

# Extractability™



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## Fume Extraction Equipment



Class W3 Approved

## Buyers Guide







## Complete extraction solutions for dust, fume and vapours

Extractability is a division of Weldability-Sif, a UK based “one stop source” for all welding fume extraction solutions. Extractability cover everything from the design stage through to installation, commissioning and servicing.

As a provider of approved DGUV/IFA (Institute of Occupational Health Standards) fume control solutions, we are committed to playing a vital role for sustainable and efficient industrial production.

All our products combine care for the environment and for employee health by improving work efficiency and production economy. We hope this catalogue will act as a practical reference document and an inspiring guide to improving workplaces and reducing environmental impact. Extractability are proud to provide products and services that contribute to reducing the environmental impacts from industrial production and help to create safe and clean working environments.

Extractability are specialists in solving problems related to fumes, gas, dust, recycling, working conditions and an efficient production environment. Services cover everything from project planning to installation, commissioning and service. You can find information on our products, solutions and contact details on the Extractability website at [www.extractability.eu](http://www.extractability.eu).

# Why do we need fume extraction?



Welders and personnel in the work area can be exposed to welding fumes, grinding dust and oil mist. It is essential to create healthy and safe working conditions by reducing these risks to health.

Protective measures are an important aspect as now there are strict international standards that have been established to regulate them. Welding fumes, small particles and remains of molten metal, must be dealt with effectively by means of efficient extraction and filtration. This ensures that workers feel comfortable, enabling them to perform better. The result is higher productivity and lower absence through illness.

## HEALTH RISKS WHEN INHALING WELDING FUME AND GASES

Fume/Dust	Possible immediate effects	Possible long-term effects
Welding fume (general)	Sore throats, eye irritation, metal fever	Bronchitis, reprotoxic
Chromium (in welding fumes from stainless steel welding)		Carcinogenic
Nickel (in welding fumes from stainless steel welding)	Metal fever	Carcinogenic
Aluminium	Irritation of respiratory organs, metal fever	
Manganese	Pneumonia	Damage to nervous system
Zinc	Metal fever	
Copper	Metal fever	
Magnesium	Irritation of respiratory organs, metal fever	
Lead	Changes of blood and kidneys	Reprotoxic
Gases	Possible immediate effects	Possible long-term effects
Nitrogen Oxide	Irritation of bronchial tubes and eyes	Bronchitis
Carbon Monoxide	Difficulty in breathing, unconsciousness	Reprotoxic
Ozone	Irritation of bronchial tubes and eyes	

# The effect of dust fumes

## WHAT IS DUST/FUME?

The definition of dust/fume applied in this context describes the amount of dispersed, firm particles in the air, which are produced during thermal processes such as welding.

In welding technology dust/ fume and other hazardous substances are produced due to the use of:

- Base materials
- Filler materials
- Impurities
- Ambient air

During processes such as:

- Evaporation
- Condensation
- Oxidation
- Decomposition
- Pyrolysis
- Combustion

## WHY IS DUST/FUME DANGEROUS?

In general, every kind of dust/fume can lead to respiratory diseases (bronchitis, obstructive bronchitis) resulting from the inhaling of dust in a high concentration and for a longer period.

Dust/fume is particularly dangerous if it contains hazardous substances.

## WHAT ARE THE FUME AND GASES FROM WELDING AND CUTTING?

The fume given off by welding and hot cutting processes are a varying mixture of airborne gases and very fine particles

which if inhaled can cause ill health.

Gases that may be present in welding and cutting fume are:

- Nitrous oxide ( $\text{NO}_2$ ),
- Carbon dioxide ( $\text{CO}_2$ ),
- Carbon monoxide (CO)
- Shielding gas (eg Argon, helium) and Ozone ( $\text{O}_3$ )

The visible part of the fume cloud is mainly particles of metal, metal oxide and flux (if used).

The exact level of risk from the fume will depend on three factors:

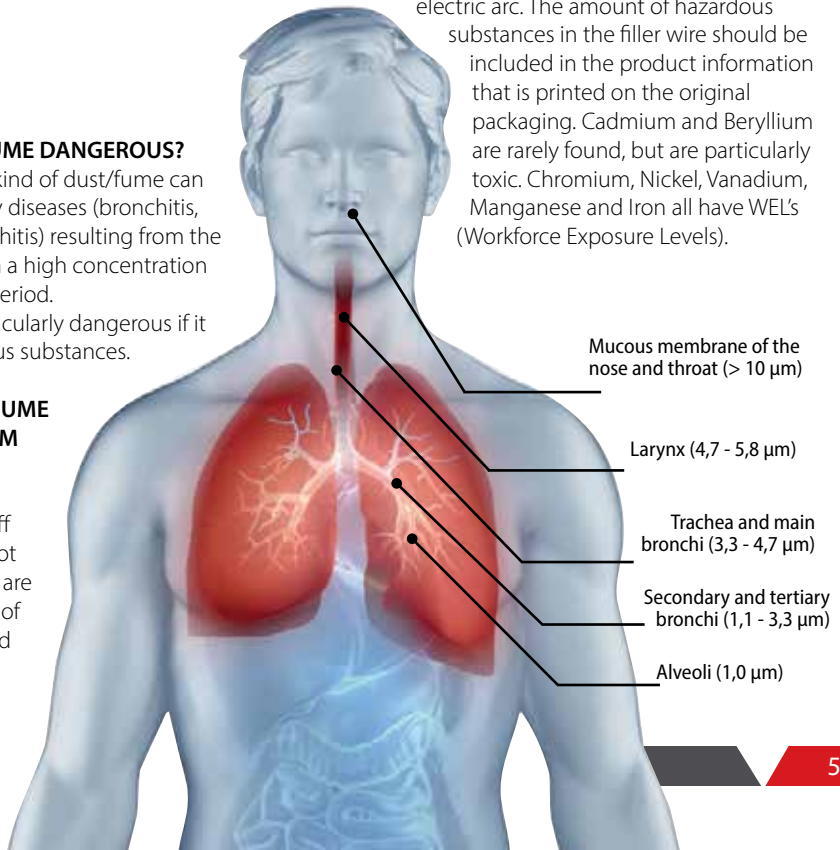
How toxic the fume is

How concentrated the fume is

How long you are breathing the fume

For arc welding, the visible fume comes mostly from the filler wire when it's exposed to the electric arc. The amount of hazardous

substances in the filler wire should be included in the product information that is printed on the original packaging. Cadmium and Beryllium are rarely found, but are particularly toxic. Chromium, Nickel, Vanadium, Manganese and Iron all have WEL's (Workforce Exposure Levels).



# A lifetime partner

## How we can help



With years of experience working with air treatment solutions, Extractability has developed a reliable approach to ensure clean air in your working environment with a cost effective and easily operated system. The process involves 7 phases, from analysis and design to supply, installation, commissioning and service, all included in a value for money package.



### INVESTIGATE

We recognise that each customer has specific requirements. To be able to meet these, it is vital to conduct a thorough investigation, answering numerous questions about the welding process, number of welders and reach within work places, facility layout, filtration needs, local legislation and need of system control. Are there plans for future expansion? Finalising this phase gives an answer to what is required.

## **PLANNING**

Once all the information has been received from the initial investigation phase we start to create a formula for achieving the best possible solution for your work environment. We choose products from our extensive product range, to customise a system, which provides a durable and optimal solution for ensuring ease of operation and a healthy work environment.

## **DESIGN**

In the design phase we fine-tune the products chosen in the planning phase by calculating pressure drops, filter sizes, fan size etc. The modularity of our products enables us to optimise your system in regard to flexibility, safety, economy and operation. The result will be a system design which fits to your requirements today and for future expansions.





## INSTALLATION

When the design phase is finished, we have the ability to install your customised system. We have vast experience of delivering turn-key solutions which will operate perfectly, enabling you to focus on your core business.

## COMMISSION

Once we have completed installation, we commission the system ensuring all parameters are set correctly. Our constant drive for perfection creates an air cleaning system which is a reliable investment today and for years to come.



## **TRAINING**

We are happy to share our professional knowledge and technology. We have the ability to give you on-site hands-on training to get the most out of our systems as well as offer time sparing courses designed to make you fully aware of the hazards of welding fumes .

## **SERVICE AND MAINTENANCE**

We understand the importance of operational safety in production lines and that it is essential to ensure high productivity. We therefore offer ongoing service agreements. Our maintenance engineers will make sure your extraction system is in perfect condition and in optimal operation.



**Providing you with the latest  
and most effective solutions**



# Mobile fume extraction units for industry

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The hazards of exposure to welding fumes, dust, and vapours in the workplace is a serious health risk, and with ever changing workplaces the need to reduce energy costs and meet environmental issues is key.

Extractability mobile filtration units can assist in meeting these matters. Mobile fume extractors provide increased flexibility, It makes extraction at various workplaces and locations possible.

# ProtectoVac 110/230v

Portable twin-motor, fume extractor

1  
Phase  
Single  
Phase

ProtectoVac is a portable, twin-motor, high-vacuum fume-extraction system specifically designed to extract and filter metal particulate fumes created in welding processes. A high efficiency three stage filtration system, including a spark arrestor and quiet operation (<70dB[A]).

The ProtectoVac is supplied with a 2.5m hose, magnetic foot welding nozzle and spare set of motor brushes. The ProtectoVac features an auto on/off function which allows the unit to be engaged automatically with the welding arc. The ProtectoVac can also be used for on-MIG-torch extraction. The ProtectoVac is highly portable weighing only 15kg and mounted on swivel castors. Operates from a 110v/230v mains input supply.



