.7 MM TUBE AND ACCESSORIES



## Ordering

	Description	Part number
15	Rail fastening bracket (posts/wall)	W000010207
16	Universal bracket	W000010218
19	Ceiling/post tube fastening	W000010182
19a	Tube fastening for swivel arm	EM61000230
20	Tube, Ø 33.7 mm - 1 meter - 2 meters - 3 meters	W000010187 W000010188 W000010189
21	Tube wall fastening	W000010183
22	Tube suspension clamp	W000010181
23	Tube connection piece	W000010185
24	Long rod bracket	W000010184
25	Opening ring with cord	W000010223
26	Posts - 50 x 50 x 2,250 mm - 50 x 50 x 3,000 mm - 80 x 80 x 3,000 mm - 100 x 100 x 3,000 mm - 120 x 120 x 3,000 mm - 160 x 160 x 3,000 mm	W000010194 W000010196 W000010193 EM61000222 EM61000223 EM61000224
27	Strip suspension hook	W000010238
28	Double swivel steel carriage	W000010179
29	10 open steel rings, 4 mm Ø 40	W000010219
30	7 closed rings for curtain	W000010170
31	10 steel S rings	W000010206
32	Finishing cap for Ø 33.7 mm tube	EM61000233



## COMPLETE UNROLLING PULLER, 8,000 MM

Unrolling puller, 8 metres long, without curtains.

- Wall bracket included,
- Supplied with cable tension mechanism,
- Cable Ø 3 mm.

To be used along with our range of curtains\*  
L 1,400 x H 1,400 - 2,000 mm [see page 112]

### Ordering

Description	Part number
Complete unrolling puller, 8,000 mm	EM61000404
Curtain suspension rings [set of 10]	EM61000225

\* Maximum 6 curtains measuring 1,400 mm



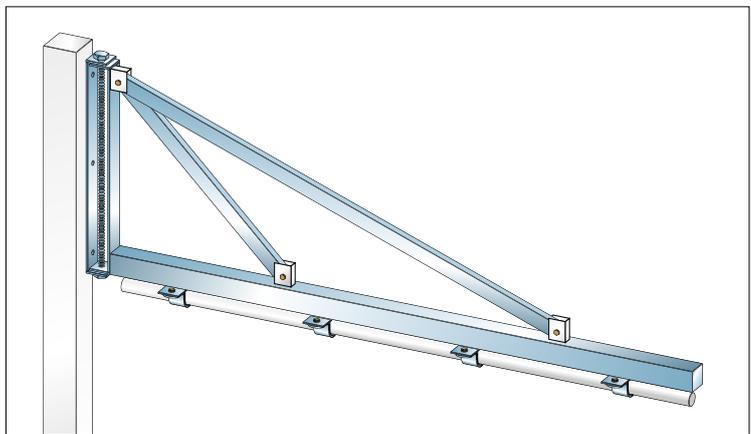
## SWIVEL ARM

Swivel arms make it possible to provide large access to working areas.

- The boom is made up of a square tube, 50 x 50 mm,
- The arm has a hinge and a slowing mechanism (rotation speed),
- Colour RAL 7035,
- The bracket for assembly against a wall is included. Possibility of assembling on posts, 80, 100 or 120, [refer to the table below].
- Two arms may be assembled on the posts measuring 160 mm [please enquire]

### Ordering

Length	Part number
2,000 mm	EM61000226
3,000 mm	EM61000227
4,000 mm	EM61000228
5,000 mm	EM61000229

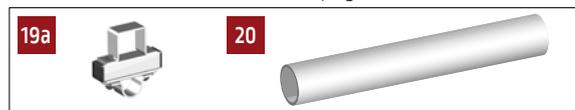


### Assembly accessories

The swivel arm must be supplemented by a round tube or a rail.