## Features

- **Cleaner work environment:** Reduces fumes and particulate in the operators and surrounding work areas.
- **Easy to maintain:** Quick disassembly for cleaning and filter replacement.
- **Light weight:** Ease of portability and placement in work areas.
- **Low noise level:** Will not contribute to increased noise levels.
- **Economical to operate:** Start/stop sensors reduce energy consumption.

## Ordering information

ProtectoVac - 110v	<b>EXT1VAC110</b>
ProtectoVac - 230v	<b>EXT1VAC230</b>
Replacement fine-filter	<b>EXT1VACF1</b>
Replacement HEPA-filter	<b>EXT1VACF2</b>
Replacement pre-filter	<b>EXT1VACF3</b>
Replacement 2.5m hose	<b>EXT1VACHOSE</b>
Suction hose 45mm 2.5m with couplings	<b>EXT9631925</b>
Suction hose 45mm 5m with couplings	<b>EXT9631950</b>

# ProtectoTwin 230v

## Twin-port mobile fume extractor



ProtectoTwin is a twin high-pressure turbine with infinitely adjustable speed control specifically designed to extract and filter metal particulate fumes created in welding processes. The ProtectoTwin is supplied with a 2.5m hose and magnetic foot welding nozzle. ProtectoTwin is fitted with a BIA M filter cartridge that filters hazardous substances to an extent of more than 99 per cent.

Dual Port facilitating local extraction via hood and torch extraction from a single unit. The filter can be cleaned manually or with compressed air, providing a long filter life. The particles are collected in a dust collection drawer and can be easily removed from the unit. The ProtectoTwin is highly portable weighing only 25kg and is supplied on swivel castors.



## Features

- Speed control
- 2 suction ports Ø 50 mm
- 1 temporary cover for an inlet port
- Optical filter control
- Automatic dedusting
- 5 metre mains cable
- 2.5 metre suction hose
- Nozzle with magnetic foot

## Ordering information

ProtectoTwin twin port extractor 230v	<b>EXT1TWI230</b>
ProtectoTwin filter	<b>EXT9870003</b>
Funnel Nozzle 45mm with magnetic base	<b>EXT96317</b>
Round Nozzle 45mm with magnetic base	<b>EXT963171</b>
Slit Nozzle 45mm with magnetic base	<b>EXT96318</b>
Suction hose 45mm 2.5m with couplings	<b>EXT9631925</b>
Suction hose 45mm 5m with couplings	<b>EXT9631950</b>
Suction hose 45mm 10m with couplings	<b>EXT9631910</b>
ProtectoTwin Carbon Brushes	<b>EXT9870004</b>

# ProtectoCart 110/230v

## Compact vacuum extraction system



ProtectoCart is a compact and affordable high-vacuum mobile cartridge filter that can be manually cleaned with compressed air. Its space-saving design and impressive negative pressure make it a viable light duty option for evacuating and filtering the fumes and particles produced by a variety of welding applications.

A maintenance free turbine draws the fumes/dust through a GORE-TEX filter cartridge with up to two suction ports. A digital interface gives easy control of the turbine speed and filter monitoring. The system is configured to enable manual cartridge cleaning using compressed air. A specially sized polyethylene bag can be fitted into the collection bin to make waste removal easier.



## Features

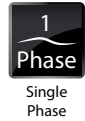
- Automatic speed control
- High quality GORE-TEX filter cartridge
- 2 suction ports Ø 50 mm
- 1 port cover for suction nozzle
- Service-friendly maintenance door
- Dust collecting tray
- Operating hours meter.
- Optical filter monitoring
- 5 metre mains cable

## Ordering information

ProtectoCart Twin Port Extractor 230v PKG	<b>EXT1CAR230</b>
ProtectoCart Twin Port Extractor 110v PKG	<b>EXT1CAR110</b>
ProtectoCart replacement filter	<b>EXT100281</b>
Funnel Nozzle 45mm with magnetic base	<b>EXT96316</b>
Round Nozzle 45mm with magnetic base	<b>EXT96317</b>
Slit Nozzle 45mm with magnetic base	<b>EXT96318</b>
Suction hose 45mm 2.5m with couplings	<b>EXT9631925</b>
Suction hose 45mm 5m with couplings	<b>EXT9631950</b>
Suction hose 45mm 10m with couplings	<b>EXT9631910</b>

# ProtectoSmart 110/230v

## Industrial vacuum extraction system



ProtectoSmart is best suited to extracting and filtering fume gases, as well as absorbing solvent fumes and odours. For this purpose, the unit can be equipped with one flexible extractor arm or application-specific fittings.

The polluted air is sucked into the extractor hood and transported through the extractor arm to the filter unit. Here, the coarse dust particles are collected in the pre-filter mat. Subsequently the air is lead through the additional filtering mats to the particle filter which traps extremely fine dust particles with an efficiency of more than 99%. Then the filtered air passes through the activated carbon cassette as a last filter stage where the gases and odours will be refined. Then the air is sucked in by the ventilator and recycled to the air in the workshop through the exhaust grid at the back of the unit.



### Features

- The unit has a 1.1 kW 230v no sparking fanset
- Suitable for absorbing overspray, solvents, isocyanate fumes and odours emerging from spraying, painting and works with solvent materials
- 14.5kg of Carbon
- Capable of handling up to 3000 m/hr
- 5 metre mains cable

### Ordering information

ProtectoSmart 230v 2m 160mm PKG

**EXT1SMA2230**

ProtectoSmart 230v 3m 160mm PKG

**EXT1SMA3230**

ProtectoSmart 230v 4m 160mm PKG

**EXT1SMA4230**

Optional Spark Latch 160mm

**EXT95014901601**

# ProtectoXtract 110/230v

Portable, high-efficiency extraction system



ProtectoXtract is a BGIA approved mobile high-vacuum extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract uses a 5-stage filtration system, with replaceable filters and is quiet in operation (<68dB[A]).

The ProtectoXtract is supplied with a 3 metre extraction arm, hose with internal joints and provides air movement of 2500 m<sup>3</sup>/h. When used in grinding applications the ProtectoSpark Grinding Filter must be installed. Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract is a mobile unit, weighing only 80kg and is supplied on swivel casters for manoeuvrability.



## Features

- Gross filter with a large surface area
- Prefilter
- Activated carbon filter
- Main filter with separation efficiency of  $\geq 99\%$
- Electronic filter monitoring
- Operating hours meter
- 5 metre mains cable

## Ordering information

ProtectoXtract Mobile Extractor 110v	<b>EXT1MOB110</b>
ProtectoXtract Mobile Extractor 230v	<b>EXT1MOB230</b>
Replacement Activated Carbon Filter	<b>EXT978006</b>
Replacement Gross Filter	<b>EXT978003</b>
Replacement Pre-Filter	<b>EXT978004</b>
Replacement Main Filter	<b>EXT978005</b>
ProtectoSpark Grinding Filter	<b>EXT978013</b>



# ProtectoXtract Twin 415v

Portable, high-efficiency extraction system



ProtectoXtract Twin is a FDA approved mobile high-vacuum extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract Twin uses a two stage filtration system, with replaceable filters and is quiet in operation (<72dB[A]).

The ProtectoXtract Twin is supplied with 2x 2m, 3m or 4m extraction arms, hose with internal joints, and provides air movement of 3500 m<sup>3</sup>/h. When used with processes that produce spatter the optional Aluminium Spark Arrestor Filter must be used. Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract Twin is a mobile unit, weighing only 130kg and is supplied on swivel castors for manoeuvrability. Operates from a 415v mains input supply.



## Features

- Activated carbon filter (optional)
- Audio and visible filter monitor
- Optional 5 stage filter system
- Intergrated hour meter
- 2x 2m, 3m or 4m extraction arms, available

## Ordering information

ProtectoXtract Twin Mobile 415v 2M	<b>EXT3MOB2415T</b>
ProtectoXtract Twin Mobile 415v 3M	<b>EXT3MOB3415T</b>
ProtectoXtract Twin Mobile 415v 4M	<b>EXT3MOB4415T</b>
Optional Aluminium Spark Arrestor Filter	<b>EXT100008</b>
Optional Carbon Filter	<b>EXT97054</b>
Optional Activated Carbon Filter	<b>EXT97053</b>
Replacement Pre Filter Mats (x10)	<b>EXT10032</b>
Replacement Main Filter	<b>EXT10029</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b>

# ProtectoReclenz 110/230v

## Portable fume extractor



ProtectoReclenz is a BGIA approved mobile fume filter type UPF-BIA class W3 incorporating a separator. Featuring a durable large surface area filter cartridge with PTFE laminate, complete with audible and visible filter monitor, rotational direction indicator and hour meter.

The unit is capable of handling up to 3000 m<sup>3</sup>/hr and is available with a 2, 3 or 4 metre 150mm dia hose type arm with internal support structure. The unit has a 1.1 kW fanset and is supplied with a 5m mains input cable and plug. The filter cartridge can be cleaned quickly and easily with compressed air. This mobile unit weighs only 130 kg and is supplied on swivel castors for manoeuvrability.