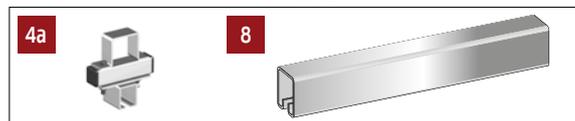
#### Round tube

- Provide ref. 20 and ref. 19a\* [see page 114]



#### Rail

- Provide ref. 8 and ref. 4a\* [see page 113]



\*1 fastener per metre

### Choice of posts for swivel arm

Arm length	Curtains			Strips, 300 x 2 mm			Strips, 300 x 3 mm		
	Height of arm			Height of arm			Height of arm		
	2,200 mm	2,700 mm	3,200 mm	2,200 mm	2,700 mm	3,200 mm	2,200 mm	2,700 mm	3,200 mm
Recommended post section									
2,000 mm	80 mm			80 mm	100 mm		100 mm		
3,000 mm	80 mm			100 mm	120 mm		120 mm	120 mm	120 mm
4,000 mm	80 mm			120 mm			120 mm	Please enquire	
5,000 mm	100 mm			120 mm	Please enquire		Please enquire		

## INSULATING PRODUCTS

Insulating heat guards are used to maintain the temperature of pre-heated pieces and avoid contact with high-temperature objects.

### Premium finishes:

- The stainless steel wire is coated with Kevlar
- Reinforced seams

## WELDING CUSHIONS

They prevent burns and injuries in the event of contact with a weld and provide a more comfortable working position. Outer fabric in Thermo E fibreglass coated on two sides.

### Ordering

Cushions	Thickness	Part number
500 mm x 500 mm	80 mm	W000010541
1,000 mm x 1,000 mm	80 mm	W000010542

Temperature: 550 °C continuous, 600 °C peak.



## INSULATING SLEEVES

They control the cooling of welds on piping and pipelines. They are designed to adapt to the diameter and dimensions of the parts they surround.

### Ordering

Insulating sleeves	Diameter	Part number
1,000 mm x 500 mm	150 - 280 mm	W000010543
2,000 mm x 500 mm	450 - 610 mm	W000010545

Temperature: 550 °C continuous, 600 °C peak.



## INSULATING BLANKETS

They control the cooling of welds or pre-heated pieces.

### Ordering

Insulating blankets	Thickness	Part number
1,000 mm x 2,000 mm	30 mm	W000010546
2,000 mm x 2,000 mm	30 mm	W000010547
1,000 mm x 2,000 mm	60 mm	W000010548
2,000 mm x 2,000 mm	60 mm	W000010549

Temperature: 550 °C continuous, 600 °C peak.



## SPATTER PROTECTION

Compliant with EN 13501-1

## Welding and grinding

Description	Base	Application	Temperature (°C)	Weight (g/m <sup>2</sup> )	Finishing	Dimensions (mm)	Part number
<b>VULCAIN CURTAIN</b> <sup>(1)</sup> 	Fibre glass coated with polyurethane (both sides)	Welding with arc and grinding. Position: horizontal and vertical. Routine work.	Peak: 600 Continuous: 550	720	Grey	1,600 x 1,500	W000010316
						1,800 x 1,500	W000010317
						2,000 x 1,500	W000010318
<b>CHRONOS</b> 	Fibre glass coated with polyurethane (one side)	Welding with arc and grinding. Position: horizontal and vertical. Routine work.	Peak: 600 Continuous: 550	690	Grey	1,000 x 2,000	W000274163
						2,000 x 2,000	W000274164
						2,000 x 3,000	W000274165
						3,000 x 3,000	W000274166
						3,000 x 4,000	W000274167
						4,000 x 4,000	W000274168
						1,000 x 25 m*	W000274169
<b>VULCAIN FABRIC</b> 	Fibre glass coated with polyurethane (both sides)	Welding with arc and grinding. Position: horizontal and vertical. Routine work.	Peak: 600 Continuous: 550	720	Grey	2,000 x 1,000	W000010319
						2,000 x 2,000	W000010320
						3,000 x 2,000	W000010321
						3,000 x 3,000	W000010322
						4,000 x 3,000	W000010323
						4,000 x 4,000	W000010324
						1,000 x 25 m*	W000010498

(1): on request, height 2,200 mm / 2,400 mm / 2,800 mm / 3,000 mm, delivery in three weeks.

\* Roll with no hemming.



## SPATTER PROTECTION

## Welding and grinding

Description	Base	Application	Temperature (°C)	Weight (g/m <sup>2</sup> )	Finishing	Dimensions (mm)	Part number
<b>VESUVIO</b> 	Fibre glass (filament), coated with calcium silicate (both sides)	Welding with arc and grinding. Position: horizontal and vertical.	Peak: 750 Continuous: 700	690	Dark grey	1,000 x 1,000	W000010529
						2,000 x 1,000	W000010530
						2,000 x 2,000	W000010531
						3,000 x 2,000	W000010532
						3,000 x 3,000	W000010533
						4,000 x 3,000	W000010534
<b>ETNA</b> 	Fibre glass, textured and coated (both sides) with polyurethane that withstands high temperatures	Welding with arc in horizontal position. Severe working conditions.	Peak: 900 Continuous: 750	1,220	Grey	1,000 x 1,000	W000010325
						2,000 x 1,000	W000010326
						2,000 x 2,000	W000010327
						3,000 x 2,000	W000010328
						3,000 x 3,000	W000010329
						4,000 x 4,000	W000010331

## Flame

Description	Base	Application	Temperature (°C)	Weight (g/m <sup>2</sup> )	Finishing	Dimensions (mm)	Part number
<b>SIRIUS</b> 	Fibre glass, textured	Welding with arc in horizontal position. Severe working conditions. High flame resistance	Peak: 1000 Continuous: 700	1,035	Light brown	1,000 x 2,000	W000274170
						2,000 x 2,000	W000274171
						2,000 x 3,000	W000274172
						3,000 x 3,000	W000274173
						1,000 x 25 m*	W000274174

## Very high welding temperature

Description	Base	Application	Temperature (°C)	Weight (g/m <sup>2</sup> )	Finishing	Dimensions (mm)	Part number
<b>STROMBOLI</b> 	Silicate fibre (filament) coated with mineral coating on both sides	Welding with arc in horizontal position. Severe working conditions. Very high flame resistance	Peak: 1300 Continuous: 1,000	1,220	Dark brown	1,000 x 900	W000010535
						2,000 x 900	W000010536
						2,000 x 1,800	W000010537
						3,000 x 1,800	W000010538
						3,000 x 2,700	W000010539

## PAINTED EMBOSSED PLATE WELDING BOOTHS

Embossed metal partitions are used to build welding booths or to mark out work spaces with rigid structures inside the workshop.

These are modular elements in steel plate, painted in Anthracite grey (RAL 7016).

The panels comprise fastening plates and 150 mm ground clearance to make it easier to clean the floor.

- 1.5 mm thick embossed panels
- Width 500 or 1,000 mm - Height 2,200 mm
- Corner frame width 66 mm
- Access to booths closed by welding curtains or strips.
- The booths may be fitted with hinged or fixed doors.

### Ordering

Description	Part number
Embossed panel H = 2,200, W = 500 mm	EM610000231
Embossed panel H = 2,200, W = 1,000 mm	EM610000232
Corner assembly upright. 2,200 mm high	W000375316
T or cross assembly tube. 2,200 mm high.	W000375319
60 x 60 mm shoe for T or cross assembly tube.	W000375320



## PHONIC 60 RANGE

This modular partitioning system allows you to make booths that offer protection from arc radiation and noise during welding and grinding.

### Benefits

- Very strong structure
- Very good soundproofing
- Mechanical assembly allowing quick and open-ended assembly.

These 2,010 mm or 2,510 mm high partitions are supplied in widths of 510 and 1,010 mm.

Possibility to mount on feet or on the floor.

Mounting on feet with 140 mm ground clearance *(only with 2010 mm high partition)*.

Mounting on floor on rails *(2,010 and 2,510 mm high partitions)*.

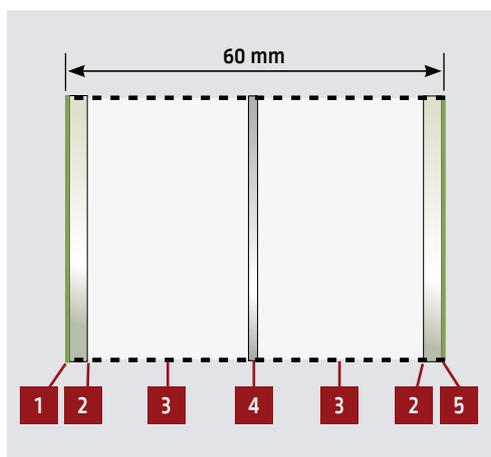
Standard booth colour: RAL 7016 grey.

### Technical specifications

The panels are 60 mm thick.