Class W3

## Features

- Large surface area filter cartridge
- Optical and acoustic filter monitoring
- Operating hours meter
- Operation control lamp
- 2m, 3m, 4m hose type arm with internal support structure
- 5m mains input cable and plug
- Unit only weighs 130kg

## Ordering information

ProtectoReclenz Mobile Extractor 2m 110v	<b>EXT1REC2110</b>
ProtectoReclenz Mobile Extractor 2m 230v	<b>EXT1REC2230</b>
ProtectoReclenz Mobile Extractor 3m 110v	<b>EXT1REC3110</b>
ProtectoReclenz Mobile Extractor 3m 230v	<b>EXT1REC3230</b>
ProtectoReclenz Mobile Extractor 4m 110v	<b>EXT1REC4110</b>
ProtectoReclenz Mobile Extractor 4m 230v	<b>EXT1REC4230</b>
Filter Cartridge 10m2 BIA M 327 x 600mm	<b>EXT10025</b>
Pre-coat for filter cartridges, 100g	<b>EXT9510050001</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b>

# ProtectoReclenz Twin 415v

Twin portable fume extractor



ProtectoReclenz Twin is a BGIA IFA certified class W3 approved mobile welding fume filter incorporating a separator. Features two durable large surface area filter cartridges with PTFE laminate, complete with audible and visible filter monitor, rotational direction indicator and hour meter.

The unit is capable of handling up to 3500 m<sup>3</sup>/hr and is available with 2x 2, 3 or 4 metre 150mm diameter hose type arm with internal support structure. The unit has a 2.2 KW fanset and is supplied with a 5m mains input cable and plug. The unit comes with two filter cartridges that can be cleaned quickly and easily with compressed air. This mobile unit weighs only 150 kg and is supplied on swivel castors for manoeuvrability.



## Features

- Two durable large surface area filter cartridges
- Audible and visible filter monitor
- Rotational direction indicator
- Hour meter
- 2m, 3m, 4m hose type arms with internal support structure
- 5m mains input cable and plug
- Unit only weighs 150g

## Ordering information

ProtectoReclenz Twin Mobile 2m 415v	<b>EXT3REC2415T</b>
ProtectoReclenz Twin Mobile 3m 415v	<b>EXT3REC3415T</b>
ProtectoReclenz Twin Mobile 4m 415v	<b>EXT3REC4415T</b>
Filter Cartridge 10m <sup>2</sup> BIA M 327 x 600mm	<b>EXT10025</b>
Pre-coat for filter cartridges, 100g	<b>EXT9510050001</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b>

# ProtectoAutoclenz 415v

Portable fume extractor



ProtectoAutoclenz is a self cleaning mobile fume filter type PF incorporating a separator, a durable large surface area filter cartridge, complete with a filter monitor, post-cleaning function and hour meter. The unit is capable of handling up to 3000 m<sup>3</sup>/hr and is available with a 2, 3 or 4metre 150mm diameter hose type arm with internal support structure.

The unit has a 1.5 kW fan set and is supplied with a 5m mains input cable. ProtectoAutoclenz weighs 160kg and is supplied on swivel castors for manoeuvrability.



Class W3

## Features

- Cleaner Work Environment: Reduces fumes and particulate in the operator and surrounding work areas.
- Long lasting, durable filter cartridge
- Low Noise Level
- Operating hours meter
- Optical and acoustic filter monitoring
- 5m mains cable

## Ordering information

ProtectoAutoclenz Mobile Extractor 2m 3ph 415v	<b>EXT3AUT2415</b>
ProtectoAutoclenz Mobile Extractor 3m 3ph 415v	<b>EXT3AUT3415</b>
ProtectoAutoclenz Mobile Extractor 4m 3ph 415v	<b>EXT3AUT4415</b>
Pre-coat for filter cartridges, 100g	<b>EXT9510050001</b>
Filter Cartridge 10m2 BIA M 327 x 600mm	<b>EXT10025</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b>
2m Replacement Hose	<b>EXT101925</b>
3m Replacement Hose	<b>EXT101926</b>
4m Replacement Hose	<b>EXT101927</b>

# ProtectoAutoclenz Twin 415v

Portable fume extractor



ProtectoAutoclenz Twin is a self cleaning mobile fume filter type PF incorporating a separator, a durable large surface area filter cartridge, complete with a filter monitor, post-cleaning function and hour meter. The unit is capable of handling up to 3500 m<sup>3</sup>/hr and is complete with 2x 2, 3 or 4metre 150mm diameter hose type arm with internal support structure.

The unit has a 2.2 kW fan set and is supplied with a 5m mains input cable. ProtectoAutoclenzTwin weighs 190kg and is supplied on swivel castors for manoeuvrability.



## Features

- Cleaner Work Environment: Reduces fumes and particulate in the operator and surrounding work areas.
- Two long lasting, durable filter cartridge.
- Optical and acoustic filter monitoring
- Operating hours meter
- 5m mains cable

## Ordering information

ProtectoAutoclenz Twin Mobile 2m 415v	<b>EXT3AUT2415T</b>
ProtectoAutoclenz Twin Mobile 3m 415v	<b>EXT3AUT3415T</b>
ProtectoAutoclenz Twin Mobile 4m 415v	<b>EXT3AUT4415T</b>
Filter Cartridge 10m2 BIA M 327 x 600mm	<b>EXT10025</b>
Pre-coat for filter cartridges, 100g	<b>EXT9510050001</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b>



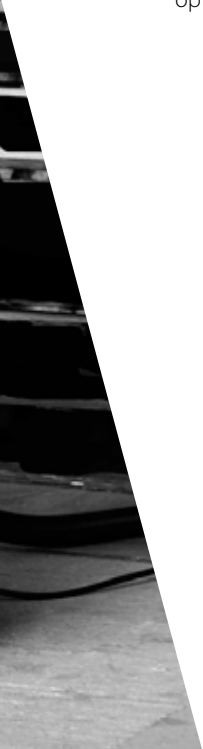
# On-Torch fume extraction

## Extraction at source

SifGun fume extraction torch	<b>24</b>
SifVac Industrial high-vacuum system	<b>25-27</b>

Extraction at source is the most effective and efficient method of capturing and removing welding fumes. This minimises the risk of the welder being subjected to hazardous fumes.

The SifGun fume extraction MIG torch is designed for use in applications which generate a large amount of fume, but the location of the weld joints makes it difficult to access with general extraction equipment. The fume nozzle is optimised to ensure maximum extraction efficiency at source.



# SifGun fume extraction torch

MIG welding torch with integrated extraction

The SifGun Fume Extraction Torch is an innovative MIG welding torch with integrated extraction at the nozzle of the welding torch. The extraction is close to the weld pool, so the fumes coming from the welding process are extracted immediately. As a result, the user's exposure to welding fumes is reduced by up to 95%. Unlike other models of on-torch extraction, the SifGun fume-extraction torch features a bespoke, optimised nozzle, which balances pressures to prevent disruption of the shielding gases. You can therefore use the same shielding gas flow rates as with a standard MIG torch.

The welding torch is delivered 'ready to use'. It only has to be connected to a welding machine and extraction unit. The SifGun Fume Extraction Torch is available in air-cooled and water-cooled versions.



## Features

- Lightweight design
- Comfortable to use
- No disruption to shielding gas
- 95% fume reduction
- For MIG/MAG and FCAW
- Euro connection

## Ordering information

SifGun FE Air-Cooled 300A 3 Metre torch	<b>EXTMT3003</b>
SifGun FE Air-Cooled 300A 4 Metre torch	<b>EXTMT3004</b>
SifGun FE Water-Cooled 500A 4 Metre torch	<b>EXTMT5004</b>
SifGun FE Air-Cooled 300A 5 Metre torch	<b>EXTMT3005</b>
SifGun FE Water-Cooled 500A 5 Metre torch	<b>EXTMT5005</b>
SifGun FE Air-Cooled 300A 6 Metre torch	<b>EXTMT3006</b>
Torch Extraction Air Flow Gauge	<b>EXTMT371300</b>



# SifVac 110/230v

## Industrial high-vacuum system



The SifVac industrial high-vacuum system is an ideal modular unit that can be modified or purpose-built for specific applications to support the extraction of fumes and dust directly at the source.

When used in combination with the SifGun Fume Extraction torch, the extraction of welding fumes and the filtration of particles not only allows you to maintain a clean working environment but also guarantees the safety of the operator by eliminating fumes before they enter the breathing zone.

The SifVac industrial high-vacuum system features a solid steel frame and can be equipped with either a single or double Ametek Lamb single-phase motor, or a brushless turbine motor providing a continuous rated and maintenance free solution. Inside the filter chamber is a large M-class filter with high filtration efficiency. The Dustop semi-automatic cleaning system filter allows the operator to clean the filter with ease by lifting the flap on the chamber. This simple operation allows the user to maintain the maximum filtering capacity and the best performance of the SifVac system.