**Sandwich design. Made up of 7 layers for maximum noise reduction.**

- 1 Perforated or solid plate *(outside)*, 0.8 mm thick
- 2 Raw wool/fibreglass with dustproof treatment
- 3 Soundproofing rock wool, 25 mm
- 4 1 mm metal plate
- 5 Perforated plate *(on the inside)* 0.8 mm thick.



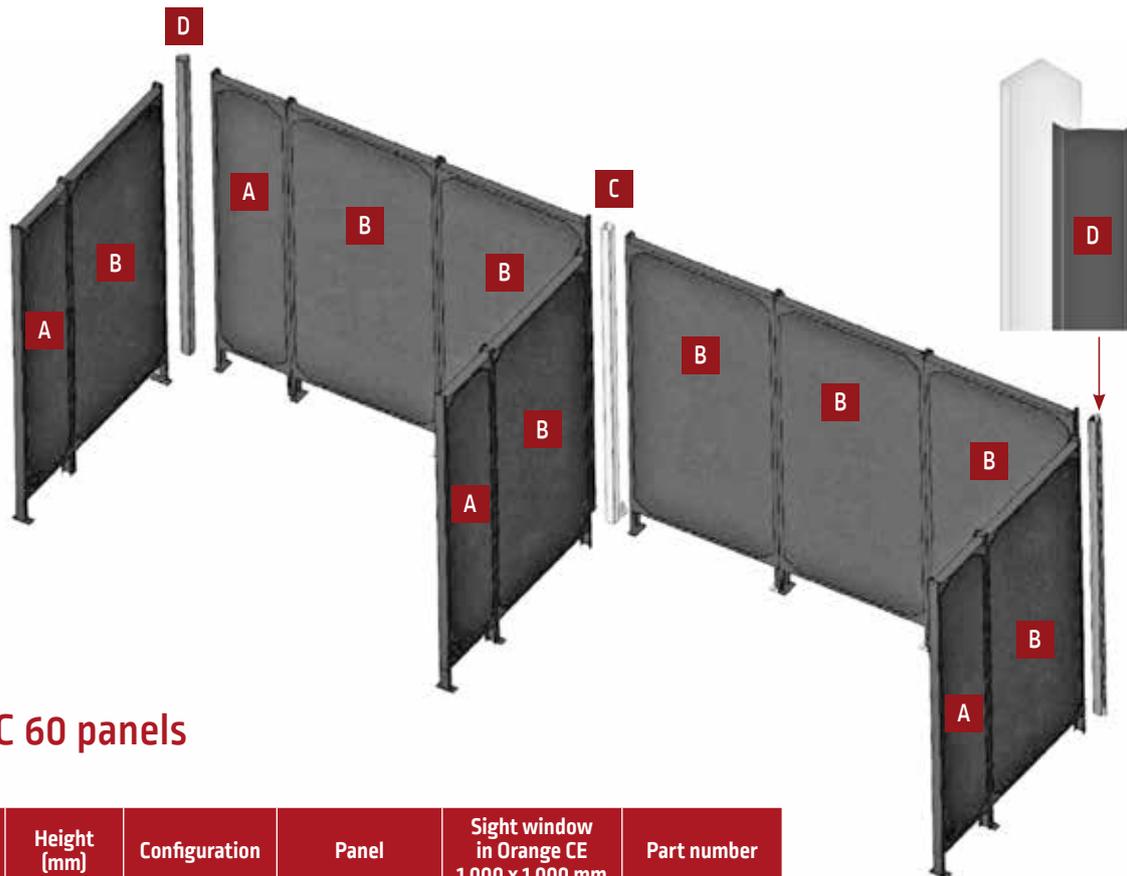
The panels and structural elements are:

- painted on both sides with paint *(RAL 7016)* that does not reflect UV rays,
- non-flammable and resistant to welding and grinding particles,
- 1,010 or 510 mm wide and 2,010 mm or 2,510 mm high,



- 140 mm ground clearance with 2,010 mm high panels, but these are available with no clearance for mounting on rails,
- 1 reversible foot for fastening to the floor is supplied with each 2,010 mm partition,
- they may be mobile or fixed.

## Example of building of a PHONIC grinding booth



## PHONIC 60 panels

### Ordering

Width (mm)	Height (mm)	Configuration	Panel	Sight window in Orange CE 1,000 x 1,000 mm	Part number	
510	2,010	On feet	Perforated/ perforated	No	W000375311	
1,010	2,010			No	W000375312	
510	2,010		Perforated/ Plain on the outside	No	W000375313	
1,010	2,010			No	W000375314	
1,010	2,010			Yes	W000375315	
Corner assembly upright. 2,200 mm high.					W000375316	
T or cross assembly tube. 2,200 mm high					W000375319	
60 x 60 mm shoe for T or cross assembly tube.					W000375320	
510	2,010	On the floor	Perforated/ perforated	No	W000375321	
1,010	2,010			No	W000375322	
510	2,510			No	W000375323	
1,010	2,510			No	W000375324	
510	2,010		Perforated/ Plain on the outside	No	W000375325	
1,010	2,010			No	W000375326	
1,010	2,010			Yes	W000375327	
510	2,510			No	W000375328	
1,010	2,510			No	W000375329	
1,010	2,510			Yes	W000375330	
Corner assembly upright. 2,500 mm high.					W000375331	
T or cross assembly tube. 2,500 mm high					W000375332	
Rail on the floor. 2850 mm long.					W000375333	
Wall rail for panel on feet. 2,010 mm high.					W000375334	
Wall rail for panel on floor. 2,010 mm high					W000375335	
Wall rail for panel on floor. 2,510 mm high.					W000375336	
Panel with castors. L 1,010 mm. H 2,010 mm.			Perforated/ perforated	-	W000375337	
Panel with castors. L 2,020 mm. H 2,010 mm.				-	W000375338	

- A** 4 panels on feet  
*(height 2,010 mm - width 510 mm)*
- B** 8 panels on feet  
*(height 2,010 mm - width 1,010 mm)*
- C** 1 tube for tee assembly
- D** 2 corner assembly uprights

## PROPHONIC 100 PARTITIONS

We have developed a range of soundproofed booths to address the increasing requirements for reducing noise in workshops.

The booths are made up of sandwich panels that offer excellent acoustic absorption with incombustible material.

### These rock wool sandwich panels are:

- insulated, partitioning and self supporting,
- cored with rock wool, using very high density fibres,
- made with fibres placed vertically and unrolled in loops,
- made with fibres with longitudinal offset and transverse compacting.

### Metal supports in:

- Sendzimir galvanised steel plates (UNI EN 10326-UNI EN 10327),
- coil coated galvanised steel plates (pre-painted),
- aluminium alloy plates with natural finish, stucco and pre-painting (standard EN 485) using the continuous process, 5 µm thick primer and 20 µm paint on the visible side,
- pre-painted after perforation:  
Ø of holes = 3 mm, centre distance: d = 5 mm,
- plain plates on the outside, perforated on the inside.

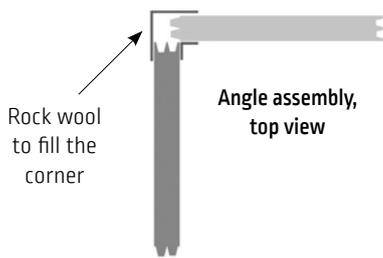


**Insulation in high-density mineral fibres**  
 [75 kg/m<sup>3</sup>, λm = 0.040 W/mK at 10° C].

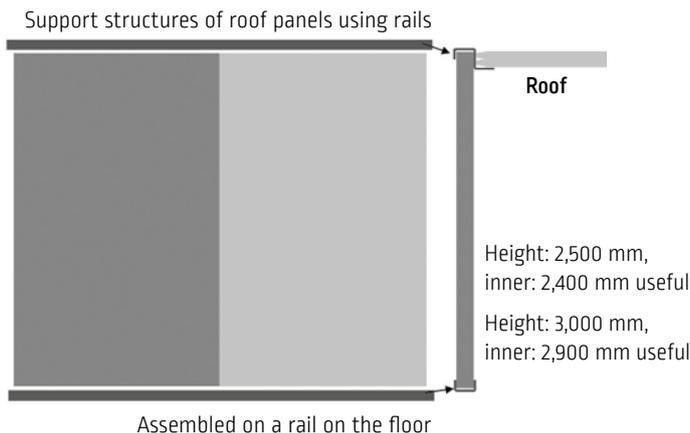
### Useful load:

- deformation: deflection equal to or below 1/200th of the permitted span,
- bending: bending force fully absorbed by the support plates,
- shearing: cutting force absorbed partly by the support plates and partly by the insulation.