### Main Features

- 110 or 230v availability
- Suction powered by a powerful single phase motor
- Multiple configurations available including a twin motor unit for double operation
- Metal Pre-filter stops sparks
- Integrated filter cleaning system
- Automatic Stop/Start available
- Choice of 15 or 20 litre detachable dust collection container
- All models feature an M-class filter for high filtration efficiency
- Castors for easy manouvability
- Optional brush kit

*Single phase  
by-pass motor*

*Two single phase  
by-pass motors*

*Single phase  
brushless turbine  
motor head*

**3 head  
options**



**2 detachable container  
size options**

*M-class cartridge  
filter*



**15ltr detachable  
container.**

**20ltr detachable  
container.**

**Choose between a single or 'branch' connector to run  
two hoses.**

## Packages

### PACKAGE 1 – SINGLE MOTOR HEAD WITH 15LTR BODY

#### Features

- Single phase by-pass motor
- 180m<sup>3</sup>/h maximum airflow
- 2500 mmH<sub>2</sub>O maximum depression
- Cartridge filter
- Metal pre-filter to stop sparks
- Automatic start / stop
- Dustop filter cleaning system
- 15ltr detachable container with handle
- Castors for easy manoeuvrability

### PACKAGE 2 – TWIN MOTOR HEAD WITH 15LTR BODY

#### Features

- Two single phase by-pass motors
- 360m<sup>3</sup>/h maximum airflow
- 2500 mmH<sub>2</sub>O maximum depression
- Cartridge filter
- Metal pre-filter to stop sparks
- Automatic start / stop
- Dustop filter cleaning system
- 15ltr detachable container with handle
- Castors for easy manoeuvrability

### PACKAGE 3 – BRUSHLESS TURBINE MOTOR HEAD WITH 20LTR BODY

#### Features

- Single phase brushless turbine motor head
- 250 m<sup>3</sup>/h maximum airflow
- 2300 mmH<sub>2</sub>O maximum depression
- Cartridge filter
- Metal pre-filter to stop sparks
- Dustop filter cleaning system
- 20ltr detachable container with handle
- Castors for easy manoeuvrability

### ADDITIONAL OPTIONS & SPARES

HD Brush Kit	EXTSVAC01
Branch Connector + Airflow Reg	EXTSVAC02
Cartridge Filter	EXTSVAC03
Replacement Seal	EXTSVAC04
Washable Spark Filter	EXTSVAC05
110v 1000W Bypass Motor	EXTSVAC07
110v 750W Bypass Motor	EXTSVAC08
230v 1000W Bypass Motor	EXTSVAC09
Funnel Nozzle 45mm	EXT96317
Slit Nozzle 45mm	EXT96318
Round Nozzle 45mm	EXT963171

### Package Ordering information

	110V	230V
Package 1 – Single motor head with 15ltr body	EXTSVAC110S15	EXTSVAC230S15
Package 2 – Twin motor head with 15ltr body	EXTSVAC110T15	EXTSVAC230T15
Package 3 – Brushless turbine motor head with 20ltr body	EXTSVAC110C20	EXTSVAC230C20



# Fixed fume extraction units

## for industry

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ProtectoXtract Wall Twin	<b>31</b>
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Protecto EcoBlock	<b>35</b>
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The hazards of exposure to welding fumes, dust, and vapours in the workplace is a serious health risk, and with ever changing workplaces the need to reduce energy costs and meet environmental issues is key.

Extractability fixed filtration units can assist in meeting these matters. Fixed filtration units for fumes, dust, and vapours can save valuable work space and can be located inside or outside the factory/workshop.

# ProtectoXtract Wall 415v

## Wall mounted filter



Three  
Phase

ProtectoXtract Wall is an FDA approved wall mounted welding fume extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract Wall unit uses a two stage filtration system, with replaceable filters and is quiet in operation (<70dB[A]). The ProtectoXtract Wall is supplied with a 2m, 3m or 4m extraction arm, hose with internal joints, and provides air movement of 2500 m<sup>3</sup>/h. When used with processes that produce spatter the optional Aluminium Spark Arrestor Filter must be used.

Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract Wall unit weighs only 122kg and operates from a 415v mains input supply.

## Features

- 4 stage filtration system with replaceable filters
- Extensive prefilter mat
- 2m, 3m or 4m extraction arm, hose with internal joints, and provides air movement of 2500 m<sup>3</sup>/h.
- Optical filter monitoring
- Tightly fitting lifting device
- Operating hours meter



## Ordering information

ProtectoXtract Wall 2M	<b>EXT3MOB2415W</b>
ProtectoXtract Wall 3M	<b>EXT3MOB3415W</b>
ProtectoXtract Wall 4M	<b>EXT3MOB4415W</b>
2m Replacement Hose	<b>EXT101925</b>
3m Replacement Hose	<b>EXT101926</b>
4m Replacement Hose	<b>EXT101927</b>
Aluminium Spark Arrestor Filter	<b>EXT100008</b>
Carbon Filter	<b>EXT97054</b>
Replacement Pre Filter	<b>EXT10032</b>
Replacement Main Filter	<b>EXT10029</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b>

# ProtectoXtract Wall Twin 415v

Twin wall mounted filter



ProtectoXtract Wall Twin is an FDA approved wall mounted welding fume extraction system for filtration of particulate fumes, dusts and some gases. The ProtectoXtract wall unit uses a 2 stage filtration system, with replaceable filters and is quiet in operation (<72dB[A]).

The ProtectoXtract Wall Twin is supplied with 2x 2m, 3m or 4m extraction arms, hose with internal joints, and provides air movement of 3500 m<sup>3</sup>/h. When used with processes that produce spatter the optional Aluminium Spark Arrestor Filter must be used.

Compliant with DIN EN ISO 15012-1, so is suitable for category W3 stainless welding fumes (>30% Ni+Cr). The ProtectoXtract Wall Twin arm unit weighs only 142kg and operates from a 415v mains input supply.

## Features

- Cleaner Work Environment: filters particulate fumes, dusts and some gases
- Extensive filter mat
- 4 stage filtration system
- Quiet operating system
- Optical filtering monitoring
- Tightly fitting lifting device
- Operating hours meter



## Ordering information

ProtectoXtract Wall Twin 2M	<b>EXT3MOB2415WT</b>
ProtectoXtract Wall Twin 3M	<b>EXT3MOB3415WT</b>
ProtectoXtract Wall Twin 4M	<b>EXT3MOB4415WT</b>
2m Replacement Hose	<b>EXT101925</b>
3m Replacement Hose	<b>EXT101926</b>
4m Replacement Hose	<b>EXT101927</b>
Aluminium Spark Arrestor Filter	<b>EXT100008</b>
Carbon Filter	<b>EXT97054</b>
Replacement Pre Filter	<b>EXT10032</b>
Replacement Main Filter	<b>EXT10029</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b> x2 Required

# ProtectoAutoclenz Wall 415v



Three  
Phase

## Wall mounted filter

ProtectoAutoclenz Wall unit is a self cleaning wall mounted welding fume filter incorporating a separator, one durable large surface area filter cartridge, and complete with a filter monitor, post-cleaning function and hour meter. The separation efficiency is > 99%

The unit is capable of handling up to 2500 m<sup>3</sup>/hr and is available with 2x 2, 3 or 4m 150mm diameter hose type arm with internal support structure.

The unit has a 1.5kW fanset and is supplied with a 5m mains input cable. ProtectoAutoclenz Wall unit weighs 165kg.



Class W3



## Features

- Cartridge filter unit with one filter cartridge
- External control unit with monitoring elements
- Silencer
- Dust container
- Optical filter monitoring
- Operating hours meter

## Ordering information

ProtectoAutoclenz Wall 2M	<b>EXT3AUT2415W</b>
ProtectoAutoclenzWall 3M	<b>EXT3AUT3415W</b>
ProtectoAutoclenzWall 4M	<b>EXT3AUT4415W</b>
2m Replacement Hose	<b>EXT101925</b>
3m Replacement Hose	<b>EXT101926</b>
4m Replacement Hose	<b>EXT101927</b>
Filter Cartridge 10m2 BIA M 327 x 600mm	<b>EXT10025</b>
Pre-coat for filter cartridges, 100g	<b>EXT9510050001</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b>



# ProtectoAutoclenz Wall Twin

415v Twin wall mounted filter



ProtectoAutoclenz Wall Twin unit is a self cleaning wall mounted welding fume filter incorporating a separator, two durable large surface area filter cartridges, and complete with a filter monitor, post-cleaning function and hour meter.

The unit is capable of handling up to 3500 m<sup>3</sup>/hr and is available with 2x 2, 3 or 4m 150mm diameter hose type arms with internal support structure.

The unit has a 2.2kW fanset and is supplied with a 5m mains input cable. ProtectoAutoclenz Wall Twin unit weighs 165kg.

## Features

- Fully automatic cleaning via Power-Spray-System
- Two long lasting filter cartridges
- Dust container
- Compressed air container
- Wall bracket
- The unit has a 2.2kW fanset and is supplied with a 5m mains input cable
- Post-cleaning function
- Hour meter



## Ordering information

ProtectoAutoclenz Wall Twin 2M	<b>EXT3AUT2415WT</b>
ProtectoAutoclenz Wall Twin 3M	<b>EXT3AUT3415WT</b>
ProtectoAutoclenz Wall Twin 4M	<b>EXT3AUT4415WT</b>
2m Replacement Hose	<b>EXT101925</b>
3m Replacement Hose	<b>EXT101926</b>
4m Replacement Hose	<b>EXT101927</b>
Filter Cartridge 10m2 BIA M 327 x 600mm	<b>EXT10025</b>
Pre-coat for filter cartridges, 100g	<b>EXT9510050001</b>
Optional Spark Latch 160mm	<b>EXT95014901601</b> x2 Required

# Protecto EcoCube 415v

Fixed filter

3  
Phase

Three  
Phase

Protecto EcoCube is a filter unit equipped with filter cartridges applicable for nearly every task in the area of fume and dust filtration. The polluted air is extracted by means of the ventilator and guided towards the filtering section. The toxic particles are deposited on the surface of the filter cartridges. The cartridges are cleaned automatically by compressed air. The particles deposited on the cartridge are detached by the compressed air blast and reach a dust collecting tank. The cleaned air is recycled back into the working space without any heat loss.

The main parts of the Protecto EcoCube are the fan, pneumatic housing, filter section including cartridges, sparklatch and dust collecting section as well as the control unit for filter cleaning.



## Features

- Pneumatic housing
- Integrated spark pre-separator
- Quiet operation
- Optical filter monitoring
- Operating hours meter
- Maintenance door

## Ordering information

EcoCube 400v 2.2kw 3ph	<b>EXT3CUB22</b>
EcoCube 400v 3kw 3ph	<b>EXT3CUB30</b>
EcoCube 400v 4kw 3ph	<b>EXT3CUB40</b>

# Protecto EcoBlock 415v

Fixed filter

3  
Phase  
Three  
Phase

Protecto EcoBlock is a filter module equipped with filter cartridges applicable for nearly every task in the area of fume and dust filtration. The polluted air is extracted by means of a separate fan and guided towards the filter module. The polluted particles deposit on the surface of the filter cartridges which are dedusted automatically by compressed air. The deposited particles on the cartridge are detached by the compressed air blast into a dust collecting tank. The clean air is then recycled back to the working space without any heat loss.



## Features

- Pneumatic housing
- Integrated spark pre-separator
- Automatic filter dedusting unit
- Quiet operation
- Optical filter monitoring
- Operating hours meter
- Maintenance door

## Ordering information

Protectocube Fan Block 55	<b>EXT3FANBLOCK55</b>
Protectocube Fan Block 75	<b>EXT3FANBLOCK75</b>
Protectocube Fan Block 11	<b>EXT3FANBLOCK11</b>
Protectocube Block ND80	<b>EXT3BLOCK80</b>

# ProtectoCube 2N-2H 415v

Fixed filter



ProtectoCube 2N-2H is suitable for various suction problems at several working places at the same time for work involving unalloyed and precious metals, galvanized material and aluminium. The unit is IFA certified for welding fume class W3.

The released fumes and dusts are extracted via appropriate suction elements and guided into the filter unit. A baffle plate with a large surface serves as pre-separator and distributes the particles on the whole filter surface. All filter units are fitted with hanging filter cartridges enabling heavy particles to fall down directly into the dust container.

The filter cartridges are precoated and work with a special filter medium. This considerably increases their lifetime compared to standard cartridges.



Class W3

## Features

- Fully automatic cleaning via Power-Spray system
- Low wear and gentle for the cartridges due to the process only needing 4 bar
- Fan with soundproof housing
- Maintenance door
- Control unit for fan
- Integrated compressed air container

## Ordering information

ProtectoCube 2N 1.5Kw Unit 415V	<b>EXT3CUB2N15</b>	Optional Spark Latch 160mm	<b>EXT95014901601</b>
ProtectoCube 2N 2.2Kw Unit 415V	<b>EXT3CUB2N22</b>	Optional Spark Latch 250mm	<b>EXT95014902501</b>
ProtectoCube 2N 3Kw Unit 415V	<b>EXT3CUB2N3</b>	Optional Spark Latch 250mm	<b>EXT95014902501</b>
ProtectoCube 2N 4Kw Unit 415V	<b>EXT3CUB2N4</b>	Optional Spark Latch 315mm	<b>EXT950149031505</b>
ProtectoCube 2H 3Kw Unit 415V	<b>EXT3CUB2H3</b>	Optional Spark Latch 250mm	<b>EXT95014902501</b>
ProtectoCube 2H 4Kw Unit 415V	<b>EXT3CUB2H4</b>	Optional Spark Latch 315mm	<b>EXT950149031505</b>

# ProtectoCube 4N - 4H 415v

Fixed filter



ProtectoCube 4N - 4H is suitable for various suction problems at several working places at the same time for work involving unalloyed and precious metals, galvanized material and aluminium. The unit is IFA certified for welding fume class W3.

The released fumes and dusts are extracted via appropriate suction elements and guided into the filter unit. A baffle plate with a large surface serves as a pre-separator and distributes the particles on the whole filter surface. All filter units are fitted with hanging filter cartridges enabling heavy particles to fall down directly into the dust container.

The filter cartridges are pre-coated and work with a special filter medium. This considerably increases their lifetime compared to standard cartridges.



Class W3

## Features

- Fully automatic cleaning via Power-Spray system
- Display control unit
- Dust container with snap fasteners
- Fan with control unit
- Maintenance door
- All filters units fitted with hanging filter Cartridges
- Particle sensor

## Ordering information

ProtectoCube 4N 2.2Kw Unit 415V	<b>EXT3CUB4N22</b>	Optional Spark Latch 250mm	<b>EXT95014902501</b>
ProtectoCube 4N 3Kw Unit 415V	<b>EXT3CUB4N3</b>	Optional Spark Latch 250mm	<b>EXT95014902501</b>
ProtectoCube 4N 4Kw Unit 415V	<b>EXT3CUB4N4</b>	Optional Spark Latch 315mm	<b>EXT950149031505</b>
ProtectoCube 4H 5Kw Unit 415V	<b>EXT3CUB4H55</b>	Optional Spark Latch 315mm	<b>EXT950149031505</b>
ProtectoCube 4H 7.5Kw Unit 415V	<b>EXT3CUB4H75</b>	Optional Spark Latch 355mm	<b>EXT95014935510</b>
ProtectoCube 4H 11Kw Unit 415V	<b>EXT3CUB4H110</b>	Optional Spark Latch 400mm	<b>EXT95014940010</b>

# Protecto ZPF 6H 415v

## Central suction and filter unit



Three  
Phase

Suitable for various extraction tasks at several working places at the same time. Especially suitable for large amounts of air. The central, self cleaning cartridge filter system cleans the polluted air that is guided by an extraction element suitable for practical application through a specially designed ducting system. A baffle plate with a large surface made of copper serves as a preseparator and disperses the particles on the whole filter surface. A suitable sized extraction fan is required.



Class W3



## Features

- Fully automatic cleaning via POWER SPRAY-SYSTEM
- Display control unit
- 6 extensive filter cartridges with 25 m<sup>2</sup> filter surface each
- Dust collecting tray with snap fasteners
- Integrated compressed air container
- Maintenance doors
- Filter required
- PE bag for the dust collecting tray

## Ordering information

Protecto ZPF 6H - 500 5.5kw

**EXTZPF6H55**

Protecto ZPF 6H - 600 7.5kw

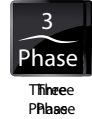
**EXTZPF6H75**

Protecto ZPF 6H - 800 11kw

**EXTZPF6H11**

# Protecto ZPF 9H-IFA 415v

## Central suction and filter unit



Suitable for various extraction tasks at several working places at the same time using unalloyed and precious metals, galvanized material and aluminium. Especially suitable for large amounts of air. This unit is IFA certified for welding fume class W3.

The central, self cleaning cartridge filter system cleans the polluted air that is guided by a suction element suitable for practical application through a specially designed ducting system. The advantages are the optimal self cleaning performance (high lifetime of the cartridges, high suction performance), the user-friendliness with low maintenance. The filter cartridges are precoated ex-works. This procedure considerably increases the lifetime compared to standard filter cartridges. A suitable sized extraction fan is required.



## Features

- Housing made of stable steel plate with powder coating from inside and outside
- Low wear and maintenance dedusting via POWER SPRAY-SYSTEM
- Dust collecting tray
- Precoated filter cartridges of the category BIA M (separation efficiency  $\geq 99\%$ )
- Display control unit
- Filter medium (Precoat)
- PE bag for the dust collecting tray

## Ordering information

Protecto ZPF 9H 7.5kw	<b>EXTZPF9H75</b>
Protecto ZPF 9H 11kw	<b>EXTZPF9H11</b>
Protecto ZPF 9H 15kw	<b>EXTZPF9H15</b>

# ProtectoSpark Latch

## Accessories

ProtectoSpark Latch consists of a separate housing with integrated copper plates. The assembly of the copper plates guarantees a multiple air scoop. Sparks bump into the baffle plates and emit their energy. The Spark Latch can be screwed to the filter unit or integrated into the suction ducting. Equipped with a maintenance tray for cleaning as required.



## Features

- Pre-separation of hot sparks prior to ductwork connection to filter systems.
- Reduces the risk of filter media catching fire.
- Baffle plates
- Maintenance door

## Ordering information

Spark Latch 160mm diameter mobile/wall unit	<b>EXT95014901601</b>
Spark Latch 160mm diameter	<b>EXT9501490160</b>
Spark Latch 200mm diameter	<b>EXT950149020005</b>
Spark Latch 224mm diameter	<b>EXT950149224</b>
Spark Latch 250mm diameter	<b>EXT95014902501</b>
Spark Latch 280mm diameter	<b>EXT9501490280</b>
Spark Latch 315mm diameter	<b>EXT950149031505</b>
Spark Latch 355mm diameter	<b>EXT95014935510</b>
Spark Latch 400mm diameter	<b>EXT95014940010</b>



# ProtectoSpark Pre-Separator

## Accessories

The ProtectoSpark Pre-Separator separates hot sparks via the inside baffle plates, causing the residue hot sparks to fall into the water trough. The air then passes into the main duct work system or filter.