### Details of corner assembly



### Details of roof assembly



Standard booth colour: RAL 9001 Cream



Weight of 100 mm thick panels: 17.32 kg/m<sup>2</sup>

Soundproofing: Rw = 35 dB (with 100 mm thick panels)

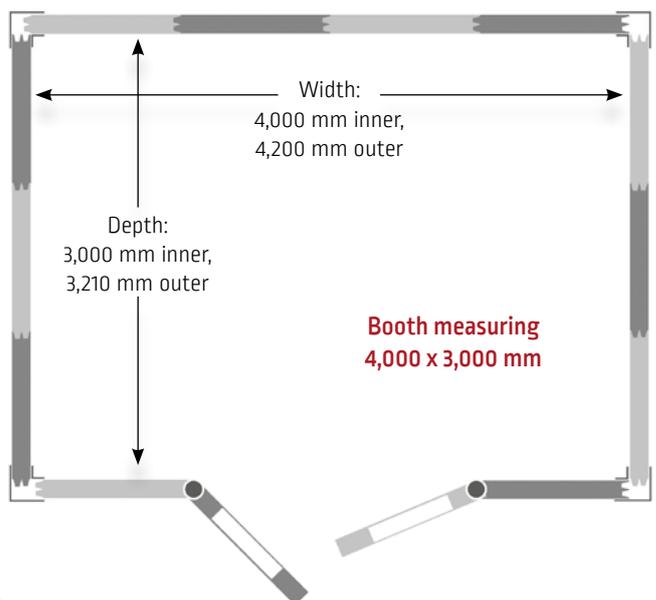
Sound absorption: weighted sound absorption coefficient aw = 1

Fire resistance (circular 91 of 14/09/1961), results:

- REI 60 for 100 mm panel

REI = Load-bearing Integrity Thermal insulation

### Possible example of equipment:



## PROPHONIC 100 PARTITIONS

The panels are available in two heights: 2,500 mm and 3,000 mm.

Maximum width of booth: 6,000 mm.

One or two doors may be added:

- with translucent sight window, double thickness, 6 mm thick glass.
- single width door, 1,000 mm, or double width door, 2,000 mm, supplied with handle on the outside and panic bar on the inside.

Provide overall ventilation with 200 m<sup>3</sup>/h single-phase 230 V - 50 Hz (*human presence*); it must be independent of the extraction of pollutants generated in the booth.

The ventilation must be made up of:

- a fan placed on the roof of the booth
- a low air inlet with acoustic plenum placed on one of the panels.

Please enquire for any request  
with or without assembly included



Door with sight window and panic bar



Acoustic air inlet



Overall ventilation



## WELDING TENTS

2,000 mm wide, 2,000 mm long, lateral height 2,000 mm, central height 2,200 mm.

Matte white PVC fabric (630 g/m<sup>2</sup>) self extinguishing, fire resistant. M1 certification.

Two openings: one on the front and the second on the rear, closed with eyes and straps.

The perimeter of the tent has a 200 mm wide guard flap for effective protection from the wind and the elements.

The structure is made of galvanised tubes with 25 mm diameter for an optimum life.

### Benefits

- Very strong structure
- Self extinguishing fabric, fire-resistant. M1 certification.
- Rigid structure.
- Central height 2,200 mm.
- Efficient insulation.



### Ordering

Description	Part number
Fabric	W000274366
Structure 2 m x 2 m	W000274367

Other dimensions: please enquire

## IMPACT PLATES



Polycarbonate plates, 3 mm wide.

Compliant with standard ISO EN 25980.

BRONZE (Orange) - protected from IR/UV rays and weld spatter.

Available in:

- 2,050 mm x 1,250 mm x 3 mm
- 1,025 mm x 1,250 mm x 3 mm
- Made to measure

On request

### Ordering

Length x Height x Thickness	Part number
2,050 mm x 1,250 mm x 3 mm	W000274744
1,025 mm x 1,250 mm x 3 mm	W000274745

Standard ISO EN 25980



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-  Solution Centers



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