## Features

- Level control
- Housing made of stainless steel
- Inspection glass for monitoring the water level
- Control and maintenance door with snap-fasteners
- Collecting container
- Water connection
- Transition piece for ducting
- Shut-off valve

## Ordering information

ProtectoSpark Pre-Separator 3000	<b>EXT201010205</b>
ProtectoSpark Pre-Separator 6000	<b>EXT201040205</b>
ProtectoSpark Pre-Separator 12000	<b>EXT201080205</b>

# Airtech 415v

## Central suction and filter unit

3  
Phase

Three  
Phase

Airtech is a stand alone system. It is mainly used for industry and welding companies where a suction solution right at the source can not be installed or where the Airtech unit is used for additional cleaning of the production hall.

The polluted air is sucked into the extraction channels attached on either side of the unit at a height of about 3m and then led into the filter section where the particles stick to the surface of the filter cartridges.

The filter cartridges are automatically air cleaned at preset intervals. The particles are loosened from the surface of the filter and fall into the dust collecting container. The cleaned air is recycled back into the room by individually adjustable high reach jet nozzles. That way the polluted air is also moved into the direction of the suction canals.

As a safety device the unit is equipped with a particle sensor on the clean air side. This way the system is constantly monitored to protect it from filter breakdowns. If an error occurs the fan is automatically shut off and simultaneously emits an optical and acoustic warning signal.



## Technical data

Max. volumetric flow of the fan	10,000-30,000 m <sup>3</sup> /h
Motor performance	11kw, 15kw, 22kw
Separation efficiency	≥ 99 %
Dimensions	1880 x 3510 x 6810 mm (Width incl. canals 4 500 mm, depth incl. jets 1455 mm)

# BlowTec 415v

## Central suction and filter unit



BlowTec is a central suction and filter unit that is a perfect solution for every kind of work that requires more than extraction right at the source. The biggest advantage is the efficient use of energy and reduction of cost. During heating times the energy costs are considerably reduced by recirculating the cleaned, warm air back into the working environment. Alternatively it can be vented to atmosphere. The modular setup of the BlowTec is perfectly adaptable to the architecture of the room. The ducting that extracts the air and guides it to the movable jets can vary in height and length. Standard dimensions guarantee fast delivery times and quick assembly.



## Features

- Housing made of stable steel plate (powder coating inside and outside)
- Fully automatic cleaning via POWER SPRAY-SYSTEM
- Fan with soundproof housing
- Filter cartridges, category BIA M
- Particle sensor
- Filter unit
- Control (filter/motor)
- Nozzle head
- Silencer
- Connection between filter unit, fan unit and nozzle head
- Filter medium (precoat)
- PE bag for the dust collecting tray

## Technical data

Max. volumetric flow of the fan	7 500 – 10 000 m <sup>3</sup> /h
Motor performance	7,5 – 11,0 kW
Separation efficiency	≥ 99 %

# Wet Dust Collector 415v

Fixed filter



Wet Dust Collector unit is simple and trouble-free during operation. The air is cleaned by swirling the dust with water. The particles in the air flow are enclosed by water and bonded. The extracted dust particles settle in the lower water tank and then can be discharged by the ball valve which is installed at the lowest point of the unit and can then be removed through a maintenance flap. The fan is suitable for continuous operation and is included with the unit as standard. The engine of the wet cyclone separator requires very low maintenance.



## Features

- Self induced spray wet collector ranging from 0.2m<sup>3</sup>/s to 4.5m<sup>3</sup>/s
- Efficiency levels of up to 98%
- Integrated fan
- Easily maintainable
- Suitable for use with aluminium dust

## Technical data

Max. volumetric flow of the fan	1500 – 9000 m <sup>3</sup> /h
Max pressure	1400 - 2700pa
Motor Performance	1.5 - 11kw

# OilMaster

## Central suction and filter unit



Oilmaster is extremely quiet and best used for separation of oil mist, emulsion, abrasive dust, extraction of metal dust and mist arising from lathing and milling. A sturdy steel sheet construction with powder coating guarantees low-maintenance operation even under rough conditions. The filter unit has four filter steps for the highest degree of separation.

The contaminated air is trapped by the trapping device and transported to the filter appliance via the suction pipe. Here the droplets that form part of the exhaust air are precipitated into the X cyclone. The purified air is sucked in and is either redirected via the sound insulation module to the hall as circulating air (winter operation), or blown outside as waste air (summer operation). The precipitated oil is caught in an emulsion tank and then precipitated into the oil pan via the drain siphon.



## Features

- Engine protection with control lamp
- Filter monitoring
- Collecting tank
- Two long-lasting X cyclone separators
- Low maintenance agglomerator
- Special particle filter
- User-friendly access doors for easy maintenance

## Ordering information

Oilmaster Mini Type TOM

**EXT94400**

Oilmaster Maxi Type TOM

**EXT94401**



PASSED ✓  
LIFE CYCLE TEST  
EQUIPMENT IS SAFE TO USE  
TEST DATE 16-3-15  
16-2-16  
Extrastability

# Vent to atmosphere systems for industry

ProtectoFan	<b>48-49</b>
Articulated Extraction Arm	<b>50</b>
Long Reach Articulated Extraction Arm	<b>51</b>
Telescopic Extraction Arm	<b>52</b>
Extraction Crane Arm	<b>53</b>

Extractability fans are efficiently applicable for the ventilation of working places and halls. Polluted air can be extracted by means of a hose or a pipe fitting with an extraction element at the suction nozzle and can afterwards be guided outside by means of the outlet nozzle and the connected ducting.

Optionally, the air can be guided from outside to inside in order to provide working places or spaces with fresh air. Our high-quality fans are made of steel plate or silumin castings, allowing stable and suitable continuous operation.

Extractability offers a wide range of suction and collecting elements for various solutions. Our suction arms range from small diameters of 50 mm for laboratories and up to large diameters for the extraction of high amounts of welding fume. Additionally, the Extractability product portfolio consists of suction arms, cranes and hoses optimised for a variety of applications such as aluminium arms that are chemically resistant or anti-static.

# ProtectoFan 230v/415v



Three  
Phase

High efficiency extraction fans that are manufactured from steel plate or silumin casting, they are stable and able to be used on a continuous basis. Additionally very smooth operation is achieved by the use of static and dynamic balancing.

These fans are normally fitted to an extraction arm, central filter system or at the end of a main ductwork system. The fans can be used to remove hazardous fumes and dust. The fans are available in different versions and performances.



## Features

- Up to 3000 m<sup>3</sup>/h made of silumin casting (with snap fastener)
- From 3500 m<sup>3</sup>/h and made of steel plate (with vibration absorber)
- Static and dynamic balanced impellers (guarantees smooth operation)
- Low maintenance motor

## Ordering information

Motor Power	Air Flow	Connection Nozzle (Dia)	Input Voltage	Part number
0.75kw	2000 m <sup>3</sup> /h	160mm	230v	<b>EXT9610123</b>
1.10kw	2500 m <sup>3</sup> /h	160mm	230v	<b>EXT9610223</b>
1.50kw	3000 m <sup>3</sup> /h	160mm	230v	<b>EXT9610323</b>
0.75kw	2000 m <sup>3</sup> /h	250mm	415v	<b>EXT9610114</b>
1.10kw	2500 m <sup>3</sup> /h	250mm	415v	<b>EXT9610214</b>
1.50kw	3000 m <sup>3</sup> /h	250mm	415v	<b>EXT9610314</b>
Fan connector				<b>EXT96301</b>





## Ordering information

Motor Power	Air Flow	Connection Nozzle (Dia)	Input Voltage	Part number
2.2kw	3500 m <sup>3</sup> /h	250mm	415v	<b>EXT961044</b>
3.00kw	4000 m <sup>3</sup> /h	250mm	415v	<b>EXT961054</b>
4.00kw	5000 m <sup>3</sup> /h	315mm	415v	<b>EXT961064</b>
5.5kw	6000 m <sup>3</sup> /h	355mm	415v	<b>EXT961074</b>
7.5kw	7500 m <sup>3</sup> /h	400mm	415v	<b>EXT961084</b>
11kw	10000 m <sup>3</sup> /h	450mm	415v	<b>EXT961094</b>

# Articulated Extraction Arm

The Extractability range of Wall mounting Vent to Atmosphere Fume Extraction packages feature a range of arm Lengths from 2 - 4 metres. Available in 230v (1ph) or 415v (3ph). The arms can either be connected to individual fans or to central suction and filter systems.

Due to the spring-support, all arms are easily positioned and are self-supporting when adjusted into place. The volumetric flow can be individually be regulated via the throttle valve integrated in the suction hood.



## Features

- Oval suction hood made of plastic (315 mm) with throttle valve
- Available lengths 2m, 3m, 4m with an additional wall bracket
- Stable wall bracket made of powder-coated sheet steel
- Connection nozzle
- Optional wall brackets for connecting to Extractability fans.
- 3 joints with spring support
- Flexible suction hose (PVC) with welded steel wire spiral (temperature-resistant up to +120°C)

## Ordering information

2m Articulated Extraction Arm PKG	<b>EXT97601</b>
3m Articulated Extraction Arm PKG	<b>EXT97602</b>
4m Articulated Extraction Arm PKG	<b>EXT97603</b>
2m Spare Hose	<b>EXT101925</b>
3m Spare Hose	<b>EXT101926</b>
4m Spare Hose	<b>EXT101927</b>

# Articulated Extraction Arm

## Long reach

Long reach extraction arms are available in different versions and lengths. Extraction arms are available with a 5 - 8 metre self supporting articulated arm.

The arms can either be connected to individual fans or to central suction and filter systems. Ideal for use in large workshops and factories.



## Features

- Oval suction hood made of plastic (315 mm) with throttle valve
- Available lengths up to 8m with an additional wall bracket
- Connection nozzle
- Optional wall bracket for connection to Extractability fans.
- 3 joints with spring support
- Flexible suction hose (PVC) with welded steel wire spiral (temperature-resistant up to +120°C)

## Ordering information

5m Articulated Extraction Arm PKG	<b>EXT976022</b>
6m Articulated Extraction Arm PKG	<b>EXT976032</b>
7m Articulated Extraction Arm PKG	<b>EXT976024</b>
8m Articulated Extraction Arm PKG	<b>EXT976034</b>
10m Spare Hose	<b>EXTPVC150</b>

# Telescopic Extraction Arm

The Extractability range of Telescopic Extraction Arms are available in different versions. This is the ideal extraction arm in limited space applications especially low headroom situations.

Suitable for connection to central units and individual fans. Ideal for extracting pollutants produced by fixed welding benches, e.g. in welding booths. Available in 100, 150 and 200mm diameter. The Telescopic Extraction Arm comes complete with a wall mounting bracket, low wear telescopic tube, hose and a suction hood with an integrated damper.



## Features

- Available in 100, 150 & 200mm diameter.
- Complete with wall mounting bracket.
- Low wear telescopic tube and hose.
- Metal suction hood with integrated damper.

## Ordering information

1.2M - 2.06M Extraction Arm 100mmØ	<b>EXT976161002111</b>
1.2M - 2.06M Extraction Arm 150mmØ	<b>EXT976162111</b>
2m Spare Hose 150mm	<b>EXT101925</b>
Replacement hose 10m 100mm dia	<b>EXTPVC100</b>
Replacement hose 10m 150mm dia	<b>EXTPVC150</b>
Replacement hose 10m 200mm dia	<b>EXTPVC200</b>

# Extraction Crane Arm

Extractability Extraction Crane Arms are available in different diameters and lengths. For example extraction cranes Ø160mm up to a reach of six metres. It is possible to attach tools due to a two part supporting construction. The first boom can accommodate a weight of up to 50kg (e.g. a mechanical wire feeder). The second boom can accommodate up to 10kg (e.g. tube package). The internal construction of the telescopic arm allows a smooth adjustment at every height).



## Features

- Pivoted, powder-coated supported construction made of sectional steel
- Adjustable brakes for the joints
- Connection of the suction pipes to flexible hoses at the joints
- Smoothly telescopic extension with suction hood situated at the front boom
- Wall bracket incl. pipe elbow and drive flange

## Ordering information

3m Extraction Crane Arm 160mm dia	<b>EXT97640</b>
3m Extraction Crane Arm 250mm dia	<b>EXT97649</b>
4.5m Extraction Crane Arm 160mm dia	<b>EXT97461</b>
4.5m Extraction Crane Arm 250mm dia	<b>EXT97650</b>
6m Extraction Crane Arm 160mm dia	<b>EXT97642</b>
6m Extraction Crane Arm 250mm dia	<b>EXT97651</b>



# Bench extraction

## for industry

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Downdraft tables and benches offer a highly effective fume removal solution where arms and hoods would not offer a viable solution. They remove the hazardous fumes and dusts generated by sanding, grinding, polishing and welding operations.

Fume is drawn away from the operators breathing zone as they are drawn back and down into the table bed. Downdraft tables and benches can be configured to suit any application.



# ProtectoBench

1000/1500/2000/2500

ProtectoBench 1000/1500/2000/2500 is a downdraft extraction bench with optional back wall extraction. The extraction bench removes hazardous fume and dust at source.

Fumes and dust are extracted downwards and also to the back wall if this option is fitted. 90% of the extracted particles are pre-separated within the bottom section of the bench which can then be disposed by means of emptying the dust tray. ProtectoBench requires a fan and filter system to be connected. It is suitable for welding and grinding alloyed and unalloyed steels, precious metals and galvanised material.



## Features

- (Optional) rear wall extraction.
- (Optional) Lamella curtain folding sides.

## Ordering information

1m Wide	<b>EXTBENCH1000</b>
1.5m Wide	<b>EXTBENCH1500</b>
2m Wide	<b>EXTBENCH2000</b>
2.5m Wide	<b>EXTBENCH2500</b>
1m Wide Back Wall Extraction	<b>EXTBENCH1000E</b>
1.5m Wide Back Wall Extraction	<b>EXTBENCH1500E</b>
2m Wide Back Wall Extraction	<b>EXTBENCH2000E</b>
2.5m Wide Back Wall Extraction	<b>EXTBENCH2500E</b>
Lamella Sides	<b>EXT999200005</b>



# ProtectoBench Basic/Ultra 415v



ProtectoBench is a downdraft and back wall extraction bench with a durable large surface area filter cartridge, complete with a filter monitor and hour meter, optional manual and available with manual or auto cleaning functions.

The Protectobench weighs 250kg and is supplied on swivel castors for manoeuvrability. The extraction bench removes hazardous smoke and dust at source and is an extraction and filter system in one. It is suitable for welding and grinding alloyed, unalloyed steels, precious metals and galvanised material. Not to be used on explosive dusts.

Depending on filter option selected, the filter cartridge will automatically be cleaned when required with compressed air and the filtered air can be re-directed back into the workplace, saving on heating costs.



## Features

- The unit is capable of handling up to 2500 m<sup>3</sup>/hr
- Optional hinged side panels,
- back wall extraction
- 2.2kw 3ph 415v fanset

## Ordering information

Basic 415v (Disposable Filters)	<b>EXT42301211</b>
Ultra 415v (Auto Cleaning Filters)	<b>EXT42201211</b>
Wheel Set	<b>EXT42671011</b>
Hinge Sides	<b>EXT42551011</b>
Backdraft Kit	<b>EXT42501011</b>

# ProtectoXtracTop

## Fixed filter

The ProtectoXtracTop is a retro-fit-able filter unit designed specifically to extract and filter metal particulate fumes created during welding processes and enables the ProtectoXtract to be used for grinding applications. Extraction of particles takes place through a perforated plate within the supporting surface.

The ProtectoXtracTop is suitable for use in the workshop, demonstration / training bay, garage and on-site. This unit must only be used in combination with the ProtectoSpark (EXT978013).



## Features

- Rear and side panels
- Perforated plate (Surface approx 1100 x 700mm)
- External dimensions 1150mm x 750mm
- Handle to lift up the work surface to gain access to internal filter

## Ordering information

ProtectoXtracTop 110v PKG	<b>EXT1MOB110TOP</b>
ProtectoXtracTop 230v PKG	<b>EXT1MOB230TOP</b>
ProtectoXtracTop	<b>EXT978016</b>
ProtectoSpark Retro-Fit Kit	<b>EXT978013</b>

# Welding Bench

## Modular work surface

A sturdy, fabricated welding bench with steel grid surface. Designed to allow jigs and clamps to be bolted in plate through the slatted grid, and to give a good earth when connected to your choice of clamp. This table serves as a cost-effective modular work surface, suitable for use in many environments including fabricator welding bays, workshops, colleges and training centres.



## Features

- Steel grind surface
- Provides a good earth
- 600 x 635 x 800mm

## Ordering information

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Welding Bench

**EXT56100**

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Welding Bench fixture

**EXT56130**

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# Services

## **COSHH / LEV TESTING**

Local Exhaust Ventilation systems (LEV) requires testing every 14 months under the current Control Of Substances Hazardous to Health Regulations (COSHH).

Extractability provides a comprehensive LEV Testing service to ensure your company is meeting these requirements as laid out by Regulation 9 of COSHH and the HSG258 guidance notice.

Regulation 9 of the Control of Substances Hazardous to Health 2002 Act states that “every employer who provides any control measure to prevent exposure of an employee to a substance hazardous to health, shall ensure that it is maintained in an efficient state, in efficient working order and in good repair” in addition, where engineering controls are provided, the employer shall ensure that thorough examinations and tests are carried out and a suitable record of these be kept and made available for at least five years.

In the case of local exhaust ventilation systems (LEV) the examinations and tests must be performed at least once every 14 months. (In certain circumstances this period is reduced to every 6 months e.g. where metallic dust is being controlled).

We are able to provide a complete service to test, maintain and where required install complete fume extraction systems. This is a vital service due to increasing pressure on companies to watch their environmental footprint and to avoid health complaints from employees.



## **AIR QUALITY MONITORING**

We offer monitoring and/or sampling of employee's exposure and background levels of hazardous dusts, vapours and fumes against health and safety executives (HSE) Workplace exposure limits and in compliance with Control of Substances Hazardous to Health Regulations (COSHH)

Local and international health and safety legislation (such as COSHH, NIOSHH, OSHA etc) states that it is the employers responsibility to protect the health, welfare and safety of their employees. Failure to do so can result in expensive legal action, potential fines and poor employee relations.

Extractability employ a dedicated team of experienced, highly-skilled engineers who operate our quality monitoring services across the UK. Contact Extractability with any questions you may have - our friendly sales department are always on hand to help.





## **NOISE ASSESSMENT**

Excessive noise at work is a significant yet preventable problem affecting thousands of UK workplaces. Now is the time to address noise in your workplace, as the recent Control of Noise at Work Regulations lower legally acceptable noise levels.

Extractability provide a fully competent noise assessor, who will visit your premises to determine noise exposures using appropriate instrumentation, calibration, measurement and analysis techniques.

The noise assessor will identify noise hazards and establish whether the lower and upper exposure action values are being exceeded. The noise assessor will also estimate the personal daily noise exposure of employees and identify measures required to eliminate or reduce risk, control exposure and protect employees. Results are analysed and presented to incorporate immediate and future actions. Our member of staff will also make recommendations on the selection of appropriate engineering controls, hearing protection programmes, health surveillance and PPE.

## **DESIGN AND INSTALLATION**

Extractability offers professional design and installation of extraction packages, tailored appropriately to each individual project. As with our welding fume extraction systems, we provide a complete package from design right through to installation and servicing.

In keeping with our design criteria, all aspects



of the installation are kept to the highest possible standard.

This includes the ducting systems that are often overlooked. Fume and dust extraction is intrinsically linked to the extraction system. Poorly designed or installed duct runs not only look messy, they are also inefficient and can be dangerous.

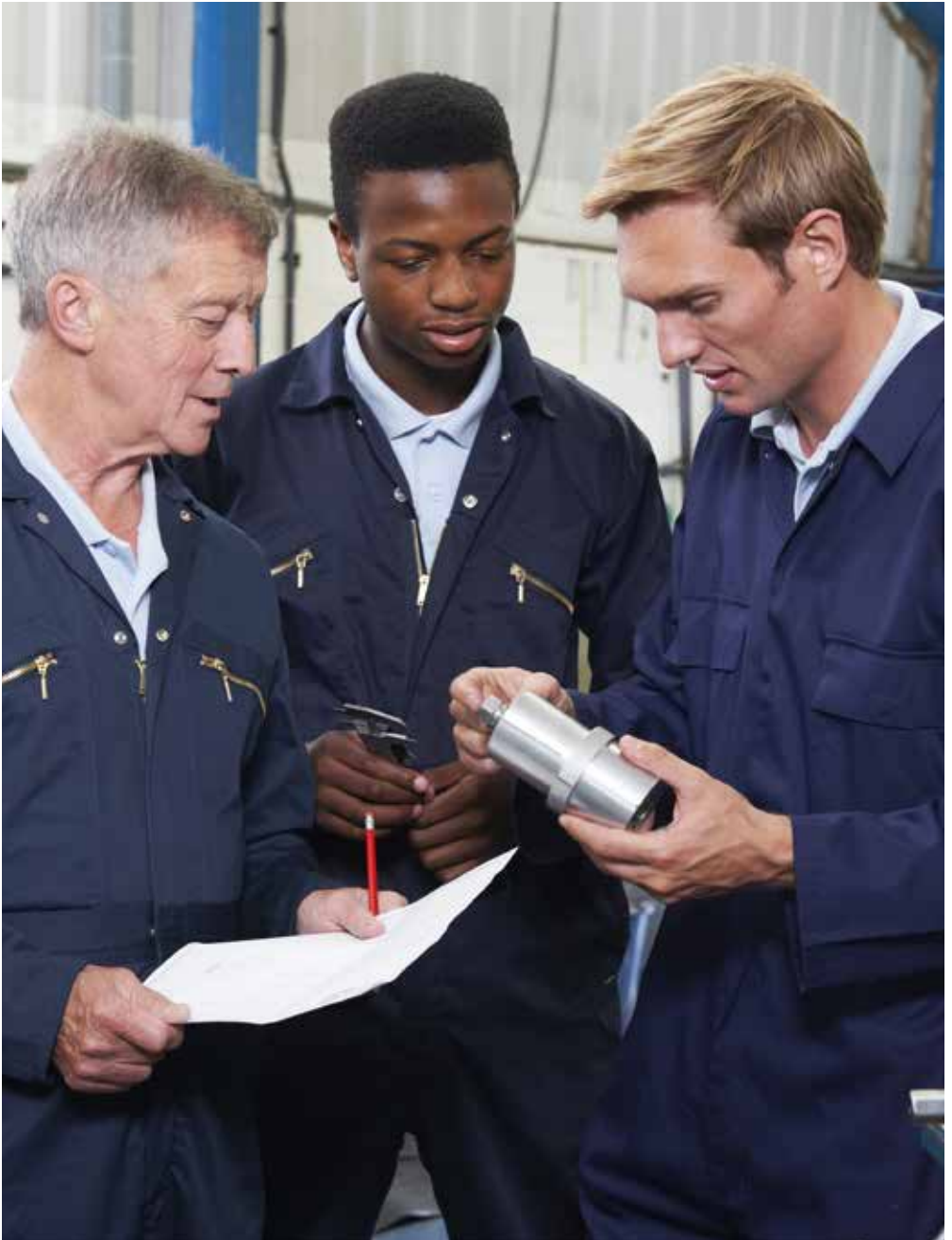
We understand air movement and air flow which is paramount for designing effective extraction systems. We ensure that the correct amount of air volume is moved, with zero noise disturbances. By providing a quieter and better environment for students or employees to work in, we find the levels of learning and output are significantly increased.

Input is as important as extract. This ensures that our extraction systems operate to optimum levels whilst creating a safe working environment. We design all our energy saving systems with adequately, balanced air input, keeping noise levels down.

Buildings vary greatly, so it is essential that systems are installed by experienced teams that have a comprehensive understanding of air flow technology. Our experienced installation teams will ensure solutions are completed on-time, with installation being planned with you to ensure minimum disruption to your day-to-day business operations or any new build schedule. All work is carried out in a safe and professionally managed way.

Installations are fully tested and commissioned to check they meet the original agreed specification and all necessary legal requirements.







# Conversion tables

## DUCT TRANSPORT VELOCITIES

5m/s>	Vapour, Gases, Smoke	All vapours, gases and smokes
7.5m/s>	Fumes	Paint and varnish fumes
10m/s>	Very light dust	Dry wood sander dust
12.5m/s>	Dry dust and powders	Fine rubberdust, very light shavings
15m/s>	Dry dust and powders	Light dust, metal fumes, welding fume
17.5m/s>	Industrial dusts	Grain and flour, dry sawdust
20m/s>	Industrial dusts	Grinding, shot and sand blasting, stone cutting
22.5m/s>	Heavy and moist industrial dusts	Wood chips and shavings

## CONVERSION TABLE

1 Cu M	=	35,3 Cu ft	1 ft WG is equivalent to 0,43 lb/sq in
1Cu M	=	220 gall	1 in WG is equivalent to 250 Pa
1 Cu ft	=	6,24 gall	1 lb/sq in is equivalent to 27,6 in WG
1 Litre/sec	=	13,2 gall/min	1 lb/sq ft is equivalent to 0,016 ft WG
1 Cu M/hr	=	3,67 gall/min	1 Cu M water weighs 1000 Kg
1 Cu M/sec	=	2120 Cu ft/min	1 Cu ft water weighs 62,4 lb
1 M/sec	=	197 ft/min	1 Cu M air weighs 1,22 Kg at NTP
1 Cu ft/min	=	1,7 Cu M/hr	1 Cu ft air weighs 0,076 lb at NTP
1 Pa	=	1 N/sq M	1 Cu M steel weighs 7,85 Tonne
1 Bar	=	1000,000 Pa	1 Cu M aluminium weighs 2,71 Tonne
1 Bar	=	14,7 lb/sq in	<b>Specific Heats of:-</b>
1 lb/sq in	=	6800 Pa	Air at const pressure = 0,238
1 N/sq M	=	0,000147 lb/sq in	Mild steel = 0,116
1 KW	=	1,33 hp	Aluminium = 0,214
1 KW hr	=	3400 Btu	<b>Coefficients of Thermal Expansion:-</b>
1 KW	=	1000 Joules/sec	Mild steel = 0,0114 mm/M/°C
1 Pa is equivalent to 0,004 in WG			Stainless steel = 0,016 mm/M/°C
1 M WG is equivalent to 0,1 Bar			Aluminium = 0,023 mm/M/ °C

# Welding fume hazard control course

## Level 1

Weldability-Sif provide a complete training and certification service which is intended to provide fundamental knowledge of hazards associated with welding and cutting and how to demonstrate good working practices to reduce exposure to fumes and gases. The higher risk activities within this unit require safeguarding at all times.

### DURATION

Two days

### SUITABLE FOR

This course and qualification is suitable for welders, managers, supervisors, inspectors and other professionals within the industry sector, wishing to understand metal particulate fume creation, risk and control.

### ENTRY REQUIREMENTS

There are no minimum requirements for this course although an awareness of welding environments and applications would be beneficial.

### COURSE CONTENT

Learners will be provided with the fundamental knowledge associated with the generation and control of welding fume. The learner will learn how to eliminate or reduce the risks associated with exposure to welding fume and gases. Underpinning knowledge will be provided to ensure a good understanding of legislation that is in place and methods available to protect people and the environment.

### OBJECTIVES

- Identify a range of welding fume hazards
- Identify how to reduce exposure to fume
- Assess risks involved with fume exposure
- Demonstrate good working practices
- Be aware of engineering solutions available.

### ADDITIONAL INFORMATION

Course bookings can be made via the offline or online course booking form. The course location is at the Learn to Weld technical training centre close to London. We also offer this course on-site, subject to class size.

### CERTIFICATION/AWARDING BODY

Training certificates are awarded by EAL.

### COURSE REFERENCE CODE

When booking please use: WBQLEV2D.

### FOR MORE INFORMATION

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